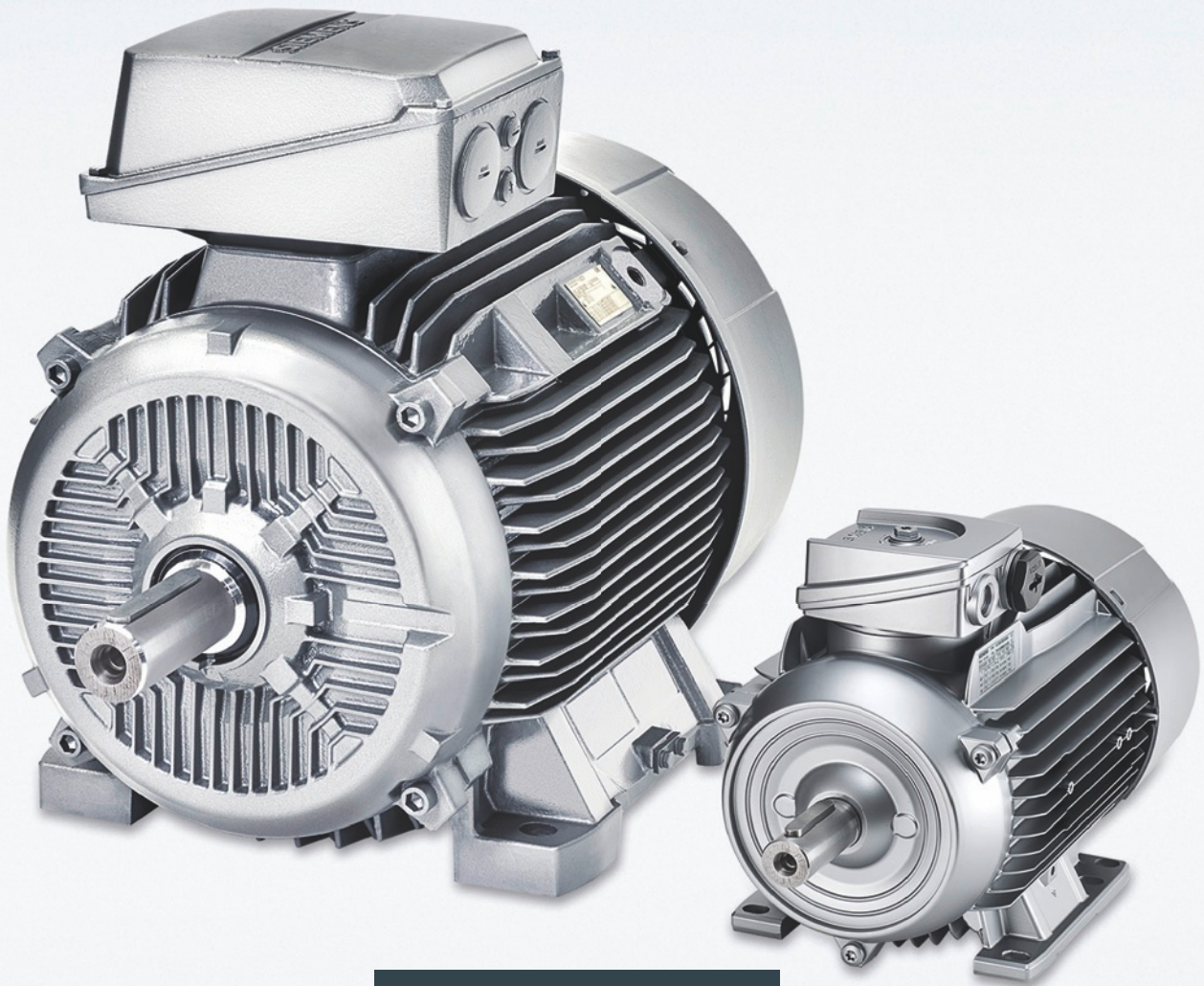


**SIEMENS**



Motors

## SIMOTICS GP, SD, XP, DP Low-Voltage Motors

Type series  
1FP, 1LE, 1MB, 1PC

Frame sizes 63 to 450 · Power range 0.09 to 1000 kW

Price List  
D 81.1 P

Edition  
01/2021

[siemens.com/drives](https://www.siemens.com/drives)

## Statutory minimum efficiencies in the European economic area

Please note that the minimum efficiencies IE3 are required by law for many low-voltage motors that are sold/installed in the European Economic Area. The statutory EU REGULATION (EC) No. 640/2009 (of July 22, 2009) governs the minimum efficiencies for electrical drives in the European Economic Area. It is based on the directive 2005/32/EC of the European Parliament and of the Council of July 6, 2005. Please observe these statutory minimum efficiencies in the European Economic Area. We as a manufacturer always recommend to use products with high efficiencies.

## Note

All mentioned efficiency classes refer to 50 Hz data (if not otherwise specified).

When operating the motors on the converter, additional losses occur which may require a torque reduction depending on the permissible excessive winding temperature. The permissible torques can be taken from the SIZER configuration tool. The lowest frequency provided there is 5 Hz. In case of stationary converter operation at lower frequencies, in particular with frame sizes < 100, a request to the Quotation Center is required.

## Energy saving/Energy-saving program SinaSave

Further information regarding energy savings and the Energy-saving program SinaSave can be found at the following internet address:  
[www.siemens.com/energysaving](http://www.siemens.com/energysaving)

## Selection tool DT Configurator



The DT Configurator covers the product range of low-voltage motors and MICROMASTER 4/SINAMICS inverters and converters as well as frequency converters for SIMATIC ET 200 distributed I/O. The range of available products is being continuously expanded.

ously expanded.

The following information is provided for the individual products:

- 2D/3D-model generator for motors and converters
- Data sheet generator
- Start-up calculation for motors
- Comprehensive product-specific documentation

Online access in the Siemens Industry Mall

The DT Configurator is integrated in the Siemens Industry Mall and can be used on the Internet without installation.

German: [www.siemens.de/dt-konfigurator](http://www.siemens.de/dt-konfigurator)

English: [www.siemens.com/dt-configurator](http://www.siemens.com/dt-configurator)

## Price Groups

| Motors      | Standard program according to catalog with standard delivery time |                |                |                |                |                 |     |
|-------------|-------------------------------------------------------------------|----------------|----------------|----------------|----------------|-----------------|-----|
| Type        | 1LE10; 1LE15;<br>1FP10; 1FP15;<br>1PC1 (self ventilated)          |                | 1LE15; 1LE5    |                | 1MB1;1<br>MB5  | 1PC13;<br>1PC14 |     |
| Frame size  | 63 ...<br>90                                                      | 100 ...<br>160 | 180 ...<br>225 | 250 ...<br>355 | 400 ...<br>450 | all             | all |
| Price group | 3F1                                                               | 3F2            | 3F3            | 3F4            | 3ZB            | 3X1             | 3Z3 |

## Surcharges for Freight and Packaging

The following surcharges for freight and packaging will be calculated as standard. Further expenditure-dependent costs will be additionally charged for seaworthy packaging.

| Order Value in EUR | Surcharge in % |
|--------------------|----------------|
| up to 500.–        | 7.5            |
| up to 2500.–       | 5              |
| over 2500.–        | 3              |

## Definition of Delivery Time – new Delivery Time concept

The delivery times provided in the price list may deviate from the actual delivery times. The currently valid delivery times can be found in the delivery time share points known as well as in PMD. The total delivery time (motor + supplements) is determined by the longer delivery time of the associated components.

Delivery times apply to clarified orders from the supplying factory – especially for larger order quantities or with customer-specific documentations.

For the explanation of the new Delivery Time concept, see also Page 2.

## Standard delivery times in working days:

|    |    |    |    |    |            |    |      |
|----|----|----|----|----|------------|----|------|
| 2  | 5  | 10 | 15 | 20 | 25         | 30 | > 30 |
| 40 | 50 | 60 | 70 | 80 | On request |    |      |

## CU surcharge

Up to the Cu DEL-notice EUR 225.– per 100 kg the printed prices apply. For quotations over EUR 225.– per 100 kg, the surcharges below are charged with regard to the relevant net price. The copper surcharge is based on the quotation (lower German electrolytic quotation + 1 %) of the previous day of the order placed.

The copper surcharges for quotations of EUR 925.– and higher per 100 kg are additionally increased in steps of EUR 50.– by 1 %. For further information on "Metal surcharges", see the Appendix.

| Copper quotation             | Cu surcharge acc. to metal factor<br>N - W - - - -<br>(for 1FP1, 1LE, 1MB, 1PC1 motors) |
|------------------------------|-----------------------------------------------------------------------------------------|
| EUR per 100 kg               | %                                                                                       |
| 225.– up to just below 275.– | 1.2                                                                                     |
| 275.– up to just below 325.– | 2.5                                                                                     |
| 325.– up to just below 375.– | 3.5                                                                                     |
| 375.– up to just below 425.– | 4.5                                                                                     |
| 425.– up to just below 475.– | 5.5                                                                                     |
| 475.– up to just below 525.– | 6.5                                                                                     |
| 525.– up to just below 575.– | 7.5                                                                                     |
| 575.– up to just below 625.– | 8.5                                                                                     |
| 625.– up to just below 675.– | 9.5                                                                                     |
| 675.– up to just below 725.– | 10.5                                                                                    |
| 725.– up to just below 775.– | 11.5                                                                                    |
| 775.– up to just below 825.– | 12.5                                                                                    |
| 825.– up to just below 875.– | 13.5                                                                                    |
| 875.– up to just below 925.– | 14.5                                                                                    |

## Changes or Cancellation

Costs will be charged according to expenses occurred through changes or cancellation.



# SIMOTICS GP, SD, XP, DP Low-Voltage Motors

Type series

1FP, 1LE, 1MB, 1PC

Price List D 81.1 P · 01/2021

Dear Customer,

We are pleased to present you with the new Price List D 81.1 P · 01/2021.  
The new price list replaces Price List D 81.1 P · 10/2019.

The following price changes and adaptations were made as of January 1, 2021:

- Price changes for SIMOTICS GP, SD, DP motors of the 1LE1 platform and derivatives: frame sizes 63 and 71: +2 % respectively +5 %
- Expansion of the SIMOTICS GP/SD motor series 1LE1083 frame size 100 bis 200 und 1LE1583 frame sizes 100 bis 315
- Expansion of the SIMOTICS XP motor series for zone 21, 22 and 2 Ex tb, Ex tc and Ex ec (1MB5514, 1MB5524, 1MB5534, 1MB5513, 1MB5523, 1MB5533) frame sizes 315 to 450;  
zone 21, 22 and 2 Ex tb, Ex tc and Ex ec (1MB5813, 1MB5823, 1MB5833) frame sizes 400 and 450;  
zone 1 Ex eb (1MB1553, 1MB5553, 1MB1556, 1MB5556, 1MB1557, 1MB5557, 1MB1853, 1MB5853) frame sizes 71 to 355;  
zone 1 Ex eb (1MB1563, 1MB1566, 1MB1567, 1MB1863) frame sizes 132 to 280
- Elimination of the "Smoke extraction motors"

The products listed in this price list are also part in the Industry Mall.  
Please contact your local Siemens office for additional information.

You can access our Interactive Catalog and our Industry Mall on the Internet at:  
[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

The Drive Technology Configurator is also available on the Internet at  
[www.siemens.com/dt-configurator](http://www.siemens.com/dt-configurator), where it is updated daily.

Up-to-date information about low-voltage motors is available online at:  
[www.siemens.com/lowvoltagegemoors](http://www.siemens.com/lowvoltagegemoors)

Your personal contact is keen to receive your suggestions and recommendations for improvement.  
You can find your contact in our contact database at  
[www.siemens.com/automation-contact](http://www.siemens.com/automation-contact)

We hope that you will often use our new Price List D 81.1 P · 01/2021 as a helpful ordering resource.

With kind regards,



Dagmar Eisinger  
Head Sales Controlling  
Siemens AG, Motion Control,  
Low Voltage Motors, Finance, Europa



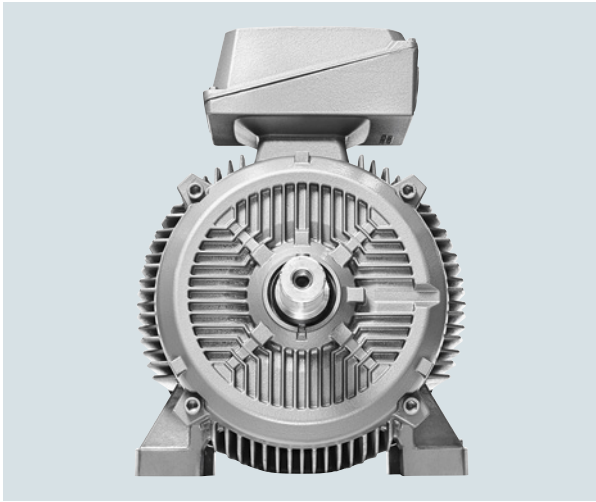
Christoph Nöth  
Head of Product Portfolio Management  
Siemens AG, Motion Control,  
Low Voltage Motors, Europa



# SIMOTICS Low-Voltage Motors

## Frame sizes 63 to 450, power range 0.09 to 1000 kW

### Motors



**Price List D 81.1 P · 01/2021**

Supersedes:

Price List D 81.1 P · 10/2019

Refer to the Industry Mall for current updates of this Price List:

[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

Please contact your local Siemens branch.

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#### **SIMOTICS GP and SIMOTICS SD standard motors**

Motors with IE4 Super Premium Efficiency, with IE3 Premium Efficiency, with IE2 High Efficiency and with IE1 Standard Efficiency  
NEMA Energy Efficient and Premium Efficient motors  
Pole-changing motors and motors for converter operation only

**1**

#### **SIMOTICS SD standard motors next generation**

**2**

#### **SIMOTICS VSD motors for converter operation**

VSD10 Line  
VSD4000 Line

**3**

#### **SIMOTICS XP explosion-protected motors**

Motors for zone 21/22 and 2 in  
type of protection Ex tb, Ex tc and Ex ec

**4**

#### **SIMOTICS DP application-specific motors**

Marine motors  
Steel plant motors

**5**

#### **Appendix**

Partner, Information and Download Center,  
Industry Services, Metal surcharges,  
Conditions of Sale and Delivery,  
Export Regulations

**6**



The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001 (Certified Registration No. DE-000357 QM). The certificate is recognized by all IQNet countries.

**Prime Delivery**

Faster on the market due to shorter delivery times

Standard delivery times in working days:

2

5

10

15

To satisfy the requirements of our customers and to respond to the trend of shorter delivery times in numerous industry sectors, the delivery time concept of our portfolio for standard motors has been fundamentally revised.

With the **Prime Delivery** concept, we offer our costumers a remarkable time advantage.

**According to this delivery time concept, we are able to deliver common IE1 and IE3 motors incl. a selected spectrum of options ex works within 2 or 5 days.**

Unlike the express motors with the order code **B19**, which are not available anymore since 01.10.2015, the now offered motor types within the **Prime Delivery** concept, valid since 01.10.2015, are available for our clients without further additional costs.

The IE3 motor versions of our SIMOTICS GP and SD motor portfolio, which are available within 48 hours ex works, are shown in the following figure.

The corresponding IE2 motor variants see page 1/16.

|                          | Motor type | Efficiency class | Frame size | Number of poles | Overall length | Voltage | Type of construction | Motor protection | Terminal box                   | Delivery time |                                                                                                            |                                                         |                              |   |   |   |
|--------------------------|------------|------------------|------------|-----------------|----------------|---------|----------------------|------------------|--------------------------------|---------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------|---|---|---|
| Position of Article No.: | 1 to 6     |                  | 7          | 8               | 9              | 10      | 11                   | 12               | 13                             | 14            | 15                                                                                                         | 16                                                      | working days                 |   |   |   |
|                          | 1LE1       |                  |            | -               |                |         |                      | -                |                                |               |                                                                                                            |                                                         |                              |   |   |   |
| SIMOTICS GP              | 1LE1       | 00               | IE1        | 2 63 0 B        | 2-pole         | A M     | 2 or 3               | 230 V/400 V      | 2                              | 2             | IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3, IM B5/IM 3001, IM V1, IM V3, stamped IM B5 flange | A without                                               | A without                    | 4 | 2 |   |
|                          |            |                  |            | 71 0 C          | 4-pole         | B       |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  | IE3        | 3 80 0 D        |                |         |                      |                  |                                |               |                                                                                                            |                                                         | 3 PTC thermistors (tripping) | B |   |   |
|                          |            |                  |            | 90 0 E          |                | S       | 0                    |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            |                 |                | L       | 4                    |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            | 100 1 A         |                | L       | 4 or 5               |                  |                                |               |                                                                                                            |                                                         | IM B35 / IM 2001 flange      | J |   |   |
|                          |            |                  |            |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            | 112 1 B         |                | M       | 2 or 3               | 230 V/400 V      | 2                              | 2             | IM B14/IM 3601, IM V19/IM 363, IM V18/IM 3611 stamped IM B14; standard flange                              | K                                                       |                              |   |   |   |
|                          |            |                  |            |                 |                |         |                      | 400 V/690 V      | 3                              | 4             |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            | 132 1 C         |                | S       | 0                    | 400 V/690 V      | 3                              | 4             |                                                                                                            |                                                         |                              |   |   |   |
|                          |            | M                | 2 or 3     |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
| 160 1 D                  |            | M                | 2 or 3     |                 |                |         |                      |                  | IM B34/IM 2101 standard flange | N             |                                                                                                            |                                                         |                              |   |   |   |
| SIMOTICS SD              | 1LE1       | 50               | 180 1 E    |                 |                |         |                      |                  |                                |               | IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3                                                    | A 3 PTC thermistors (tripping)                          | B                            |   | 5 |   |
|                          |            |                  |            |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  | 200 2 A    |                 | L              | 4 or 5  |                      |                  |                                |               |                                                                                                            | IM B5/IM 3001, IM V1, IM V3, stamped IM B5 flange       | F                            |   |   |   |
|                          |            |                  |            |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  | 200 2 A    |                 | L              | 4 or 5  |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  | 225 2 B    | 4-pole          | B S            | 0       |                      |                  |                                |               |                                                                                                            | IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3 | A                            |   |   | 2 |
|                          |            |                  |            |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
| 250 2 C                  |            | M                | 2 or 3     |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
| 280 2 D                  |            | M                | 2 or 3     |                 |                |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |
|                          |            |                  |            | S               | 0              |         |                      |                  |                                |               |                                                                                                            |                                                         |                              |   |   |   |

Basic versions of the SIMOTICS GP and SD motor range, deliverable within 2 or 5 days (ex works) <sup>1)</sup>

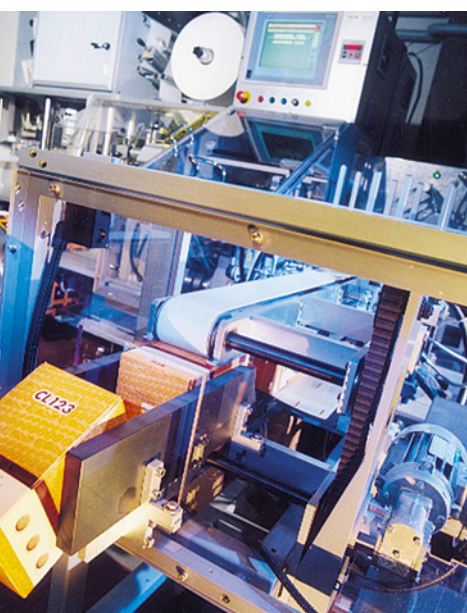
If an order can be delivered within 48 hours (ex works) depends on the ordered basic motor type and the ordered options. The exact delivery times can be found out via our ordering systems or the Siemens distributors. For projects with larger quantities, the delivery time must be requested separately at the factory.

Possible impacts of particular technical features on the overall delivery time of an order are explained in the ordering examples shown in the following overview.

| Order            | Delivery time of basic motor                                                                            | Delivery time options                                                                                                                                                            | Overall delivery time           |
|------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>Example 1</b> | SIMOTICS GP, IE2, 4-pole, FS112, 4 kW (50 Hz)<br>1LE1001-1BB22-2AA4<br><b>2 working days ex works</b>   | Order code <b>H04</b><br>(External grounding)<br><b>2 working days ex works</b>                                                                                                  | <b>2 working days ex works</b>  |
| <b>Example 2</b> | SIMOTICS GP, IE3, 4-pole, FS160, 15 kW (50 Hz)<br>1LE1003-1DB42-1AA4<br><b>10 working days ex works</b> | Order code <b>H04</b><br>(External grounding)<br><b>2 working days ex works</b><br>Order code <b>G11</b><br>(Mounting of rotary pulse encoder)<br><b>5 working days ex works</b> | <b>10 working days ex works</b> |
| <b>Example 3</b> | SIMOTICS SD, IE3, 4-pole, FS225, 37 kW (50 Hz)<br>1LE1503-2BB03-4AB5<br><b>10 working days ex works</b> | Order code <b>S03</b><br>(Special finish sea air resistant C4)<br><b>15 working days ex works</b>                                                                                | <b>15 working days ex works</b> |

<sup>1)</sup> Article number code see Catalog D 81.1 · 2016 in chapter 2.

## SIMOTICS GP and SIMOTICS SD standard motors



|             |                                                            |             |                                                              |
|-------------|------------------------------------------------------------|-------------|--------------------------------------------------------------|
| <b>1/2</b>  | <b>Motors with IE4 Super Premium Efficiency</b>            | <b>1/40</b> | <b>Article No. supplements and special versions</b>          |
| 1/2         | Aluminum series 1LE1004                                    | 1/40        | <u>Voltages</u>                                              |
| 1/3         | Cast-iron series 1LE1504/1LE1604                           | 1/40        | Aluminum series 1LE10, 1PC10                                 |
| <b>1/4</b>  | <b>Motors with IE3 Premium Efficiency</b>                  | 1/43        | Aluminum series 1LE1011, 1LE1012 – pole-changing             |
| 1/4         | Aluminum series 1LE1003                                    | 1/44        | Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line    |
| 1/6         | Aluminum series 1LE1083                                    | 1/47        | Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773 |
| 1/7         | Cast-iron series 1LE1503/1LE1603                           | 1/48        | <u>Types of construction</u>                                 |
| 1/9         | Cast-iron series 1LE1503/1LE1603 with increased power      | 1/48        | Aluminum series 1LE10, 1PC10                                 |
| 1/10        | Cast-iron series 1LE1583                                   | 1/52        | Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line    |
| 1/12        | Aluminum series 1LE1043                                    | 1/57        | Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773 |
| 1/12        | Aluminum series 1LE1043 with increased power               | 1/62        | <u>Motor protection</u>                                      |
| 1/13        | Cast-iron series 1LE1543/1LE1643                           | 1/62        | Aluminum series 1LE10, 1PC10                                 |
| 1/15        | Cast-iron series 1LE1543/1LE1643 with increased power      | 1/63        | Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line    |
| <b>1/16</b> | <b>Motors with IE2 High Efficiency</b>                     | 1/64        | Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773 |
| 1/16        | Aluminum series 1LE1001                                    | 1/65        | <u>Terminal box position</u>                                 |
| 1/16        | Aluminum series 1LE1001 with increased power               | 1/65        | Aluminum series 1LE10, 1PC10                                 |
| 1/18        | Aluminum series 1PC1001                                    | 1/66        | Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line    |
| 1/20        | Cast-iron series 1LE1501/1LE1601                           | 1/67        | Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773 |
| 1/22        | Cast-iron series 1LE1501/1LE1601 with increased power      | 1/68        | <u>Options</u>                                               |
| 1/23        | Aluminum series 1LE1041                                    | 1/68        | Aluminum series 1LE10, 1PC10                                 |
| 1/23        | Aluminum series 1LE1041 with increased power               | 1/76        | Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line    |
| 1/24        | Cast-iron series 1LE1541                                   | 1/87        | Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773 |
| 1/24        | Cast-iron series 1LE1541 with increased power              |             |                                                              |
| <b>1/25</b> | <b>Motors with IE1 Standard Efficiency</b>                 |             |                                                              |
| 1/25        | Aluminum series 1LE1002                                    |             |                                                              |
| 1/25        | Aluminum series 1LE1002 with increased power               |             |                                                              |
| 1/27        | Aluminum series 1PC1002                                    |             |                                                              |
| 1/28        | Cast-iron series 1LE1502                                   |             |                                                              |
| 1/29        | Cast-iron series 1LE1502 with increased power              |             |                                                              |
| <b>1/30</b> | <b>Motors with Rendimento Premium IR3</b>                  |             |                                                              |
| 1/30        | Aluminum series 1LE1073                                    |             |                                                              |
| 1/32        | Cast-iron series 1LE1573/1LE1673                           |             |                                                              |
| <b>1/34</b> | <b>NEMA Energy Efficient MG1 Motors Table 12-11</b>        |             |                                                              |
| 1/34        | Aluminum series 1LE1021                                    |             |                                                              |
| 1/35        | Cast-iron series 1LE1521/1LE1621                           |             |                                                              |
| <b>1/36</b> | <b>NEMA Premium Efficient MG1 Motors Table 12-12</b>       |             |                                                              |
| 1/36        | Aluminum series 1LE1023                                    |             |                                                              |
| 1/37        | Cast-iron series 1LE1523/1LE1623                           |             |                                                              |
| <b>1/39</b> | <b>Pole-changing motors</b>                                |             |                                                              |
| 1/39        | Aluminum series 1LE1011 for constant load torque           |             |                                                              |
| 1/39        | Aluminum series 1LE1011/1LE1012 for square-law load torque |             |                                                              |

# SIMOTICS GP 1LE1 Standard Motors

## Orientation

2

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE4 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Aluminum series 1LE1004</b>                                                                                |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4                                                                                                          |
| Frame sizes (FS)                       | 100 L ... 200 L                                                                                               |
| Rated power at 50 Hz                   | 2.2 ... 37 kW                                                                                                 |
| Synchronous speed at 50 Hz             | 1500 ... 3000 rpm                                                                                             |
| Rated torque at 50 Hz                  | 9.8 ... 194 Nm                                                                                                |
| Efficiency                             | IE4 Super Premium Efficiency                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                                                 |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 3                                | IE4         | 100 L               | 1LE1004-1AA4-.... | 1430.-               |
| 4                                | IE4         | 112 M               | 1LE1004-1BA2-.... | 1690.-               |
| 5.5                              | IE4         | 132 S               | 1LE1004-1CA0-.... | 2130.-               |
| 7.5                              | IE4         | 132 S               | 1LE1004-1CA1-.... | 2700.-               |
| 11                               | IE4         | 160 M               | 1LE1004-1DA2-.... | 3760.-               |
| 15                               | IE4         | 160 M               | 1LE1004-1DA3-.... | 4900.-               |
| 18.5                             | IE4         | 160 L               | 1LE1004-1DA4-.... | 5850.-               |
| 22                               | IE4         | 180 M               | 1LE1004-1EA2-.... | 6610.-               |
| 30                               | IE4         | 200 L               | 1LE1004-2AA4-.... | 8450.-               |
| 37                               | IE4         | 200 L               | 1LE1004-2AA5-.... | 10600.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 2.2                              | IE4         | 100 L               | 1LE1004-1AB4-.... | 1320.-               |
| 3                                | IE4         | 100 L               | 1LE1004-1AB5-.... | 1510.-               |
| 4                                | IE4         | 112 M               | 1LE1004-1BB2-.... | 1850.-               |
| 5.5                              | IE4         | 132 S               | 1LE1004-1CB0-.... | 2310.-               |
| 7.5                              | IE4         | 132 M               | 1LE1004-1CB2-.... | 2920.-               |
| 11                               | IE4         | 160 M               | 1LE1004-1DB2-.... | 3840.-               |
| 15                               | IE4         | 160 L               | 1LE1004-1DB4-.... | 4970.-               |
| 18.5                             | IE4         | 180 M               | 1LE1004-1EB2-.... | 5540.-               |
| 22                               | IE4         | 180 L               | 1LE1004-1EB4-.... | 6390.-               |
| 30                               | IE4         | 200 L               | 1LE1004-2AB5-.... | 8270.-               |

Standard delivery times in working days:

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On  
requestSIMOTICS SD 1LE1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE4 Super Premium Efficiency</b>                                                |
| Series version                         | <b>Cast-iron series 1LE1504/1LE1604<br/>Basic/Performance Line</b>                             |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4                                                                                           |
| Frame sizes (FS)                       | 100 L ... 315 L                                                                                |
| Rated power at 50 Hz                   | 2.2 ... 200 kW                                                                                 |
| Synchronous speed at 50 Hz             | 1500 ... 3000 rpm                                                                              |
| Rated torque at 50 Hz                  | 9.8 ... 1281 Nm                                                                                |
| Efficiency                             | IE4 Super Premium Efficiency                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 3                                | IE4         | 100 L               | 1LE1504-1AA4-....                | 1560.-               | 1LE1604-1AA4-....                      | 1750.-               |
| 4                                | IE4         | 112 M               | 1LE1504-1BA2-....                | 1850.-               | 1LE1604-1BA2-....                      | 2090.-               |
| 5.5                              | IE4         | 132 S               | 1LE1504-1CA0-....                | 2310.-               | 1LE1604-1CA0-....                      | 2610.-               |
| 7.5                              | IE4         | 132 M               | 1LE1504-1CA1-....                | 2950.-               | 1LE1604-1CA1-....                      | 3340.-               |
| 11                               | IE4         | 160 M               | 1LE1504-1DA2-....                | 4070.-               | 1LE1604-1DA2-....                      | 4590.-               |
| 15                               | IE4         | 160 M               | 1LE1504-1DA3-....                | 5290.-               | 1LE1604-1DA3-....                      | 6010.-               |
| 18.5                             | IE4         | 160 L               | 1LE1504-1DA4-....                | 6330.-               | 1LE1604-1DA4-....                      | 7150.-               |
| 22                               | IE4         | 180 L               | 1LE1504-1EA2-....                | 6960.-               | 1LE1604-1EA2-....                      | 7660.-               |
| 30                               | IE4         | 200 L               | 1LE1504-2AA4-....                | 8860.-               | 1LE1604-2AA4-....                      | 9770.-               |
| 37                               | IE4         | 200 L               | 1LE1504-2AA5-....                | 11100.-              | 1LE1604-2AA5-....                      | 12100.-              |
| 45                               | IE4         | 225 M               | 1LE1504-2BA2-....                | 12100.-              | 1LE1604-2BA2-....                      | 13500.-              |
| 55                               | IE4         | 250 M               | 1LE1504-2CA2-....                | 14400.-              | 1LE1604-2CA2-....                      | 15900.-              |
| 75                               | IE4         | 280 S               | 1LE1504-2DA0-....                | 19600.-              | 1LE1604-2DA0-....                      | 20200.-              |
| 90                               | IE4         | 280 M               | 1LE1504-2DA2-....                | 23000.-              | 1LE1604-2DA2-....                      | 23700.-              |
| 110                              | IE4         | 315 S               | 1LE1504-3AA0-....                | 27200.-              | 1LE1604-3AA0-....                      | 27900.-              |
| 132                              | IE4         | 315 M               | 1LE1504-3AA2-....                | 32500.-              | 1LE1604-3AA2-....                      | 33600.-              |
| 160                              | IE4         | 315 L               | 1LE1504-3AA4-....                | 40600.-              | 1LE1604-3AA4-....                      | 41700.-              |
| 200                              | IE4         | 315 L               | 1LE1504-3AA5-....                | 50600.-              | 1LE1604-3AA5-....                      | 52100.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 2.2                              | IE4         | 100 L               | 1LE1504-1AB4-....                | 1420.-               | 1LE1604-1AB4-....                      | 1600.-               |
| 3                                | IE4         | 100 L               | 1LE1504-1AB5-....                | 1640.-               | 1LE1604-1AB5-....                      | 1860.-               |
| 4                                | IE4         | 112 M               | 1LE1504-1BB2-....                | 1990.-               | 1LE1604-1BB2-....                      | 2250.-               |
| 5.5                              | IE4         | 132 S               | 1LE1504-1CB0-....                | 2500.-               | 1LE1604-1CB0-....                      | 2830.-               |
| 7.5                              | IE4         | 132 M               | 1LE1504-1CB2-....                | 3180.-               | 1LE1604-1CB2-....                      | 3590.-               |
| 11                               | IE4         | 160 M               | 1LE1504-1DB2-....                | 4170.-               | 1LE1604-1DB2-....                      | 4710.-               |
| 15                               | IE4         | 160 L               | 1LE1504-1DB4-....                | 5400.-               | 1LE1604-1DB4-....                      | 6100.-               |
| 18.5                             | IE4         | 160 L               | 1LE1504-1EB2-....                | 5900.-               | 1LE1604-1EB2-....                      | 6410.-               |
| 22                               | IE4         | 180 L               | 1LE1504-1EB4-....                | 6800.-               | 1LE1604-1EB4-....                      | 7400.-               |
| 30                               | IE4         | 200 L               | 1LE1504-2AB5-....                | 8760.-               | 1LE1604-2AB5-....                      | 9540.-               |
| 37                               | IE4         | 200 L               | 1LE1504-2BB0-....                | 9780.-               | 1LE1604-2BB0-....                      | 10700.-              |
| 45                               | IE4         | 225 M               | 1LE1504-2BB2-....                | 11400.-              | 1LE1604-2BB2-....                      | 12500.-              |
| 55                               | IE4         | 250 M               | 1LE1504-2CB2-....                | 13800.-              | 1LE1604-2CB2-....                      | 15100.-              |
| 75                               | IE4         | 280 S               | 1LE1504-2DB0-....                | 18500.-              | 1LE1604-2DB0-....                      | 18900.-              |
| 90                               | IE4         | 280 M               | 1LE1504-2DB2-....                | 21400.-              | 1LE1604-2DB2-....                      | 22000.-              |
| 110                              | IE4         | 315 M               | 1LE1504-3AB0-....                | 26600.-              | 1LE1604-3AB0-....                      | 27100.-              |
| 132                              | IE4         | 315 M               | 1LE1504-3AB2-....                | 31200.-              | 1LE1604-3AB2-....                      | 32200.-              |
| 160                              | IE4         | 315 L               | 1LE1504-3AB4-....                | 37800.-              | 1LE1604-3AB4-....                      | 38800.-              |
| 200                              | IE4         | 315 L               | 1LE1504-3AB5-....                | 47000.-              | 1LE1604-3AB5-....                      | 48300.-              |

# SIMOTICS GP 1LE1 Standard Motors

## Orientation

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### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

| Category                               | Motors with IE3 Premium Efficiency                                                                            |                                                                                        |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Series version                         | <b>Aluminum series 1LE1003</b><br>(continued on next page)                                                    | <b>Aluminum series 1LE1003</b><br><b>with increased power</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                                                               |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                                                          |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                                                                  |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                                                                  |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6                                                                                |
| Frame sizes (FS)                       | 80 M ... 200 L                                                                                                | 132 M ... 200 L                                                                        |
| Rated power at 50 Hz                   | 0.37 ... 37 kW                                                                                                | 11 ... 45 kW                                                                           |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 1000 ... 3000 rpm                                                                      |
| Rated torque at 50 Hz                  | 2.5 ... 215 Nm                                                                                                | 36 ... 293 Nm                                                                          |
| Efficiency                             | IE3 Premium Efficiency                                                                                        | IE3 Premium Efficiency                                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                                                          |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 132 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                          |

Range of motors in standard version with Article No., delivery time and base price plus MS  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|-------------------------------------|-------------|---------------------|--------------------|----------------------|-------------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |             |                     |                    |                      |                                     |             |                     |                    |                      |
| 0.75                                | IE3         | 80 M                | 1LE1003-0DA2.-.... | 630.-                |                                     |             |                     |                    |                      |
| 1.1                                 | IE3         | 80 M                | 1LE1003-0DA3.-.... | 721.-                |                                     |             |                     |                    |                      |
| 1.5                                 | IE3         | 90 S                | 1LE1003-0EA0.-.... | 832.-                |                                     |             |                     |                    |                      |
| 2.2                                 | IE3         | 90 L                | 1LE1003-0EA4.-.... | 1070.-               |                                     |             |                     |                    |                      |
| 3                                   | IE3         | 100 L               | 1LE1003-1AA4.-.... | 1180.-               |                                     |             |                     |                    |                      |
| 4                                   | IE3         | 112 M               | 1LE1003-1BA2.-.... | 1400.-               |                                     |             |                     |                    |                      |
| 5.5                                 | IE3         | 132 S               | 1LE1003-1CA0.-.... | 1750.-               |                                     |             |                     |                    |                      |
| 7.5                                 | IE3         | 132 S               | 1LE1003-1CA1.-.... | 2230.-               |                                     |             |                     |                    |                      |
|                                     |             |                     |                    |                      | 11                                  | IE3         | 132 M               | 1LE1003-1CA6.-.... | 3100.-               |
| 11                                  | IE3         | 160 M               | 1LE1003-1DA2.-.... | 3100.-               |                                     |             |                     |                    |                      |
| 15                                  | IE3         | 160 M               | 1LE1003-1DA3.-.... | 4060.-               |                                     |             |                     |                    |                      |
| 18.5                                | IE3         | 160 L               | 1LE1003-1DA4.-.... | 4830.-               | 22                                  | IE3         | 160 L               | 1LE1003-1DA6.-.... | 5500.-               |
| 22                                  | IE3         | 180 M               | 1LE1003-1EA2.-.... | 5390.-               | 30                                  | IE3         | 180 M               | 1LE1003-1EA6.-.... | 7000.-               |
| 30                                  | IE3         | 200 L               | 1LE1003-2AA4.-.... | 7000.-               | 45                                  | IE3         | 200 L               | 1LE1003-2AA6.-.... | 10200.-              |
| 37                                  | IE3         | 200 L               | 1LE1003-2AA5.-.... | 8770.-               |                                     |             |                     |                    |                      |
| <b>4-pole: 1500 rpm at 50 Hz</b>    |             |                     |                    |                      |                                     |             |                     |                    |                      |
| 0.55                                | IE3         | 80 M                | 1LE1003-0DB2.-.... | 623.-                |                                     |             |                     |                    |                      |
| 0.75                                | IE3         | 80 M                | 1LE1003-0DB3.-.... | 681.-                |                                     |             |                     |                    |                      |
| 1.1                                 | IE3         | 90 S                | 1LE1003-0EB0.-.... | 809.-                |                                     |             |                     |                    |                      |
| 1.5                                 | IE3         | 90 L                | 1LE1003-0EB4.-.... | 957.-                |                                     |             |                     |                    |                      |
| 2.2                                 | IE3         | 100 L               | 1LE1003-1AB4.-.... | 1080.-               |                                     |             |                     |                    |                      |
| 3                                   | IE3         | 100 L               | 1LE1003-1AB5.-.... | 1250.-               |                                     |             |                     |                    |                      |
| 4                                   | IE3         | 112 M               | 1LE1003-1BB2.-.... | 1520.-               |                                     |             |                     |                    |                      |
| 5.5                                 | IE3         | 132 S               | 1LE1003-1CB0.-.... | 1910.-               |                                     |             |                     |                    |                      |
| 7.5                                 | IE3         | 132 M               | 1LE1003-1CB2.-.... | 2420.-               | 11                                  | IE3         | 132 M               | 1LE1003-1CB6.-.... | 3170.-               |
| 11                                  | IE3         | 160 M               | 1LE1003-1DB2.-.... | 3170.-               |                                     |             |                     |                    |                      |
| 15                                  | IE3         | 160 L               | 1LE1003-1DB4.-.... | 4120.-               | 18.5                                | IE3         | 160 L               | 1LE1003-1DB6.-.... | 4660.-               |
| 18.5                                | IE3         | 180 M               | 1LE1003-1EB2.-.... | 4580.-               |                                     |             |                     |                    |                      |
| 22                                  | IE3         | 180 L               | 1LE1003-1EB4.-.... | 5290.-               | 30                                  | IE3         | 180 L               | 1LE1003-1EB6.-.... | 6900.-               |
| 30                                  | IE3         | 200 L               | 1LE1003-2AB5.-.... | 6900.-               | 37                                  | IE3         | 200 L               | 1LE1003-2AB6.-.... | 8170.-               |

Standard delivery times in working days:

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Overview of selection and ordering data with base prices and standard delivery times

## Overview

| Category                               | Motors with IE3 Premium Efficiency                                                                            |                                              |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Series version                         | Aluminum series 1LE1003                                                                                       | Aluminum series 1LE1003 with increased power |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                     |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                        |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                        |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6                                      |
| Frame sizes (FS)                       | 80 M ... 200 L                                                                                                | 132 M ... 200 L                              |
| Rated power at 50 Hz                   | 0.37 ... 37 kW                                                                                                | 11 ... 45 kW                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 1000 ... 3000 rpm                            |
| Rated torque at 50 Hz                  | 2.5 ... 215 Nm                                                                                                | 36 ... 293 Nm                                |
| Efficiency                             | IE3 Premium Efficiency                                                                                        | IE3 Premium Efficiency                       |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 180 ... 200: 3F3                 |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|-------------------------------------|-------------|---------------------|--------------------|----------------------|-------------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b>    |             |                     |                    |                      |                                     |             |                     |                    |                      |
| 0.37                                | IE3         | 80 M                | 1LE1003-ODC2.-.... | 606.-                |                                     |             |                     |                    |                      |
| 0.55                                | IE3         | 80 M                | 1LE1003-ODC3.-.... | 700.-                |                                     |             |                     |                    |                      |
| 0.75                                | IE3         | 90 S                | 1LE1003-OEC0.-.... | 791.-                |                                     |             |                     |                    |                      |
| 1.1                                 | IE3         | 90 L                | 1LE1003-OEC4.-.... | 980.-                |                                     |             |                     |                    |                      |
| 1.5                                 | IE3         | 100 L               | 1LE1003-1AC4.-.... | 1070.-               |                                     |             |                     |                    |                      |
| 2.2                                 | IE3         | 112 M               | 1LE1003-1BC2.-.... | 1360.-               |                                     |             |                     |                    |                      |
| 3                                   | IE3         | 132 S               | 1LE1003-1CC0.-.... | 1690.-               |                                     |             |                     |                    |                      |
| 4                                   | IE3         | 132 M               | 1LE1003-1CC2.-.... | 2090.-               |                                     |             |                     |                    |                      |
| 5.5                                 | IE3         | 132 M               | 1LE1003-1CC3.-.... | 2630.-               |                                     |             |                     |                    |                      |
| 7.5                                 | IE3         | 160 M               | 1LE1003-1DC2.-.... | 3340.-               |                                     |             |                     |                    |                      |
| 11                                  | IE3         | 160 L               | 1LE1003-1DC4.-.... | 4600.-               |                                     |             |                     |                    |                      |
| 15                                  | IE3         | 180 L               | 1LE1003-1EC4.-.... | 5680.-               | 18.5                                | IE3         | 180 L               | 1LE1003-1EC6.-.... | 6930.-               |
| 18.5                                | IE3         | 200 L               | 1LE1003-2AC4.-.... | 6930.-               | 30                                  | IE3         | 200 L               | 1LE1003-2AC6.-.... | 10500.-              |
| 22                                  | IE3         | 200 L               | 1LE1003-2AC5.-.... | 8040.-               |                                     |             |                     |                    |                      |
| <b>8-pole: 750 rpm at 50 Hz</b>     |             |                     |                    |                      |                                     |             |                     |                    |                      |
| 2.2                                 | IE3         | 132 S               | 1LE1003-1CD0.-.... | 2610.-               |                                     |             |                     |                    |                      |
| 3                                   | IE3         | 132 M               | 1LE1003-1CD2.-.... | 3130.-               |                                     |             |                     |                    |                      |
| 4                                   | IE3         | 160 M               | 1LE1003-1DD2.-.... | 3860.-               |                                     |             |                     |                    |                      |
| 5.5                                 | IE3         | 160 M               | 1LE1003-1DD3.-.... | 4650.-               |                                     |             |                     |                    |                      |
| 7.5                                 | IE3         | 160 L               | 1LE1003-1DD4.-.... | 5530.-               |                                     |             |                     |                    |                      |
| 11                                  | IE3         | 180 L               | 1LE1003-1ED4.-.... | 6710.-               |                                     |             |                     |                    |                      |
| 15                                  | IE3         | 200 L               | 1LE1003-2AD5.-.... | 8800.-               |                                     |             |                     |                    |                      |

# SIMOTICS GP 1LE1 Standard Motors

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## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                                  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                                        |
| Series version                         | <b>Aluminum series 1LE1083</b>                                                                                   |
| Cooling                                | Self-ventilated (IC 411) or with order code F90<br>forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                    |
| Insulation                             | Thermal class 155 (F)                                                                                            |
| Utilization                            | Thermal class 130 (B)                                                                                            |
| Number of poles                        | 2, 4, 6, 8                                                                                                       |
| Frame sizes (FS)                       | 100 L ... 200 L                                                                                                  |
| Rated power at 50 Hz                   | 2.2 ... 37 kW                                                                                                    |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                                 |
| Rated torque at 50 Hz                  | 10 ... 215 Nm                                                                                                    |
| Efficiency                             | IE3 Premium Efficiency                                                                                           |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                    |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                                                    |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br>▲ New | Base<br>price<br>EUR |
|-------------------------------------|-------------|---------------------|----------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |             |                     |                      |                      |
| 3                                   | IE3         | 100 L               | ▲ 1LE1083-1AA4.-.... | 1900.-               |
| 4                                   | IE3         | 112 M               | ▲ 1LE1083-1BA2.-.... | 2330.-               |
| 5.5                                 | IE3         | 132 S               | ▲ 1LE1083-1CA0.-.... | 2910.-               |
| 7.5                                 | IE3         | 132 S               | ▲ 1LE1083-1CA1.-.... | 3430.-               |
| 11                                  | IE3         | 160 M               | ▲ 1LE1083-1DA2.-.... | 4310.-               |
| 15                                  | IE3         | 160 M               | ▲ 1LE1083-1DA3.-.... | 5270.-               |
| 18.5                                | IE3         | 160 M               | ▲ 1LE1083-1DA4.-.... | 6170.-               |
| 22                                  | IE3         | 180 M               | ▲ 1LE1083-1EA2.-.... | 7070.-               |
| 30                                  | IE3         | 200 L               | ▲ 1LE1083-2AA4.-.... | 9060.-               |
| 37                                  | IE3         | 200 L               | ▲ 1LE1083-2AA5.-.... | 10700.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b>    |             |                     |                      |                      |
| 2.2                                 | IE3         | 100 L               | ▲ 1LE1083-1AB4.-.... | 2010.-               |
| 3                                   | IE3         | 100 L               | ▲ 1LE1083-1AB5.-.... | 2570.-               |
| 4                                   | IE3         | 112 M               | ▲ 1LE1083-1BB2.-.... | 2830.-               |
| 5.5                                 | IE3         | 132 S               | ▲ 1LE1083-1CB0.-.... | 3240.-               |
| 7.5                                 | IE3         | 132 M               | ▲ 1LE1083-1CB2.-.... | 3750.-               |
| 11                                  | IE3         | 160 M               | ▲ 1LE1083-1DB2.-.... | 4650.-               |
| 15                                  | IE3         | 160 M               | ▲ 1LE1083-1DB4.-.... | 5720.-               |
| 18.5                                | IE3         | 180 M               | ▲ 1LE1083-1EB2.-.... | 6690.-               |
| 22                                  | IE3         | 180 L               | ▲ 1LE1083-1EB4.-.... | 7580.-               |
| 30                                  | IE3         | 200 L               | ▲ 1LE1083-2AB5.-.... | 9710.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b>    |             |                     |                      |                      |
| 15                                  | IE3         | 180 L               | ▲ 1LE1083-1EC4.-.... | 7290.-               |
| 18.5                                | IE3         | 200 L               | ▲ 1LE1083-2AC4.-.... | 8810.-               |
| 22                                  | IE3         | 200 L               | ▲ 1LE1083-2AC5.-.... | 10200.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>     |             |                     |                      |                      |
| 11                                  | IE3         | 180 L               | ▲ 1LE1083-1ED4.-.... | 9680.-               |
| 15                                  | IE3         | 200 L               | ▲ 1LE1083-2AD5.-.... | 11500.-              |

Standard delivery times in working days:

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## Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                                            |
| Series version                         | <b>Cast-iron series 1LE1503/1LE1603</b>                                                                              |
| Cooling                                | Self-ventilated (IC 411)                                                                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                        |
| Insulation                             | Thermal class 155 (F)                                                                                                |
| Utilization                            | Thermal class 130 (B)                                                                                                |
| Number of poles                        | 2, 4, 6, 8                                                                                                           |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                       |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                                                                      |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                                     |
| Rated torque at 50 Hz                  | 1.2 ... 1284 Nm                                                                                                      |
| Efficiency                             | IE3 Premium Efficiency                                                                                               |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                        |
| Price group (PG)                       | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.37                             | IE3         | 71 M                | 1LE1503-0CA2-....                | 673.-                |                                        |                      |
| 0.55                             | IE3         | 71 M                | 1LE1503-0CA3-....                | 789.-                |                                        |                      |
| 0.75                             | IE3         | 80 M                | 1LE1503-0DA2-....                | 813.-                |                                        |                      |
| 1.1                              | IE3         | 80 M                | 1LE1503-0DA3-....                | 927.-                |                                        |                      |
| 1.5                              | IE3         | 90 S                | 1LE1503-0EA0-....                | 1070.-               |                                        |                      |
| 2.2                              | IE3         | 90 L                | 1LE1503-0EA4-....                | 1320.-               |                                        |                      |
| 3                                | IE3         | 100 L               | 1LE1503-1AA4-....                | 1300.-               | 1LE1603-1AA4-....                      | 1440.-               |
| 4                                | IE3         | 112 M               | 1LE1503-1BA2-....                | 1530.-               | 1LE1603-1BA2-....                      | 1720.-               |
| 5.5                              | IE3         | 132 S               | 1LE1503-1CA0-....                | 1910.-               | 1LE1603-1CA0-....                      | 2160.-               |
| 7.5                              | IE3         | 132 S               | 1LE1503-1CA1-....                | 2450.-               | 1LE1603-1CA1-....                      | 2750.-               |
| 11                               | IE3         | 160 M               | 1LE1503-1DA2-....                | 3360.-               | 1LE1603-1DA2-....                      | 3800.-               |
| 15                               | IE3         | 160 M               | 1LE1503-1DA3-....                | 4400.-               | 1LE1603-1DA3-....                      | 4950.-               |
| 18.5                             | IE3         | 160 L               | 1LE1503-1DA4-....                | 5230.-               | 1LE1603-1DA4-....                      | 5920.-               |
| 22                               | IE3         | 180 M               | 1LE1503-1EA2-....                | 5730.-               | 1LE1603-1EA2-....                      | 6240.-               |
| 30                               | IE3         | 200 L               | 1LE1503-2AA4-....                | 7440.-               | 1LE1603-2AA4-....                      | 8090.-               |
| 37                               | IE3         | 200 L               | 1LE1503-2AA5-....                | 9340.-               | 1LE1603-2AA5-....                      | 10100.-              |
| 45                               | IE3         | 225 M               | 1LE1503-2BA2-....                | 10500.-              | 1LE1603-2BA2-....                      | 11400.-              |
| 55                               | IE3         | 250 M               | 1LE1503-2CA2-....                | 12600.-              | 1LE1603-2CA2-....                      | 13600.-              |
| 75                               | IE3         | 280 S               | 1LE1503-2DA0-....                | 16900.-              | 1LE1603-2DA0-....                      | 17300.-              |
| 90                               | IE3         | 280 M               | 1LE1503-2DA2-....                | 20000.-              | 1LE1603-2DA2-....                      | 20900.-              |
| 110                              | IE3         | 315 S               | 1LE1503-3AA0-....                | 24000.-              | 1LE1603-3AA0-....                      | 25100.-              |
| 132                              | IE3         | 315 M               | 1LE1503-3AA2-....                | 28800.-              | 1LE1603-3AA2-....                      | 30100.-              |
| 160                              | IE3         | 315 L               | 1LE1503-3AA4-....                | 35700.-              | 1LE1603-3AA4-....                      | 37400.-              |
| 200                              | IE3         | 315 L               | 1LE1503-3AA5-....                | 44600.-              | 1LE1603-3AA5-....                      | 46700.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.25                             | IE3         | 71 M                | 1LE1503-0CB2-....                | 668.-                |                                        |                      |
| 0.37                             | IE3         | 71 M                | 1LE1503-0CB3-....                | 748.-                |                                        |                      |
| 0.55                             | IE3         | 80 M                | 1LE1503-0DB2-....                | 805.-                |                                        |                      |
| 0.75                             | IE3         | 80 M                | 1LE1503-0DB3-....                | 879.-                |                                        |                      |
| 1.1                              | IE3         | 90 S                | 1LE1503-0EB0-....                | 1040.-               |                                        |                      |
| 1.5                              | IE3         | 90 L                | 1LE1503-0EB4-....                | 1170.-               |                                        |                      |
| 2.2                              | IE3         | 100 L               | 1LE1503-1AB4-....                | 1170.-               | 1LE1603-1AB4-....                      | 1330.-               |
| 3                                | IE3         | 100 L               | 1LE1503-1AB5-....                | 1360.-               | 1LE1603-1AB5-....                      | 1530.-               |
| 4                                | IE3         | 112 M               | 1LE1503-1BB2-....                | 1650.-               | 1LE1603-1BB2-....                      | 1870.-               |
| 5.5                              | IE3         | 132 S               | 1LE1503-1CB0-....                | 2060.-               | 1LE1603-1CB0-....                      | 2350.-               |
| 7.5                              | IE3         | 132 M               | 1LE1503-1CB2-....                | 2630.-               | 1LE1603-1CB2-....                      | 2970.-               |
| 11                               | IE3         | 160 M               | 1LE1503-1DB2-....                | 3460.-               | 1LE1603-1DB2-....                      | 3890.-               |
| 15                               | IE3         | 160 L               | 1LE1503-1DB4-....                | 4460.-               | 1LE1603-1DB4-....                      | 5040.-               |
| 18.5                             | IE3         | 180 M               | 1LE1503-1EB2-....                | 4870.-               | 1LE1603-1EB2-....                      | 5270.-               |
| 22                               | IE3         | 180 L               | 1LE1503-1EB4-....                | 5660.-               | 1LE1603-1EB4-....                      | 6160.-               |
| 30                               | IE3         | 200 L               | 1LE1503-2AB5-....                | 7340.-               | 1LE1603-2AB5-....                      | 7980.-               |
| 37                               | IE3         | 225 S               | 1LE1503-2BB0-....                | 8400.-               | 1LE1603-2BB0-....                      | 9180.-               |
| 45                               | IE3         | 225 M               | 1LE1503-2BB2-....                | 9890.-               | 1LE1603-2BB2-....                      | 10800.-              |
| 55                               | IE3         | 250 M               | 1LE1503-2CB2-....                | 11900.-              | 1LE1603-2CB2-....                      | 13300.-              |
| 75                               | IE3         | 280 S               | 1LE1503-2DB0-....                | 16000.-              | 1LE1603-2DB0-....                      | 16400.-              |
| 90                               | IE3         | 280 M               | 1LE1503-2DB2-....                | 18800.-              | 1LE1603-2DB2-....                      | 19400.-              |
| 110                              | IE3         | 315 S               | 1LE1503-3AB0-....                | 23500.-              | 1LE1603-3AB0-....                      | 24000.-              |
| 132                              | IE3         | 315 M               | 1LE1503-3AB2-....                | 27700.-              | 1LE1603-3AB2-....                      | 28600.-              |
| 160                              | IE3         | 315 L               | 1LE1503-3AB4-....                | 33600.-              | 1LE1603-3AB4-....                      | 34500.-              |
| 200                              | IE3         | 315 L               | 1LE1503-3AB5-....                | 41700.-              | 1LE1603-3AB5-....                      | 42900.-              |

# SIMOTICS SD 1LE1 Standard Motors

## Orientation

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On  
request

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                                            |
| Series version                         | <b>Cast-iron series 1LE1503/1LE1603<br/>Basic/Performance Line</b>                                                   |
| Cooling                                | Self-ventilated (IC 411)                                                                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                        |
| Insulation                             | Thermal class 155 (F)                                                                                                |
| Utilization                            | Thermal class 130 (B)                                                                                                |
| Number of poles                        | 2, 4, 6, 8                                                                                                           |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                       |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                                                                      |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                                     |
| Rated torque at 50 Hz                  | 1.2 ... 1284 Nm                                                                                                      |
| Efficiency                             | IE3 Premium Efficiency                                                                                               |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                        |
| Price group (PG)                       | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.18                             | IE3         | 71 M                | 1LE1503-0CC2-....                | 648.-                |                                        |                      |
| 0.25                             | IE3         | 71 M                | 1LE1503-0CC3-....                | 767.-                |                                        |                      |
| 0.37                             | IE3         | 80 M                | 1LE1503-0DC2-....                | 781.-                |                                        |                      |
| 0.55                             | IE3         | 80 M                | 1LE1503-0DC3-....                | 900.-                |                                        |                      |
| 0.75                             | IE3         | 90 S                | 1LE1503-0EC0-....                | 1020.-               |                                        |                      |
| 1.1                              | IE3         | 90 L                | 1LE1503-0EC4-....                | 1160.-               |                                        |                      |
| 1.5                              | IE3         | 100 L               | 1LE1503-1AC4-....                | 1150.-               | 1LE1603-1AC4-....                      | 1320.-               |
| 2.2                              | IE3         | 112 M               | 1LE1503-1BC2-....                | 1460.-               | 1LE1603-1BC2-....                      | 1660.-               |
| 3                                | IE3         | 132 S               | 1LE1503-1CC0-....                | 1860.-               | 1LE1603-1CC0-....                      | 2090.-               |
| 4                                | IE3         | 132 M               | 1LE1503-1CC2-....                | 2260.-               | 1LE1603-1CC2-....                      | 2550.-               |
| 5.5                              | IE3         | 132 M               | 1LE1503-1CC3-....                | 2860.-               | 1LE1603-1CC3-....                      | 3220.-               |
| 7.5                              | IE3         | 160 M               | 1LE1503-1DC2-....                | 3600.-               | 1LE1603-1DC2-....                      | 4090.-               |
| 11                               | IE3         | 160 L               | 1LE1503-1DC4-....                | 4990.-               | 1LE1603-1DC4-....                      | 5660.-               |
| 15                               | IE3         | 180 L               | 1LE1503-1EC4-....                | 6040.-               | 1LE1603-1EC4-....                      | 6560.-               |
| 18.5                             | IE3         | 200 L               | 1LE1503-2AC4-....                | 7380.-               | 1LE1603-2AC4-....                      | 8030.-               |
| 22                               | IE3         | 200 L               | 1LE1503-2AC5-....                | 8540.-               | 1LE1603-2AC5-....                      | 9300.-               |
| 30                               | IE3         | 225 M               | 1LE1503-2BC2-....                | 10800.-              | 1LE1603-2BC2-....                      | 11700.-              |
| 37                               | IE3         | 250 M               | 1LE1503-2CC2-....                | 13300.-              | 1LE1603-2CC2-....                      | 14300.-              |
| 45                               | IE3         | 280 S               | 1LE1503-2DC0-....                | 16000.-              | 1LE1603-2DC0-....                      | 16300.-              |
| 55                               | IE3         | 280 M               | 1LE1503-2DC2-....                | 18800.-              | 1LE1603-2DC2-....                      | 19400.-              |
| 75                               | IE3         | 315 S               | 1LE1503-3AC0-....                | 25500.-              | 1LE1603-3AC0-....                      | 26300.-              |
| 90                               | IE3         | 315 M               | 1LE1503-3AC2-....                | 28800.-              | 1LE1603-3AC2-....                      | 29600.-              |
| 110                              | IE3         | 315 L               | 1LE1503-3AC4-....                | 34700.-              | 1LE1603-3AC4-....                      | 35600.-              |
| 132                              | IE3         | 315 L               | 1LE1503-3AC5-....                | 41200.-              | 1LE1603-3AC5-....                      | 42400.-              |
| 160                              | IE3         | 315 L               | 1LE1503-3AC6-....                | 50000.-              | 1LE1603-3AC6-....                      | 51400.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 2.2                              | IE3         | 132 S               |                                  |                      | 1LE1603-1CD0-....                      | 2850.-               |
| 3                                | IE3         | 132 M               |                                  |                      | 1LE1603-1CD2-....                      | 3480.-               |
| 4                                | IE3         | 160 M               |                                  |                      | 1LE1603-1DD2-....                      | 4250.-               |
| 5.5                              | IE3         | 160 M               |                                  |                      | 1LE1603-1DD3-....                      | 5230.-               |
| 7.5                              | IE3         | 160 L               |                                  |                      | 1LE1603-1DD4-....                      | 6320.-               |
| 11                               | IE3         | 180 L               |                                  |                      | 1LE1603-1ED4-....                      | 7250.-               |
| 15                               | IE3         | 200 L               |                                  |                      | 1LE1603-2AD5-....                      | 9580.-               |
| 18.5                             | IE3         | 225 M               |                                  |                      | 1LE1603-2BD0-....                      | 10900.-              |
| 22                               | IE3         | 225 M               |                                  |                      | 1LE1603-2BD2-....                      | 12500.-              |
| 30                               | IE3         | 250 M               |                                  |                      | 1LE1603-2CD2-....                      | 16100.-              |
| 37                               | IE3         | 280 S               |                                  |                      | 1LE1603-2DD0-....                      | 18200.-              |
| 45                               | IE3         | 280 M               |                                  |                      | 1LE1603-2DD2-....                      | 22000.-              |
| 55                               | IE3         | 315 S               |                                  |                      | 1LE1603-3AD0-....                      | 26100.-              |
| 75                               | IE3         | 315 M               |                                  |                      | 1LE1603-3AD2-....                      | 35000.-              |
| 90                               | IE3         | 315 L               |                                  |                      | 1LE1603-3AD4-....                      | 39000.-              |
| 110                              | IE3         | 315 L               |                                  |                      | 1LE1603-3AD5-....                      | 47000.-              |
| 132                              | IE3         | 315 L               |                                  |                      | 1LE1603-3AD6-....                      | 56200.-              |

Standard delivery times in working days:

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On  
request

# SIMOTICS SD 1LE1 Standard Motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron series 1LE1503/1LE1603<br/>Basic/Performance Line<br/>with increased power</b>    |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6                                                                                        |
| Frame sizes (FS)                       | 132 M ... 280 M                                                                                |
| Rated power at 50 Hz                   | 11 ... 110 kW                                                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                              |
| Rated torque at 50 Hz                  | 36 ... 725 Nm                                                                                  |
| Efficiency                             | IE3 Premium Efficiency                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 132 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|-------------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |             |                     |                                  |                      |                                        |                      |
| 11                                  | IE3         | 132 M               | 1LE1503-1CA6-....                | 3360.-               | 1LE1603-1CA6-....                      | 3800.-               |
| 22                                  | IE3         | 160 L               | 1LE1503-1DA6-....                | 5840.-               | 1LE1603-1DA6-....                      | 6360.-               |
| 30                                  | IE3         | 180 L               | 1LE1503-1EA6-....                | 7440.-               | 1LE1603-1EA6-....                      | 8090.-               |
| 45                                  | IE3         | 200 L               | 1LE1503-2AA6-....                | 10800.-              | 1LE1603-2AA6-....                      | 11800.-              |
| 55                                  | IE3         | 225 M               | 1LE1503-2BA6-....                | 12600.-              | 1LE1603-2BA6-....                      | 13600.-              |
| 75                                  | IE3         | 250 M               | 1LE1503-2CA6-....                | 17100.-              | 1LE1603-2CA6-....                      | 17500.-              |
| 110                                 | IE3         | 280 M               | 1LE1503-2DA6-....                | 24000.-              | 1LE1603-2DA6-....                      | 25100.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b>    |             |                     |                                  |                      |                                        |                      |
| 11                                  | IE3         | 132 M               | 1LE1503-1CB6-....                | 3460.-               | 1LE1603-1CB6-....                      | 3890.-               |
| 18.5                                | IE3         | 160 L               | 1LE1503-1DB6-....                | 4960.-               | 1LE1603-1DB6-....                      | 5400.-               |
| 30                                  | IE3         | 180 L               | 1LE1503-1EB6-....                | 7340.-               | 1LE1603-1EB6-....                      | 7980.-               |
| 37                                  | IE3         | 200 L               | 1LE1503-2AB6-....                | 8700.-               | 1LE1603-2AB6-....                      | 9500.-               |
| 55                                  | IE3         | 225 M               | 1LE1503-2BB6-....                | 11900.-              | 1LE1603-2BB6-....                      | 13300.-              |
| 75                                  | IE3         | 250 M               | 1LE1503-2CB6-....                | 16200.-              | 1LE1603-2CB6-....                      | 16600.-              |
| 110                                 | IE3         | 280 M               | 1LE1503-2DB6-....                | 23500.-              | 1LE1603-2DB6-....                      | 24000.-              |
| <b>6-pole: 1000 rpm at 50 Hz</b>    |             |                     |                                  |                      |                                        |                      |
| 18.5                                | IE3         | 180 L               | 1LE1503-1EC6-....                | 7380.-               | 1LE1603-1EC6-....                      | 8030.-               |
| 30                                  | IE3         | 200 L               | 1LE1503-2AC6-....                | 11100.-              | 1LE1603-2AC6-....                      | 12100.-              |
| 37                                  | IE3         | 225 M               | 1LE1503-2BC6-....                | 13300.-              | 1LE1603-2BC6-....                      | 14300.-              |
| 45                                  | IE3         | 250 M               | 1LE1503-2CC6-....                | 16100.-              | 1LE1603-2CC6-....                      | 16500.-              |
| 75                                  | IE3         | 280 M               | 1LE1503-2DC6-....                | 25500.-              | 1LE1603-2DC6-....                      | 26300.-              |

# SIMOTICS SD 1LE1 Standard Motors

## Orientation

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On  
request

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron serie 1LE1583</b><br>(continued on next page)                                     |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6, 8                                                                                     |
| Frame sizes (FS)                       | 100 L ... 315 L                                                                                |
| Rated power at 50 Hz                   | 2.2... 200 kW                                                                                  |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                               |
| Rated torque at 50 Hz                  | 10 ... 1701 Nm                                                                                 |
| Efficiency                             | IE3 Premium Efficiency                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

Range of motors in standard version with Article No., delivery time and base price plus MS  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                      |                      |
| 3                                | IE3         | 100 L               | ▲ 1LE1583-1AA4-....  | 2050.-               |
| 4                                | IE3         | 112 M               | ▲ 1LE1583-1BA2-....  | 2500.-               |
| 5.5                              | IE3         | 132 S               | ▲ 1LE1583-1CA0-....  | 3180.-               |
| 7.5                              | IE3         | 132 S               | ▲ 1LE1583-1CA1-....  | 3690.-               |
| 11                               | IE3         | 160 M               | ▲ 1LE1583-1DA2-....  | 4590.-               |
| 15                               | IE3         | 160 M               | ▲ 1LE1583-1DA3-....  | 5630.-               |
| 18.5                             | IE3         | 160 M               | ▲ 1LE1583-1DA4-....  | 6510.-               |
| 22                               | IE3         | 180 M               | ▲ 1LE1583-1EA2-....  | 7370.-               |
| 30                               | IE3         | 200 L               | ▲ 1LE1583-2AA4-....  | 9420.-               |
| 37                               | IE3         | 200 L               | ▲ 1LE1583-2AA5-....  | 11100.-              |
| 45                               | IE3         | 225 M               | ▲ 1LE1583-2BA2-....  | 13000.-              |
| 55                               | IE3         | 250 M               | ▲ 1LE1583-2CA2-....  | 15200.-              |
| 75                               | IE3         | 280 S               | ▲ 1LE1583-2DA0-....  | 19900.-              |
| 90                               | IE3         | 280 M               | ▲ 1LE1583-2DA2-....  | 23000.-              |
| 110                              | IE3         | 315 S               | ▲ 1LE1583-3AA0-....  | 27700.-              |
| 132                              | IE3         | 315 M               | ▲ 1LE1583-3AA2-....  | 32700.-              |
| 160                              | IE3         | 315 L               | ▲ 1LE1583-3AA4-....  | 39100.-              |
| 200                              | IE3         | 315 L               | ▲ 1LE1583-3AA5-....  | 48800.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                      |                      |
| 2.2                              | IE3         | 100 L               | ▲ 1LE1583-1AB4-....  | 2140.-               |
| 3                                | IE3         | 100 L               | ▲ 1LE1583-1AB5-....  | 2740.-               |
| 3.7                              | IE3         | 112 M               | ▲ 1LE1583-1BB2-....  | 2990.-               |
| 5.5                              | IE3         | 132 S               | ▲ 1LE1583-1CB0-....  | 3470.-               |
| 7.5                              | IE3         | 132 M               | ▲ 1LE1583-1CB2-....  | 4030.-               |
| 11                               | IE3         | 160 M               | ▲ 1LE1583-1DB2-....  | 4970.-               |
| 15                               | IE3         | 160 M               | ▲ 1LE1583-1DB4-....  | 6040.-               |
| 18.5                             | IE3         | 180 M               | ▲ 1LE1583-1EB2-....  | 7040.-               |
| 22                               | IE3         | 180 L               | ▲ 1LE1583-1EB4-....  | 8000.-               |
| 30                               | IE3         | 200 L               | ▲ 1LE1583-2AB5-....  | 10200.-              |
| 37                               | IE3         | 225 S               | ▲ 1LE1583-2BB0-....  | 12200.-              |
| 45                               | IE3         | 225 M               | ▲ 1LE1583-2BB2-....  | 14200.-              |
| 55                               | IE3         | 250 M               | ▲ 1LE1583-2CB2-....  | 16500.-              |
| 75                               | IE3         | 280 S               | ▲ 1LE1583-2DB0-....  | 20500.-              |
| 90                               | IE3         | 280 M               | ▲ 1LE1583-2DB2-....  | 23400.-              |
| 110                              | IE3         | 315 S               | ▲ 1LE1583-3AB0-....  | 27400.-              |
| 132                              | IE3         | 315 M               | ▲ 1LE1583-3AB2-....  | 31800.-              |
| 160                              | IE3         | 315 L               | ▲ 1LE1583-3AB4-....  | 37700.-              |
| 200                              | IE3         | 315 L               | ▲ 1LE1583-3AB5-....  | 45600.-              |

Standard delivery times in working days:

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On  
requestSIMOTICS SD 1LE1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron serie 1LE1583</b>                                                                 |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6, 8                                                                                     |
| Frame sizes (FS)                       | 100 L ... 315 L                                                                                |
| Rated power at 50 Hz                   | 2.2 ... 200 kW                                                                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                               |
| Rated torque at 50 Hz                  | 10 ... 1701 Nm                                                                                 |
| Efficiency                             | IE3 Premium Efficiency                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                      |                      |
| 15                               | IE3         | 180 L               | ▲ 1LE1583-1EC4-....  | 7680.-               |
| 18.5                             | IE3         | 200 L               | ▲ 1LE1583-2AC4-....  | 9280.-               |
| 22                               | IE3         | 200 L               | ▲ 1LE1583-2AC5-....  | 10700.-              |
| 30                               | IE3         | 225 M               | ▲ 1LE1583-2BC2-....  | 14100.-              |
| 37                               | IE3         | 250 M               | ▲ 1LE1583-2CC2-....  | 16500.-              |
| 45                               | IE3         | 280 S               | ▲ 1LE1583-2DC0-....  | 19300.-              |
| 55                               | IE3         | 280 M               | ▲ 1LE1583-2DC2-....  | 22800.-              |
| 75                               | IE3         | 315 S               | ▲ 1LE1583-3AC0-....  | 29100.-              |
| 90                               | IE3         | 315 M               | ▲ 1LE1583-3AC2-....  | 32700.-              |
| 110                              | IE3         | 315 L               | ▲ 1LE1583-3AC4-....  | 38300.-              |
| 132                              | IE3         | 315 L               | ▲ 1LE1583-3AC5-....  | 45500.-              |
| 160                              | IE3         | 315 L               | ▲ 1LE1583-3AC6-....  | 54900.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                      |                      |
| 11                               | IE3         | 180 L               | ▲ 1LE1583-1ED4-....  | 9380.-               |
| 15                               | IE3         | 200 L               | ▲ 1LE1583-2AD5-....  | 11400.-              |
| 18.5                             | IE3         | 225 S               | ▲ 1LE1583-2BD0-....  | 13000.-              |
| 22                               | IE3         | 225 M               | ▲ 1LE1583-2BD2-....  | 14600.-              |
| 30                               | IE3         | 250 M               | ▲ 1LE1583-2CD2-....  | 18400.-              |
| 37                               | IE3         | 280 S               | ▲ 1LE1583-2DD0-....  | 21400.-              |
| 45                               | IE3         | 280 M               | ▲ 1LE1583-2DD2-....  | 24600.-              |
| 55                               | IE3         | 315 S               | ▲ 1LE1583-3AD0-....  | 28400.-              |
| 75                               | IE3         | 315 M               | ▲ 1LE1583-3AD2-....  | 36200.-              |
| 90                               | IE3         | 315 L               | ▲ 1LE1583-3AD4-....  | 41500.-              |
| 110                              | IE3         | 315 L               | ▲ 1LE1583-3AD5-....  | 49300.-              |
| 132                              | IE3         | 315 L               | ▲ 1LE1583-3AD6-....  | 58300.-              |

# SIMOTICS GP 1LE1 Standard Motors – APAC Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

| Category                               | Motors with IE3 Premium Efficiency                                                                            |                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Series version                         | Aluminum series 1LE1043                                                                                       | Aluminum series 1LE1043 with increased power                  |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                                      |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                                         |
| Number of poles                        | 2, 4, 6                                                                                                       | 2, 4                                                          |
| Frame sizes (FS)                       | 80 M ... 200 L                                                                                                | 132 M ... 200 L                                               |
| Rated power at 50 Hz                   | 0.75 ... 37 kW                                                                                                | 4 ... 45 kW                                                   |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                             | 1500 ... 3000 rpm                                             |
| Rated torque at 50 Hz                  | 2.1 ... 178 Nm                                                                                                | 12 ... 198 Nm                                                 |
| Efficiency                             | IE3 Premium Efficiency                                                                                        | IE3 Premium Efficiency                                        |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                                 |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3 |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------|----------------------|------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.75                             | IE3         | 80 M                | 1LE1043-0DA2.-.... | 668.-                |                              |             |                     |                    |                      |
| 1.1                              | IE3         | 80 M                | 1LE1043-0DA3.-.... | 761.-                |                              |             |                     |                    |                      |
| 1.5                              | IE3         | 90 S                | 1LE1043-0EA0.-.... | 883.-                |                              |             |                     |                    |                      |
| 2.2                              | IE3         | 90 L                | 1LE1043-0EA4.-.... | 1130.-               |                              |             |                     |                    |                      |
| 3                                | IE3         | 100 L               | 1LE1043-1AA4.-.... | 1260.-               | 4                            | IE3         | 100 L               | 1LE1043-1AA6.-.... | 1480.-               |
| 4                                | IE3         | 112 M               | 1LE1043-1BA2.-.... | 1480.-               |                              |             |                     |                    |                      |
| 5.5                              | IE3         | 132 S               | 1LE1043-1CA0.-.... | 1870.-               |                              |             |                     |                    |                      |
| 7.5                              | IE3         | 132 S               | 1LE1043-1CA1.-.... | 2380.-               | 11                           | IE3         | 132 L               | 1LE1043-1CA6.-.... | 3270.-               |
| 11                               | IE3         | 160 M               | 1LE1043-1DA2.-.... | 3270.-               | 15                           | IE3         | 132 M               | 1LE1043-1CA7.-.... | 4280.-               |
| 15                               | IE3         | 160 M               | 1LE1043-1DA3.-.... | 4280.-               |                              |             |                     |                    |                      |
| 18.5                             | IE3         | 160 L               | 1LE1043-1DA4.-.... | 5130.-               | 22                           | IE3         | 160 L               | 1LE1043-1DA6.-.... | 5820.-               |
| 22                               | IE3         | 180 M               | 1LE1043-1EA2.-.... | 5710.-               | 30                           | IE3         | 180 M               | 1LE1043-1EA6.-.... | 7410.-               |
| 30                               | IE3         | 200 L               | 1LE1043-2AA4.-.... | 7420.-               |                              |             |                     |                    |                      |
| 37                               | IE3         | 200 L               | 1LE1043-2AA5.-.... | 9310.-               | 45                           | IE3         | 200 L               | 1LE1043-2AA6.-.... | 10800.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.75                             | IE3         | 80 M                | 1LE1043-0DB3.-.... | 726.-                |                              |             |                     |                    |                      |
| 1.1                              | IE3         | 90 S                | 1LE1043-0EB0.-.... | 854.-                |                              |             |                     |                    |                      |
| 1.5                              | IE3         | 90 L                | 1LE1043-0EB4.-.... | 1010.-               |                              |             |                     |                    |                      |
| 2.2                              | IE3         | 100 L               | 1LE1043-1AB4.-.... | 1140.-               |                              |             |                     |                    |                      |
| 3                                | IE3         | 100 L               | 1LE1043-1AB5.-.... | 1330.-               |                              |             |                     |                    |                      |
| 4                                | IE3         | 112 M               | 1LE1043-1BB2.-.... | 1610.-               |                              |             |                     |                    |                      |
| 5.5                              | IE3         | 132 S               | 1LE1043-1CB0.-.... | 2020.-               |                              |             |                     |                    |                      |
| 7.5                              | IE3         | 132 M               | 1LE1043-1CB2.-.... | 2560.-               | 11                           | IE3         | 132 M               | 1LE1043-1CB6.-.... | 3360.-               |
| 11                               | IE3         | 160 M               | 1LE1043-1DB2.-.... | 3360.-               |                              |             |                     |                    |                      |
| 15                               | IE3         | 160 L               | 1LE1043-1DB4.-.... | 4370.-               | 18.5                         | IE3         | 160 L               | 1LE1043-1DB6.-.... | 4950.-               |
| 18.5                             | IE3         | 180 M               | 1LE1043-1EB2.-.... | 4860.-               |                              |             |                     |                    |                      |
| 22                               | IE3         | 180 L               | 1LE1043-1EB4.-.... | 5630.-               | 30                           | IE3         | 180 L               | 1LE1043-1EB6.-.... | 7320.-               |
| 30                               | IE3         | 200 L               | 1LE1043-2AB5.-.... | 7310.-               | 37                           | IE3         | 200 L               | 1LE1043-2AB6.-.... | 8670.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.75                             | IE3         | 90 S                | 1LE1043-0EC0.-.... | 843.-                |                              |             |                     |                    |                      |
| 1.1                              | IE3         | 100 L               | 1LE1043-1AC3.-.... | 1130.-               |                              |             |                     |                    |                      |
| 1.5                              | IE3         | 112 S               | 1LE1043-1BC1.-.... | 1470.-               |                              |             |                     |                    |                      |
| 2.2                              | IE3         | 132 S               | 1LE1043-1CC1.-.... | 1470.-               |                              |             |                     |                    |                      |
| 3                                | IE3         | 132 S               | 1LE1043-1CC0.-.... | 1810.-               |                              |             |                     |                    |                      |
| 4                                | IE3         | 132 M               | 1LE1043-1CC2.-.... | 2210.-               |                              |             |                     |                    |                      |
| 5.5                              | IE3         | 132 M               | 1LE1043-1CC3.-.... | 2780.-               |                              |             |                     |                    |                      |
| 7.5                              | IE3         | 160 M               | 1LE1043-1DC2.-.... | 3540.-               |                              |             |                     |                    |                      |
| 11                               | IE3         | 160 L               | 1LE1043-1DC4.-.... | 4880.-               |                              |             |                     |                    |                      |
| 15                               | IE3         | 180 L               | 1LE1043-1EC4.-.... | 6020.-               |                              |             |                     |                    |                      |
| 18.5                             | IE3         | 200 L               | 1LE1043-2AC4.-.... | 7360.-               |                              |             |                     |                    |                      |
| 22                               | IE3         | 200 L               | 1LE1043-2AC5.-.... | 8520.-               |                              |             |                     |                    |                      |

Standard delivery times in working days:

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On  
requestSIMOTICS SD 1LE1 Standard Motors – APAC Line  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                                            |
| Series version                         | <b>Cast-iron series 1LE1543/1LE1643</b><br><b>Basic/Performance Line</b> (continued on next page)                    |
| Cooling                                | Self-ventilated (IC 411)                                                                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                        |
| Insulation                             | Thermal class 155 (F)                                                                                                |
| Utilization                            | Thermal class 130 (B)                                                                                                |
| Number of poles                        | 2, 4, 6                                                                                                              |
| Frame sizes (FS)                       | 80 M ... 315 L                                                                                                       |
| Rated power at 50 Hz                   | 0.75 ... 200 kW                                                                                                      |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                                    |
| Rated torque at 50 Hz                  | 2.1 ... 1057 Nm                                                                                                      |
| Efficiency                             | IE3 Premium Efficiency                                                                                               |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                        |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.75                             | IE3         | 80 M                | 1LE1543-0DA2-....                | 865.-                |                                        |                      |
| 1.1                              | IE3         | 80 M                | 1LE1543-0DA3-....                | 761.-                |                                        |                      |
| 1.5                              | IE3         | 90 S                | 1LE1543-0EA0-....                | 1120.-               |                                        |                      |
| 2.2                              | IE3         | 90 L                | 1LE1543-0EA4-....                | 1390.-               |                                        |                      |
| 3                                | IE3         | 100 L               | 1LE1543-1AA4-....                | 1370.-               | 1LE1643-1AA4-....                      | 1540.-               |
| 3.7                              | IE3         | 112 M               | 1LE1543-1BA2-....                | 1620.-               | 1LE1643-1BA2-....                      | 1840.-               |
| 5.5                              | IE3         | 132 S               | 1LE1543-1CA0-....                | 2020.-               | 1LE1643-1CA0-....                      | 2280.-               |
| 7.5                              | IE3         | 132 S               | 1LE1543-1CA1-....                | 2580.-               | 1LE1643-1CA1-....                      | 2920.-               |
| 11                               | IE3         | 160 M               | 1LE1543-1DA2-....                | 3560.-               | 1LE1643-1DA2-....                      | 4020.-               |
| 15                               | IE3         | 160 M               | 1LE1543-1DA3-....                | 4640.-               | 1LE1643-1DA3-....                      | 5240.-               |
| 18.5                             | IE3         | 160 L               | 1LE1543-1DA4-....                | 5550.-               | 1LE1643-1DA4-....                      | 6260.-               |
| 22                               | IE3         | 180 M               | 1LE1543-1EA2-....                | 6070.-               | 1LE1643-1EA2-....                      | 6610.-               |
| 30                               | IE3         | 200 L               | 1LE1543-2AA4-....                | 7880.-               | 1LE1643-2AA4-....                      | 8570.-               |
| 37                               | IE3         | 200 L               | 1LE1543-2AA5-....                | 9900.-               | 1LE1643-2AA5-....                      | 10700.-              |
| 45                               | IE3         | 225 M               | 1LE1543-2BA2-....                | 11100.-              | 1LE1643-2BA2-....                      | 12000.-              |
| 55                               | IE3         | 250 M               | 1LE1543-2CA2-....                | 13400.-              | 1LE1643-2CA2-....                      | 14400.-              |
| 75                               | IE3         | 280 S               | 1LE1543-2DA0-....                | 18100.-              | 1LE1643-2DA0-....                      | 18500.-              |
| 90                               | IE3         | 280 M               | 1LE1543-2DA2-....                | 21200.-              | 1LE1643-2DA2-....                      | 22100.-              |
| 110                              | IE3         | 315 S               | 1LE1543-3AA0-....                | 25400.-              | 1LE1643-3AA0-....                      | 26600.-              |
| 132                              | IE3         | 315 M               | 1LE1543-3AA2-....                | 30500.-              | 1LE1643-3AA2-....                      | 31800.-              |
| 160                              | IE3         | 315 L               | 1LE1543-3AA4-....                | 37800.-              | 1LE1643-3AA4-....                      | 39700.-              |
| 200                              | IE3         | 315 L               | 1LE1543-3AA5-....                | 47300.-              | 1LE1643-3AA5-....                      | 49500.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.75                             | IE3         | 80 M                | 1LE1543-0DB3-....                | 934.-                |                                        |                      |
| 1.1                              | IE3         | 90 S                | 1LE1543-0EB0-....                | 854.-                |                                        |                      |
| 1.5                              | IE3         | 90 L                | 1LE1543-0EB4-....                | 1230.-               |                                        |                      |
| 2.2                              | IE3         | 100 L               | 1LE1543-1AB4-....                | 1250.-               | 1LE1643-1AB4-....                      | 1400.-               |
| 3                                | IE3         | 100 L               | 1LE1543-1AB5-....                | 1430.-               | 1LE1643-1AB5-....                      | 1620.-               |
| 3.7                              | IE3         | 112 M               | 1LE1543-1BB2-....                | 1740.-               | 1LE1643-1BB2-....                      | 1980.-               |
| 5.5                              | IE3         | 132 S               | 1LE1543-1CB0-....                | 2180.-               | 1LE1643-1CB0-....                      | 2480.-               |
| 7.5                              | IE3         | 132 M               | 1LE1543-1CB2-....                | 2780.-               | 1LE1643-1CB2-....                      | 3160.-               |
| 11                               | IE3         | 160 M               | 1LE1543-1DB2-....                | 3640.-               | 1LE1643-1DB2-....                      | 4130.-               |
| 15                               | IE3         | 160 L               | 1LE1543-1DB4-....                | 4730.-               | 1LE1643-1DB4-....                      | 5360.-               |
| 18.5                             | IE3         | 180 M               | 1LE1543-1EB2-....                | 5160.-               | 1LE1643-1EB2-....                      | 5590.-               |
| 22                               | IE3         | 180 L               | 1LE1543-1EB4-....                | 6000.-               | 1LE1643-1EB4-....                      | 6530.-               |
| 30                               | IE3         | 200 L               | 1LE1543-2AB5-....                | 7770.-               | 1LE1643-2AB5-....                      | 8450.-               |
| 37                               | IE3         | 225 S               | 1LE1543-2BB0-....                | 8900.-               | 1LE1643-2BB0-....                      | 9730.-               |
| 45                               | IE3         | 225 M               | 1LE1543-2BB2-....                | 10500.-              | 1LE1643-2BB2-....                      | 11400.-              |
| 55                               | IE3         | 250 M               | 1LE1543-2CB2-....                | 12800.-              | 1LE1643-2CB2-....                      | 14000.-              |
| 75                               | IE3         | 280 S               | 1LE1543-2DB0-....                | 16900.-              | 1LE1643-2DB0-....                      | 17300.-              |
| 90                               | IE3         | 280 M               | 1LE1543-2DB2-....                | 19900.-              | 1LE1643-2DB2-....                      | 20400.-              |
| 110                              | IE3         | 315 S               | 1LE1543-3AB0-....                | 24800.-              | 1LE1643-3AB0-....                      | 25400.-              |
| 132                              | IE3         | 315 M               | 1LE1543-3AB2-....                | 29500.-              | 1LE1643-3AB2-....                      | 30300.-              |
| 160                              | IE3         | 315 L               | 1LE1543-3AB4-....                | 35600.-              | 1LE1643-3AB4-....                      | 36500.-              |
| 200                              | IE3         | 315 L               | 1LE1543-3AB5-....                | 44300.-              | 1LE1643-3AB5-....                      | 45500.-              |

# SIMOTICS SD 1LE1 Standard Motors – APAC Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                              |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                                    |
| Series version                         | <b>Cast-iron series 1LE1543/1LE1643 Basic/Performance Line</b>                                               |
| Cooling                                | Self-ventilated (IC 411)                                                                                     |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                |
| Insulation                             | Thermal class 155 (F)                                                                                        |
| Utilization                            | Thermal class 130 (B)                                                                                        |
| Number of poles                        | 2, 4, 6                                                                                                      |
| Frame sizes (FS)                       | 80 M ... 315 L                                                                                               |
| Rated power at 50 Hz                   | 0.75 ... 200 kW                                                                                              |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                            |
| Rated torque at 50 Hz                  | 2.1 ... 1057 Nm                                                                                              |
| Efficiency                             | IE3 Premium Efficiency                                                                                       |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                |
| Price group (PG)                       | Frame size 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base<br/>price</b><br>EUR | Article No.<br><b>Performance Line</b> | <b>Base<br/>price</b><br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|------------------------------|----------------------------------------|------------------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                              |                                        |                              |
| 0.75                             | IE3         | 90 S                | 1LE1543-0EC0-....                | 1080.-                       |                                        |                              |
| 1.1                              | IE3         | 100 L               | 1LE1543-1AC3-....                | O. R.                        | 1LE1643-1AC3-....                      | 1390.-                       |
| 1.5                              | IE3         | 112 M               | 1LE1543-1BC1-....                | 1550.-                       | 1LE1643-1BC1-....                      | 1750.-                       |
| 2.2                              | IE3         | 132 S               | 1LE1543-1CC1-....                | 1530.-                       | 1LE1643-1CC1-....                      | 1740.-                       |
| 3                                | IE3         | 132 S               | 1LE1543-1CC0-....                | 1970.-                       | 1LE1643-1CC0-....                      | 2210.-                       |
| 3.7                              | IE3         | 132 M               | 1LE1543-1CC2-....                | 2410.-                       | 1LE1643-1CC2-....                      | 2710.-                       |
| 5.5                              | IE3         | 132 M               | 1LE1543-1CC3-....                | 3030.-                       | 1LE1643-1CC3-....                      | 3430.-                       |
| 7.5                              | IE3         | 160 M               | 1LE1543-1DC2-....                | 3830.-                       | 1LE1643-1DC2-....                      | 4320.-                       |
| 11                               | IE3         | 160 L               | 1LE1543-1DC4-....                | 5290.-                       | 1LE1643-1DC4-....                      | 6000.-                       |
| 15                               | IE3         | 180 L               | 1LE1543-1EC4-....                | 6400.-                       | 1LE1643-1EC4-....                      | 6960.-                       |
| 18.5                             | IE3         | 200 L               | 1LE1543-2AC4-....                | 7820.-                       | 1LE1643-2AC4-....                      | 8510.-                       |
| 22                               | IE3         | 200 L               | 1LE1543-2AC5-....                | 9060.-                       | 1LE1643-2AC5-....                      | 9840.-                       |
| 37                               | IE3         | 250 M               | 1LE1543-2CC2-....                | 14000.-                      | 1LE1643-2CC2-....                      | 15100.-                      |
| 45                               | IE3         | 280 S               | 1LE1543-2DC0-....                | 16900.-                      | 1LE1643-2DC0-....                      | 17200.-                      |
| 55                               | IE3         | 280 M               | 1LE1543-2DC2-....                | 19900.-                      | 1LE1643-2DC2-....                      | 20400.-                      |
| 75                               | IE3         | 315 S               | 1LE1543-3AC0-....                | 27000.-                      | 1LE1643-3AC0-....                      | 27700.-                      |
| 90                               | IE3         | 315 M               | 1LE1543-3AC2-....                | 30400.-                      | 1LE1643-3AC2-....                      | 31300.-                      |
| 110                              | IE3         | 315 L               | 1LE1543-3AC4-....                | 36600.-                      | 1LE1643-3AC4-....                      | 37700.-                      |
| 132                              | IE3         | 315 L               | 1LE1543-3AC5-....                | 43700.-                      | 1LE1643-3AC5-....                      | 44900.-                      |
| 160                              | IE3         | 315 L               | 1LE1543-3AC6-....                | 52900.-                      | 1LE1643-3AC6-....                      | 54600.-                      |

Standard delivery times in working days:

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On  
request**SIMOTICS SD 1LE1 Standard Motors – APAC Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron series 1LE1543/1LE1643<br/>Basic/Performance Line<br/>with increased power</b>    |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6                                                                                        |
| Frame sizes (FS)                       | 100 L ... 280 M                                                                                |
| Rated power at 50 Hz                   | 4 ... 110 kW                                                                                   |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                              |
| Rated torque at 50 Hz                  | 12 ... 1057 Nm                                                                                 |
| Efficiency                             | IE3 Premium Efficiency                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 280: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base<br/>price</b><br>EUR | Article No.<br><b>Performance Line</b> | <b>Base<br/>price</b><br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|------------------------------|----------------------------------------|------------------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                              |                                        |                              |
| 4                                | IE3         | 100 L               | 1LE1543-1AA6-....                | 1590.-                       | 1LE1643-1AA6-....                      | 1820.-                       |
| 11                               | IE3         | 132 M               | 1LE1543-1CA6-....                | 3560.-                       | 1LE1643-1CA6-....                      | 4020.-                       |
| 15                               | IE3         | 132 M               | 1LE1543-1CA7-....                | 4640.-                       | 1LE1643-1CA7-....                      | 5240.-                       |
| 22                               | IE3         | 160 L               | 1LE1543-1DA6-....                | 6200.-                       | 1LE1643-1DA6-....                      | 6750.-                       |
| 30                               | IE3         | 180 L               | 1LE1543-1EA6-....                | 7880.-                       | 1LE1643-1EA6-....                      | 8570.-                       |
| 45                               | IE3         | 200 L               | 1LE1543-2AA6-....                | 11400.-                      | 1LE1643-2AA6-....                      | 12600.-                      |
| 55                               | IE3         | 225 M               | 1LE1543-2BA6-....                | 13400.-                      | 1LE1643-2BA6-....                      | 14400.-                      |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                              |                                        |                              |
| 11                               | IE3         | 132 M               | 1LE1543-1CB6-....                | 3640.-                       | 1LE1643-1CB6-....                      | 4130.-                       |
| 18.5                             | IE3         | 160 L               | 1LE1543-1DB6-....                | 5250.-                       | 1LE1643-1DB6-....                      | 5720.-                       |
| 30                               | IE3         | 180 L               | 1LE1543-1EB6-....                | 7770.-                       | 1LE1643-1EB6-....                      | 8450.-                       |
| 37                               | IE3         | 200 L               | 1LE1543-2AB6-....                | 9220.-                       | 1LE1643-2AB6-....                      | 10100.-                      |
| 55                               | IE3         | 225 M               | 1LE1543-2BB6-....                | 12800.-                      | 1LE1643-2BB6-....                      | 14000.-                      |
| 75                               | IE3         | 250 M               | 1LE1543-2CB6-....                | 17100.-                      | 1LE1643-2CB6-....                      | 17600.-                      |
| 110                              | IE3         | 280 M               | 1LE1543-2DB6-....                | 24800.-                      | 1LE1643-2DB6-....                      | 25300.-                      |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                              |                                        |                              |
| 18.5                             | IE3         | 180 L               | 1LE1543-1EC6-....                | 7820.-                       | 1LE1643-1EC6-....                      | 8510.-                       |
| 30                               | IE3         | 200 L               | 1LE1543-2AC6-....                | 11800.-                      | 1LE1643-2AC6-....                      | 13100.-                      |
| 37                               | IE3         | 225 M               | 1LE1543-2BC6-....                | 14000.-                      | 1LE1643-2BC6-....                      | 15100.-                      |
| 45                               | IE3         | 250 M               | 1LE1543-2CC6-....                | 17000.-                      | 1LE1643-2CC6-....                      | 17500.-                      |
| 75                               | IE3         | 280 M               | 1LE1543-2DC6-....                | 27100.-                      | 1LE1643-2DC6-....                      | 27800.-                      |

# SIMOTICS GP 1LE1 Standard Motors

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

| Category                               | Motors with IE2 High Efficiency                                                                               |                                                                                              |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Series version                         | Aluminum series 1LE1001<br>(continued on next page)                                                           | Aluminum series 1LE1001<br>with increased power (continued on next page)                     |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                                                                     |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                                                                |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                                                                        |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                                                                        |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6, 8                                                                                   |
| Frame sizes (FS)                       | 63 M ... 200 L                                                                                                | 80 M ... 200 L                                                                               |
| Rated power at 50 Hz                   | 0.12 ... 37 kW                                                                                                | 1.1 ... 45 kW                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 750 ... 3000 rpm                                                                             |
| Rated torque at 50 Hz                  | 0.6 ... 215 Nm                                                                                                | 1.3 ... 294 Nm                                                                               |
| Efficiency                             | IE2 High Efficiency                                                                                           | IE2 High Efficiency                                                                          |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                                                                |
| Price group (PG)                       | Frame sizes 63 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3 |

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efficiencies  
in the European  
Economic Area!

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efficiencies  
in the European  
Economic Area!

Range of motors in standard version with Article No., delivery time and base price plus MS  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |                              |             |                     |                   |                      |
| 0.18                             | IE2         | 63 M                | 1LE1001-0BA2-.... | 419.-                |                              |             |                     |                   |                      |
| 0.25                             | IE2         | 63 M                | 1LE1001-0BA3-.... | 443.-                |                              |             |                     |                   |                      |
| 0.37                             | IE2         | 71 M                | 1LE1001-0CA2-.... | 450.-                |                              |             |                     |                   |                      |
| 0.55                             | IE2         | 71 M                | 1LE1001-0CA3-.... | 506.-                |                              |             |                     |                   |                      |
| 0.75                             | IE2         | 80 M                | 1LE1001-0DA2-.... | 525.-                |                              |             |                     |                   |                      |
| 1.1                              | IE2         | 80 M                | 1LE1001-0DA3-.... | 601.-                | 1.5                          | IE2         | 80 M                | 1LE1001-0DA6-.... | 693.-                |
| 1.5                              | IE2         | 90 S                | 1LE1001-0EA0-.... | 693.-                |                              |             |                     |                   |                      |
| 2.2                              | IE2         | 90 L                | 1LE1001-0EA4-.... | 894.-                | 3                            | IE2         | 90 L                | 1LE1001-0EA6-.... | 1070.-               |
| 3                                | IE2         | 100 L               | 1LE1001-1AA4-.... | 1050.-               | 4                            | IE2         | 100 L               | 1LE1001-1AA6-.... | 1250.-               |
| 4                                | IE2         | 112 M               | 1LE1001-1BA2-.... | 1250.-               | 5.5                          | IE2         | 112 M               | 1LE1001-1BA6-.... | 1560.-               |
| 5.5                              | IE2         | 132 S               | 1LE1001-1CA0-.... | 1560.-               |                              |             |                     |                   |                      |
| 7.5                              | IE2         | 132 S               | 1LE1001-1CA1-.... | 1980.-               |                              |             |                     |                   |                      |
|                                  |             |                     |                   |                      | 11                           | IE2         | 132 M               | 1LE1001-1CA6-.... | 2750.-               |
| 11                               | IE2         | 160 M               | 1LE1001-1DA2-.... | 2750.-               |                              |             |                     |                   |                      |
| 15                               | IE2         | 160 M               | 1LE1001-1DA3-.... | 3590.-               |                              |             |                     |                   |                      |
| 18.5                             | IE2         | 160 L               | 1LE1001-1DA4-.... | 4280.-               | 22                           | IE2         | 160 L               | 1LE1001-1DA6-.... | 5060.-               |
| 22                               | IE2         | 180 M               | 1LE1001-1EA2-.... | 4890.-               | 30                           | IE2         | 180 M               | 1LE1001-1EA6-.... | 6330.-               |
| 30                               | IE2         | 200 L               | 1LE1001-2AA4-.... | 6330.-               | 45                           | IE2         | 200 L               | 1LE1001-2AA6-.... | 9490.-               |
| 37                               | IE2         | 200 L               | 1LE1001-2AA5-.... | 7960.-               |                              |             |                     |                   |                      |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |                              |             |                     |                   |                      |
| 0.12                             | IE2         | 63 M                | 1LE1001-0BB2-.... | 426.-                |                              |             |                     |                   |                      |
| 0.18                             | IE2         | 63 M                | 1LE1001-0BB3-.... | 461.-                |                              |             |                     |                   |                      |
| 0.25                             | IE2         | 71 M                | 1LE1001-0CB2-.... | 458.-                |                              |             |                     |                   |                      |
| 0.37                             | IE2         | 71 M                | 1LE1001-0CB3-.... | 513.-                |                              |             |                     |                   |                      |
| 0.55                             | IE2         | 80 M                | 1LE1001-0DB2-.... | 522.-                |                              |             |                     |                   |                      |
| 0.75                             | IE2         | 80 M                | 1LE1001-0DB3-.... | 568.-                | 1.1                          | IE2         | 80 M                | 1LE1001-0DB6-.... | 672.-                |
| 1.1                              | IE2         | 90 S                | 1LE1001-0EB0-.... | 672.-                |                              |             |                     |                   |                      |
| 1.5                              | IE2         | 90 L                | 1LE1001-0EB4-.... | 798.-                | 2.2                          | IE2         | 90 L                | 1LE1001-0EB6-.... | 978.-                |
| 2.2                              | IE2         | 100 L               | 1LE1001-1AB4-.... | 959.-                | 4                            | IE2         | 100 L               | 1LE1001-1AB6-.... | 1360.-               |
| 3                                | IE2         | 100 L               | 1LE1001-1AB5-.... | 1100.-               |                              |             |                     |                   |                      |
| 4                                | IE2         | 112 M               | 1LE1001-1BB2-.... | 1360.-               | 5.5                          | IE2         | 112 M               | 1LE1001-1BB6-.... | 1680.-               |
| 5.5                              | IE2         | 132 S               | 1LE1001-1CB0-.... | 1680.-               |                              |             |                     |                   |                      |
| 7.5                              | IE2         | 132 M               | 1LE1001-1CB2-.... | 2140.-               | 11                           | IE2         | 132 M               | 1LE1001-1CB6-.... | 2820.-               |
| 11                               | IE2         | 160 M               | 1LE1001-1DB2-.... | 2820.-               |                              |             |                     |                   |                      |
| 15                               | IE2         | 160 L               | 1LE1001-1DB4-.... | 3630.-               | 18.5                         | IE2         | 160 L               | 1LE1001-1DB6-.... | 4290.-               |
| 18.5                             | IE2         | 180 M               | 1LE1001-1EB2-.... | 4140.-               |                              |             |                     |                   |                      |
| 22                               | IE2         | 180 L               | 1LE1001-1EB4-.... | 4820.-               | 30                           | IE2         | 180 L               | 1LE1001-1EB6-.... | 6240.-               |
| 30                               | IE2         | 200 L               | 1LE1001-2AB5-.... | 6240.-               | 37                           | IE2         | 200 L               | 1LE1001-2AB6-.... | 7580.-               |

Standard delivery times in working days:

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On  
requestSIMOTICS GP 1LE1 Standard Motors  
Orientation

## Overview of selection and ordering data with base prices and standard delivery times

## Overview

| Category                               | Motors with IE2 High Efficiency                                                                               |                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Series version                         | Aluminum series 1LE1001                                                                                       | Aluminum series 1LE1001 with increased power                  |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                                      |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6, 8                                                    |
| Frame sizes (FS)                       | 63 M ... 200 L                                                                                                | 63 M ... 200 L                                                |
| Rated power at 50 Hz                   | 0.12 ... 37 kW                                                                                                | 0.29 ... 45 kW                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 750 ... 3000 rpm                                              |
| Rated torque at 50 Hz                  | 0.6 ... 215 Nm                                                                                                | 1.3 ... 294 Nm                                                |
| Efficiency                             | IE2 High Efficiency                                                                                           | IE2 High Efficiency                                           |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                                 |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3 |

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efficiencies  
in the European  
Economic Area!Please note  
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efficiencies  
in the European  
Economic Area!

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------|----------------------|------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.37                             | IE2         | 80 M                | 1LE1001-0DC2.-.... | 504.-                |                              |             |                     |                    |                      |
| 0.55                             | IE2         | 80 M                | 1LE1001-0DC3.-.... | 583.-                |                              |             |                     |                    |                      |
| 0.75                             | IE2         | 90 S                | 1LE1001-0EC0.-.... | 660.-                |                              |             |                     |                    |                      |
| 1.1                              | IE2         | 90 L                | 1LE1001-0EC4.-.... | 818.-                |                              |             |                     |                    |                      |
| 1.5                              | IE2         | 100 L               | 1LE1001-1AC4.-.... | 948.-                | 2.2                          | IE2         | 100 L               | 1LE1001-1AC6.-.... | 1190.-               |
| 2.2                              | IE2         | 112 M               | 1LE1001-1BC2.-.... | 1190.-               | 3                            | IE2         | 112 M               | 1LE1001-1BC6.-.... | 1510.-               |
| 3                                | IE2         | 132 S               | 1LE1001-1CC0.-.... | 1510.-               |                              |             |                     |                    |                      |
| 4                                | IE2         | 132 M               | 1LE1001-1CC2.-.... | 1860.-               | 7.5                          | IE2         | 132 M               | 1LE1001-1CC6.-.... | 2960.-               |
| 5.5                              | IE2         | 132 M               | 1LE1001-1CC3.-.... | 2350.-               |                              |             |                     |                    |                      |
| 7.5                              | IE2         | 160 M               | 1LE1001-1DC2.-.... | 2960.-               |                              |             |                     |                    |                      |
| 11                               | IE2         | 160 L               | 1LE1001-1DC4.-.... | 4090.-               | 15                           | IE2         | 160 L               | 1LE1001-1DC6.-.... | 5280.-               |
| 15                               | IE2         | 180 L               | 1LE1001-1EC4.-.... | 5140.-               | 18.5                         | IE2         | 180 L               | 1LE1001-1EC6.-.... | 6280.-               |
| 18.5                             | IE2         | 200 L               | 1LE1001-2AC4.-.... | 6280.-               | 30                           | IE2         | 200 L               | 1LE1001-2AC6.-.... | 9760.-               |
| 22                               | IE2         | 200 L               | 1LE1001-2AC5.-.... | 7290.-               |                              |             |                     |                    |                      |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.75                             | IE2         | 100 L               | 1LE1001-1AD4.-.... | 1060.-               |                              |             |                     |                    |                      |
| 1.1                              | IE2         | 100 L               | 1LE1001-1AD5.-.... | 1350.-               |                              |             |                     |                    |                      |
| 1.5                              | IE2         | 112 M               | 1LE1001-1BD2.-.... | 1600.-               |                              |             |                     |                    |                      |
| 2.2                              | IE2         | 132 S               | 1LE1001-1CD0.-.... | 2060.-               |                              |             |                     |                    |                      |
| 3                                | IE2         | 132 M               | 1LE1001-1CD2.-.... | 2510.-               |                              |             |                     |                    |                      |
| 4                                | IE2         | 160 M               | 1LE1001-1DD2.-.... | 3080.-               |                              |             |                     |                    |                      |
| 5.5                              | IE2         | 160 M               | 1LE1001-1DD3.-.... | 3780.-               |                              |             |                     |                    |                      |
| 7.5                              | IE2         | 160 L               | 1LE1001-1DD4.-.... | 4560.-               |                              |             |                     |                    |                      |
| 11                               | -           | 180 L               | 1LE1001-1ED4.-.... | 5490.-               | 15                           | -           | 180 L               | 1LE1001-1ED6.-.... | 7230.-               |
| 15                               | -           | 200 L               | 1LE1001-2AD5.-.... | 7230.-               | 18.5                         | -           | 200 L               | 1LE1001-2AD6.-.... | 8780.-               |

# SIMOTICS PG 1PC1 Standard Motors

## Orientation

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On  
request

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                      |
|----------------------------------------|----------------------------------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>                               |
| Series version                         | <b>Aluminum series 1PC1001<sup>1)</sup></b> (continued on next page) |
| Cooling                                | Self-cooled without external fan (IC 410)                            |
| Degree of protection                   | IP55, optionally IP56 or IP65                                        |
| Insulation                             | Thermal class 155 (F)                                                |
| Utilization                            | Thermal class 130 (B)                                                |
| Number of poles                        | 2, 4, 6, 8                                                           |
| Frame sizes (FS)                       | 100 L ... 160 L                                                      |
| Rated power at 50 Hz                   | 0.37 ... 9 kW                                                        |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                     |
| Rated torque at 50 Hz                  | On request <sup>1)</sup>                                             |
| Efficiency                             | On request <sup>1)</sup>                                             |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                        |
| Price group (PG)                       | 3F2                                                                  |

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#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 1.4                              | IE2         | 100 L               | 1PC1001-1AA4-.... | 1340.-               |
| 1.6                              | IE2         | 112 M               | 1PC1001-1BA2-.... | 1530.-               |
| 3.1                              | IE2         | 132 S               | 1PC1001-1CA0-.... | 1860.-               |
| 4.3                              | IE2         | 132 S               | 1PC1001-1CA1-.... | 2280.-               |
| 6.3                              | IE2         | 160 M               | 1PC1001-1DA2-.... | 3060.-               |
| 6.5                              | IE2         | 160 M               | 1PC1001-1DA3-.... | 3920.-               |
| 9                                | IE2         | 160 L               | 1PC1001-1DA4-.... | 4620.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 1.1                              | IE2         | 100 L               | 1PC1001-1AB4-.... | 1240.-               |
| 1.5                              | IE2         | 100 L               | 1PC1001-1AB5-.... | 1380.-               |
| 2                                | IE2         | 112 M               | 1PC1001-1BB2-.... | 1640.-               |
| 2.6                              | IE2         | 132 S               | 1PC1001-1CB0-.... | 1980.-               |
| 4                                | IE2         | 132 M               | 1PC1001-1CB2-.... | 2450.-               |
| 6                                | IE2         | 160 M               | 1PC1001-1DB2-.... | 3120.-               |
| 6.2                              | IE2         | 160 L               | 1PC1001-1DB4-.... | 3980.-               |

<sup>1)</sup> The rated power and weights may slightly change after they have been checked. Further electrical data can be calculated and supplied on receipt of order.

Standard delivery times in working days:

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On  
requestSIMOTICS GP 1PC1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>      |
| Series version                         | <b>Aluminum series 1PC1001<sup>1)</sup></b> |
| Cooling                                | Self-cooled without external fan (IC 410)   |
| Degree of protection                   | IP55, optionally IP56 or IP65               |
| Insulation                             | Thermal class 155 (F)                       |
| Utilization                            | Thermal class 130 (B)                       |
| Number of poles                        | 2, 4, 6, 8                                  |
| Frame sizes (FS)                       | 100 L ... 160 L                             |
| Rated power at 50 Hz                   | 0.37 ... 9 kW                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                            |
| Rated torque at 50 Hz                  | On request <sup>1)</sup>                    |
| Efficiency                             | On request <sup>1)</sup>                    |
| Metal factor for metal surcharges (MS) | N - W - - - -                               |
| Price group (PG)                       | 3F2                                         |



Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 0.85                             | O. R.       | 100 L               | 1PC1001-1AC4-.... | 1210.-               |
| 1.2                              | O. R.       | 112 M               | 1PC1001-1BC2-.... | 1480.-               |
| 1.5                              | O. R.       | 132 S               | 1PC1001-1CC0-.... | 1810.-               |
| 2.5                              | O. R.       | 132 M               | 1PC1001-1CC2-.... | 2150.-               |
| 2.7                              | O. R.       | 132 M               | 1PC1001-1CC3-.... | 2640.-               |
| 5                                | O. R.       | 160 M               | 1PC1001-1DC2-.... | 3260.-               |
| 6.5                              | O. R.       | 160 L               | 1PC1001-1DC4-.... | 4430.-               |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                   |                      |
| 0.37                             | -           | 100 L               | 1PC1001-1AD4-.... | 1340.-               |
| 0.55                             | -           | 100 L               | 1PC1001-1AD5-.... | 1630.-               |
| 0.75                             | -           | 112 M               | 1PC1001-1BD2-.... | 1880.-               |
| 1.1                              | -           | 132 S               | 1PC1001-1CD0-.... | 2360.-               |
| 1.5                              | -           | 132 M               | 1PC1001-1CD2-.... | 2820.-               |
| 2.4                              | -           | 160 M               | 1PC1001-1DD2-.... | 3400.-               |
| 3.3                              | -           | 160 M               | 1PC1001-1DD3-.... | 4120.-               |
| 4.6                              | -           | 160 L               | 1PC1001-1DD4-.... | 4910.-               |

<sup>1)</sup> The rated power and weights may slightly change after they have been checked. Further electrical data can be calculated and supplied on receipt of order.

# SIMOTICS SD 1LE1 Standard Motors

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>                                                                               |
| Series version                         | <b>Cast-iron series 1LE1501/1LE1601</b>                                                                              |
|                                        | <b>Basic/Performance Line (continued on next page)</b>                                                               |
| Cooling                                | Self-ventilated (IC 411)                                                                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                        |
| Insulation                             | Thermal class 155 (F)                                                                                                |
| Utilization                            | Thermal class 130 (B)                                                                                                |
| Number of poles                        | 2, 4, 6, 8                                                                                                           |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                       |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                                                                      |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                                     |
| Rated torque at 50 Hz                  | 1.3 ... 1703 Nm                                                                                                      |
| Efficiency                             | IE2 High Efficiency                                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                        |
| Price group (PG)                       | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |



**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.37                             | IE2         | 71 M                | 1LE1501-0CA2-....                | 536.-                |                                        |                      |
| 0.55                             | IE2         | 71 M                | 1LE1501-0CA3-....                | 630.-                |                                        |                      |
| 0.75                             | IE2         | 80 M                | 1LE1501-0DA2-....                | 648.-                |                                        |                      |
| 1.1                              | IE2         | 80 M                | 1LE1501-0DA3-....                | 741.-                |                                        |                      |
| 1.5                              | IE2         | 90 S                | 1LE1501-0EA0-....                | 856.-                |                                        |                      |
| 2.2                              | IE2         | 90 L                | 1LE1501-0EA4-....                | 1050.-               |                                        |                      |
| 3                                | IE2         | 100 L               | 1LE1501-1AA4-....                | 1140.-               | 1LE1601-1AA4-....                      | 1260.-               |
| 4                                | IE2         | 112 M               | 1LE1501-1BA2-....                | 1360.-               | 1LE1601-1BA2-....                      | 1480.-               |
| 5.5                              | IE2         | 132 S               | 1LE1501-1CA0-....                | 1690.-               | 1LE1601-1CA0-....                      | 1880.-               |
| 7.5                              | IE2         | 132 S               | 1LE1501-1CA1-....                | 2160.-               | 1LE1601-1CA1-....                      | 2380.-               |
| 11                               | IE2         | 160 M               | 1LE1501-1DA2-....                | 2990.-               | 1LE1601-1DA2-....                      | 3450.-               |
| 15                               | IE2         | 160 M               | 1LE1501-1DA3-....                | 3890.-               | 1LE1601-1DA3-....                      | 4480.-               |
| 18.5                             | IE2         | 160 L               | 1LE1501-1DA4-....                | 4640.-               | 1LE1601-1DA4-....                      | 5340.-               |
| 22                               | IE2         | 180 M               | 1LE1501-1EA2-....                | 5200.-               | 1LE1601-1EA2-....                      | 5720.-               |
| 30                               | IE2         | 200 L               | 1LE1501-2AA4-....                | 6740.-               | 1LE1601-2AA4-....                      | 7410.-               |
| 37                               | IE2         | 200 L               | 1LE1501-2AA5-....                | 8460.-               | 1LE1601-2AA5-....                      | 9310.-               |
| 45                               | IE2         | 225 M               | 1LE1501-2BA2-....                | 9760.-               | 1LE1601-2BA2-....                      | 10700.-              |
| 55                               | IE2         | 250 M               | 1LE1501-2CA2-....                | 11500.-              | 1LE1601-2CA2-....                      | 12900.-              |
| 75                               | IE2         | 280 S               | 1LE1501-2DA0-....                | 15900.-              | 1LE1601-2DA0-....                      | 16300.-              |
| 90                               | IE2         | 280 M               | 1LE1501-2DA2-....                | 18800.-              | 1LE1601-2DA2-....                      | 19700.-              |
| 110                              | IE2         | 315 S               | 1LE1501-3AA0-....                | 22400.-              | 1LE1601-3AA0-....                      | 23800.-              |
| 132                              | IE2         | 315 M               | 1LE1501-3AA2-....                | 27000.-              | 1LE1601-3AA2-....                      | 28300.-              |
| 160                              | IE2         | 315 L               | 1LE1501-3AA4-....                | 33600.-              | 1LE1601-3AA4-....                      | 35200.-              |
| 200                              | IE2         | 315 L               | 1LE1501-3AA5-....                | 41800.-              | 1LE1601-3AA5-....                      | 44000.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 0.25                             | IE2         | 71 M                | 1LE1501-0CB2-....                | 532.-                |                                        |                      |
| 0.37                             | IE2         | 71 M                | 1LE1501-0CB3-....                | 597.-                |                                        |                      |
| 0.55                             | IE2         | 80 M                | 1LE1501-0DB2-....                | 644.-                |                                        |                      |
| 0.75                             | IE2         | 80 M                | 1LE1501-0DB3-....                | 703.-                |                                        |                      |
| 1.1                              | IE2         | 90 S                | 1LE1501-0EB0-....                | 830.-                |                                        |                      |
| 1.5                              | IE2         | 90 L                | 1LE1501-0EB4-....                | 935.-                |                                        |                      |
| 2.2                              | IE2         | 100 L               | 1LE1501-1AB4-....                | 1040.-               | 1LE1601-1AB4-....                      | 1140.-               |
| 3                                | IE2         | 100 L               | 1LE1501-1AB5-....                | 1190.-               | 1LE1601-1AB5-....                      | 1330.-               |
| 4                                | IE2         | 112 M               | 1LE1501-1BB2-....                | 1460.-               | 1LE1601-1BB2-....                      | 1620.-               |
| 5.5                              | IE2         | 132 S               | 1LE1501-1CB0-....                | 1840.-               | 1LE1601-1CB0-....                      | 2010.-               |
| 7.5                              | IE2         | 132 M               | 1LE1501-1CB2-....                | 2340.-               | 1LE1601-1CB2-....                      | 2550.-               |
| 11                               | IE2         | 160 M               | 1LE1501-1DB2-....                | 3050.-               | 1LE1601-1DB2-....                      | 3510.-               |
| 15                               | IE2         | 160 L               | 1LE1501-1DB4-....                | 3950.-               | 1LE1601-1DB4-....                      | 4560.-               |
| 18.5                             | IE2         | 180 M               | 1LE1501-1EB2-....                | 4410.-               | 1LE1601-1EB2-....                      | 4850.-               |
| 22                               | IE2         | 180 L               | 1LE1501-1EB4-....                | 5130.-               | 1LE1601-1EB4-....                      | 5630.-               |
| 30                               | IE2         | 200 L               | 1LE1501-2AB5-....                | 6640.-               | 1LE1601-2AB5-....                      | 7310.-               |
| 37                               | IE2         | 225 S               | 1LE1501-2BB0-....                | 7790.-               | 1LE1601-2BB0-....                      | 8570.-               |
| 45                               | IE2         | 225 M               | 1LE1501-2BB2-....                | 9180.-               | 1LE1601-2BB2-....                      | 10100.-              |
| 55                               | IE2         | 250 M               | 1LE1501-2CB2-....                | 11100.-              | 1LE1601-2CB2-....                      | 12100.-              |
| 75                               | IE2         | 280 S               | 1LE1501-2DB0-....                | 14900.-              | 1LE1601-2DB0-....                      | 15400.-              |
| 90                               | IE2         | 280 M               | 1LE1501-2DB2-....                | 17500.-              | 1LE1601-2DB2-....                      | 18200.-              |
| 110                              | IE2         | 315 S               | 1LE1501-3AB0-....                | 21900.-              | 1LE1601-3AB0-....                      | 22500.-              |
| 132                              | IE2         | 315 M               | 1LE1501-3AB2-....                | 26000.-              | 1LE1601-3AB2-....                      | 26800.-              |
| 160                              | IE2         | 315 L               | 1LE1501-3AB4-....                | 31300.-              | 1LE1601-3AB4-....                      | 32300.-              |
| 200                              | IE2         | 315 L               | 1LE1501-3AB5-....                | 39200.-              | 1LE1601-3AB5-....                      | 40400.-              |

Standard delivery times in working days:

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On  
requestSIMOTICS SD 1LE1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>                                                                               |
| Series version                         | <b>Cast-iron series 1LE1501/1LE1601<br/>Basic/Performance Line</b>                                                   |
| Cooling                                | Self-ventilated (IC 411)                                                                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                        |
| Insulation                             | Thermal class 155 (F)                                                                                                |
| Utilization                            | Thermal class 130 (B)                                                                                                |
| Number of poles                        | 2, 4, 6, 8                                                                                                           |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                       |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                                                                      |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                                     |
| Rated torque at 50 Hz                  | 1.3 ... 1703 Nm                                                                                                      |
| Efficiency                             | IE2 High Efficiency                                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                        |
| Price group (PG)                       | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |

Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Basic Line | Base<br>price<br>EUR | Article No.<br>Performance Line | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|---------------------------|----------------------|---------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                           |                      |                                 |                      |
| 0.18                             | IE2         | 71 M                | 1LE1501-0CC2-....         | 516.-                |                                 |                      |
| 0.25                             | IE2         | 71 M                | 1LE1501-0CC3-....         | 614.-                |                                 |                      |
| 0.37                             | IE2         | 80 M                | 1LE1501-0DC2-....         | 621.-                |                                 |                      |
| 0.55                             | IE2         | 80 M                | 1LE1501-0DC3-....         | 721.-                |                                 |                      |
| 0.75                             | IE2         | 90 S                | 1LE1501-0EC0-....         | 815.-                |                                 |                      |
| 1.1                              | IE2         | 90 L                | 1LE1501-0EC4-....         | 950.-                |                                 |                      |
| 1.5                              | IE2         | 100 L               | 1LE1501-1AC4-....         | 1030.-               | 1LE1601-1AC4-....               | 1130.-               |
| 2.2                              | IE2         | 112 M               | 1LE1501-1BC2-....         | 1310.-               | 1LE1601-1BC2-....               | 1420.-               |
| 3                                | IE2         | 132 S               | 1LE1501-1CC0-....         | 1640.-               | 1LE1601-1CC0-....               | 1810.-               |
| 4                                | IE2         | 132 M               | 1LE1501-1CC2-....         | 2010.-               | 1LE1601-1CC2-....               | 2210.-               |
| 5.5                              | IE2         | 132 M               | 1LE1501-1CC3-....         | 2530.-               | 1LE1601-1CC3-....               | 2780.-               |
| 7.5                              | IE2         | 160 M               | 1LE1501-1DC2-....         | 3200.-               | 1LE1601-1DC2-....               | 3680.-               |
| 11                               | IE2         | 160 L               | 1LE1501-1DC4-....         | 4440.-               | 1LE1601-1DC4-....               | 5110.-               |
| 15                               | IE2         | 180 L               | 1LE1501-1EC4-....         | 5470.-               | 1LE1601-1EC4-....               | 6010.-               |
| 18.5                             | IE2         | 200 L               | 1LE1501-2AC4-....         | 6680.-               | 1LE1601-2AC4-....               | 7360.-               |
| 22                               | IE2         | 200 L               | 1LE1501-2AC5-....         | 7740.-               | 1LE1601-2AC5-....               | 8510.-               |
| 30                               | IE2         | 225 M               | 1LE1501-2BC2-....         | 10000.-              | 1LE1601-2BC2-....               | 11000.-              |
| 37                               | IE2         | 250 M               | 1LE1501-2CC2-....         | 12100.-              | 1LE1601-2CC2-....               | 13500.-              |
| 45                               | IE2         | 280 S               | 1LE1501-2DC0-....         | 14800.-              | 1LE1601-2DC0-....               | 15300.-              |
| 55                               | IE2         | 280 M               | 1LE1501-2DC2-....         | 17500.-              | 1LE1601-2DC2-....               | 18200.-              |
| 75                               | IE2         | 315 S               | 1LE1501-3AC0-....         | 24000.-              | 1LE1601-3AC0-....               | 24600.-              |
| 90                               | IE2         | 315 M               | 1LE1501-3AC2-....         | 27000.-              | 1LE1601-3AC2-....               | 27700.-              |
| 110                              | IE2         | 315 L               | 1LE1501-3AC4-....         | 32400.-              | 1LE1601-3AC4-....               | 33500.-              |
| 132                              | IE2         | 315 L               | 1LE1501-3AC5-....         | 38700.-              | 1LE1601-3AC5-....               | 39900.-              |
| 160                              | IE2         | 315 L               | 1LE1501-3AC6-....         | 46800.-              | 1LE1601-3AC6-....               | 48300.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                           |                      |                                 |                      |
| 0.09                             | -           | 71 M                | 1LE1501-0CD2-....         | 601.-                |                                 |                      |
| 0.12                             | IE2         | 71 M                | 1LE1501-0CD3-....         | 669.-                |                                 |                      |
| 0.18                             | IE2         | 80 M                | 1LE1501-0DD2-....         | 704.-                |                                 |                      |
| 0.25                             | IE2         | 80 M                | 1LE1501-0DD3-....         | 865.-                |                                 |                      |
| 0.37                             | IE2         | 90 S                | 1LE1501-0ED0-....         | 1010.-               |                                 |                      |
| 0.55                             | IE2         | 90 L                | 1LE1501-0ED4-....         | 1160.-               |                                 |                      |
| 0.75                             | IE2         | 100 L               | 1LE1501-1AD4-....         | 1150.-               | 1LE1601-1AD4-....               | 1280.-               |
| 1.1                              | IE2         | 100 L               | 1LE1501-1AD5-....         | 1440.-               | 1LE1601-1AD5-....               | 1600.-               |
| 1.5                              | IE2         | 112 M               | 1LE1501-1BD2-....         | 1710.-               | 1LE1601-1BD2-....               | 1900.-               |
| 2.2                              | IE2         | 132 S               | 1LE1501-1CD0-....         | 2220.-               | 1LE1601-1CD0-....               | 2470.-               |
| 3                                | IE2         | 132 M               | 1LE1501-1CD2-....         | 2720.-               | 1LE1601-1CD2-....               | 3010.-               |
| 4                                | IE2         | 160 M               | 1LE1501-1DD2-....         | 3340.-               | 1LE1601-1DD2-....               | 3840.-               |
| 5.5                              | IE2         | 160 M               | 1LE1501-1DD3-....         | 4110.-               | 1LE1601-1DD3-....               | 4710.-               |
| 7.5                              | IE2         | 160 L               | 1LE1501-1DD4-....         | 4950.-               | 1LE1601-1DD4-....               | 5700.-               |
| 11                               | -           | 180 L               | 1LE1501-1ED4-....         | 5830.-               | 1LE1601-1ED4-....               | 6430.-               |
| 15                               | -           | 200 L               | 1LE1501-2AD5-....         | 7700.-               | 1LE1601-2AD5-....               | 8480.-               |
| 18.5                             | -           | 225 S               | 1LE1501-2BD0-....         | 9040.-               | 1LE1601-2BD0-....               | 9930.-               |
| 22                               | -           | 225 M               | 1LE1501-2BD2-....         | 10300.-              | 1LE1601-2BD2-....               | 11300.-              |
| 30                               | -           | 250 M               | 1LE1501-2CD2-....         | 13400.-              | 1LE1601-2CD2-....               | 14700.-              |
| 37                               | -           | 280 S               | 1LE1501-2DD0-....         | 16000.-              | 1LE1601-2DD0-....               | 16500.-              |
| 45                               | -           | 280 M               | 1LE1501-2DD2-....         | 19500.-              | 1LE1601-2DD2-....               | 20100.-              |
| 55                               | -           | 315 S               | 1LE1501-3AD0-....         | 23100.-              | 1LE1601-3AD0-....               | 23900.-              |
| 75                               | -           | 315 M               | 1LE1501-3AD2-....         | 30900.-              | 1LE1601-3AD2-....               | 31900.-              |
| 90                               | -           | 315 L               | 1LE1501-3AD4-....         | 34500.-              | 1LE1601-3AD4-....               | 35500.-              |
| 110                              | -           | 315 L               | 1LE1501-3AD5-....         | 41500.-              | 1LE1601-3AD5-....               | 42800.-              |
| 132                              | -           | 315 L               | 1LE1501-3AD6-....         | 49600.-              | 1LE1601-3AD6-....               | 51200.-              |

# SIMOTICS SD 1LE1 Standard Motors

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>                                                         |
| Series version                         | <b>Cast-iron series 1LE1501/1LE1601<br/>Basic/Performance Line<br/>with increased power</b>    |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6, 8                                                                                     |
| Frame sizes (FS)                       | 100 L ... 280 M                                                                                |
| Rated power at 50 Hz                   | 2.2 ... 110 kW                                                                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                               |
| Rated torque at 50 Hz                  | 13 ... 726 Nm                                                                                  |
| Efficiency                             | IE2 High Efficiency                                                                            |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |



### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 4                                | IE2         | 100 L               | 1LE1501-1AA6-....                | 1360.-               | 1LE1601-1AA6-....                      | 1480.-               |
| 5.5                              | IE2         | 112 M               | 1LE1501-1BA6-....                | 1690.-               | 1LE1601-1BA6-....                      | 1880.-               |
| 11                               | IE2         | 132 M               | 1LE1501-1CA6-....                | 2990.-               | 1LE1601-1CA6-....                      | 3270.-               |
| 22                               | IE2         | 160 L               | 1LE1501-1DA6-....                | 5490.-               | 1LE1601-1DA6-....                      | 6290.-               |
| 30                               | IE2         | 180 M               | 1LE1501-1EA6-....                | 6870.-               | 1LE1601-1EA6-....                      | 7560.-               |
| 45                               | IE2         | 200 L               | 1LE1501-2AA6-....                | 10300.-              | 1LE1601-2AA6-....                      | 11300.-              |
| 55                               | IE2         | 225 M               | 1LE1501-2BA6-....                | 11700.-              | 1LE1601-2BA6-....                      | 13100.-              |
| 75                               | IE2         | 250 M               | 1LE1501-2CA6-....                | 16200.-              | 1LE1601-2CA6-....                      | 16600.-              |
| 110                              | IE2         | 280 M               | 1LE1501-2DA6-....                | 23000.-              | 1LE1601-2DA6-....                      | 24200.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 4                                | IE2         | 100 L               | 1LE1501-1AB6-....                | 1460.-               | 1LE1601-1AB6-....                      | 1620.-               |
| 5.5                              | IE2         | 112 M               | 1LE1501-1BB6-....                | 1840.-               | 1LE1601-1BB6-....                      | 2010.-               |
| 11                               | IE2         | 132 M               | 1LE1501-1CB6-....                | 3050.-               | 1LE1601-1CB6-....                      | 3360.-               |
| 18.5                             | IE2         | 160 L               | 1LE1501-1DB6-....                | 4650.-               | 1LE1601-1DB6-....                      | 5370.-               |
| 30                               | IE2         | 180 M               | 1LE1501-1EB6-....                | 6770.-               | 1LE1601-1EB6-....                      | 7450.-               |
| 37                               | IE2         | 200 L               | 1LE1501-2AB6-....                | 8220.-               | 1LE1601-2AB6-....                      | 9060.-               |
| 55                               | IE2         | 225 M               | 1LE1501-2BB6-....                | 11300.-              | 1LE1601-2BB6-....                      | 12500.-              |
| 75                               | IE2         | 250 M               | 1LE1501-2CB6-....                | 15300.-              | 1LE1601-2CB6-....                      | 15800.-              |
| 110                              | IE2         | 280 M               | 1LE1501-2DB6-....                | 22300.-              | 1LE1601-2DB6-....                      | 23100.-              |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 2.2                              | IE2         | 100 L               | 1LE1501-1AC6-....                | 1310.-               | 1LE1601-1AC6-....                      | 1420.-               |
| 3                                | IE2         | 112 M               | 1LE1501-1BC6-....                | 1640.-               | 1LE1601-1BC6-....                      | 1810.-               |
| 7.5                              | IE2         | 132 M               | 1LE1501-1CC6-....                | 3200.-               | 1LE1601-1CC6-....                      | 3530.-               |
| 15                               | IE2         | 160 L               | 1LE1501-1DC6-....                | 5750.-               | 1LE1601-1DC6-....                      | 6610.-               |
| 18.5                             | IE2         | 180 M               | 1LE1501-1EC6-....                | 6810.-               | 1LE1601-1EC6-....                      | 7500.-               |
| 30                               | IE2         | 200 L               | 1LE1501-2AC6-....                | 10600.-              | 1LE1601-2AC6-....                      | 11600.-              |
| 37                               | IE2         | 225 M               | 1LE1501-2BC6-....                | 12500.-              | 1LE1601-2BC6-....                      | 13700.-              |
| 45                               | IE2         | 250 M               | 1LE1501-2CC6-....                | 15200.-              | 1LE1601-2CC6-....                      | 15600.-              |
| 75                               | IE2         | 280 M               | 1LE1501-2DC6-....                | 24400.-              | 1LE1601-2DC6-....                      | 25100.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 15                               | IE2         | 180 M               | 1LE1501-1ED6-....                | 7700.-               | 1LE1601-1ED6-....                      | 8480.-               |
| 18.5                             | IE2         | 200 L               | 1LE1501-2AD6-....                | 9350.-               | 1LE1601-2AD6-....                      | 10300.-              |
| 30                               | IE2         | 225 M               | 1LE1501-2BD6-....                | 13400.-              | 1LE1601-2BD6-....                      | 14700.-              |
| 37                               | IE2         | 250 M               | 1LE1501-2CD6-....                | 16000.-              | 1LE1601-2CD6-....                      | 16500.-              |
| 55                               | IE2         | 280 M               | 1LE1501-2DD6-....                | 23100.-              | 1LE1601-2DD6-....                      | 23900.-              |

Standard delivery times in working days:

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On  
request**SIMOTICS GP 1LE1 Standard Motors – APAC Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                                               |                                                     |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Category                               | <b>Motors with IE2 High Efficiency</b>                                                                        |                                                     |
| Series version                         | <b>Aluminum series 1LE1041</b>                                                                                | <b>Aluminum series 1LE1041 with increased power</b> |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                            |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                       |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                               |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                               |
| Number of poles                        | 2, 4, 6                                                                                                       | 2, 4, 6                                             |
| Frame sizes (FS)                       | 80 M ... 160 L                                                                                                | 100 L ... 160 L                                     |
| Rated power at 50 Hz                   | 0.75 ... 18.5 kW                                                                                              | 4 ... 22 kW                                         |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                             | 1000 ... 3000 rpm                                   |
| Rated torque at 50 Hz                  | 2.1 ... 89 Nm                                                                                                 | 10 ... 121 Nm                                       |
| Efficiency                             | IE2 High Efficiency                                                                                           | IE2 High Efficiency                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                       |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2                                                   | 3F2                                                 |

Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!Please note  
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efficiencies  
in the European  
Economic Area!

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |                              |             |                     |                   |                      |
| 0.75                             | IE2         | 80 M                | 1LE1041-0DA2-.... | 557.-                |                              |             |                     |                   |                      |
| 1.5                              | IE2         | 90 S                | 1LE1041-0EA0-.... | 734.-                |                              |             |                     |                   |                      |
| 2.2                              | IE2         | 90 L                | 1LE1041-0EA4-.... | 949.-                |                              |             |                     |                   |                      |
|                                  |             |                     |                   |                      | 4                            | IE2         | 100 L               | 1LE1041-1AA6-.... | 1330.-               |
| 4                                | IE2         | 112 M               | 1LE1041-1BA2-.... | 1330.-               | 5.5                          | IE2         | 112 M               | 1LE1041-1BA6-.... | 1650.-               |
| 5.5                              | IE2         | 132 S               | 1LE1041-1CA0-.... | 1650.-               |                              |             |                     |                   |                      |
| 7.5                              | IE2         | 132 S               | 1LE1041-1CA1-.... | 2110.-               |                              |             |                     |                   |                      |
|                                  |             |                     |                   |                      | 11                           | IE2         | 132 M               | 1LE1041-1CA6-.... | 2920.-               |
| 11                               | IE2         | 160 M               | 1LE1041-1DA2-.... | 2920.-               |                              |             |                     |                   |                      |
| 15                               | IE2         | 160 M               | 1LE1041-1DA3-.... | 3810.-               |                              |             |                     |                   |                      |
| 18.5                             | IE2         | 160 L               | 1LE1041-1DA4-.... | 4550.-               | 22                           | IE2         | 160 L               | 1LE1041-1DA6-.... | 5370.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |                              |             |                     |                   |                      |
| 0.75                             | IE2         | 80 M                | 1LE1041-0DB3-.... | 604.-                |                              |             |                     |                   |                      |
| 1.5                              | IE2         | 90 L                | 1LE1041-0EB4-.... | 847.-                |                              |             |                     |                   |                      |
| 2.2                              | IE2         | 100 L               | 1LE1041-1AB4-.... | 1020.-               | 4                            | IE2         | 100 L               | 1LE1041-1AB6-.... | 1430.-               |
| 4                                | IE2         | 112 M               | 1LE1041-1BB2-.... | 1430.-               | 5.5                          | IE2         | 112 M               | 1LE1041-1BB6-.... | 1800.-               |
| 5.5                              | IE2         | 132 S               | 1LE1041-1CB0-.... | 1800.-               |                              |             |                     |                   |                      |
| 7.5                              | IE2         | 132 M               | 1LE1041-1CB2-.... | 2250.-               | 11                           | IE2         | 132 M               | 1LE1041-1CB6-.... | 2990.-               |
| 11                               | IE2         | 160 M               | 1LE1041-1DB2-.... | 2990.-               |                              |             |                     |                   |                      |
| 15                               | IE2         | 160 L               | 1LE1041-1DB4-.... | 3860.-               | 18.5                         | IE2         | 160 L               | 1LE1041-1DB6-.... | 4560.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |                              |             |                     |                   |                      |
| 0.75                             | IE2         | 90 S                | 1LE1041-0EC0-.... | 699.-                |                              |             |                     |                   |                      |
| 1.5                              | IE2         | 100 L               | 1LE1041-1AC4-.... | 1000.-               |                              |             |                     |                   |                      |
| 2.2                              | IE2         | 112 M               | 1LE1041-1BC2-.... | 1280.-               |                              |             |                     |                   |                      |
| 4                                | IE2         | 132 M               | 1LE1041-1CC2-.... | 1970.-               |                              |             |                     |                   |                      |
| 5.5                              | IE2         | 132 M               | 1LE1041-1CC3-.... | 2480.-               | 7.5                          | IE2         | 132 M               | 1LE1041-1CC6-.... | 3150.-               |
| 7.5                              | IE2         | 160 M               | 1LE1041-1DC2-.... | 3150.-               |                              |             |                     |                   |                      |
| 11                               | IE2         | 160 L               | 1LE1041-1DC4-.... | 4320.-               | 15                           | IE2         | 160 L               | 1LE1041-1DC6-.... | 5610.-               |

# SIMOTICS SD 1LE1 Standard Motors – APAC Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

| Category                               | Motors with IE2 High Efficiency                               |                                                               |
|----------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| Series version                         | Cast-iron series 1LE1541 Basic Line                           | Cast-iron series 1LE1541 Basic Line with increased power      |
| Cooling                                | Self-ventilated (IC 411)                                      | Self-ventilated (IC 411)                                      |
| Degree of protection                   | IP55, optionally IP56 or IP65                                 | IP55, optionally IP56 or IP65                                 |
| Insulation                             | Thermal class 155 (F)                                         | Thermal class 155 (F)                                         |
| Utilization                            | Thermal class 130 (B)                                         | Thermal class 130 (B)                                         |
| Number of poles                        | 2, 4, 6                                                       | 2, 4, 6                                                       |
| Frame sizes (FS)                       | 180 M ... 315 L                                               | 180 L ... 315 L                                               |
| Rated power at 50 Hz                   | 15 ... 200 kW                                                 | 18.5 ... 160 kW                                               |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                             | 1000 ... 3000 rpm                                             |
| Rated torque at 50 Hz                  | 59 ... 1059 Nm                                                | 81 ... 1202 Nm                                                |
| Efficiency                             | IE2 High Efficiency                                           | IE2 High Efficiency                                           |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                 | N - W - - - -                                                 |
| Price group (PG)                       | Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 | Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

Please note minimum legal efficiencies in the European Economic Area!

Please note minimum legal efficiencies in the European Economic Area!

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Basic Line | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br>Basic Line | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|---------------------------|----------------------|------------------------------|-------------|---------------------|---------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                           |                      |                              |             |                     |                           |                      |
| 22                               | IE2         | 180 M               | 1LE1541-1EA2-....         | 5520.-               |                              |             |                     |                           |                      |
| 30                               | IE2         | 200 L               | 1LE1541-2AA4-....         | 7140.-               | 30                           | IE2         | 180 L               | 1LE1541-1EA6-....         | 7290.-               |
| 37                               | IE2         | 200 L               | 1LE1541-2AA5-....         | 8980.-               | 45                           | IE2         | 200 L               | 1LE1541-2AA6-....         | 10900.-              |
| 45                               | IE2         | 225 M               | 1LE1541-2BA2-....         | 10300.-              | 55                           | IE2         | 225 M               | 1LE1541-2BA6-....         | 12500.-              |
| 55                               | IE2         | 250 M               | 1LE1541-2CA2-....         | 12100.-              | 75                           | IE2         | 250 M               | 1LE1541-2CA6-....         | 17100.-              |
| 75                               | IE2         | 280 S               | 1LE1541-2DA0-....         | 16800.-              |                              |             |                     |                           |                      |
| 90                               | IE2         | 280 M               | 1LE1541-2DA2-....         | 19900.-              | 110                          | IE2         | 280 M               | 1LE1541-2DA6-....         | 24400.-              |
| 110                              | IE2         | 315 S               | 1LE1541-3AA0-....         | 23900.-              |                              |             |                     |                           |                      |
| 132                              | IE2         | 315 M               | 1LE1541-3AA2-....         | 28600.-              |                              |             |                     |                           |                      |
| 160                              | IE2         | 315 L               | 1LE1541-3AA4-....         | 35500.-              |                              |             |                     |                           |                      |
| 200                              | IE2         | 315 L               | 1LE1541-3AA5-....         | 44400.-              |                              |             |                     |                           |                      |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                           |                      |                              |             |                     |                           |                      |
| 18.5                             | IE2         | 180 M               | 1LE1541-1EB2-....         | 4650.-               |                              |             |                     |                           |                      |
| 22                               | IE2         | 180 L               | 1LE1541-1EB4-....         | 5440.-               | 30                           | IE2         | 180 L               | 1LE1541-1EB6-....         | 7170.-               |
| 30                               | IE2         | 200 L               | 1LE1541-2AB5-....         | 7040.-               | 37                           | IE2         | 200 L               | 1LE1541-2AB6-....         | 8730.-               |
| 37                               | IE2         | 225 S               | 1LE1541-2BB0-....         | 8260.-               |                              |             |                     |                           |                      |
| 45                               | IE2         | 225 M               | 1LE1541-2BB2-....         | 9730.-               | 55                           | IE2         | 225 M               | 1LE1541-2BB6-....         | 11900.-              |
| 55                               | IE2         | 250 M               | 1LE1541-2CB2-....         | 11700.-              | 75                           | IE2         | 250 M               | 1LE1541-2CB6-....         | 16200.-              |
| 75                               | IE2         | 280 S               | 1LE1541-2DB0-....         | 15900.-              |                              |             |                     |                           |                      |
| 90                               | IE2         | 280 M               | 1LE1541-2DB2-....         | 18700.-              | 110                          | IE2         | 280 M               | 1LE1541-2DB6-....         | 23800.-              |
| 110                              | IE2         | 315 S               | 1LE1541-3AB0-....         | 23400.-              |                              |             |                     |                           |                      |
| 132                              | IE2         | 315 M               | 1LE1541-3AB2-....         | 27500.-              |                              |             |                     |                           |                      |
| 160                              | IE2         | 315 L               | 1LE1541-3AB4-....         | 33200.-              |                              |             |                     |                           |                      |
| 200                              | IE2         | 315 L               | 1LE1541-3AB5-....         | 41600.-              |                              |             |                     |                           |                      |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                           |                      |                              |             |                     |                           |                      |
| 15                               | IE2         | 180 L               | 1LE1541-1EC4-....         | 5790.-               | 18,5                         | IE2         | 180 L               | 1LE1541-1EC6-....         | 7220.-               |
| 18.5                             | IE2         | 200 L               | 1LE1541-2AC4-....         | 7080.-               |                              |             |                     |                           |                      |
| 22                               | IE2         | 200 L               | 1LE1541-2AC5-....         | 8200.-               | 30                           | IE2         | 200 L               | 1LE1541-2AC6-....         | 11200.-              |
| 30                               | IE2         | 225 M               | 1LE1541-2BC2-....         | 10600.-              | 37                           | IE2         | 225 M               | 1LE1541-2BC6-....         | 13300.-              |
| 37                               | IE2         | 250 M               | 1LE1541-2CC2-....         | 13100.-              | 45                           | IE2         | 250 M               | 1LE1541-2CC6-....         | 16100.-              |
| 45                               | IE2         | 280 S               | 1LE1541-2DC0-....         | 15800.-              |                              |             |                     |                           |                      |
| 55                               | IE2         | 280 M               | 1LE1541-2DC2-....         | 18700.-              | 75                           | IE2         | 280 M               | 1LE1541-2DC6-....         | 25700.-              |
| 75                               | IE2         | 315 S               | 1LE1541-3AC0-....         | 25300.-              |                              |             |                     |                           |                      |
| 90                               | IE2         | 315 M               | 1LE1541-3AC2-....         | 28600.-              |                              |             |                     |                           |                      |
| 110                              | IE2         | 315 L               | 1LE1541-3AC4-....         | 34500.-              |                              |             |                     |                           |                      |
| 132                              | IE2         | 315 L               | 1LE1541-3AC5-....         | 41000.-              | 160                          | IE2         | 315 L               | 1LE1541-3AC6-....         | 49700.-              |

Standard delivery times in working days:

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On  
requestSIMOTICS GP 1LE1 Standard Motors  
Orientation

## Overview of selection and ordering data with base prices and standard delivery times

## Overview

| Category                               | Motors with IE1 Standard Efficiency                                                                           |                                                                          |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Series version                         | Aluminum series 1LE1002<br>(continued on next page)                                                           | Aluminum series 1LE1002<br>with increased power (continued on next page) |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                                                 |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                                            |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                                                    |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                                                    |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6                                                                  |
| Frame sizes (FS)                       | 63 M ... 200 L                                                                                                | 63 M ... 160 L                                                           |
| Rated power at 50 Hz                   | 0.09 ... 37 kW                                                                                                | 0.25 ... 22 kW                                                           |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 1000 ... 3000 rpm                                                        |
| Rated torque at 50 Hz                  | 2.5 ... 109 Nm                                                                                                | 13 ... 148 Nm                                                            |
| Efficiency                             | IE1 Standard Efficiency                                                                                       | IE1 Standard Efficiency                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                                            |
| Price group (PG)                       | Frame sizes 63 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 63 ... 71: 3F1,<br>Frame sizes 100 ... 160: 3F2              |

Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!Range of motors in standard version with Article No., delivery time and base price plus MS  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------|----------------------|------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.18                             | IE1         | 63 M                | 1LE1002-0BA2.-.... | 319.-                |                              |             |                     |                    |                      |
| 0.25                             | IE1         | 63 M                | 1LE1002-0BA3.-.... | 338.-                | 0.37                         | IE1         | 63 M                | 1LE1002-0BA6.-.... | 342.-                |
| 0.37                             | IE1         | 71 M                | 1LE1002-0CA2.-.... | 342.-                |                              |             |                     |                    |                      |
| 0.55                             | IE1         | 71 M                | 1LE1002-0CA3.-.... | 383.-                | 0.86                         | IE1         | 71 M                | 1LE1002-0CA6.-.... | 464.-                |
| 0.75                             | IE1         | 80 M                | 1LE1002-0DA2.-.... | 464.-                |                              |             |                     |                    |                      |
| 1.1                              | IE1         | 80 M                | 1LE1002-0DA3.-.... | 528.-                |                              |             |                     |                    |                      |
| 1.5                              | IE1         | 90 M                | 1LE1002-0EA0.-.... | 582.-                |                              |             |                     |                    |                      |
| 2.2                              | IE1         | 90 M                | 1LE1002-0EA4.-.... | 742.-                |                              |             |                     |                    |                      |
| 3                                | IE1         | 100 L               | 1LE1002-1AA4.-.... | 817.-                | 4                            | IE1         | 100 L               | 1LE1002-1AA6.-.... | 1010.-               |
| 4                                | IE1         | 112 M               | 1LE1002-1BA2.-.... | 1010.-               | 5.5                          | IE1         | 112 M               | 1LE1002-1BA6.-.... | 1300.-               |
| 5.5                              | IE1         | 132 S               | 1LE1002-1CA0.-.... | 1300.-               |                              |             |                     |                    |                      |
| 7.5                              | IE1         | 132 S               | 1LE1002-1CA1.-.... | 1660.-               |                              |             |                     |                    |                      |
|                                  |             |                     |                    |                      | 11                           | IE1         | 132 M               | 1LE1002-1CA6.-.... | 2320.-               |
| 11                               | IE1         | 160 M               | 1LE1002-1DA2.-.... | 2320.-               |                              |             |                     |                    |                      |
| 15                               | IE1         | 160 M               | 1LE1002-1DA3.-.... | 3020.-               |                              |             |                     |                    |                      |
| 18.5                             | IE1         | 160 L               | 1LE1002-1DA4.-.... | 3600.-               | 22                           | IE1         | 160 L               | 1LE1002-1DA6.-.... | 4250.-               |
| 22                               | IE1         | 180 M               | 1LE1002-1EA2.-.... | 4110.-               |                              |             |                     |                    |                      |
| 30                               | IE1         | 200 L               | 1LE1002-2AA4.-.... | 5300.-               |                              |             |                     |                    |                      |
| 37                               | IE1         | 200 L               | 1LE1002-2AA5.-.... | 6960.-               |                              |             |                     |                    |                      |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.12                             | IE1         | 63 M                | 1LE1002-0BB2.-.... | 314.-                |                              |             |                     |                    |                      |
| 0.18                             | IE1         | 63 M                | 1LE1002-0BB3.-.... | 338.-                | 0.25                         | IE1         | 63 M                | 1LE1002-0BB6.-.... | 339.-                |
| 0.25                             | IE1         | 71 M                | 1LE1002-0CB2.-.... | 339.-                |                              |             |                     |                    |                      |
| 0.37                             | IE1         | 71 M                | 1LE1002-0CB3.-.... | 377.-                | 0.55                         | IE1         | 71 M                | 1LE1002-0CB6.-.... | 467.-                |
| 0.55                             | IE1         | 80 M                | 1LE1002-0DB2.-.... | 443.-                |                              |             |                     |                    |                      |
| 0.75                             | IE1         | 80 M                | 1LE1002-0DB3.-.... | 483.-                |                              |             |                     |                    |                      |
| 1.1                              | IE1         | 90 M                | 1LE1002-0EB0.-.... | 573.-                |                              |             |                     |                    |                      |
| 1.5                              | IE1         | 90 M                | 1LE1002-0EB4.-.... | 645.-                |                              |             |                     |                    |                      |
| 2.2                              | IE1         | 100 L               | 1LE1002-1AB4.-.... | 719.-                | 4                            | IE1         | 100 L               | 1LE1002-1AB6.-.... | 1050.-               |
| 3                                | IE1         | 100 L               | 1LE1002-1AB5.-.... | 828.-                |                              |             |                     |                    |                      |
| 4                                | IE1         | 112 M               | 1LE1002-1BB2.-.... | 1050.-               | 5.5                          | IE1         | 112 M               | 1LE1002-1BB6.-.... | 1360.-               |
| 5.5                              | IE1         | 132 S               | 1LE1002-1CB0.-.... | 1360.-               |                              |             |                     |                    |                      |
| 7.5                              | IE1         | 132 M               | 1LE1002-1CB2.-.... | 1720.-               | 11                           | IE1         | 132 M               | 1LE1002-1CB6.-.... | 2370.-               |
| 11                               | IE1         | 160 M               | 1LE1002-1DB2.-.... | 2370.-               |                              |             |                     |                    |                      |
| 15                               | IE1         | 160 L               | 1LE1002-1DB4.-.... | 3080.-               | 18.5                         | IE1         | 160 L               | 1LE1002-1DB6.-.... | 3710.-               |
| 18                               | IE1         | 180 M               | 1LE1002-1EB2.-.... | 3560.-               |                              |             |                     |                    |                      |
| 22                               | IE1         | 180 L               | 1LE1002-1EB4.-.... | 4210.-               |                              |             |                     |                    |                      |
| 30                               | IE1         | 200 L               | 1LE1002-2AB5.-.... | 5590.-               |                              |             |                     |                    |                      |

# SIMOTICS GP 1LE1 Standard Motors

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

| Category                               | Motors with IE1 Standard Efficiency                                                                           |                                              |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Series version                         | Aluminum series 1LE1002                                                                                       | Aluminum series 1LE1002 with increased power |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) | Self-ventilated (IC 411)                     |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 | IP55, optionally IP56 or IP65                |
| Insulation                             | Thermal class 155 (F)                                                                                         | Thermal class 155 (F)                        |
| Utilization                            | Thermal class 130 (B)                                                                                         | Thermal class 130 (B)                        |
| Number of poles                        | 2, 4, 6, 8                                                                                                    | 2, 4, 6                                      |
| Frame sizes (FS)                       | 63 M ... 200 L                                                                                                | 63 M ... 160 L                               |
| Rated power at 50 Hz                   | 0.09 ... 37 kW                                                                                                | 0.25 ... 22 kW                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              | 1000 ... 3000 rpm                            |
| Rated torque at 50 Hz                  | 2.5 ... 109 Nm                                                                                                | 13 ... 148 Nm                                |
| Efficiency                             | IE1 Standard Efficiency                                                                                       | IE1 Standard Efficiency                      |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 | N - W - - - -                                |
| Price group (PG)                       | Frame sizes 63 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  | Frame sizes 100 ... 160: 3F2                 |

Please note  
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efficiencies  
in the European  
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Range of motors in standard version with Article No., delivery time and base price plus MS  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------|----------------------|------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.09                             | IE1         | 63 M                | 1LE1002-0BC2.-.... | 339.-                |                              |             |                     |                    |                      |
| 0.18                             | IE1         | 71 M                | 1LE1002-0CC2.-.... | 361.-                |                              |             |                     |                    |                      |
| 0.25                             | IE1         | 71 M                | 1LE1002-0CC3.-.... | 402.-                |                              |             |                     |                    |                      |
| 0.37                             | IE1         | 80 M                | 1LE1002-0DC2.-.... | 464.-                |                              |             |                     |                    |                      |
| 0.55                             | IE1         | 80 M                | 1LE1002-0DC3.-.... | 537.-                |                              |             |                     |                    |                      |
| 0.75                             | IE1         | 90 M                | 1LE1002-0EC0.-.... | 605.-                |                              |             |                     |                    |                      |
| 1.1                              | IE1         | 90 M                | 1LE1002-0EC4.-.... | 747.-                |                              |             |                     |                    |                      |
| 1.5                              | IE1         | 100 L               | 1LE1002-1AC4.-.... | 766.-                | 2.2                          | IE1         | 100 L               | 1LE1002-1AC6.-.... | 959.-                |
| 2.2                              | IE1         | 112 M               | 1LE1002-1BC2.-.... | 959.-                | 3                            | IE1         | 112 M               | 1LE1002-1BC6.-.... | 1200.-               |
| 3                                | IE1         | 132 S               | 1LE1002-1CC0.-.... | 1200.-               |                              |             |                     |                    |                      |
| 4                                | IE1         | 132 M               | 1LE1002-1CC2.-.... | 1510.-               | 7.5                          | IE1         | 132 M               | 1LE1002-1CC6.-.... | 2480.-               |
| 5.5                              | IE1         | 132 M               | 1LE1002-1CC3.-.... | 1910.-               |                              |             |                     |                    |                      |
| 7.5                              | IE1         | 160 M               | 1LE1002-1DC2.-.... | 2480.-               |                              |             |                     |                    |                      |
| 11                               | IE1         | 160 L               | 1LE1002-1DC4.-.... | 3440.-               | 15                           | IE1         | 160 L               | 1LE1002-1DC6.-.... | 4460.-               |
| 15                               | IE1         | 180 L               | 1LE1002-1EC4.-.... | 4300.-               |                              |             |                     |                    |                      |
| 18.5                             | IE1         | 200 L               | 1LE1002-2AC4.-.... | 5270.-               |                              |             |                     |                    |                      |
| 22                               | IE1         | 200 L               | 1LE1002-2AC5.-.... | 6220.-               |                              |             |                     |                    |                      |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                    |                      |                              |             |                     |                    |                      |
| 0.09                             | IE1         | 71 M                | 1LE1002-0CD2.-.... | 378.-                |                              |             |                     |                    |                      |
| 0.12                             | IE1         | 71 M                | 1LE1002-0CD3.-.... | 427.-                |                              |             |                     |                    |                      |
| 0.75                             | IE1         | 100 L               | 1LE1002-1AD4.-.... | 797.-                |                              |             |                     |                    |                      |
| 1.1                              | IE1         | 100 L               | 1LE1002-1AD5.-.... | 1010.-               |                              |             |                     |                    |                      |
| 1.5                              | IE1         | 112 M               | 1LE1002-1BD2.-.... | 1190.-               |                              |             |                     |                    |                      |
| 2.2                              | IE1         | 132 S               | 1LE1002-1CD0.-.... | 1550.-               |                              |             |                     |                    |                      |
| 3                                | IE1         | 132 M               | 1LE1002-1CD2.-.... | 1890.-               |                              |             |                     |                    |                      |
| 4                                | IE1         | 160 M               | 1LE1002-1DD2.-.... | 2320.-               |                              |             |                     |                    |                      |
| 5.5                              | IE1         | 160 M               | 1LE1002-1DD3.-.... | 2880.-               |                              |             |                     |                    |                      |
| 7.5                              | IE1         | 160 L               | 1LE1002-1DD4.-.... | 3550.-               |                              |             |                     |                    |                      |
| 13.2                             | IE1         | 180 L               | 1LE1002-1ED4.-.... | 4540.-               |                              |             |                     |                    |                      |
| 15                               | IE1         | 200 L               | 1LE1002-2AD5.-.... | 5970.-               |                              |             |                     |                    |                      |

Standard delivery times in working days:

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On  
requestSIMOTICS GP 1PC1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                              |
|----------------------------------------|----------------------------------------------|
| Category                               | <b>Motors with IE1 Standard Efficiency</b>   |
| Series version                         | <b>Aluminum series 1PC1002 <sup>1)</sup></b> |
| Cooling                                | Self-cooled without external fan (IC 410)    |
| Degree of protection                   | IP55, optionally IP56 or IP65                |
| Insulation                             | Thermal class 155 (F)                        |
| Utilization                            | Thermal class 130 (B)                        |
| Number of poles                        | 2, 4, 6, 8                                   |
| Frame sizes (FS)                       | 100 L ... 160 L                              |
| Rated power at 50 Hz                   | 0.3 ... 7.4 kW                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                             |
| Rated torque at 50 Hz                  | On request <sup>1)</sup>                     |
| Efficiency                             | On request <sup>1)</sup>                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2                 |

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**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 1.2                              | IE1         | 100 L               | 1PC1002-1AA4-.... | 993.-                |
| 1.6                              | IE1         | 112 M               | 1PC1002-1BA2-.... | 1170.-               |
| 2.2                              | IE1         | 132 S               | 1PC1002-1CA0-.... | 1510.-               |
| 3                                | IE1         | 132 S               | 1PC1002-1CA1-.... | 1850.-               |
| 4.4                              | IE1         | 160 M               | 1PC1002-1DA2-.... | 2410.-               |
| 6                                | IE1         | 160 M               | 1PC1002-1DA3-.... | 3010.-               |
| 7.4                              | IE1         | 160 L               | 1PC1002-1DA4-.... | 3530.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 0.88                             | IE1         | 100 L               | 1PC1002-1AB4-.... | 890.-                |
| 1.2                              | IE1         | 100 L               | 1PC1002-1AB5-.... | 1010.-               |
| 1.6                              | IE1         | 112 M               | 1PC1002-1BB2-.... | 1240.-               |
| 2.2                              | IE1         | 132 S               | 1PC1002-1CB0-.... | 1550.-               |
| 3                                | IE1         | 132 M               | 1PC1002-1CB2-.... | 1880.-               |
| 4.4                              | IE1         | 160 M               | 1PC1002-1DB2-.... | 2450.-               |
| 6                                | IE1         | 160 L               | 1PC1002-1DB4-.... | 3120.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 0.6                              | IE1         | 100 L               | 1PC1002-1AC4-.... | 932.-                |
| 0.88                             | IE1         | 112 M               | 1PC1002-1BC2-.... | 1120.-               |
| 1.2                              | IE1         | 132 S               | 1PC1002-1CC0-.... | 1420.-               |
| 1.6                              | IE1         | 132 M               | 1PC1002-1CC2-.... | 1710.-               |
| 2.2                              | IE1         | 132 M               | 1PC1002-1CC3-.... | 2120.-               |
| 3                                | IE1         | 160 M               | 1PC1002-1DC2-.... | 2600.-               |
| 4.4                              | IE1         | 160 L               | 1PC1002-1DC4-.... | 3350.-               |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                   |                      |
| 0.3                              | IE1         | 100 L               | 1PC1002-1AD4-.... | 979.-                |
| 0.44                             | IE1         | 100 L               | 1PC1002-1AD5-.... | 1170.-               |
| 0.6                              | IE1         | 112 M               | 1PC1002-1BD2-.... | 1380.-               |
| 0.88                             | IE1         | 132 S               | 1PC1002-1CD0-.... | 1750.-               |
| 1.2                              | IE1         | 132 M               | 1PC1002-1CD2-.... | 2040.-               |
| 1.6                              | IE1         | 160 M               | 1PC1002-1DD2-.... | 2390.-               |
| 2.2                              | IE1         | 160 M               | 1PC1002-1DD3-.... | 2850.-               |
| 3                                | IE1         | 160 L               | 1PC1002-1DD4-.... | 3410.-               |

<sup>1)</sup> The rated power and weights may slightly change after they have been checked. Further electrical data can be calculated and supplied on receipt of order.

# SIMOTICS SD 1LE1 Standard Motors

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE1 Standard Efficiency</b>                                                     |
| Series version                         | <b>Cast-iron series 1LE1502 Basic Line</b>                                                     |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 130 (B)                                                                          |
| Number of poles                        | 2, 4, 6, 8                                                                                     |
| Frame sizes (FS)                       | 100 L ... 315 L                                                                                |
| Rated power at 50 Hz                   | 0.75 ... 200 kW                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                               |
| Rated torque at 50 Hz                  | 10 ... 1703 Nm                                                                                 |
| Efficiency                             | IE1 Standard Efficiency                                                                        |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

Please note  
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Economic Area!

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR |
|-------------------------------------|-------------|---------------------|----------------------------------|----------------------|-------------------------------------|-------------|---------------------|----------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |             |                     |                                  |                      | <b>6-pole: 1000 rpm at 50 Hz</b>    |             |                     |                                  |                      |
| 3                                   | IE1         | 100 L               | 1LE1502-1AA4-....                | 926.-                | 1.5                                 | IE1         | 100 L               | 1LE1502-1AC4-....                | 865.-                |
| 4                                   | IE1         | 112 M               | 1LE1502-1BA2-....                | 1140.-               | 2.2                                 | IE1         | 112 M               | 1LE1502-1BC2-....                | 1080.-               |
| 5.5                                 | IE1         | 132 S               | 1LE1502-1CA0-....                | 1410.-               | 3                                   | IE1         | 132 S               | 1LE1502-1CC0-....                | 1350.-               |
| 7.5                                 | IE1         | 132 S               | 1LE1502-1CA1-....                | 1840.-               | 4                                   | IE1         | 132 M               | 1LE1502-1CC2-....                | 1660.-               |
| 11                                  | IE1         | 160 M               | 1LE1502-1DA2-....                | 2450.-               | 5.5                                 | IE1         | 132 M               | 1LE1502-1CC3-....                | 2110.-               |
| 15                                  | IE1         | 160 M               | 1LE1502-1DA3-....                | 3230.-               | 7.5                                 | IE1         | 160 M               | 1LE1502-1DC2-....                | 2680.-               |
| 18.5                                | IE1         | 160 L               | 1LE1502-1DA4-....                | 3880.-               | 11                                  | IE1         | 160 L               | 1LE1502-1DC4-....                | 3680.-               |
| 22                                  | IE1         | 180 M               | 1LE1502-1EA2-....                | 4220.-               | 15                                  | IE1         | 180 L               | 1LE1502-1EC4-....                | 4460.-               |
| 30                                  | IE1         | 200 L               | 1LE1502-2AA4-....                | 5500.-               | 18.5                                | IE1         | 200 L               | 1LE1502-2AC4-....                | 5470.-               |
| 37                                  | IE1         | 200 L               | 1LE1502-2AA5-....                | 7190.-               | 22                                  | IE1         | 200 L               | 1LE1502-2AC5-....                | 6430.-               |
| 45                                  | IE1         | 225 M               | 1LE1502-2BA2-....                | 8440.-               | 30                                  | IE1         | 225 M               | 1LE1502-2BC2-....                | 8530.-               |
| 55                                  | IE1         | 250 M               | 1LE1502-2CA2-....                | 10300.-              | 37                                  | IE1         | 250 M               | 1LE1502-2CC2-....                | 10300.-              |
| 75                                  | IE1         | 280 S               | 1LE1502-2DA0-....                | 14100.-              | 45                                  | IE1         | 280 S               | 1LE1502-2DC0-....                | 12800.-              |
| 90                                  | IE1         | 280 M               | 1LE1502-2DA2-....                | 17100.-              | 55                                  | IE1         | 280 M               | 1LE1502-2DC2-....                | 15300.-              |
| 110                                 | IE1         | 315 S               | 1LE1502-3AA0-....                | 20900.-              | 75                                  | IE1         | 315 S               | 1LE1502-3AC0-....                | 20900.-              |
| 132                                 | IE1         | 315 M               | 1LE1502-3AA2-....                | 25000.-              | 90                                  | IE1         | 315 M               | 1LE1502-3AC2-....                | 25000.-              |
| 160                                 | IE1         | 315 L               | 1LE1502-3AA4-....                | 31000.-              | 110                                 | IE1         | 315 L               | 1LE1502-3AC4-....                | 30200.-              |
| 200                                 | IE1         | 315 L               | 1LE1502-3AA5-....                | 38800.-              | 132                                 | IE1         | 315 L               | 1LE1502-3AC5-....                | 35700.-              |
|                                     |             |                     |                                  |                      | 160                                 | IE1         | 315 L               | 1LE1502-3AC6-....                | 43400.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b>    |             |                     |                                  |                      | <b>8-pole: 750 rpm at 50 Hz</b>     |             |                     |                                  |                      |
| 2.2                                 | IE1         | 100 L               | 1LE1502-1AB4-....                | 811.-                | 0.75                                | IE1         | 100 L               | 1LE1502-1AD4-....                | 897.-                |
| 3                                   | IE1         | 100 L               | 1LE1502-1AB5-....                | 935.-                | 1.1                                 | IE1         | 100 L               | 1LE1502-1AD5-....                | 1140.-               |
| 4                                   | IE1         | 112 M               | 1LE1502-1BB2-....                | 1190.-               | 1.5                                 | IE1         | 112 M               | 1LE1502-1BD2-....                | 1360.-               |
| 5.5                                 | IE1         | 132 S               | 1LE1502-1CB0-....                | 1480.-               | 2.2                                 | IE1         | 132 S               | 1LE1502-1CD0-....                | 1710.-               |
| 7.5                                 | IE1         | 132 M               | 1LE1502-1CB2-....                | 1880.-               | 3                                   | IE1         | 132 M               | 1LE1502-1CD2-....                | 2070.-               |
| 11                                  | IE1         | 160 M               | 1LE1502-1DB2-....                | 2550.-               | 4                                   | IE1         | 160 M               | 1LE1502-1DD2-....                | 2450.-               |
| 15                                  | IE1         | 160 L               | 1LE1502-1DB4-....                | 3290.-               | 5.5                                 | IE1         | 160 M               | 1LE1502-1DD3-....                | 3090.-               |
| 18.5                                | IE1         | 180 M               | 1LE1502-1EB2-....                | 3680.-               | 7.5                                 | IE1         | 160 L               | 1LE1502-1DD4-....                | 3860.-               |
| 22                                  | IE1         | 180 L               | 1LE1502-1EB4-....                | 4350.-               | 11                                  | IE1         | 180 L               | 1LE1502-1ED4-....                | 4660.-               |
| 30                                  | IE1         | 200 L               | 1LE1502-2AB5-....                | 5780.-               | 15                                  | IE1         | 200 L               | 1LE1502-2AD5-....                | 6170.-               |
| 37                                  | IE1         | 225 S               | 1LE1502-2BB0-....                | 6790.-               | 18.5                                | IE1         | 225 S               | 1LE1502-2BD0-....                | 7220.-               |
| 45                                  | IE1         | 225 M               | 1LE1502-2BB2-....                | 8210.-               | 22                                  | IE1         | 225 S               | 1LE1502-2BD2-....                | 8380.-               |
| 55                                  | IE1         | 250 M               | 1LE1502-2CB2-....                | 9990.-               | 30                                  | IE1         | 250 M               | 1LE1502-2CD2-....                | 11000.-              |
| 75                                  | IE1         | 280 S               | 1LE1502-2DB0-....                | 13700.-              | 37                                  | IE1         | 280 S               | 1LE1502-2DD0-....                | 13400.-              |
| 90                                  | IE1         | 280 M               | 1LE1502-2DB2-....                | 16100.-              | 45                                  | IE1         | 280 S               | 1LE1502-2DD2-....                | 16200.-              |
| 110                                 | IE1         | 315 S               | 1LE1502-3AB0-....                | 20000.-              | 55                                  | IE1         | 315 S               | 1LE1502-3AD0-....                | 19800.-              |
| 132                                 | IE1         | 315 M               | 1LE1502-3AB2-....                | 23700.-              | 75                                  | IE1         | 315 M               | 1LE1502-3AD2-....                | 26500.-              |
| 160                                 | IE1         | 315 L               | 1LE1502-3AB4-....                | 29200.-              | 90                                  | IE1         | 315 L               | 1LE1502-3AD4-....                | 31200.-              |
| 200                                 | IE1         | 315 L               | 1LE1502-3AB5-....                | 36200.-              | 110                                 | IE1         | 315 L               | 1LE1502-3AD5-....                | 37700.-              |
|                                     |             |                     |                                  |                      | 132                                 | IE1         | 315 L               | 1LE1502-3AD6-....                | 45200.-              |

Standard delivery times in working days:

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On  
request**SIMOTICS SD 1LE1 Standard Motors**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE1 Standard Efficiency</b>                                                     |
| Series version                         | <b>Cast-iron series 1LE1502 Basic Line with increased power</b>                                |
| Cooling                                | Self-ventilated (IC 411)                                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                  |
| Insulation                             | Thermal class 155 (F)                                                                          |
| Utilization                            | Thermal class 155 (F)                                                                          |
| Number of poles                        | 2, 4, 6, 8                                                                                     |
| Frame sizes (FS)                       | 100 L ... 280 M                                                                                |
| Rated power at 50 Hz                   | 2.2 ... 110 kW                                                                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                               |
| Rated torque at 50 Hz                  | 13 ... 727 Nm                                                                                  |
| Efficiency                             | IE1 Standard Efficiency                                                                        |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                  |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 280: 3F4 |

Please note  
minimum legal  
efficiencies  
in the European  
Economic Area!

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |
| 4                                | IE1         | 100 L               | 1LE1502-1AA6-....                | 1140.-               |
| 5.5                              | IE1         | 112 M               | 1LE1502-1BA6-....                | 1410.-               |
| 11                               | IE1         | 132 M               | 1LE1502-1CA6-....                | 2450.-               |
| 22                               | IE1         | 160 L               | 1LE1502-1DA6-....                | 4220.-               |
| 30                               | IE1         | 180 L               | 1LE1502-1EA6-....                | 5500.-               |
| 45                               | IE1         | 200 L               | 1LE1502-2AA6-....                | 7980.-               |
| 55                               | IE1         | 225 M               | 1LE1502-2BA6-....                | 9360.-               |
| 75                               | IE1         | 250 M               | 1LE1502-2CA6-....                | 12100.-              |
| 110                              | IE1         | 280 M               | 1LE1502-2DA6-....                | 18900.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |
| 4                                | IE1         | 100 L               | 1LE1502-1AB6-....                | 1190.-               |
| 5.5                              | IE1         | 112 M               | 1LE1502-1BB6-....                | 1480.-               |
| 11                               | IE1         | 132 M               | 1LE1502-1CB6-....                | 2550.-               |
| 18.5                             | IE1         | 160 L               | 1LE1502-1DB6-....                | 3680.-               |
| 30                               | IE1         | 180 L               | 1LE1502-1EB6-....                | 5780.-               |
| 37                               | IE1         | 200 L               | 1LE1502-2AB6-....                | 6790.-               |
| 55                               | IE1         | 225 M               | 1LE1502-2BB6-....                | 9090.-               |
| 75                               | IE1         | 250 M               | 1LE1502-2CB6-....                | 11700.-              |
| 110                              | IE1         | 280 M               | 1LE1502-2DB6-....                | 18000.-              |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |
| 2.2                              | IE1         | 100 L               | 1LE1502-1AC6-....                | 1080.-               |
| 3                                | IE1         | 112 M               | 1LE1502-1BC6-....                | 1350.-               |
| 7.5                              | IE1         | 132 M               | 1LE1502-1CC6-....                | 2680.-               |
| 15                               | IE1         | 160 L               | 1LE1502-1DC6-....                | 4460.-               |
| 18.5                             | IE1         | 180 S               | 1LE1502-1EC6-....                | 5470.-               |
| 30                               | IE1         | 200 L               | 1LE1502-2AC6-....                | 8530.-               |
| 37                               | IE1         | 225 M               | 1LE1502-2BC6-....                | 9450.-               |
| 45                               | IE1         | 250 M               | 1LE1502-2CC6-....                | 11500.-              |
| 75                               | IE1         | 280 M               | 1LE1502-2DC6-....                | 18200.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |
| 15                               | IE1         | 180 L               | 1LE1502-1ED6-....                | 6170.-               |
| 18.5                             | IE1         | 200 L               | 1LE1502-2AD6-....                | 7220.-               |
| 30                               | IE1         | 225 M               | 1LE1502-2BD6-....                | 9750.-               |
| 37                               | IE1         | 250 M               | 1LE1502-2CD6-....                | 12100.-              |
| 55                               | IE1         | 280 M               | 1LE1502-2DD6-....                | 18000.-              |

# SIMOTICS GP 1LE Standard Motors – ABNT Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with Rendimento Premium IR3</b>                                                                     |
| Series version                         | <b>Aluminum series 1LE1073</b><br>(continued on next page)                                                    |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 80 M ... 160 L                                                                                                |
| Rated power                            | 0.25 ... 22 kW at 50 Hz<br>0.33 ... 30 kW at 60 Hz                                                            |
| Synchronous speed                      | 750 ... 3000 rpm                                                                                              |
| Rated torque                           | 3.0 ... 121 Nm at 50 Hz                                                                                       |
| Efficiency                             | Rendimento Premium IR3 to NBR 17094-1                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2                                                   |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated, 50 Hz}}$<br>kW  | $P_{\text{rated, 60 Hz}}$<br>kW | Frame size<br>BG | Article No.       | Base price<br>EUR |
|----------------------------------|---------------------------------|------------------|-------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |                                 |                  |                   |                   |
| 1.1                              | 1.5                             | 80 M             | 1LE1073-0DA3-.... | 970.-             |
| 1.5                              | 2                               | 80 M             | 1LE1073-0DA6-.... | 1110.-            |
| 2.2                              | 3                               | 90 S             | 1LE1073-0EA4-.... | 1410.-            |
| 3                                | 4                               | 100 L            | 1LE1073-1AA4-.... | 1510.-            |
| 3.7                              | 5                               | 100 L            | 1LE1073-1AA6-.... | 1620.-            |
| 4.5                              | 6                               | 112 M            | 1LE1073-1BA5-.... | 1760.-            |
| 5.5                              | 7.5                             | 112 M            | 1LE1073-1BA6-.... | 2110.-            |
| 7.5                              | 10                              | 132 S            | 1LE1073-1CA1-.... | 2660.-            |
| 9.2                              | 12.5                            | 132 M            | 1LE1073-1CA5-.... | 3040.-            |
| 11                               | 15                              | 132 M            | 1LE1073-1CA6-.... | 3610.-            |
| 15                               | 20                              | 160 M            | 1LE1073-1DA3-.... | 4900.-            |
| 18.5                             | 25                              | 160 M            | 1LE1073-1DA4-.... | 5420.-            |
| 22                               | 30                              | 160 L            | 1LE1073-1DA6-.... | 5980.-            |
| <b>4-pole: 1500 rpm at 50 Hz</b> |                                 |                  |                   |                   |
| 0.75                             | 1                               | 80 M             | 1LE1073-0DB3-.... | 818.-             |
| 1.1                              | 1.5                             | 80 M             | 1LE1073-0DB6-.... | 985.-             |
| 1.5                              | 2                               | 90 S             | 1LE1073-0EB4-.... | 1150.-            |
| 2.2                              | 3                               | 90 L             | 1LE1073-0EB6-.... | 1350.-            |
| 3                                | 4                               | 100 L            | 1LE1073-1AB5-.... | 1500.-            |
| 3.7                              | 5                               | 100 L            | 1LE1073-1AB6-.... | 1670.-            |
| 4.5                              | 6                               | 112 M            | 1LE1073-1BB5-.... | 1820.-            |
| 5.5                              | 7.5                             | 112 M            | 1LE1073-1BB6-.... | 2310.-            |
| 7.5                              | 10                              | 132 S            | 1LE1073-1CB2-.... | 2910.-            |
| 9.2                              | 12.5                            | 132 M            | 1LE1073-1CB5-.... | 3720.-            |
| 11                               | 15                              | 132 M            | 1LE1073-1CB6-.... | 3800.-            |
| 15                               | 20                              | 160 M            | 1LE1073-1DB4-.... | 4940.-            |
| 18.5                             | 25                              | 160 L            | 1LE1073-1DB6-.... | 5580.-            |

Standard delivery times in working days:

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On  
request**SIMOTICS GP 1LE Standard Motors – ABNT Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Kategorie                              | <b>Motors with Rendimento Premium IR3</b>                                                                     |
| Series version                         | <b>Aluminum series 1LE1073</b>                                                                                |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 80 M ... 160 L                                                                                                |
| Rated power                            | 0.25 ... 22 kW at 50 Hz<br>0.33 ... 30 kW at 60 Hz                                                            |
| Synchronous speed                      | 750 ... 3000 rpm                                                                                              |
| Rated torque                           | 3.0 ... 121 Nm at 50 Hz                                                                                       |
| Efficiency                             | Rendimento Premium IR3 to NBR 17094-1                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2                                                   |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated, 50\text{ Hz}}$<br>kW  | $P_{rated, 60\text{ Hz}}$<br>kW | Frame<br>size<br>BG | Article No.       | Base<br>price<br>EUR |
|----------------------------------|---------------------------------|---------------------|-------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |                                 |                     |                   |                      |
| 0.37                             | 0.5                             | 80 M                | 1LE1073-0DC2-.... | 660.–                |
| 0.55                             | 0.75                            | 80 M                | 1LE1073-0DC3-.... | 706.–                |
| 0.75                             | 1                               | 90 S                | 1LE1073-0EC0-.... | 997.–                |
| 1.1                              | 1.5                             | 100 L               | 1LE1073-1AC3-.... | 1210.–               |
| 1.5                              | 2                               | 112 M               | 1LE1073-1BC1-.... | 2110.–               |
| 2.2                              | 3                               | 132 S               | 1LE1073-1CC1-.... | 2100.–               |
| 3                                | 4                               | 132 S               | 1LE1073-1CC0-.... | 2390.–               |
| 3.7                              | 5                               | 132 S               | 1LE1073-1CC2-.... | 2520.–               |
| 4.5                              | 6                               | 132 S               | 1LE1073-1CC4-.... | 2970.–               |
| 5.5                              | 7.5                             | 132 M               | 1LE1073-1CC3-.... | 3280.–               |
| 7.5                              | 10                              | 132 M               | 1LE1073-1CC6-.... | 3880.–               |
| 9.2                              | 12.5                            | 160 M               | 1LE1073-1DC3-.... | 4390.–               |
| 11                               | 15                              | 160 M               | 1LE1073-1DC4-.... | 5870.–               |
| 15                               | 20                              | 160 L               | 1LE1073-1DC6-.... | 6960.–               |
| <b>8-pole: 750 rpm at 50 Hz</b>  |                                 |                     |                   |                      |
| 0.25                             | 0.33                            | 80 M                | 1LE1073-0DD3-.... | 753.–                |
| 0.37                             | 0.5                             | 90 S                | 1LE1073-0ED0-.... | 872.–                |
| 0.55                             | 0.75                            | 90 L                | 1LE1073-0ED4-.... | 1060.–               |
| 0.75                             | 1                               | 100 L               | 1LE1073-1AD4-.... | 1510.–               |
| 2.2                              | 3                               | 132 S               | 1LE1073-1CD0-.... | 2750.–               |
| 3.7                              | 5                               | 132 M               | 1LE1073-1CD6-.... | 3510.–               |
| 4.5                              | 6                               | 160 M               | 1LE1073-1DD1-.... | 4230.–               |
| 5.5                              | 7.5                             | 160 M               | 1LE1073-1DD3-.... | 4660.–               |
| 7.5                              | 10                              | 160 L               | 1LE1073-1DD4-.... | 5230.–               |

# SIMOTICS SD 1LE Standard Motors – ABNT Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Kategorie                              | <b>Motors with Rendimento Premium IR3</b>                                                                     |
| Series version                         | <b>Cast-iron series 1LE1573/1LE5773</b><br>(continued on next page)                                           |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 180 M ... 315 L                                                                                               |
| Rated power                            | 9.2 ... 300 kW at 50 Hz<br>12.5 ... 400 kW at 60 Hz                                                           |
| Synchronous speed                      | 750 ... 3000 rpm                                                                                              |
| Rated torque                           | 80 ... 1978 Nm at 50 Hz                                                                                       |
| Efficiency                             | Rendimento Premium IR3 to NBR 17094-1                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 200 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4                                                 |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated, 50 Hz}}$<br>kW  | $P_{\text{rated, 60 Hz}}$<br>kW | Frame size<br>BG | Article No.       | Base price<br>EUR |
|----------------------------------|---------------------------------|------------------|-------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |                                 |                  |                   |                   |
| 30                               | 40                              | 200 L            | 1LE1573-2AA4-.... | 8350.-            |
| 37                               | 50                              | 200 L            | 1LE1573-2AA5-.... | 10600.-           |
| 45                               | 60                              | 225 S            | 1LE1573-2BA2-.... | 12600.-           |
| 55                               | 75                              | 225 M            | 1LE1573-2BA6-.... | 14500.-           |
| 75                               | 100                             | 250 M            | 1LE1573-2CA6-.... | 19200.-           |
| 90                               | 125                             | 280 S            | 1LE1573-2DA2-.... | 21800.-           |
| 110                              | 150                             | 280 M            | 1LE1573-2DA6-.... | 23600.-           |
| 132                              | 175                             | 315 S            | 1LE5773-3AA2-.... | 40300.-           |
| 150                              | 200                             | 315 M            | 1LE5773-3AA4-.... | 49000.-           |
| 185                              | 250                             | 315 M            | 1LE5773-3AA5-.... | 58900.-           |
| 220                              | 300                             | 315 L            | 1LE5773-3AA6-.... | 63300.-           |
| <b>4-pole: 1500 rpm at 50 Hz</b> |                                 |                  |                   |                   |
| 22                               | 30                              | 180 M            | 1LE1573-1EB4-.... | 6790.-            |
| 30                               | 40                              | 200 L            | 1LE1573-2AB5-.... | 8600.-            |
| 37                               | 50                              | 200 L            | 1LE1573-2AB6-.... | 10200.-           |
| 45                               | 60                              | 225 S            | 1LE1573-2BB2-.... | 11300.-           |
| 55                               | 75                              | 225 M            | 1LE1573-2BB6-.... | 13800.-           |
| 75                               | 100                             | 250 M            | 1LE1573-2CB6-.... | 18600.-           |
| 90                               | 125                             | 280 S            | 1LE1573-2DB2-.... | 21300.-           |
| 110                              | 150                             | 280 M            | 1LE1573-2DB6-.... | 21500.-           |
| 132                              | 175                             | 315 S            | 1LE5773-3AB2-.... | 37000.-           |
| 150                              | 200                             | 315 M            | 1LE5773-3AB4-.... | 41800.-           |
| 185                              | 250                             | 315 M            | 1LE5773-3AB5-.... | 54800.-           |
| 220                              | 300                             | 315 L            | 1LE5773-3AB6-.... | 63200.-           |
| 300                              | 400                             | 315 L            | 1LE5773-3AB7-.... | 79900.-           |

Standard delivery times in working days:

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On  
request**SIMOTICS SD 1LE Standard Motors – ABNT Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Kategorie                              | <b>Motors with Rendimento Premium IR3</b>                                                                     |
| Series version                         | <b>Cast-iron series 1LE1573/1LE5773</b>                                                                       |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 180 M ... 315 L                                                                                               |
| Rated power                            | 9.2 ... 300 kW at 50 Hz<br>12.5 ... 400 kW at 60 Hz                                                           |
| Synchronous speed                      | 750 ... 3000 rpm                                                                                              |
| Rated torque                           | 80 ... 1978 Nm at 50 Hz                                                                                       |
| Efficiency                             | Rendimento Premium IR3 to NBR 17094-1                                                                         |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4                                                 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated, 50 Hz}}$<br>kW  | $P_{\text{rated, 60 Hz}}$<br>kW | Frame<br>size<br>BG | Article No.       | Base<br>price<br>EUR |
|----------------------------------|---------------------------------|---------------------|-------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |                                 |                     |                   |                      |
| 18.5                             | 25                              | 180 L               | 1LE1573-1EC6-.... | 7920.-               |
| 22                               | 30                              | 200 L               | 1LE1573-2AC5-.... | 9450.-               |
| 30                               | 40                              | 200 L               | 1LE1573-2AC6-.... | 13000.-              |
| 37                               | 50                              | 225 M               | 1LE1573-2BC6-.... | 14500.-              |
| 45                               | 60                              | 250 S               | 1LE1573-2CC6-.... | 17600.-              |
| 55                               | 75                              | 280 S               | 1LE1573-2DC2-.... | 26900.-              |
| 75                               | 100                             | 280 S               | 1LE1573-2DC6-.... | 29300.-              |
| 90                               | 125                             | 280 M               | 1LE1573-2DC7-.... | 37000.-              |
| 110                              | 150                             | 315 M               | 1LE5773-3AC4-.... | 50400.-              |
| 132                              | 175                             | 315 M               | 1LE5773-3AC5-.... | 58800.-              |
| 150                              | 200                             | 315 M               | 1LE5773-3AC6-.... | 68300.-              |
| 185                              | 250                             | 315 L               | 1LE5773-3AC7-.... | 89700.-              |
| <b>8-pole: 750 rpm at 50 Hz</b>  |                                 |                     |                   |                      |
| 9.2                              | 12.5                            | 180 M               | 1LE1573-1ED3-.... | 6860.-               |
| 11                               | 15                              | 180 L               | 1LE1573-1ED4-.... | 8490.-               |
| 15                               | 20                              | 180 L               | 1LE1573-1ED6-.... | 9930.-               |
| 18.5                             | 25                              | 200 L               | 1LE1573-2AD6-.... | 12900.-              |
| 22                               | 30                              | 225 S               | 1LE1573-2BD2-.... | 13400.-              |
| 30                               | 40                              | 225 M               | 1LE1573-2BD6-.... | 16400.-              |
| 37                               | 50                              | 250 M               | 1LE1573-2CD6-.... | 21100.-              |
| 45                               | 60                              | 250 M               | 1LE1573-2CD7-.... | 19500.-              |
| 55                               | 75                              | 280 S               | 1LE1573-2DD6-.... | 28500.-              |
| 75                               | 100                             | 280 M               | 1LE1573-2DD7-.... | 36400.-              |
| 90                               | 125                             | 315 M               | 1LE5773-3AD4-.... | 49700.-              |
| 110                              | 150                             | 315 M               | 1LE5773-3AD5-.... | 57800.-              |
| 132                              | 175                             | 315 L               | 1LE5773-3AD6-.... | 67300.-              |
| 150                              | 200                             | 315 L               | 1LE5773-3AD7-.... | 75800.-              |
| 185                              | 250                             | 315 L               | 1LE5773-3AD8-.... | 83200.-              |

# SIMOTICS GP 1LE1 Standard Motors – Eagle Line Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                                  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>NEMA Energy Efficient MG1 Motors Table 12-11</b>                                                              |
| Series version                         | <b>Aluminum series 1LE1021 <sup>1)</sup></b>                                                                     |
| Cooling                                | Self-ventilated (IC 411) or with order code F90<br>forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                    |
| Insulation                             | Thermal class 155 (F)                                                                                            |
| Utilization                            | Thermal class 130 (B)                                                                                            |
| Number of poles                        | 4, 6                                                                                                             |
| Frame sizes (FS)                       | 80 M                                                                                                             |
| Rated power                            | 0.37 ... 0.55 kW at 50 Hz<br>0.5 ... 0.75 hp at 60 Hz                                                            |
| Synchronous speed at 60 Hz             | 1200 ... 1800 rpm                                                                                                |
| Rated torque                           | 3 ... 4.6 Nm at 60 Hz                                                                                            |
| Efficiency                             | NEMA Energy Efficient MG1 Table 12-11 <sup>1)</sup>                                                              |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                    |
| Price group (PG)                       | 3F1                                                                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated, 50\text{ Hz}}$<br>kW                     | $P_{rated, 60\text{ Hz}}$<br>hp | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|-----------------------------------------------------|---------------------------------|---------------------|-------------------|----------------------|
| <b>4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz</b> |                                 |                     |                   |                      |
| 0.55                                                | 0.75                            | 80 M                | 1LE1021-0DB2-.... | 645.–                |
| <b>6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz</b> |                                 |                     |                   |                      |
| 0.37                                                | 0.5                             | 80 M                | 1LE1021-0DC2-.... | 500.–                |
| 0.55                                                | 0.75                            | 80 M                | 1LE1021-0DC3-.... | 578.–                |

<sup>1)</sup> Notes on the 1LE1021 NEMA Energy Efficient Motors:

- Comprises CSA, UL and CC No.
- Only valid for voltages ≤ 600 V
- For ≤ 200 hp only flange types are admissible

Standard delivery times in working days:

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On  
request**SIMOTICS SD 1LE1 Standard Motors – Eagle Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                          |
|----------------------------------------|----------------------------------------------------------|
| Category                               | <b>NEMA Energy Efficient MG1 Motors Table 12-11</b>      |
| Series version                         | <b>Cast-iron series 1LE1521 Basic Line <sup>1)</sup></b> |
| Cooling                                | Self-ventilated (IC 411)                                 |
| Degree of protection                   | IP55, optionally IP56 or IP65                            |
| Insulation                             | Thermal class 155 (F)                                    |
| Utilization                            | Thermal class 130 (B)                                    |
| Number of poles                        | 2, 4, 6, 8                                               |
| Frame sizes (FS)                       | 71 M ... 90 L                                            |
| Rated power                            | 0.09 ... 0.55 kW at 50 Hz<br>0.12 ... 0.75 hp at 60 Hz   |
| Synchronous speed at 60 Hz             | 900 ... 3600 rpm                                         |
| Rated torque                           | 1.0 ... 6.3 Nm at 60 Hz                                  |
| Efficiency                             | NEMA Energy Efficient MG1 Table 12-11 <sup>1)</sup>      |
| Metal factor for metal surcharges (MS) | N - W - - - -                                            |
| Price group (PG)                       | 3F1                                                      |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated, 50 Hz}$<br>kW                            | $P_{rated, 60 Hz}$<br>hp | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base<br/>price</b><br>EUR |
|-----------------------------------------------------|--------------------------|---------------------|----------------------------------|------------------------------|
| <b>2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz</b> |                          |                     |                                  |                              |
| 0.37                                                | 0.5                      | 71 M                | 1LE1521-OCA2-....                | 620.–                        |
| 0.55                                                | 0.75                     | 71 M                | 1LE1521-OCA3-....                | 715.–                        |
| <b>4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz</b> |                          |                     |                                  |                              |
| 0.25                                                | 0.33                     | 71 M                | 1LE1521-OCB2-....                | 617.–                        |
| 0.37                                                | 0.5                      | 71 M                | 1LE1521-OCB3-....                | 681.–                        |
| 0.55                                                | 0.75                     | 80 M                | 1LE1521-ODB2-....                | 770.–                        |
| <b>6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz</b> |                          |                     |                                  |                              |
| 0.18                                                | 0.25                     | 71 M                | 1LE1521-0CC2-....                | 601.–                        |
| 0.25                                                | 0.33                     | 71 M                | 1LE1521-0CC3-....                | 698.–                        |
| 0.37                                                | 0.5                      | 80 M                | 1LE1521-0DC2-....                | 713.–                        |
| 0.55                                                | 0.75                     | 80 M                | 1LE1521-0DC3-....                | 812.–                        |
| <b>8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz</b>   |                          |                     |                                  |                              |
| 0.09                                                | 0.12                     | 71 M                | 1LE1521-0CD2-....                | 684.–                        |
| 0.12                                                | 0.16                     | 71 M                | 1LE1521-0CD3-....                | 753.–                        |
| 0.18                                                | 0.25                     | 80 M                | 1LE1521-0DD2-....                | 793.–                        |
| 0.25                                                | 0.33                     | 80 M                | 1LE1521-0DD3-....                | 955.–                        |
| 0.37                                                | 0.5                      | 90 S                | 1LE1521-0ED0-....                | 1110.–                       |
| 0.55                                                | 0.75                     | 90 L                | 1LE1521-0ED4-....                | 1280.–                       |

<sup>1)</sup> Notes on the 1LE1521 NEMA Energy Efficient Motors:

- Comprises CSA, UL and CC No.
- Only valid for voltages ≤ 600 V
- For ≤ 200 hp only flange types are admissible

# SIMOTICS GP 1LE1 Standard Motors – Eagle Line

## Orientation

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On request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>NEMA Premium Efficient MG1 Motors Table 12-12</b>                                                          |
| Series version                         | <b>Aluminum series 1LE1023 <sup>1)</sup></b>                                                                  |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 80 M ... 200 L                                                                                                |
| Rated power                            | 0.37 ... 37 kW at 50 Hz<br>0.5 ... 50 hp at 60 Hz                                                             |
| Synchronous speed at 60 Hz             | 900 ... 3600 rpm                                                                                              |
| Rated torque                           | 2.1 ... 178 Nm at 60 Hz                                                                                       |
| Efficiency                             | NEMA Premium Efficient MG1 Table 12-12 <sup>1)</sup>                                                          |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                 |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1,<br>Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                  |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW                        | $P_{rated}$ ,<br>60 Hz<br>hp | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{rated}$ ,<br>50 Hz<br>kW                        | $P_{rated}$ ,<br>60 Hz<br>hp | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|-----------------------------------------------------|------------------------------|---------------------|--------------------|----------------------|-----------------------------------------------------|------------------------------|---------------------|--------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz</b> |                              |                     |                    |                      | <b>6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz</b> |                              |                     |                    |                      |
| 0.75                                                | 1                            | 80 M                | 1LE1023-0DA2.-.... | 722.-                | 0.37                                                | 0.5                          | 80 M                | 1LE1023-0DC2.-.... | 693.-                |
| 1.1                                                 | 1.5                          | 80 M                | 1LE1023-0DA3.-.... | 826.-                | 0.55                                                | 0.75                         | 80 M                | 1LE1023-0DC3.-.... | 802.-                |
| 1.5                                                 | 2                            | 90 S                | 1LE1023-0EA0.-.... | 954.-                | 0.75                                                | 1                            | 90 S                | 1LE1023-0EC0.-.... | 908.-                |
| 2.2                                                 | 3                            | 90 L                | 1LE1023-0EA4.-.... | 1220.-               | 1.1                                                 | 1.5                          | 100 L               | 1LE1023-1AC3.-.... | 1100.-               |
| 3                                                   | 4                            | 100 L               | 1LE1023-1AA4.-.... | 1340.-               | 3                                                   | 4                            | 132 S               | 1LE1023-1CC0.-.... | 1910.-               |
| 4                                                   | 5                            | 112 M               | 1LE1023-1BA2.-.... | 1580.-               | 4                                                   | 5                            | 132 M               | 1LE1023-1CC2.-.... | 2360.-               |
| 5.5                                                 | 7.5                          | 132 S               | 1LE1023-1CA0.-.... | 1980.-               | 5.5                                                 | 7.5                          | 132 M               | 1LE1023-1CC3.-.... | 2950.-               |
| 7.5                                                 | 10                           | 132 S               | 1LE1023-1CA1.-.... | 2510.-               | 7.5                                                 | 10                           | 160 M               | 1LE1023-1DC2.-.... | 3740.-               |
| 11                                                  | 15                           | 160 M               | 1LE1023-1DA2.-.... | 3490.-               | 11                                                  | 15                           | 160 L               | 1LE1023-1DC4.-.... | 5170.-               |
| 15                                                  | 20                           | 160 M               | 1LE1023-1DA3.-.... | 4550.-               | 15                                                  | 20                           | 180 L               | 1LE1023-1EC4.-.... | 6380.-               |
| 18.5                                                | 25                           | 160 L               | 1LE1023-1DA4.-.... | 5420.-               | 18.5                                                | 25                           | 200 L               | 1LE1023-2AC4.-.... | 7850.-               |
| 22                                                  | 30                           | 180 M               | 1LE1023-1EA2.-.... | 6090.-               | 22                                                  | 30                           | 200 L               | 1LE1023-2AC5.-.... | 8970.-               |
| 30                                                  | 40                           | 200 L               | 1LE1023-2AA4.-.... | 7930.-               |                                                     |                              |                     |                    |                      |
| 37                                                  | 50                           | 200 L               | 1LE1023-2AA5.-.... | 9710.-               |                                                     |                              |                     |                    |                      |
| <b>4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz</b> |                              |                     |                    |                      | <b>8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz</b>   |                              |                     |                    |                      |
| 0.55                                                | 0.75                         | 80 M                | 1LE1023-0DB2.-.... | 717.-                | 2.2                                                 | 3                            | 132 S               | 1LE1023-1CD0.-.... | 2940.-               |
| 0.75                                                | 1                            | 80 M                | 1LE1023-0DB3.-.... | 782.-                | 3                                                   | 4                            | 132 M               | 1LE1023-1CD2.-.... | 3530.-               |
| 1.1                                                 | 1.5                          | 90 S                | 1LE1023-0EB0.-.... | 925.-                | 3.7                                                 | 5                            | 160 M               | 1LE1023-1DD2.-.... | 4340.-               |
| 1.5                                                 | 2                            | 90 L                | 1LE1023-0EB4.-.... | 1090.-               | 5.5                                                 | 7.5                          | 160 M               | 1LE1023-1DD3.-.... | 5240.-               |
| 2.2                                                 | 3                            | 100 L               | 1LE1023-1AB4.-.... | 1200.-               | 7.5                                                 | 10                           | 160 L               | 1LE1023-1DD4.-.... | 6230.-               |
| 3                                                   | 4                            | 100 L               | 1LE1023-1AB5.-.... | 1390.-               | 11                                                  | 15                           | 180 L               | 1LE1023-1ED4.-.... | 7560.-               |
| 4                                                   | 5                            | 112 M               | 1LE1023-1BB2.-.... | 1700.-               | 15                                                  | 20                           | 200 L               | 1LE1023-2AD5.-.... | 9910.-               |
| 5.5                                                 | 7.5                          | 132 S               | 1LE1023-1CB0.-.... | 2140.-               |                                                     |                              |                     |                    |                      |
| 7.5                                                 | 10                           | 132 M               | 1LE1023-1CB2.-.... | 2710.-               |                                                     |                              |                     |                    |                      |
| 11                                                  | 15                           | 160 M               | 1LE1023-1DB2.-.... | 3560.-               |                                                     |                              |                     |                    |                      |
| 15                                                  | 20                           | 160 L               | 1LE1023-1DB4.-.... | 4620.-               |                                                     |                              |                     |                    |                      |
| 18.5                                                | 25                           | 180 M               | 1LE1023-1EB2.-.... | 5270.-               |                                                     |                              |                     |                    |                      |
| 22                                                  | 30                           | 180 L               | 1LE1023-1EB4.-.... | 6020.-               |                                                     |                              |                     |                    |                      |
| 30                                                  | 40                           | 200 L               | 1LE1023-2AB5.-.... | 7810.-               |                                                     |                              |                     |                    |                      |

<sup>1)</sup> Notes on the 1LE1023 NEMA Premium Efficient Motors:  
 - Comprises CSA, UL and CC No.  
 - Only valid for voltages ≤ 600 V  
 - All types of construction are admissible

Standard delivery times in working days:

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On  
request**SIMOTICS SD 1LE1 Standard Motors – Eagle Line**  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

| Category                                                                                                                                                                                                                                              | NEMA Premium Efficient MG1 Motors Table 12-12                                                                        |                                     |                     |                           |                      |                                 |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------|---------------------------|----------------------|---------------------------------|----------------------|
| Series version                                                                                                                                                                                                                                        | Cast-iron series 1LE1523 Basic Line, 1LE1623 Performance Line <sup>1)</sup> (continued on next page)                 |                                     |                     |                           |                      |                                 |                      |
| Cooling                                                                                                                                                                                                                                               | Self-ventilated (IC 411)                                                                                             |                                     |                     |                           |                      |                                 |                      |
| Degree of protection                                                                                                                                                                                                                                  | IP55, optionally IP56 or IP65                                                                                        |                                     |                     |                           |                      |                                 |                      |
| Insulation                                                                                                                                                                                                                                            | Thermal class 155 (F)                                                                                                |                                     |                     |                           |                      |                                 |                      |
| Utilization                                                                                                                                                                                                                                           | Thermal class 130 (B)                                                                                                |                                     |                     |                           |                      |                                 |                      |
| Number of poles                                                                                                                                                                                                                                       | 2, 4, 6, 8                                                                                                           |                                     |                     |                           |                      |                                 |                      |
| Frame sizes (FS)                                                                                                                                                                                                                                      | 71 M ... 315 L                                                                                                       |                                     |                     |                           |                      |                                 |                      |
| Rated power                                                                                                                                                                                                                                           | 0.18 ... 185 kW at 50 Hz<br>0.25 ... 250 hp at 60 Hz                                                                 |                                     |                     |                           |                      |                                 |                      |
| Synchronous speed at 60 Hz                                                                                                                                                                                                                            | 900 ... 3600 rpm                                                                                                     |                                     |                     |                           |                      |                                 |                      |
| Rated torque                                                                                                                                                                                                                                          | 1.0 ... 1202 Nm at 60 Hz                                                                                             |                                     |                     |                           |                      |                                 |                      |
| Efficiency                                                                                                                                                                                                                                            | NEMA Premium Efficient MG1 Table 12-12 <sup>1)</sup>                                                                 |                                     |                     |                           |                      |                                 |                      |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                                | N - W - - - -                                                                                                        |                                     |                     |                           |                      |                                 |                      |
| Price group (PG)                                                                                                                                                                                                                                      | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |                                     |                     |                           |                      |                                 |                      |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price) |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | P <sub>rated</sub> ,<br>50 Hz<br>kW                                                                                  | P <sub>rated</sub> ,<br>60 Hz<br>hp | Frame<br>size<br>FS | Article No.<br>Basic Line | Base<br>price<br>EUR | Article No.<br>Performance Line | Base<br>price<br>EUR |
| 2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz                                                                                                                                                                                                          |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.37                                                                                                                 | 0.5                                 | 71 M                | 1LE1523-0CA2-....         | 807.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.55                                                                                                                 | 0.75                                | 71 M                | 1LE1523-0CA3-....         | 928.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.75                                                                                                                 | 1                                   | 80 M                | 1LE1523-0DA2-....         | 968.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 1.1                                                                                                                  | 1.5                                 | 80 M                | 1LE1523-0DA3-....         | 1090.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 1.5                                                                                                                  | 2                                   | 90 S                | 1LE1523-0EA0-....         | 1260.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 2.2                                                                                                                  | 3                                   | 90 L                | 1LE1523-0EA4-....         | 1540.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 3                                                                                                                    | 4                                   | 100 L               | 1LE1523-1AA4-....         | 1430.-               | 1LE1623-1AA4-....               | 1560.-               |
|                                                                                                                                                                                                                                                       | 4                                                                                                                    | 5                                   | 112 M               | 1LE1523-1BA2-....         | 1700.-               | 1LE1623-1BA2-....               | 1850.-               |
|                                                                                                                                                                                                                                                       | 5.5                                                                                                                  | 7.5                                 | 132 S               | 1LE1523-1CA0-....         | 2150.-               | 1LE1623-1CA0-....               | 2340.-               |
|                                                                                                                                                                                                                                                       | 7.5                                                                                                                  | 10                                  | 132 S               | 1LE1523-1CA1-....         | 2720.-               | 1LE1623-1CA1-....               | 2940.-               |
|                                                                                                                                                                                                                                                       | 11                                                                                                                   | 15                                  | 160 M               | 1LE1523-1DA2-....         | 3780.-               | 1LE1623-1DA2-....               | 4210.-               |
|                                                                                                                                                                                                                                                       | 15                                                                                                                   | 20                                  | 160 M               | 1LE1523-1DA3-....         | 4930.-               | 1LE1623-1DA3-....               | 5510.-               |
|                                                                                                                                                                                                                                                       | 18.5                                                                                                                 | 25                                  | 160 L               | 1LE1523-1DA4-....         | 5890.-               | 1LE1623-1DA4-....               | 6570.-               |
|                                                                                                                                                                                                                                                       | 22                                                                                                                   | 30                                  | 180 M               | 1LE1523-1EA2-....         | 6440.-               | 1LE1623-1EA2-....               | 6940.-               |
|                                                                                                                                                                                                                                                       | 30                                                                                                                   | 40                                  | 200 L               | 1LE1523-2AA4-....         | 8360.-               | 1LE1623-2AA4-....               | 9020.-               |
|                                                                                                                                                                                                                                                       | 37                                                                                                                   | 50                                  | 200 L               | 1LE1523-2AA5-....         | 10500.-              | 1LE1623-2AA5-....               | 11300.-              |
|                                                                                                                                                                                                                                                       | 45                                                                                                                   | 60                                  | 225 M               | 1LE1523-2BA2-....         | 11500.-              | 1LE1623-2BA2-....               | 12600.-              |
|                                                                                                                                                                                                                                                       | 55                                                                                                                   | 75                                  | 250 M               | 1LE1523-2CA2-....         | 13700.-              | 1LE1623-2CA2-....               | 14800.-              |
|                                                                                                                                                                                                                                                       | 75                                                                                                                   | 100                                 | 280 S               | 1LE1523-2DA0-....         | 18600.-              | 1LE1623-2DA0-....               | 19000.-              |
|                                                                                                                                                                                                                                                       | 90                                                                                                                   | 125                                 | 280 M               | 1LE1523-2DA2-....         | 22000.-              | 1LE1623-2DA2-....               | 23000.-              |
|                                                                                                                                                                                                                                                       | 110                                                                                                                  | 150                                 | 315 S               | 1LE1523-3AA0-....         | 26500.-              | 1LE1623-3AA0-....               | 27500.-              |
|                                                                                                                                                                                                                                                       | 132                                                                                                                  | 175                                 | 315 M               | 1LE1523-3AA2-....         | 31700.-              | 1LE1623-3AA2-....               | 32900.-              |
|                                                                                                                                                                                                                                                       | 150                                                                                                                  | 200                                 | 315 L               | 1LE1523-3AA4-....         | 39300.-              | 1LE1623-3AA4-....               | 41000.-              |
|                                                                                                                                                                                                                                                       | 185                                                                                                                  | 250                                 | 315 L               | 1LE1523-3AA5-....         | 46000.-              | 1LE1623-3AA5-....               | 48000.-              |
| 4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz                                                                                                                                                                                                          |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.25                                                                                                                 | 0.33                                | 71 M                | 1LE1523-0CB2-....         | 802.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.37                                                                                                                 | 0.5                                 | 71 M                | 1LE1523-0CB3-....         | 886.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.55                                                                                                                 | 0.75                                | 80 M                | 1LE1523-0DB2-....         | 960.-                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.75                                                                                                                 | 1                                   | 80 M                | 1LE1523-0DB3-....         | 1040.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 1.1                                                                                                                  | 1.5                                 | 90 S                | 1LE1523-0EB0-....         | 1210.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 1.5                                                                                                                  | 2                                   | 90 L                | 1LE1523-0EB4-....         | 1380.-               |                                 |                      |
|                                                                                                                                                                                                                                                       | 2.2                                                                                                                  | 3                                   | 100 L               | 1LE1523-1AB4-....         | 1320.-               | 1LE1623-1AB4-....               | 1410.-               |
|                                                                                                                                                                                                                                                       | 3                                                                                                                    | 4                                   | 100 L               | 1LE1523-1AB5-....         | 1520.-               | 1LE1623-1AB5-....               | 1630.-               |
|                                                                                                                                                                                                                                                       | 4                                                                                                                    | 5                                   | 112 M               | 1LE1523-1BB2-....         | 1870.-               | 1LE1623-1BB2-....               | 2000.-               |
|                                                                                                                                                                                                                                                       | 5.5                                                                                                                  | 7.5                                 | 132 S               | 1LE1523-1CB0-....         | 2320.-               | 1LE1623-1CB0-....               | 2500.-               |
|                                                                                                                                                                                                                                                       | 7.5                                                                                                                  | 10                                  | 132 M               | 1LE1523-1CB2-....         | 2940.-               | 1LE1623-1CB2-....               | 3170.-               |
|                                                                                                                                                                                                                                                       | 11                                                                                                                   | 15                                  | 160 M               | 1LE1523-1DB2-....         | 3860.-               | 1LE1623-1DB2-....               | 4310.-               |
|                                                                                                                                                                                                                                                       | 15                                                                                                                   | 20                                  | 160 L               | 1LE1523-1DB4-....         | 5010.-               | 1LE1623-1DB4-....               | 5610.-               |
|                                                                                                                                                                                                                                                       | 18.5                                                                                                                 | 25                                  | 180 M               | 1LE1523-1EB2-....         | 5470.-               | 1LE1623-1EB2-....               | 5900.-               |
|                                                                                                                                                                                                                                                       | 22                                                                                                                   | 30                                  | 180 L               | 1LE1523-1EB4-....         | 6350.-               | 1LE1623-1EB4-....               | 6850.-               |
|                                                                                                                                                                                                                                                       | 30                                                                                                                   | 40                                  | 200 L               | 1LE1523-2AB5-....         | 8220.-               | 1LE1623-2AB5-....               | 8890.-               |
|                                                                                                                                                                                                                                                       | 37                                                                                                                   | 50                                  | 225 S               | 1LE1523-2BB0-....         | 9240.-               | 1LE1623-2BB0-....               | 10000.-              |
|                                                                                                                                                                                                                                                       | 45                                                                                                                   | 60                                  | 225 M               | 1LE1523-2BB2-....         | 10900.-              | 1LE1623-2BB2-....               | 11700.-              |
|                                                                                                                                                                                                                                                       | 55                                                                                                                   | 75                                  | 250 M               | 1LE1523-2CB2-....         | 13300.-              | 1LE1623-2CB2-....               | 14200.-              |
|                                                                                                                                                                                                                                                       | 75                                                                                                                   | 100                                 | 280 S               | 1LE1523-2DB0-....         | 17600.-              | 1LE1623-2DB0-....               | 18200.-              |
|                                                                                                                                                                                                                                                       | 90                                                                                                                   | 125                                 | 280 M               | 1LE1523-2DB2-....         | 20700.-              | 1LE1623-2DB2-....               | 21200.-              |
|                                                                                                                                                                                                                                                       | 110                                                                                                                  | 150                                 | 315 S               | 1LE1523-3AB0-....         | 25700.-              | 1LE1623-3AB0-....               | 26500.-              |
|                                                                                                                                                                                                                                                       | 132                                                                                                                  | 175                                 | 315 M               | 1LE1523-3AB2-....         | 30500.-              | 1LE1623-3AB2-....               | 31200.-              |
|                                                                                                                                                                                                                                                       | 150                                                                                                                  | 200                                 | 315 L               | 1LE1523-3AB4-....         | 37000.-              | 1LE1623-3AB4-....               | 37800.-              |
|                                                                                                                                                                                                                                                       | 185                                                                                                                  | 250                                 | 315 L               | 1LE1523-3AB5-....         | 43000.-              | 1LE1623-3AB5-....               | 44200.-              |

<sup>1)</sup> Notes on the 1LE1523/1LE1623 NEMA Premium Efficient Motors:

- Comprises CSA, UL and CC No.
- Only valid for voltages ≤ 600 V
- All types of construction are admissible

# SIMOTICS SD 1LE1 Standard Motors – Eagle Line

## Orientation

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On  
request

## Overview of selection and ordering data with base prices and standard delivery times

### Overview

| Category                                                                                                                                                                                                                                              | NEMA Premium Efficient MG1 Motors Table 12-12                                                                        |                                     |                     |                           |                      |                                 |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------|---------------------------|----------------------|---------------------------------|----------------------|
| Series version                                                                                                                                                                                                                                        | Cast-iron series 1LE1523 Basic Line, 1LE1623 Performance Line <sup>1)</sup>                                          |                                     |                     |                           |                      |                                 |                      |
| Cooling                                                                                                                                                                                                                                               | Self-ventilated (IC 411)                                                                                             |                                     |                     |                           |                      |                                 |                      |
| Degree of protection                                                                                                                                                                                                                                  | IP55, optionally IP56 or IP65                                                                                        |                                     |                     |                           |                      |                                 |                      |
| Insulation                                                                                                                                                                                                                                            | Thermal class 155 (F)                                                                                                |                                     |                     |                           |                      |                                 |                      |
| Utilization                                                                                                                                                                                                                                           | Thermal class 130 (B)                                                                                                |                                     |                     |                           |                      |                                 |                      |
| Number of poles                                                                                                                                                                                                                                       | 2, 4, 6, 8                                                                                                           |                                     |                     |                           |                      |                                 |                      |
| Frame sizes (FS)                                                                                                                                                                                                                                      | 71 M ... 315 L                                                                                                       |                                     |                     |                           |                      |                                 |                      |
| Rated power                                                                                                                                                                                                                                           | 0.18 ... 200 kW at 50 Hz<br>0.25 ... 250 hp at 60 Hz                                                                 |                                     |                     |                           |                      |                                 |                      |
| Synchronous speed at 60 Hz                                                                                                                                                                                                                            | 900 ... 3600 rpm                                                                                                     |                                     |                     |                           |                      |                                 |                      |
| Rated torque                                                                                                                                                                                                                                          | 1.0 ... 1202 Nm at 60 Hz                                                                                             |                                     |                     |                           |                      |                                 |                      |
| Efficiency                                                                                                                                                                                                                                            | NEMA Premium Efficient MG1 Table 12-12 <sup>1)</sup>                                                                 |                                     |                     |                           |                      |                                 |                      |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                                | N - W - - - -                                                                                                        |                                     |                     |                           |                      |                                 |                      |
| Price group (PG)                                                                                                                                                                                                                                      | Frame sizes 71 ... 90: 3F1, Frame sizes 100 ... 160: 3F2, Frame sizes 180 ... 225: 3F3, Frame sizes 250 ... 315: 3F4 |                                     |                     |                           |                      |                                 |                      |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price) |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | P <sub>rated</sub> ,<br>50 Hz<br>kW                                                                                  | P <sub>rated</sub> ,<br>60 Hz<br>hp | Frame<br>size<br>FS | Article No.<br>Basic Line | Base<br>price<br>EUR | Article No.<br>Performance Line | Base<br>price<br>EUR |
| 6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz                                                                                                                                                                                                          |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.18                                                                                                                 | 0.25                                | 71 M                | 1LE1523-0CC2-....         | 780.–                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.25                                                                                                                 | 0.33                                | 71 M                | 1LE1523-0CC3-....         | 908.–                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.37                                                                                                                 | 0.5                                 | 80 M                | 1LE1523-0DC2-....         | 932.–                |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.55                                                                                                                 | 0.75                                | 80 M                | 1LE1523-0DC3-....         | 1060.–               |                                 |                      |
|                                                                                                                                                                                                                                                       | 0.75                                                                                                                 | 1                                   | 90 S                | 1LE1523-0EC0-....         | 1190.–               |                                 |                      |
|                                                                                                                                                                                                                                                       | 3                                                                                                                    | 4                                   | 132 S               | 1LE1523-1CC0-....         | 2060.–               | 1LE1623-1CC0-....               | 2230.–               |
|                                                                                                                                                                                                                                                       | 4                                                                                                                    | 5                                   | 132 M               | 1LE1523-1CC2-....         | 2540.–               | 1LE1623-1CC2-....               | 2750.–               |
|                                                                                                                                                                                                                                                       | 5.5                                                                                                                  | 7.5                                 | 132 M               | 1LE1523-1CC3-....         | 3200.–               | 1LE1623-1CC3-....               | 3470.–               |
|                                                                                                                                                                                                                                                       | 7.5                                                                                                                  | 10                                  | 160 M               | 1LE1523-1DC2-....         | 4070.–               | 1LE1623-1DC2-....               | 4550.–               |
|                                                                                                                                                                                                                                                       | 11                                                                                                                   | 15                                  | 160 L               | 1LE1523-1DC4-....         | 5610.–               | 1LE1623-1DC4-....               | 6260.–               |
|                                                                                                                                                                                                                                                       | 15                                                                                                                   | 20                                  | 180 L               | 1LE1523-1EC4-....         | 6770.–               | 1LE1623-1EC4-....               | 7320.–               |
|                                                                                                                                                                                                                                                       | 18.5                                                                                                                 | 25                                  | 200 L               | 1LE1523-2AC4-....         | 8290.–               | 1LE1623-2AC4-....               | 8970.–               |
|                                                                                                                                                                                                                                                       | 22                                                                                                                   | 30                                  | 200 L               | 1LE1523-2AC5-....         | 9600.–               | 1LE1623-2AC5-....               | 10400.–              |
|                                                                                                                                                                                                                                                       | 30                                                                                                                   | 40                                  | 225 M               | 1LE1523-2BC2-....         | 11800.–              | 1LE1623-2BC2-....               | 13100.–              |
|                                                                                                                                                                                                                                                       | 37                                                                                                                   | 50                                  | 250 M               | 1LE1523-2CC2-....         | 14400.–              | 1LE1623-2CC2-....               | 15600.–              |
|                                                                                                                                                                                                                                                       | 45                                                                                                                   | 60                                  | 280 S               | 1LE1523-2DC0-....         | 17400.–              | 1LE1623-2DC0-....               | 18000.–              |
|                                                                                                                                                                                                                                                       | 55                                                                                                                   | 75                                  | 280 M               | 1LE1523-2DC2-....         | 20700.–              | 1LE1623-2DC2-....               | 21200.–              |
|                                                                                                                                                                                                                                                       | 75                                                                                                                   | 100                                 | 315 S               | 1LE1523-3AC0-....         | 28100.–              | 1LE1623-3AC0-....               | 28800.–              |
|                                                                                                                                                                                                                                                       | 90                                                                                                                   | 125                                 | 315 M               | 1LE1523-3AC2-....         | 31700.–              | 1LE1623-3AC2-....               | 32400.–              |
|                                                                                                                                                                                                                                                       | 110                                                                                                                  | 150                                 | 315 L               | 1LE1523-3AC4-....         | 38100.–              | 1LE1623-3AC4-....               | 39000.–              |
|                                                                                                                                                                                                                                                       | 132                                                                                                                  | 175                                 | 315 L               | 1LE1523-3AC5-....         | 45400.–              | 1LE1623-3AC5-....               | 46500.–              |
|                                                                                                                                                                                                                                                       | 160                                                                                                                  | 200                                 | 315 L               | 1LE1523-3AC6-....         | 51500.–              | 1LE1623-3AC6-....               | 52800.–              |
| 8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz                                                                                                                                                                                                            |                                                                                                                      |                                     |                     |                           |                      |                                 |                      |
|                                                                                                                                                                                                                                                       | 2.2                                                                                                                  | 3                                   | 132 S               |                           |                      | 1LE1623-1CD0-....               | 3220.–               |
|                                                                                                                                                                                                                                                       | 3                                                                                                                    | 4                                   | 132 M               |                           |                      | 1LE1623-1CD2-....               | 3920.–               |
|                                                                                                                                                                                                                                                       | 3.7                                                                                                                  | 5                                   | 160 M               |                           |                      | 1LE1623-1DD2-....               | 4810.–               |
|                                                                                                                                                                                                                                                       | 5.5                                                                                                                  | 7.5                                 | 160 M               |                           |                      | 1LE1623-1DD3-....               | 5920.–               |
|                                                                                                                                                                                                                                                       | 7.5                                                                                                                  | 10                                  | 160 L               |                           |                      | 1LE1623-1DD4-....               | 7140.–               |
|                                                                                                                                                                                                                                                       | 11                                                                                                                   | 15                                  | 180 L               |                           |                      | 1LE1623-1ED4-....               | 7980.–               |
|                                                                                                                                                                                                                                                       | 15                                                                                                                   | 20                                  | 200 L               |                           |                      | 1LE1623-2AD5-....               | 10500.–              |
|                                                                                                                                                                                                                                                       | 18.5                                                                                                                 | 25                                  | 225 M               |                           |                      | 1LE1623-2BD0-....               | 11900.–              |
|                                                                                                                                                                                                                                                       | 22                                                                                                                   | 30                                  | 250 M               |                           |                      | 1LE1623-2BD2-....               | 13700.–              |
|                                                                                                                                                                                                                                                       | 30                                                                                                                   | 40                                  | 250 M               |                           |                      | 1LE1623-2CD2-....               | 17600.–              |
|                                                                                                                                                                                                                                                       | 37                                                                                                                   | 50                                  | 280 S               |                           |                      | 1LE1623-2DD0-....               | 19900.–              |
|                                                                                                                                                                                                                                                       | 45                                                                                                                   | 60                                  | 280 M               |                           |                      | 1LE1623-2DD2-....               | 24300.–              |
|                                                                                                                                                                                                                                                       | 55                                                                                                                   | 75                                  | 315 S               |                           |                      | 1LE1623-3AD0-....               | 28800.–              |
|                                                                                                                                                                                                                                                       | 75                                                                                                                   | 100                                 | 315 M               |                           |                      | 1LE1623-3AD2-....               | 38500.–              |
|                                                                                                                                                                                                                                                       | 90                                                                                                                   | 125                                 | 315 L               |                           |                      | 1LE1623-3AD4-....               | 42900.–              |
|                                                                                                                                                                                                                                                       | 110                                                                                                                  | 150                                 | 315 L               |                           |                      | 1LE1623-3AD5-....               | 51800.–              |
|                                                                                                                                                                                                                                                       | 132                                                                                                                  | 175                                 | 315 L               |                           |                      | 1LE1623-3AD6-....               | 61800.–              |

<sup>1)</sup> Notes on the 1LE1523/1LE1623 NEMA Premium Efficient Motors:  
 - Comprises CSA, UL and CC No.  
 - Only valid for voltages ≤ 600 V  
 - All types of construction are admissible

Standard delivery times in working days:

2

5

10

15

20

30

40

On  
requestSIMOTICS GP 1LE1 Standard Motors  
Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

| Category                               | Pole-changing motors                             |                                                                                        |
|----------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------|
| Series version                         | Aluminum series 1LE1011 for constant load torque | Aluminum series 1LE1011 and 1LE1012 for square-law load torque (e.g. for driving fans) |
| Cooling                                | Self-ventilated (IC 411)                         | Self-ventilated (IC 411)                                                               |
| Degree of protection                   | IP55, optionally IP56 or IP65                    | IP55, optionally IP56 or IP65                                                          |
| Insulation                             | Thermal class 155 (F)                            | Thermal class 155 (F)                                                                  |
| Utilization                            | Thermal class 130 (B)                            | Thermal class 130 (B)                                                                  |
| Number of poles                        | 4/2, 8/4                                         | 4/2, 6/4, 8/4                                                                          |
| Frame sizes (FS)                       | 100 L ... 160 L                                  | 100 L ... 200 L                                                                        |
| Rated power at 50 Hz                   | 0.55 ... 16 kW                                   | 0.5 ... 28 kW                                                                          |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                 | 750 ... 3000 rpm                                                                       |
| Rated torque at 50 Hz                  | 7.3 ... 86 Nm                                    | 4.4 ... 97 Nm                                                                          |
| Efficiency                             | –                                                | –                                                                                      |
| Metal factor for metal surcharges (MS) | N - W - - - -                                    | N - W - - - -                                                                          |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2                     | Frame sizes 100 ... 160: 3F2,<br>Frame sizes 180 ... 200: 3F3                          |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 1/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated 1}}$<br>50 Hz<br>kW                                                      | $P_{\text{rated 2}}$<br>50 Hz<br>kW | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR | $P_{\text{rated 1}}$<br>50 Hz<br>kW | $P_{\text{rated 2}}$<br>50 Hz<br>kW | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|------------------------------------------------------------------------------------------|-------------------------------------|---------------------|--------------------|----------------------|-------------------------------------|-------------------------------------|---------------------|--------------------|----------------------|
| <b>4-/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit</b> |                                     |                     |                    |                      |                                     |                                     |                     |                    |                      |
| 1500<br>rpm                                                                              | 3000<br>rpm                         |                     |                    |                      | 1500<br>rpm                         | 3000<br>rpm                         |                     |                    |                      |
| 1.9                                                                                      | 2.4                                 | 100 L               | 1LE1011-1AJ4.-.... | 1010.-               | 0.65                                | 2.4                                 | 100 L               | 1LE1011-1AP4.-.... | 1010.-               |
| 2.5                                                                                      | 3.1                                 | 100 L               | 1LE1011-1AJ5.-.... | 1200.-               | 0.8                                 | 3.1                                 | 100 L               | 1LE1011-1AP5.-.... | 1200.-               |
| 3.7                                                                                      | 4.4                                 | 112 M               | 1LE1011-1BJ2.-.... | 1510.-               | 1.1                                 | 4.4                                 | 112 M               | 1LE1011-1BP2.-.... | 1510.-               |
| 4.7                                                                                      | 5.9                                 | 132 S               | 1LE1011-1CJ0.-.... | 1940.-               | 1.45                                | 5.9                                 | 132 S               | 1LE1011-1CP0.-.... | 1940.-               |
| 6.5                                                                                      | 8                                   | 132 M               | 1LE1011-1CJ2.-.... | 2520.-               | 2                                   | 8                                   | 132 M               | 1LE1011-1CP2.-.... | 2520.-               |
| 9.3                                                                                      | 11.5                                | 160 M               | 1LE1011-1DJ2.-.... | 3350.-               | 2.9                                 | 11.5                                | 160 M               | 1LE1011-1DP2.-.... | 3350.-               |
| 13                                                                                       | 16                                  | 160 L               | 1LE1011-1DJ6.-.... | 4850.-               | 4.3                                 | 16                                  | 160 L               | 1LE1011-1DP6.-.... | 4850.-               |
| <b>6-/4-pole: 1000/1500 rpm at 50 Hz with two windings</b>                               |                                     |                     |                    |                      |                                     |                                     |                     |                    |                      |
|                                                                                          |                                     |                     |                    |                      | 1000<br>rpm                         | 1500<br>rpm                         |                     |                    |                      |
|                                                                                          |                                     |                     |                    |                      | 0.6                                 | 1.7                                 | 100 L               | 1LE1012-1AQ4.-.... | 1080.-               |
|                                                                                          |                                     |                     |                    |                      | 0.8                                 | 2.1                                 | 100 L               | 1LE1012-1AQ5.-.... | 1200.-               |
|                                                                                          |                                     |                     |                    |                      | 0.9                                 | 3                                   | 112 M               | 1LE1012-1BQ2.-.... | 1400.-               |
|                                                                                          |                                     |                     |                    |                      | 1.2                                 | 3.9                                 | 132 S               | 1LE1012-1CQ0.-.... | 1730.-               |
|                                                                                          |                                     |                     |                    |                      | 1.7                                 | 5.4                                 | 132 M               | 1LE1012-1CQ2.-.... | 2140.-               |
|                                                                                          |                                     |                     |                    |                      | 2.5                                 | 7.2                                 | 160 M               | 1LE1012-1DQ2.-.... | 3120.-               |
|                                                                                          |                                     |                     |                    |                      | 3.7                                 | 12                                  | 160 L               | 1LE1012-1DQ4.-.... | 4550.-               |
|                                                                                          |                                     |                     |                    |                      | 6.5                                 | 19                                  | 180 L               | 1LE1012-1EQ4.-.... | 7210.-               |
|                                                                                          |                                     |                     |                    |                      | 9.5                                 | 26                                  | 200 L               | 1LE1012-2AQ5.-.... | 10300.-              |
| <b>8-/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit</b>  |                                     |                     |                    |                      |                                     |                                     |                     |                    |                      |
| 750<br>rpm                                                                               | 1500<br>rpm                         |                     |                    |                      | 750<br>rpm                          | 1500<br>rpm                         |                     |                    |                      |
| 0.55                                                                                     | 1.1                                 | 100 L               | 1LE1011-1AL4.-.... | 852.-                | 0.5                                 | 2                                   | 100 L               | 1LE1011-1AR4.-.... | 852.-                |
| 0.9                                                                                      | 1.5                                 | 100 L               | 1LE1011-1AL5.-.... | 983.-                | 0.65                                | 2.5                                 | 100 L               | 1LE1011-1AR5.-.... | 983.-                |
| 1.1                                                                                      | 1.9                                 | 112 M               | 1LE1011-1BL2.-.... | 1140.-               | 0.9                                 | 3.6                                 | 112 M               | 1LE1011-1BR2.-.... | 1140.-               |
| 1.6                                                                                      | 3.2                                 | 132 S               | 1LE1011-1CL0.-.... | 1600.-               | 1.1                                 | 4.7                                 | 132 S               | 1LE1011-1CR0.-.... | 1600.-               |
| 2.2                                                                                      | 4.4                                 | 132 M               | 1LE1011-1CL2.-.... | 2060.-               | 1.4                                 | 6.4                                 | 132 M               | 1LE1011-1CR2.-.... | 2060.-               |
| 3.5                                                                                      | 7                                   | 160 M               | 1LE1011-1DL2.-.... | 2840.-               | 2.2                                 | 9.5                                 | 160 M               | 1LE1011-1DR2.-.... | 2840.-               |
| 5.6                                                                                      | 11                                  | 160 L               | 1LE1011-1DL4.-.... | 4200.-               | 3.3                                 | 14                                  | 160 L               | 1LE1011-1DR4.-.... | 4200.-               |
|                                                                                          |                                     |                     |                    |                      | 4.5                                 | 16                                  | 180 M               | 1LE1011-1ER2.-.... | 4980.-               |
|                                                                                          |                                     |                     |                    |                      | 5                                   | 18.5                                | 180 L               | 1LE1011-1ER4.-.... | 6510.-               |
|                                                                                          |                                     |                     |                    |                      | 7.5                                 | 28                                  | 200 L               | 1LE1011-2AR5.-.... | 9680.-               |

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

Standard delivery times in working days:

**2****5****10****15****20****Voltages · Aluminum series 1LE10, 1PC10****Selection and ordering data**

| Voltages                                                                                                                    | Article No. supplement                                 |                                                                           | Frame size |         |       |            |         |      |            |            |       |       | Motor version |                         |                                     |                   |                                    |                   |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|---------|-------|------------|---------|------|------------|------------|-------|-------|---------------|-------------------------|-------------------------------------|-------------------|------------------------------------|-------------------|
|                                                                                                                             | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 63         | 71      | 80    | 90         | 100     | 112  | 132        | 160        | 180   | 200   |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            |         |       |            | 1LE1004 |      |            |            |       | IEC   | IE4           | ①                       |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            | 1LE1003 |       |            |         |      | IE3        | ②          |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            | 1LE1083 |       |            |         |      |            | ③          |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           | 1LE1001    |         |       |            |         |      | IE2        | ④          |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           | 1PC1001    |         |       |            |         |      | ⑤          |            |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           | 1LE1002    |         |       |            |         |      | IE1        | ⑥          |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           | 1PC1002    |         |       |            |         |      | ⑦          |            |       |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            | 1LE1043 |       |            |         |      | APAC Line  | IE3        | ⑧     |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            | 1LE1041 |       |            |         |      |            | IE2        | ⑨     |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             |                                                        |                                                                           |            | 1LE1023 |       |            |         |      | Eagle Line | NPE (NEMA) | ⑩     |       |               |                         |                                     |                   |                                    |                   |
|                                                                                                                             | 1LE1021                                                |                                                                           |            |         |       | NEE (NEMA) | ⑪       |      |            |            |       |       |               |                         |                                     |                   |                                    |                   |
| Voltage at 50 Hz or 60 Hz – Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DTC) |                                                        |                                                                           |            |         |       |            |         |      |            |            |       |       |               |                         |                                     |                   |                                    |                   |
| 50 Hz 230 VΔ/400 VY, 60 Hz 460 VY                                                                                           | 2                                                      | 2                                                                         | –          | ■       | ■     | ■          | ■       | ■    | ■          | ■          | ■     |       |               |                         |                                     |                   |                                    |                   |
| 50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ <sup>1)</sup>                                                                             | 3                                                      | 4                                                                         | –          | ■       | ■     | ■          | ■       | ■    | ■          | ■          | ■     | ■     | Not for:      | APAC Line<br>Eagle Line | ⑧, ⑨<br>⑩, ⑪                        |                   |                                    |                   |
| 50 Hz 400 VΔ, 60 Hz 460 VΔ <sup>1)</sup>                                                                                    |                                                        |                                                                           |            | –       | –     | ■          | ■       | ■    | ■          | ■          | ■     | ■     |               |                         | ■                                   | Only for:         | APAC Line<br>Eagle Line            | ⑧, ⑨<br>⑩, ⑪      |
| 50 Hz 400 VY, 60 Hz 460 VY <sup>2) 3)</sup>                                                                                 | 0                                                      | 2                                                                         | –          | –       | –     | ■          | ■       | ■    | ■          | ■          | ■     | ■     | Not for:      | IEC IE3                 | ③                                   |                   |                                    |                   |
| 50 Hz 400 VΔ, 60 Hz 460 VΔ <sup>4)</sup>                                                                                    | 0                                                      | 4                                                                         | –          | –       | –     | ■          | ■       | ■    | ■          | ■          | ■     | ■     | Not for:      | IEC IE3                 | ③                                   |                   |                                    |                   |
| 50 Hz 500 VY, 60 Hz 575 VY <sup>7)</sup>                                                                                    | 2                                                      | 7                                                                         | –          | ○       | ○     | ○          | ○       | ○    | ○          | ○          | ○     | ○     | Not for:      | IEC IE4                 | ①                                   |                   |                                    |                   |
| 50 Hz 500 VΔ, 60 Hz 575 VΔ                                                                                                  | 4                                                      | 0                                                                         | –          | ○       | ○     | –          | –       | ○    | ○          | ○          | ○     | ○     | Not for:      | IEC IE4                 | ①                                   |                   |                                    |                   |
| 50 Hz 690 VY                                                                                                                | 0                                                      | 6                                                                         | –          | –       | –     | –          | ○       | ○    | ○          | ○          | ○     | ○     | Only for:     | IEC IE3                 | ③                                   |                   |                                    |                   |
| 50 Hz 690 VΔ                                                                                                                | 4                                                      | 7                                                                         | –          | –       | –     | –          | ○       | ○    | ○          | ○          | ○     | ○     | Only for:     | IEC IE3                 | ③                                   |                   |                                    |                   |
| 50 Hz 220 VΔ/380 VY, 60 Hz 440 VY                                                                                           | 2                                                      | 1                                                                         | –          | 29.20   | 32.70 | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Not for:                | IEC IE3                             | ③                 |                                    |                   |
| 50 Hz 380 VΔ/660 VY <sup>1)</sup> , 60 Hz 440 VΔ                                                                            | 3                                                      | 3                                                                         | –          | 29.20   | 32.70 | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Not for:                | APAC Line<br>Eagle Line<br>IEC IE3  | ⑧, ⑨<br>⑩, ⑪<br>③ |                                    |                   |
| 50 Hz 380 VΔ <sup>1)</sup>                                                                                                  |                                                        |                                                                           |            | –       | –     | –          | –       | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         |                         |                                     | Only for:         | APAC Line<br>Eagle Line<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |
| 50 Hz 240 VΔ/415 VY, 60 Hz 480 VY                                                                                           | 2                                                      | 3                                                                         | –          | 29.20   | 32.70 | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Not for:                | IEC IE3                             | ③                 |                                    |                   |
| 50 Hz 415 VΔ, 60 Hz 480 VΔ                                                                                                  | 3                                                      | 5                                                                         | –          | 29.20   | 32.70 | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Not for:                | IEC IE3                             | ③                 |                                    |                   |
| 60 Hz 220 VΔ/380 VY                                                                                                         | 1                                                      | 7                                                                         | –          | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 159.–         | Not for:                | IEC IE1<br>IEC IE3                  | ⑥, ⑦<br>③         |                                    |                   |
| 60 Hz 230 VΔ/400 VY                                                                                                         | 1                                                      | 8                                                                         | –          | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 159.–         | Not for:                | IEC IE1<br>IEC IE3                  | ⑥, ⑦<br>③         |                                    |                   |
| 60 Hz 380 VΔ/660 VY <sup>1)</sup>                                                                                           | 3                                                      | 0                                                                         | –          | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Not for:                | IEC IE1<br>Eagle Line<br>IEC IE3    | ⑥, ⑦<br>⑩, ⑪<br>③ |                                    |                   |
| 60 Hz 380 VΔ <sup>1)</sup>                                                                                                  |                                                        |                                                                           |            | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         |                         |                                     | Only for:         | Eagle Line                         | ⑩, ⑪              |
| 60 Hz 400 VΔ/690 VY <sup>1)</sup>                                                                                           |                                                        |                                                                           |            | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         |                         |                                     | Not for:          | IEC IE1<br>Eagle Line<br>IEC IE3   | ⑥, ⑦<br>⑩, ⑪<br>③ |
| 60 Hz 400 VΔ <sup>1)</sup>                                                                                                  |                                                        |                                                                           | –          | –       | –     | 37.10      | 43.50   | 54.– | 65.30      | 83.70      | 103.– | 139.– | 139.–         | Only for:               | Eagle Line                          | ⑩, ⑪              |                                    |                   |
| Multi-voltage at 60 Hz and required power at 60 Hz                                                                          |                                                        |                                                                           |            |         |       |            |         |      |            |            |       |       |               |                         |                                     |                   |                                    |                   |
| 60 Hz 230 VYY/460 VY; 50 Hz power, 9 main terminals and electrical design according to NEMA                                 | 6                                                      | 0                                                                         | –          | –       | –     | –          | –       | –    | –          | –          | –     | 136.– | 156.–         | Not for:                | IEC IE1<br>APAC Line IE2<br>IEC IE3 | ⑥, ⑦<br>⑨<br>③    |                                    |                   |
| 60 Hz 230 VYY/460 VY; 60 Hz power, 9 main terminals and electrical design according to NEMA                                 | 6                                                      | 1                                                                         | –          | –       | –     | –          | –       | –    | –          | –          | –     | 136.– | 156.–         | Not for:                | IEC IE1<br>APAC Line IE2<br>IEC IE3 | ⑥, ⑦<br>⑨<br>③    |                                    |                   |
| 60 Hz 230 VΔΔ/460 VΔ; 50 Hz power, 12 main terminals and electrical design according to NEMA                                | 6                                                      | 2                                                                         | –          | –       | –     | –          | –       | –    | –          | –          | –     | 136.– | 156.–         | Not for:                | IEC IE1<br>APAC Line IE2<br>IEC IE3 | ⑥, ⑦<br>⑨<br>③    |                                    |                   |
| 60 Hz 230 VΔΔ/460 VΔ; 60 Hz power, 12 main terminals and electrical design according to NEMA                                | 6                                                      | 3                                                                         | –          | –       | –     | –          | –       | –    | –          | –          | –     | 136.– | 156.–         | Not for:                | IEC IE1<br>APAC Line IE2<br>IEC IE3 | ⑥, ⑦<br>⑨<br>③    |                                    |                   |

For legends and footnotes, see Page 1/42.

Standard delivery times in working days:

2

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10

15

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**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**Voltages · Aluminum series 1LE10, 1PC10**

| Voltages                                     | Article No. supplement                                     |                                                        | Additional identification code with order code and plain text if required | Frame size |       |       |       |      |       |            |            |            |       | Motor version |                                   |                   |     |   |
|----------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|-------|-------|-------|------|-------|------------|------------|------------|-------|---------------|-----------------------------------|-------------------|-----|---|
|                                              |                                                            |                                                        |                                                                           | 63         | 71    | 80    | 90    | 100  | 112   | 132        | 160        | 180        | 200   |               |                                   |                   |     |   |
|                                              | 1LE10...- - - - - ■ - ■ ...<br>1PC10...- - - - - ■ - ■ ... | Voltage code 12th and 13th position of the Article No. | Order code                                                                | 1LE1004    |       |       |       |      |       |            |            |            |       | IEC           | IE4                               | ①                 |     |   |
|                                              |                                                            |                                                        |                                                                           | 1LE1003    |       |       |       |      |       |            |            |            |       |               |                                   |                   | IE3 | ② |
|                                              |                                                            |                                                        |                                                                           | 1LE1083    |       |       |       |      |       |            |            |            |       |               |                                   |                   |     |   |
|                                              |                                                            |                                                        |                                                                           | 1LE1001    |       |       |       |      |       |            |            |            |       |               | IE1                               | ④                 |     |   |
|                                              |                                                            |                                                        |                                                                           | 1PC1001    |       |       |       |      |       |            |            |            |       |               |                                   |                   | IE1 | ⑤ |
|                                              |                                                            |                                                        |                                                                           | 1LE1002    |       |       |       |      |       |            |            |            |       |               | IE1                               | ⑥                 |     |   |
|                                              |                                                            |                                                        |                                                                           | 1PC1002    |       |       |       |      |       |            |            |            |       |               |                                   |                   | IE1 | ⑦ |
|                                              | 1LE1043                                                    |                                                        |                                                                           |            |       |       |       |      |       |            | APAC Line  | IE3        | ⑧     |               |                                   |                   |     |   |
|                                              | 1LE1041                                                    |                                                        |                                                                           |            |       |       |       |      |       |            |            |            |       | IE2           | ⑨                                 |                   |     |   |
| 1LE1023                                      |                                                            |                                                        |                                                                           |            |       |       |       |      |       | Eagle Line |            |            |       |               |                                   | NPE (NEMA)        | ⑩   |   |
| 1LE1021                                      |                                                            |                                                        |                                                                           |            |       |       |       |      |       |            | Eagle Line | NEE (NEMA) | ⑪     |               |                                   |                   |     |   |
| Voltage at 60 Hz and required power at 60 Hz |                                                            |                                                        |                                                                           |            |       |       |       |      |       |            |            |            |       |               |                                   |                   |     |   |
| 220 VΔ/380 VY; 50 Hz power                   | 9                                                          | 0                                                      | M2A                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 220 VΔ/380 VY; 60 Hz power                   | 9                                                          | 0                                                      | M1A                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 380 VΔ/660 VY; 50 Hz power <sup>1)</sup>     | 9                                                          | 0                                                      | M2B                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.20 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 380 VΔ; 50 Hz power <sup>1)</sup>            |                                                            |                                                        |                                                                           | –          | –     | –     | –     | 54.– | 65.20 | 83.70      | 103.–      | 139.–      | 139.– | Only for:     | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 380 VΔ/660 VY; 60 Hz power <sup>1) 5)</sup>  | 9                                                          | 0                                                      | M1B                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 440 VY; 50 Hz power                          | 9                                                          | 0                                                      | M2C                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 440 VY; 60 Hz power                          | 9                                                          | 0                                                      | M1C                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 440 VΔ; 50 Hz power                          | 9                                                          | 0                                                      | M2D                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 440 VΔ; 60 Hz power                          | 9                                                          | 0                                                      | M1D                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 460 VY; 50 Hz power                          | 9                                                          | 0                                                      | M2E                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 460 VY; 60 Hz power                          | 9                                                          | 0                                                      | M1E                                                                       | 0          | 0     | 0     | 0     | 0    | 0     | 0          | 0          | 0          | 0     | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 460 VΔ; 50 Hz power                          | 9                                                          | 0                                                      | M2F                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 460 VΔ; 60 Hz power                          | 9                                                          | 0                                                      | M1F                                                                       | 0          | 0     | 0     | 0     | 0    | 0     | 0          | 0          | 0          | 0     | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 575 VY; 50 Hz power <sup>7)</sup>            | 9                                                          | 0                                                      | M2G                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE4                           | ①                 |     |   |
| 575 VY; 60 Hz power <sup>7)</sup>            | 9                                                          | 0                                                      | M1G                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 575 VΔ; 50 Hz power <sup>7)</sup>            | 9                                                          | 0                                                      | M2H                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE4                           | ①                 |     |   |
| 575 VΔ; 60 Hz power <sup>7)</sup>            | 9                                                          | 0                                                      | M1H                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | APAC Line<br>Eagle Lin<br>IEC IE3 | ⑧, ⑨<br>⑩, ⑪<br>③ |     |   |
| 400 VΔ/690 VY; 50 Hz power <sup>1)</sup>     | 9                                                          | 0                                                      | M2J                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.20 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |
| 400 VΔ; 50 Hz power                          |                                                            |                                                        |                                                                           | –          | –     | 37.10 | 43.50 | 54.– | 65.20 | 83.70      | 103.–      | 139.–      | 139.– | Only for:     | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |
| 400 VΔ/690 VY; 60 Hz power                   | 9                                                          | 0                                                      | M1J                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |
| 480 VY; 50 Hz power                          | 9                                                          | 0                                                      | M2K                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 480 VY; 60 Hz power                          | 9                                                          | 0                                                      | M1K                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |
| 480 VΔ; 50 Hz power                          | 9                                                          | 0                                                      | M2L                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 480 VΔ; 60 Hz power                          | 9                                                          | 0                                                      | M1L                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |
| 230 VΔ/400 VY; 50 Hz power                   | 9                                                          | 0                                                      | M2M                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | IEC IE3                           | ③                 |     |   |
| 230 VΔ/400 VY; 60 Hz power                   | 9                                                          | 0                                                      | M1M                                                                       | 29.20      | 32.70 | 37.10 | 43.50 | 54.– | 65.30 | 83.70      | 103.–      | 139.–      | 139.– | Not for:      | Eagle Line<br>IEC IE3             | ⑩, ⑪<br>③         |     |   |

For legends and footnotes, see Page 1/42.

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

2

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## Voltages · Aluminum series 1LE10, 1PC10

| Voltage                                 | Article No. supplement                                 |                                                                           | Frame size                        |       |       |       |       |       |       |       |       |       | Motor version |            |         |   |
|-----------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|------------|---------|---|
|                                         | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 63                                | 71    | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   |               |            |         |   |
|                                         |                                                        |                                                                           | 1LE1004                           |       |       |       |       |       |       |       |       |       | IEC           | IE4        | ①       |   |
|                                         |                                                        |                                                                           | 1LE1003                           |       |       |       |       |       |       |       |       |       |               | IE3        | ②       |   |
|                                         |                                                        |                                                                           | 1LE1083                           |       |       |       |       |       |       |       |       |       |               |            | ③       |   |
|                                         |                                                        |                                                                           | 1LE1001                           |       |       |       |       |       |       |       |       |       | IE2           |            | ④       |   |
|                                         |                                                        |                                                                           | 1PC1001                           |       |       |       |       |       |       |       |       |       |               |            | ⑤       |   |
|                                         |                                                        |                                                                           | 1LE1002                           |       |       |       |       |       |       |       |       |       |               | IE1        | ⑥       |   |
|                                         |                                                        |                                                                           | 1PC1002                           |       |       |       |       |       |       |       |       |       |               | ⑦          |         |   |
|                                         |                                                        |                                                                           | 1LE1043                           |       |       |       |       |       |       |       |       |       | APAC Line     | IE3        | ⑧       |   |
| 1LE1041                                 |                                                        |                                                                           |                                   |       |       |       |       |       |       | IE2   | ⑨     |       |               |            |         |   |
| 1LE10 . . . . .                         |                                                        | Order code                                                                | 1LE1023                           |       |       |       |       |       |       |       |       |       | Eagle Line    | NPE (NEMA) | ⑩       |   |
| 1PC10 . . . . .                         |                                                        |                                                                           | 1LE1021                           |       |       |       |       |       |       |       |       |       |               | NEE (NEMA) | ⑪       |   |
| Voltage at 87 Hz and 87 Hz power        |                                                        |                                                                           |                                   |       |       |       |       |       |       |       |       |       |               |            |         |   |
| 400 VΔ <sup>5)</sup>                    | 9                                                      | 0                                                                         | M3A                               | –     | –     | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 139.–         | Not for:   | IEC IE3 | ③ |
| Non-standard voltage and/or frequencies |                                                        |                                                                           |                                   |       |       |       |       |       |       |       |       |       |               |            |         |   |
| Non-standard winding <sup>6)</sup>      | 9                                                      | 0                                                                         | M1Y • and customer specifications | 58.90 | 66.20 | 74.40 | 87.50 | 108.– | 132.– | 167.– | 208.– | 268.– | 268.–         |            |         |   |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible

1) For North America export versions Eagle Line 1LE1021 NEMA Energy Efficient, 1LE1023 NEMA Premium Efficient and 1LE1083, voltages above 600 V will not be stamped.

2) Frame sizes 80 and 90 with voltage code 02 are only available without motor protection (motor protection code A).

3) Delta connection is not possible.

4) Star connection is not possible.

<sup>5)</sup> Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter operation is also provided in a table on the rating plate.

6) Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

7) Not possible for 2-pole and 4-pole motors with increased power (11th position of the Article No.: 6) of frame sizes 80 and 90.

Standard delivery times in working days:

**10****15**

# SIMOTICS GP 1LE1 Standard Motors

Article No. supplements and special versions

Voltages · Aluminum series 1LE1011, 1LE1012 – pole-changing

1

## Selection and ordering data

| Voltages                                | Article No. supplement                                 |                                                                           | Frame size                        |       |       |       |       |       | Motor version |
|-----------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|---------------|
|                                         | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 100                               | 112   | 132   | 160   | 180   | 200   |               |
|                                         |                                                        |                                                                           | 1LE1011                           |       |       |       |       |       |               |
|                                         |                                                        |                                                                           | 1LE1012                           |       |       |       |       |       | Pole-changing |
| 1LE1 ... - ...                          | ■ - ■ ...                                              | Order code                                                                |                                   |       |       |       |       |       |               |
| Voltage at 50 Hz and 50 Hz power        |                                                        |                                                                           |                                   |       |       |       |       |       |               |
| 230 V                                   | 2                                                      | 2                                                                         | –                                 | □     | □     | □     | □     | □     |               |
| 400 V                                   | 3                                                      | 4                                                                         | –                                 | □     | □     | □     | □     | □     |               |
| 500 V                                   | 4                                                      | 0                                                                         | –                                 | ○     | ○     | ○     | ○     | ○     |               |
| 690 V                                   | 4                                                      | 7                                                                         | –                                 | ○     | ○     | ○     | ○     | ○     |               |
| Voltage at 60 Hz and required power     |                                                        |                                                                           |                                   |       |       |       |       |       |               |
| 220 V; 50 Hz power                      | 9                                                      | 0                                                                         | M5K                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 220 V; 60 Hz power                      | 9                                                      | 0                                                                         | M5C                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 380 V; 50 Hz power                      | 9                                                      | 0                                                                         | M5L                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 380 V; 60 Hz power                      | 9                                                      | 0                                                                         | M5D                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 440 V; 50 Hz power                      | 9                                                      | 0                                                                         | M5M                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 440 V; 60 Hz power                      | 9                                                      | 0                                                                         | M5E                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 460 V; 50 Hz power                      | 9                                                      | 0                                                                         | M5N                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 460 V; 60 Hz power                      | 9                                                      | 0                                                                         | M5F                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 575 V; 50 Hz power                      | 9                                                      | 0                                                                         | M5P                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| 575 V; 60 Hz power                      | 9                                                      | 0                                                                         | M5G                               | O. R. | O. R. | O. R. | O. R. | O. R. |               |
| Non-standard voltage and/or frequencies |                                                        |                                                                           |                                   |       |       |       |       |       |               |
| Non-standard winding <sup>1)</sup>      | 9                                                      | 0                                                                         | M1Y • and customer specifications | 108.– | 132.– | 167.– | 208.– | 268.– |               |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request

<sup>1)</sup> Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

## Article No. supplements and special versions

## Voltages · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Voltages   | Article No. supplement                                 | Frame size                                                                |                          |    |     |     |     |     |     |     |     |     |     |     | Motor version |            |            |            |
|------------|--------------------------------------------------------|---------------------------------------------------------------------------|--------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|------------|------------|------------|
|            |                                                        | 71                                                                        | 80                       | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 |               |            |            |            |
| 1LE1 ..... | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 1LE1504 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               | IEC        | IE4        | ①          |
|            |                                                        |                                                                           | 1LE1604 Performance Line |    |     |     |     |     |     |     |     |     |     |     |               |            |            | ②          |
|            |                                                        |                                                                           | 1LE1503 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               |            | IE3        | ③          |
|            |                                                        |                                                                           | 1LE1603 Performance Line |    |     |     |     |     |     |     |     |     |     |     |               |            |            | ④          |
|            |                                                        |                                                                           | 1LE1583                  |    |     |     |     |     |     |     |     |     |     |     |               |            |            | ⑤          |
|            |                                                        |                                                                           | 1LE1501 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               | IE2        | ⑥          |            |
|            |                                                        |                                                                           | 1LE1601 Performance Line |    |     |     |     |     |     |     |     |     |     |     |               |            | ⑦          |            |
|            |                                                        |                                                                           | 1LE1502 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               |            | IE1        | ⑧          |
|            |                                                        |                                                                           | 1LE1543 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               | APAC Line  |            | ⑨          |
|            |                                                        |                                                                           | 1LE1643 Performance Line |    |     |     |     |     |     |     |     |     |     |     |               |            |            | ⑩          |
|            |                                                        |                                                                           | 1LE1541 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               | IE2        | ⑪          |            |
|            |                                                        |                                                                           | 1LE1523 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               |            | Eagle Line | NPE (NEMA) |
|            |                                                        |                                                                           | 1LE1623 Performance Line |    |     |     |     |     |     |     |     |     |     |     |               | ⑬          |            |            |
|            |                                                        |                                                                           | 1LE1521 Basic Line       |    |     |     |     |     |     |     |     |     |     |     |               | NEE (NEMA) |            | ⑭          |

**Recommended retail prices plus metal surcharges (MS)**

## SIMOTICS GP/SD 1LE – ABNT Line Standard Motors

Article No. supplements and special versions

## Voltages · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Voltages                                        | Article No. supplement                                 |                                                                           | Frame size |                          |       |       |      |       |       |       |       |       |       |       |       |       | Motor version |                                                         |   |  |
|-------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|--------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|---------------------------------------------------------|---|--|
|                                                 | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | Order code | 71                       | 80    | 90    | 100  | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   | IEC           | IE4                                                     | ① |  |
|                                                 |                                                        |                                                                           |            | 1LE1504 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1604 Performance Line |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1503 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1603 Performance Line |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1583                  |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1501 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1601 Performance Line |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1502 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1543 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1643 Performance Line |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
|                                                 |                                                        |                                                                           |            | 1LE1541 Basic Line       |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
| 1LE1523 Basic Line                              |                                                        |                                                                           |            |                          |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
| 1LE1623 Performance Line                        |                                                        |                                                                           |            |                          |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
| 1LE1521 Basic Line                              |                                                        |                                                                           |            |                          |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
| Voltage at 60 Hz and required power (continued) |                                                        |                                                                           |            |                          |       |       |      |       |       |       |       |       |       |       |       |       |               |                                                         |   |  |
| 440 VY;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1C        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | APAC Line ⑨, ⑩, ⑪<br>Eagle Line ⑫, ⑬, ⑭<br>IEC IE3 ⑤    |   |  |
| 440 VA;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2D        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 440 VΔ;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1D        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | APAC Line ⑨, ⑩, ⑪<br>Eagle Line ⑫, ⑬, ⑭<br>IEC IE3 ⑤    |   |  |
| 460 VY;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2E        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 460 VY;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1E        | –                        | –     | –     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | Not for:      | APAC Line ⑨, ⑩, ⑪<br>Eagle Line ⑫, ⑬, ⑭<br>IEC IE3 ⑤    |   |  |
| 460 VΔ;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2F        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 460 VΔ;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1F        | –                        | –     | –     | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | Not for:      | APAC Line ⑨, ⑩, ⑪<br>Eagle Line ⑫, ⑬, ⑭<br>IEC IE3 ⑤    |   |  |
| 575 VY;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2G        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE4 ①, ②<br>frame sizes<br>100 ... 160<br>IEC IE3 ⑤ |   |  |
| 575 VY;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1G        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | ⑪, ⑫, ⑬, ⑭ and<br>①, ② frame sizes<br>100 ... 160       |   |  |
| 575 VΔ;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2H        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE4 ①, ②<br>frame sizes<br>100 ... 160<br>IEC IE3 ⑤ |   |  |
| 575 VΔ;<br>60 Hz power <sup>2)</sup>            | 9                                                      | 0                                                                         | M1H        | –                        | –     | –     | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | ⑪, ⑫, ⑬, ⑭ and<br>①, ② frame sizes<br>100 ... 160       |   |  |
| 400 VΔ/690 VY;<br>50 Hz power <sup>1)</sup>     | 9                                                      | 0                                                                         | M2J        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |
| 400 VΔ;<br>50 Hz power <sup>1)</sup>            |                                                        |                                                                           |            | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Only for:     | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |
| 400 VΔ/690 VY;<br>60 Hz power                   | 9                                                      | 0                                                                         | M1J        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |
| 480 VY;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2K        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 480 VY;<br>60 Hz power                          | 9                                                      | 0                                                                         | M1K        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |
| 480 VΔ;<br>50 Hz power                          | 9                                                      | 0                                                                         | M2L        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 480 VΔ;<br>60 Hz power                          | 9                                                      | 0                                                                         | M1L        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |
| 230 VΔ/400 VY;<br>50 Hz power                   | 9                                                      | 0                                                                         | M2M        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE3 ⑤                                               |   |  |
| 230 VΔ/400 VY;<br>60 Hz power                   | 9                                                      | 0                                                                         | M1M        | 32.70                    | 37.10 | 43.50 | 54.– | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | 317.– | 412.– | Not for:      | IEC IE1 ⑧<br>Eagle Line ⑫, ⑬                            |   |  |

For legends and footnotes, see Page 1/46.

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**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**Voltages · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Voltages                                | Article No. supplement                                 |                                                                           | Frame size                        |       |       |       |       |       |       |       |       |       |       |           |       | Motor version |            |           |
|-----------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|---------------|------------|-----------|
|                                         | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 71                                | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280       | 315   |               |            |           |
| 1LE1 . . . . . ■ - ■ . . .              | 9                                                      | 0                                                                         | 1LE1504 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       | IEC           | IE4        | ①         |
|                                         |                                                        |                                                                           | 1LE1604 Performance Line          |       |       |       |       |       |       |       |       |       |       |           |       |               |            | ②         |
|                                         |                                                        |                                                                           | 1LE1503 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       |               | IE3        | ③         |
|                                         |                                                        |                                                                           | 1LE1603 Performance Line          |       |       |       |       |       |       |       |       |       |       |           |       |               |            | ④         |
|                                         |                                                        |                                                                           | 1LE1583                           |       |       |       |       |       |       |       |       |       |       |           |       |               |            | ⑤         |
|                                         |                                                        |                                                                           | 1LE1501 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       | IE2           | ⑥          |           |
|                                         |                                                        |                                                                           | 1LE1601 Performance Line          |       |       |       |       |       |       |       |       |       |       |           |       |               | ⑦          |           |
|                                         |                                                        |                                                                           | 1LE1502 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       |               | ⑧          |           |
|                                         |                                                        |                                                                           | 1LE1543 Basic Line                |       |       |       |       |       |       |       |       |       |       | APAC Line | IE3   | ⑨             |            |           |
|                                         |                                                        |                                                                           | 1LE1643 Performance Line          |       |       |       |       |       |       |       |       |       |       |           |       | ⑩             |            |           |
|                                         |                                                        |                                                                           | 1LE1541 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       | ⑪             |            |           |
|                                         |                                                        |                                                                           | 1LE1523 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       | Eagle Line    | NPE (NEMA) | ⑫         |
|                                         |                                                        |                                                                           | 1LE1623 Performance Line          |       |       |       |       |       |       |       |       |       |       |           |       |               |            | ⑬         |
|                                         |                                                        |                                                                           | 1LE1521 Basic Line                |       |       |       |       |       |       |       |       |       |       |           |       |               |            | ⑭         |
| Voltage at 87 Hz and 87 Hz power        |                                                        |                                                                           |                                   |       |       |       |       |       |       |       |       |       |       |           |       |               |            |           |
| 400 VΔ <sup>5)</sup>                    | 9                                                      | 0                                                                         | M3A                               | 32.70 | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.–     | 317.– | 412.–         | Not for:   | IEC IE3 ⑤ |
| Non-standard voltage and/or frequencies |                                                        |                                                                           |                                   |       |       |       |       |       |       |       |       |       |       |           |       |               |            |           |
| Non-standard winding <sup>6)</sup>      | 9                                                      | 0                                                                         | M1Y • and customer specifications | 65.60 | 74.40 | 87.50 | 108.– | 132.– | 167.– | 208.– | 268.– | 326.– | 483.– | 609.–     | 779.– | 1010.–        |            |           |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.

<sup>1)</sup> For North America export versions Eagle Line 1LE1521 NEMA Energy Efficient, 1LE1523/1LE1623 NEMA Premium Efficient and 1LE1583, voltages above 600 V will not be stamped.

<sup>2)</sup> Not admissible for North America export versions Eagle Line 1LE1521 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient.

<sup>3)</sup> Delta connection is not possible.

<sup>4)</sup> Star connection is not possible.

<sup>5)</sup> Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter operation is also provided in a table on the rating plate.

<sup>6)</sup> Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

Standard delivery times in working days:

40

50

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

Voltages · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

1

**Selection and ordering data**

| Voltages                                | Article No. supplement                                 |                                                                           | Frame size                        |       |       |       |       |       |         |       |       |       |       |       | Motor version |     |
|-----------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|---------------|-----|
|                                         | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 80                                | 90    | 100   | 112   | 132   | 160   | 180     | 200   | 225   | 250   | 280   | 315   | IEC           | IE3 |
|                                         |                                                        |                                                                           | 1LE1073 Basic Line                |       |       |       |       |       | 1LE1573 |       |       |       |       |       |               |     |
|                                         |                                                        |                                                                           |                                   |       |       |       |       |       | 1LE5773 |       |       |       |       |       |               |     |
| 1LE .... - ....                         | -                                                      | ...                                                                       | Order code                        |       |       |       |       |       |         |       |       |       |       |       |               |     |
| Voltage at 60 Hz and 50 Hz power        |                                                        |                                                                           |                                   |       |       |       |       |       |         |       |       |       |       |       |               |     |
| 220 VΔΔ/380 VYY, 440 VΔ                 | 6                                                      | 4                                                                         | –                                 | □     | □     | □     | □     | □     | □       | □     | □     | □     | □     | □     |               |     |
| 220 VΔ/380 VY                           | 9                                                      | 0                                                                         | M2A                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| 380 VΔ/660 VY                           | 9                                                      | 0                                                                         | M2B                               | 37.10 | 43.50 | 54.–  | 65.20 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 440 VY                                  | 9                                                      | 0                                                                         | M2C                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| 440 VΔ                                  | 9                                                      | 0                                                                         | M2D                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 460 VY                                  | 9                                                      | 0                                                                         | M2E                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| 460 VΔ                                  | 9                                                      | 0                                                                         | M2F                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 575 VY                                  | 9                                                      | 0                                                                         | M2G                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| 575 VΔ                                  | 9                                                      | 0                                                                         | M2H                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 400 VΔ/690 VY                           | 9                                                      | 0                                                                         | M2J                               | 37.10 | 43.50 | 54.–  | 65.20 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 480 VY                                  | 9                                                      | 0                                                                         | M2K                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| 480 VΔ                                  | 9                                                      | 0                                                                         | M2L                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | 412.–         |     |
| 230 VΔ/400 VY                           | 9                                                      | 0                                                                         | M2M                               | 37.10 | 43.50 | 54.–  | 65.30 | 83.70 | 103.–   | 139.– | 159.– | 215.– | 246.– | 317.– | –             |     |
| Non-standard voltage and/or frequencies |                                                        |                                                                           |                                   |       |       |       |       |       |         |       |       |       |       |       |               |     |
| Non-standard winding <sup>1)</sup>      | 9                                                      | 0                                                                         | M1Y • and customer specifications | 74.40 | 87.50 | 108.– | 132.– | 167.– | 208.–   | 268.– | 326.– | 483.– | 609.– | 779.– | 1010.–        |     |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible

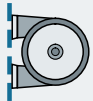
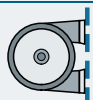
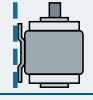
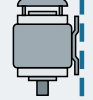
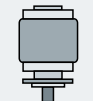
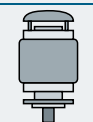
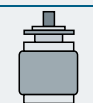
<sup>1)</sup> Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

|   |   |    |
|---|---|----|
| 2 | 5 | 10 |
|---|---|----|

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1LE10, 1PC10****Selection and ordering data**

| Types of construction                                                     | Article No.                                                                         | supplement                                                                                                    | Frame size            |                |                |                |                |                |                |                |                |                | Motor version  |            |                                                                    |        |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|--------------------------------------------------------------------|--------|
|                                                                           |                                                                                     |                                                                                                               | 63                    | 71             | 80             | 90             | 100            | 112            | 132            | 160            | 180            | 200            |                |            |                                                                    |        |
| <div>1LE10 . . . . . ■ .. (-Z)</div> <div>1PC10 . . . . . ■ .. (-Z)</div> | Type of construction letter 14th position of the Article No.                        | For types of construction with order code(s)<br><br>Article No. with additional identification code <b>-Z</b> |                       |                |                |                | 1LE1004        |                |                |                |                |                | IEC            | IE4        | ①                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1003        |                |                |                |                |                |                | IE3        | ②                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1083        |                |                |                |                |                |                |            | ③                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               | 1LE1001               |                |                |                |                |                |                |                |                |                |                | IE2        | ④                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1PC1001        |                |                |                |                |                |                |            | ⑤                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               | 1LE1002               |                |                |                |                |                |                |                |                |                |                | IE1        | ⑥                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1PC1002        |                |                |                |                |                |                |            | ⑦                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1043        |                |                |                |                |                | APAC Line      | IE3        | ⑧                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1041        |                |                |                |                |                |                | IE2        | ⑨                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1023        |                |                |                |                |                | Eagle Line     | NPE (NEMA) | ⑩                                                                  |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                |                |                | 1LE1021        |                |                |                |                |                |                | NEE (NEMA) | ⑪                                                                  |        |
|                                                                           |                                                                                     | Order code                                                                                                    |                       |                |                |                | 1LE1011        |                |                |                |                | Pole-changing  |                | ⑫          |                                                                    |        |
|                                                                           |                                                                                     |                                                                                                               |                       |                | 1LE1012        |                |                |                |                |                | ⑬              |                |                |            |                                                                    |        |
| Without flange                                                            |                                                                                     |                                                                                                               |                       |                |                |                |                |                |                |                |                |                |                |            |                                                                    |        |
| IM B3 <sup>1) 2) 3)</sup>                                                 |    | A                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM B6 <sup>2) 3)</sup>                                                    |    | T                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM B7 <sup>2) 3) 9)</sup>                                                 |   | U                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM B8 <sup>2) 3)</sup>                                                    |  | V                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM V6 <sup>2) 3)</sup>                                                    |  | D                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM V5 without protective cover <sup>2) 3)</sup>                           |  | C                                                                                                             | —                     |                |                |                |                |                |                |                |                |                |                | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |
| IM V5 with protective cover <sup>2) 3) 4) 5) 6)</sup>                     |  | C                                                                                                             | H00                   | 56.70          | 56.70          | 56.70          | 56.70          | 82.40          | 82.40          | 144.—          | 144.—          | 192.—          | 289.—          | Not for:   | APAC Line IE2<br>Eagle Line NEE<br>Combination with order code F90 | ⑨<br>⑪ |
| With flange                                                               |                                                                                     |                                                                                                               | EN 50347<br>DIN 42948 | FF115<br>A 140 | FF130<br>A 160 | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 |            |                                                                    |        |
| IM B5 <sup>2) 7)</sup>                                                    |  | F                                                                                                             | —                     | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          |            |                                                                    |        |
| IM V1 without protective cover <sup>2)</sup>                              |  | G                                                                                                             | —                     | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 268.—          | 324.—          |            |                                                                    |        |
| IM V1 with protective cover <sup>2) 4) 5) 6)</sup>                        |  | G                                                                                                             | H00                   | 100.2<br>0     | 104.9<br>0     | 111.50         | 122.40         | 163.70         | 183.40         | 276.—          | 314.—          | 460.—          | 613.—          | Not for:   | Combination with order code F90                                    |        |
| IM V3 <sup>4)</sup>                                                       |  | H                                                                                                             | —                     | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          |            |                                                                    |        |
| IM B35 <sup>3)</sup>                                                      |  | J                                                                                                             | —                     | 49.40          | 52.50          | 58.10          | 68.30          | 89.80          | 110.—          | 137.—          | 189.—          | 315.—          | 420.—          | Not for:   | APAC Line IE2<br>Eagle Line NEE                                    | ⑨<br>⑪ |

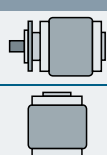
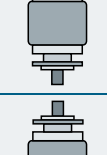
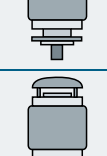
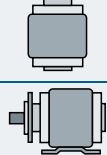
For legends and footnotes, see Page 1/51.

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

## Types of construction · Aluminum series 1LE10, 1PC10

| Types of construction    | <div>Article No.</div> <div>Type of construction letter 14th position of the Article No.</div> <div>For types of construction with order code(s)</div> <div>Article No. with additional identification code <b>-Z</b></div> | supplement | Frame size |    |    |    |     |     |     |               |     |     | Motor version |            |     |            |     |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|----|----|----|-----|-----|-----|---------------|-----|-----|---------------|------------|-----|------------|-----|
|                          |                                                                                                                                                                                                                             |            | 63         | 71 | 80 | 90 | 100 | 112 | 132 | 160           | 180 | 200 |               |            |     |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1004    |    |    |    |     |     |     |               |     |     | IEC           | IE4        | ①   |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1003    |    |    |    |     |     |     |               |     |     |               |            |     | IE3        | ②   |
|                          |                                                                                                                                                                                                                             |            | 1LE1083    |    |    |    |     |     |     |               |     |     |               |            |     |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1001    |    |    |    |     |     |     |               |     |     | IE2           | ④          |     |            |     |
|                          |                                                                                                                                                                                                                             |            | 1PC1001    |    |    |    |     |     |     |               |     |     |               |            | ⑤   |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1002    |    |    |    |     |     |     |               |     |     |               |            |     | IE1        | ⑥   |
|                          |                                                                                                                                                                                                                             |            | 1PC1002    |    |    |    |     |     |     |               |     |     | ⑦             |            |     |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1043    |    |    |    |     |     |     |               |     |     |               | APAC Line  | IE3 | ⑧          |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1041    |    |    |    |     |     |     |               |     |     |               |            |     |            | IE2 |
|                          |                                                                                                                                                                                                                             |            | 1LE1023    |    |    |    |     |     |     |               |     |     | Eagle Line    | NPE (NEMA) | ⑩   |            |     |
|                          |                                                                                                                                                                                                                             |            | 1LE1021    |    |    |    |     |     |     |               |     |     |               |            |     | NEE (NEMA) | ⑪   |
| 1LE1011                  |                                                                                                                                                                                                                             |            |            |    |    |    |     |     |     | Pole-changing |     | ⑫   |               |            |     |            |     |
| 1LE1012                  |                                                                                                                                                                                                                             |            |            |    |    |    |     |     |     |               |     |     | ⑬             |            |     |            |     |
| Order code               |                                                                                                                                                                                                                             |            |            |    |    |    |     |     |     |               |     |     |               |            |     |            |     |
| 1LE10.....<br>1PC10..... | ■ ..(-Z)<br>■ ..(-Z)                                                                                                                                                                                                        |            |            |    |    |    |     |     |     |               |     |     |               |            |     |            |     |

| With special flange next larger                    |                                                                                     | EN 50347<br>DIN 42948 |         |                |                |                |        | –              | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | –              | –        | –                                          | –      |
|----------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------|---------|----------------|----------------|----------------|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------|--------------------------------------------|--------|
| IM B5 <sup>2) 7)</sup>                             |    | F                     | P01     | –              | –              | –              | 113.40 | 129.–          | 148.70         | 191.60         | –              | –              | –              |          |                                            |        |
| IM V1 without protective cover <sup>2)</sup>       |   | G                     | P01     | –              | –              | –              | 113.40 | 129.–          | 148.70         | 179.70         | –              | –              | –              |          |                                            |        |
| IM V1 with protective cover <sup>2) 4) 5) 6)</sup> |  | G                     | P01+H00 | –              | –              | –              | 170.10 | 211.40         | 231.10         | 335.60         | –              | –              | –              | Not for: | Combination with order code F90            |        |
| IM V3 <sup>4)</sup>                                |  | H                     | P01     | –              | –              | –              | 113.40 | 129.–          | 148.70         | 191.60         | –              | –              | –              |          |                                            |        |
| IM B35 <sup>3)</sup>                               |  | J                     | P01     | –              | –              | –              | 116.–  | 137.50         | 157.70         | 196.60         | –              | –              | –              | Not for: | APAC Line IE2<br>Eagle Line NEE            | ⑨<br>⑩ |
| With special flange next smaller                   |                                                                                     | EN 50347<br>DIN 42948 |         | FF100<br>A 120 | FF115<br>A 140 | FF130<br>A 160 | –      | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 |          |                                            |        |
| IM B5 <sup>2) 7)</sup>                             |  | F                     | P02     | 140.40         | 155.20         | 187.80         | –      | 285.30         | 346.–          | 448.–          | 578.–          | 922.–          | 1122.–         | Not for: | IEC IE3                                    | ③      |
| IM V1 without protective cover <sup>2)</sup>       |  | G                     | P02     | 140.40         | 155.20         | 187.80         | –      | 285.30         | 346.–          | 448.–          | 578.–          | 921.–          | 1120.–         | Not for: | IEC IE3                                    | ③      |
| IM V1 with protective cover <sup>2) 4) 5) 6)</sup> |  | G                     | P02+H00 | 197.10         | 211.90         | 244.50         | –      | 367.70         | 428.40         | 592.–          | 722.–          | 1113.–         | 1409.–         | Not for: | Combination with order code F90<br>IEC IE3 | ③      |
| IM V3 <sup>4)</sup>                                |  | H                     | P02     | 140.40         | 155.20         | 187.80         | –      | 285.30         | 346.–          | 448.–          | 578.–          | 922.–          | 1122.–         | Not for: | IEC IE3                                    | ③      |
| IM B35 <sup>3)</sup>                               |  | J                     | P02     | 146.30         | 159.50         | 191.10         | –      | 293.80         | 355.–          | 453.–          | 597.–          | 968.–          | 1216.–         | Not for: | APAC Line IE2<br>Eagle Line NEE            | ⑨<br>⑩ |

For legends and footnotes, see Page 1/51.

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

**2      5      10**

## Types of construction · Aluminum series 1LE10, 1PC10

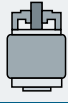
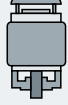
| Types of construction                               | Article No. supplement | Type of construction letter 14th position of the Article No.                        | For types of construction with order code(s) | Article No. with additional identification code <b>-Z</b> | Frame size     |                |                |                |                |                |                |                |            |            | Motor version                                |  |  |           |     |
|-----------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|------------|----------------------------------------------|--|--|-----------|-----|
|                                                     |                        |                                                                                     |                                              |                                                           | 63             | 71             | 80             | 90             | 100            | 112            | 132            | 160            | 180        | 200        |                                              |  |  |           |     |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1004        |                |                |            |            | IEC                                          |  |  | IE4       | ①   |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1003        |                |                |            |            |                                              |  |  | IE3       | ②   |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1083        |                |                |            |            |                                              |  |  |           | ③   |
|                                                     |                        |                                                                                     |                                              |                                                           | 1LE1001        |                |                |                |                |                |                |                |            |            |                                              |  |  | IE2       | ④   |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1PC1001        |                |                |            |            |                                              |  |  |           | ⑤   |
|                                                     |                        |                                                                                     |                                              |                                                           | 1LE1002        |                |                |                |                |                |                |                |            |            |                                              |  |  | IE1       | ⑥   |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1PC1002        |                |                |            |            |                                              |  |  |           | ⑦   |
|                                                     |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1043        |                |                |            |            |                                              |  |  | APAC Line | IE3 |
|                                                     |                        |                                                                                     |                                              |                                                           | 1LE1041        |                |                |                |                |                |                |                |            | IE2        | ⑨                                            |  |  |           |     |
|                                                     |                        |                                                                                     |                                              |                                                           | 1LE1023        |                |                |                |                |                |                |                | Eagle Line | NPE (NEMA) | ⑩                                            |  |  |           |     |
|                                                     |                        |                                                                                     |                                              |                                                           | 1LE1021        |                |                |                |                |                |                |                |            | NEE (NEMA) | ⑪                                            |  |  |           |     |
| 1LE10 . . . . . ■ ... (-Z)                          |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1011        |                |                |            |            | Pole-changing                                |  |  | ⑫         |     |
| 1PC10 . . . . . ■ .. (-Z)                           |                        |                                                                                     |                                              |                                                           |                |                |                |                |                | 1LE1012        |                |                |            |            |                                              |  |  | ⑬         |     |
| Order code                                          |                        |                                                                                     |                                              |                                                           |                |                |                |                |                |                |                |                |            |            |                                              |  |  |           |     |
| With flange                                         |                        | EN 50347<br>DIN 42948                                                               |                                              |                                                           | FT75<br>C 90   | FT85<br>C 105  | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT215<br>C 250 | –          | –          |                                              |  |  |           |     |
| IM B14 <sup>2) 8)</sup>                             |                        |    | K                                            | –                                                         | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.–          | 132.–          | 170.–          | –          | –          |                                              |  |  |           |     |
| IM V19 <sup>2)</sup>                                |                        |    | L                                            | –                                                         | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.–          | 132.–          | 170.–          | –          | –          |                                              |  |  |           |     |
| IM V18 without protective cover <sup>2)</sup>       |                        |    | M                                            | –                                                         | 43.50          | 48.20          | 54.80          | 65.70          | 81.30          | 101.–          | 132.–          | 170.–          | –          | –          |                                              |  |  |           |     |
| IM V18 with protective cover <sup>2) 4) 5) 6)</sup> |                        |   | M                                            | H00                                                       | 100.2<br>0     | 104.9<br>0     | 111.50         | 122.40         | 163.70         | 183.40         | 276.–          | 314.–          | –          | –          | Not for: Combination with order code F90     |  |  |           |     |
| IM B34 <sup>3)</sup>                                |                        |  | N                                            | –                                                         | 43.50          | 48.20          | 57.80          | 68.30          | 89.40          | 110.–          | 137.–          | 189.–          | –          | –          | Not for: Eagle Line NEE ⑪                    |  |  |           |     |
| With special flange next larger <sup>10)</sup>      |                        | EN 50347<br>DIN 42948                                                               |                                              |                                                           | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT165<br>C 200 | FT215<br>C 250 | –              | –          | –          |                                              |  |  |           |     |
| IM B14 <sup>2) 8) 10)</sup>                         |                        |  | K                                            | P01                                                       | 91.20          | 95.90          | 102.50         | 113.40         | 129.–          | 148.70         | 191.60         | –              | –          | –          |                                              |  |  |           |     |
| IM V19 <sup>2)</sup>                                |                        |  | L                                            | P01                                                       | 91.20          | 95.90          | 102.50         | 113.40         | 129.–          | 148.70         | 191.60         | –              | –          | –          |                                              |  |  |           |     |
| IM V18 without protective cover <sup>2)</sup>       |                        |  | M                                            | P01                                                       | 91.20          | 95.90          | 102.50         | 113.40         | 129.–          | 148.70         | 191.60         | –              | –          | –          |                                              |  |  |           |     |
| IM V18 with protective cover <sup>2) 4) 5) 6)</sup> |                        |  | M                                            | P01+H00                                                   | 147.9<br>0     | 152.6<br>0     | 159.20         | 170.10         | 211.40         | 231.10         | 335.60         | –              | –          | –          | Not for: Combination with order code F90     |  |  |           |     |
| IM B34 <sup>3)</sup>                                |                        |  | N                                            | P01                                                       | 91.20          | 95.90          | 105.50         | 116.–          | 137.10         | 157.70         | 196.60         | –              | –          | –          | Not for: APAC Line IE2 ⑨<br>Eagle Line NEE ⑪ |  |  |           |     |

For legends and footnotes, see Page 1/51.

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

### Types of construction · Aluminum series 1LE10, 1PC10

| Types of construction                               | Article No.<br>Type of construction letter<br>14th position of the Article No.      | supplement<br>For types of construction with order code(s)<br>Article No. with additional identification code -Z | Frame size            |        |              |              |     |         |                |               |            |     | Motor version |          |                                                       |             |  |
|-----------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------|--------|--------------|--------------|-----|---------|----------------|---------------|------------|-----|---------------|----------|-------------------------------------------------------|-------------|--|
|                                                     |                                                                                     |                                                                                                                  | 63                    | 71     | 80           | 90           | 100 | 112     | 132            | 160           | 180        | 200 |               |          |                                                       |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     | 1LE1004 |                |               |            |     | IEC           | IE4      | ①                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     | 1LE1003 |                |               |            |     |               | IE3      | ②                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     | 1LE1083 |                |               |            |     |               |          | ③                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  | 1LE1001               |        |              |              |     | 1PC1001 |                |               |            |     | IE2           |          | ④                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  | 1LE1002               |        |              |              |     |         |                |               |            |     |               |          | ⑤                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     | 1PC1002 |                |               |            |     | APAC Line     | IE1      | ⑥                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     |         |                |               |            |     |               |          | ⑦                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        |              |              |     | 1LE1043 |                |               |            |     |               | IE3      | ⑧                                                     |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        | 1LE1041      |              |     |         |                | IE2           | ⑨          |     |               |          |                                                       |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        | 1LE1023      |              |     |         |                | Eagle Line    | NPE (NEMA) | ⑩   |               |          |                                                       |             |  |
|                                                     |                                                                                     |                                                                                                                  |                       |        | 1LE1021      |              |     |         |                |               | NEE (NEMA) | ⑪   |               |          |                                                       |             |  |
| 1LE10 .....                                         |                                                                                     |                                                                                                                  |                       |        | 1LE1011      |              |     |         |                | Pole-changing |            |     | ⑫             |          |                                                       |             |  |
| 1PC10 .....                                         |                                                                                     |                                                                                                                  |                       |        | 1LE1012      |              |     |         |                |               |            |     | ⑬             |          |                                                       |             |  |
| Order code                                          |                                                                                     |                                                                                                                  |                       |        |              |              |     |         |                |               |            |     |               |          |                                                       |             |  |
| With special flange next smaller                    |                                                                                     |                                                                                                                  | EN 50347<br>DIN 42948 |        | FT65<br>C 80 | FT75<br>C 90 | –   | –       | FT115<br>C 140 | –             | –          | –   | –             | –        |                                                       |             |  |
| IM B14 <sup>2) 8)</sup>                             |    | K                                                                                                                | P02                   | 140.40 | 155.20       | –            | –   | 285.30  | –              | –             | –          | –   | –             | Not for: | IEC IE4<br>IEC IE3                                    | ①<br>③      |  |
| IM V19 <sup>2)</sup>                                |    | L                                                                                                                | P02                   | 140.40 | 155.20       | –            | –   | 285.30  | –              | –             | –          | –   | –             | Not for: | IEC IE4<br>IEC IE3                                    | ①<br>③      |  |
| IM V18 without protective cover <sup>2)</sup>       |    | M                                                                                                                | P02                   | 140.40 | 155.20       | –            | –   | 285.30  | –              | –             | –          | –   | –             | Not for: | IEC IE4<br>IEC IE3                                    | ①<br>③      |  |
| IM V18 with protective cover <sup>2) 4) 5) 6)</sup> |  | M                                                                                                                | P02+H00               | 197.10 | 211.90       | –            | –   | 367.70  | –              | –             | –          | –   | –             | Not for: | IEC IE4<br>Combination with order code F90<br>IEC IE3 | ①<br>③      |  |
| IM B34 <sup>3)</sup>                                |  | N                                                                                                                | P02                   | 140.40 | 155.20       | –            | –   | 293.40  | –              | –             | –          | –   | –             | Not for: | IEC IE4<br>IEC IE3<br>APAC Line IE2<br>Eagle Line NEE | ①<br>③<br>⑨ |  |

- Standard version
- Not possible

1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

2) The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

3) For North America export version Eagle Line 1LE1021 NEMA Energy Efficient, types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors  $\leq 200$  hp in accordance with NEMA MG1 Table 12-11.

4) The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

5) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

<sup>6)</sup> Not possible for forced-air cooled 1LE1 motors with order code **F90** without external fan and fan cover.

7) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

8) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

9) When ordering the type of construction B7 and desired cable outlet downwards, the option **R12** needs to be ordered additionally.

<sup>10)</sup> With reference to the EN 50347 standard, flanges that are two sizes larger are used in the frame size 80 with option **P01**.

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**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

**Selection and ordering data**

| Types of construction                                                             | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Order code | Frame size               |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | Motor version |     |     |   |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|--------------|---------------------|-------------------------------------------------------|------------|---------------|-----|-----|---|
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 71                       | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315 S/M | 315 L 2-pole | 315 L 4- ... 8-pole |                                                       |            |               |     |     |   |
|  | Type of construction letter 14th position of the Article No.                        |                                                              |                                                                                                 |            | 1LE1504 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | IEC           | IE4 | ①   |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1604 Performance Line |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               |     | ②   |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1503 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               |     | IE3 | ③ |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1603 Performance Line |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               |     |     | ④ |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1583                  |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               |     |     | ⑤ |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1501 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     | IE2                                                   | ⑥          |               |     |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1601 Performance Line |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | ⑦             |     |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1502 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | IE1           | ⑧   |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1543 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     | APAC Line                                             | IE3        |               | ⑨   |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1643 Performance Line |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               | ⑩   |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1541 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | ⑪             |     |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1523 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     | Eagle Line                                            | NPE (NEMA) | ⑫             |     |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1623 Performance Line |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | ⑬             |     |     |   |
|                                                                                   |                                                                                     |                                                              |                                                                                                 |            | 1LE1521 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            | ⑭             |     |     |   |
| Without flange                                                                    |                                                                                     |                                                              |                                                                                                 |            |                          |       |       |       |       |       |       |       |       |       |       |       |         |              |                     |                                                       |            |               |     |     |   |
| IM B3<br>1) 2) 3)                                                                 |    | A                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □       | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM B6<br>2) 3)                                                                    |    | T                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □       | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM B7<br>2) 3) 9)                                                                 |  | U                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □       | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM B8<br>2) 3)                                                                    |  | V                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □       | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM V6<br>2) 3)                                                                    |  | D                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | 460.–   | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM V5 without protective cover 2) 3)                                              |  | C                                                            | —                                                                                               | □          | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | 460.–   | □            | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |
| IM V5 with protective cover 2) 3) 4) 5)                                           |  | C                                                            | H00                                                                                             | 56.70      | 56.70                    | 56.70 | 82.40 | 82.40 | 144.– | 144.– | 192.– | 289.– | 383.– | 478.– | 573.– | 766.– | 766.–   | 766.–        | Not for:            | ⑪, ⑭ 2-, 4-, 6-pole ≤ 200 hp;<br>⑫, ⑬ 8-pole ≤ 200 hp |            |               |     |     |   |

For legends, see Page 1/55, for footnotes, see Page 1/56.

Standard delivery times in working days:

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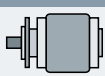
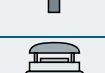
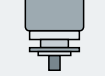
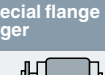
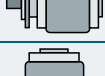
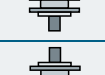
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# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Types of construction                           | Article No. supplement<br><br>Type of construction letter 14th position of the Article No.<br><br>For types of construction with order code(s)<br><br>Article No. with additional identification code -Z<br><br>Order code | Frame size |                    |                |                          |                |                |                |                |                |                |                |                |                |                    |                    | Motor version  |            |     |     |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|----------------|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|--------------------|----------------|------------|-----|-----|
|                                                 |                                                                                                                                                                                                                            | 71         | 80                 | 90             | 100                      | 112            | 132            | 160            | 180            | 200            | 225            | 250            | 280            | 315 S/M        | 315 L 2-pole       | 315 L 4-... 8-pole |                |            |     |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1504 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    | IEC            | IE4        | ①   |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1604 Performance Line |                |                |                |                |                |                |                |                |                |                    |                    |                |            | IE3 | ②   |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1503 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    |                |            |     | ③   |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1603 Performance Line |                |                |                |                |                |                |                |                |                |                    |                    |                |            |     | ④   |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1583                  |                |                |                |                |                |                |                |                |                |                    |                    |                |            |     | IE2 |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1501 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    | ⑥              |            |     |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1601 Performance Line |                |                |                |                |                |                |                |                |                |                    |                    | IE1            | ⑦          |     |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1502 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    |                | ⑧          |     |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1543 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    | APAC Line      | IE3        | ⑨   |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1643 Performance Line |                |                |                |                |                |                |                |                |                |                    |                    |                |            | ⑩   |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                |                          |                |                |                |                |                |                |                |                |                | 1LE1541 Basic Line |                    | IE2            | ⑪          |     |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1523 Basic Line       |                |                |                |                |                |                |                |                |                |                    |                    | Eagle Line     | NPE (NEMA) | ⑫   |     |
|                                                 |                                                                                                                                                                                                                            |            |                    |                | 1LE1623 Performance Line |                |                |                |                |                |                |                |                |                |                    |                    |                |            | ⑬   |     |
| 1LE1 ..... -Z                                   |                                                                                                                                                                                                                            |            | 1LE1521 Basic Line |                |                          |                |                |                |                |                |                |                |                |                |                    | NEE (NEMA)         | ⑭              |            |     |     |
| With flange                                     | EN 50347<br>DIN 42948                                                                                                                                                                                                      |            | FF130<br>A 160     | FF165<br>A 200 | FF165<br>A 200           | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 | FF600<br>A 660     | FF600<br>A 660     | FF600<br>A 660 |            |     |     |
| IM B5<br>2) 6)                                  |                                                                                                                                           | F          | —                  | 48.20          | 54.80                    | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          | 422.—          | 507.—          | 738.—              | 1050.—             | —              | —          |     |     |
| IM V1<br>without protec-<br>tive cover<br>2)    |                                                                                                                                           | G          | —                  | 48.20          | 54.80                    | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 268.—          | 324.—          | 424.—          | 517.—          | 742.—              | 1060.—             | 1060.—         | 1060.—     |     |     |
| IM V1<br>with protec-<br>tive cover<br>2) 4) 5) |                                                                                                                                          | G          | H00                | 104.90         | 111.50                   | 122.40         | 163.70         | 183.40         | 276.—          | 314.—          | 460.—          | 613.—          | 807.—          | 995.—          | 1315.—             | 1826.—             | 1826.—         | 1826.—     |     |     |
| IM V3<br>5)                                     |                                                                                                                                         | H          | —                  | 48.20          | 54.80                    | 65.70          | 81.30          | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          | 422.—          | 507.—          | 738.—              | 1050.—             | —              | —          |     |     |
| IM B35<br>3)                                    |                                                                                                                                         | J          | —                  | 52.50          | 57.80                    | 68.—           | 89.40          | 110.—          | 137.—          | 189.—          | 315.—          | 420.—          | 525.—          | 735.—          | 946.—              | 1200.—             | 1200.—         | 1200.—     |     |     |
| With special flange<br>next larger              | EN 50347<br>DIN 42948                                                                                                                                                                                                      |            | —                  | —              | FF215<br>A 250           | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | —              | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |
| IM B5<br>2) 6)                                  |                                                                                                                                         | F          | P01                | —              | —                        | 113.40         | 129.—          | 148.70         | 191.60         | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |
| IM V1<br>without protec-<br>tive cover<br>2)    |                                                                                                                                         | G          | P01                | —              | —                        | 113.40         | 129.—          | 148.70         | 191.60         | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |
| IM V1<br>with protec-<br>tive cover<br>2) 4) 5) |                                                                                                                                         | G          | P01+<br>H00        | —              | —                        | 122.40         | 211.40         | 231.10         | 335.60         | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |
| IM V3<br>5)                                     |                                                                                                                                         | H          | P01                | —              | —                        | 113.40         | 129.—          | 148.70         | 191.60         | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |
| IM B35<br>3)                                    |                                                                                                                                         | J          | P01                | —              | —                        | 116.—          | 137.10         | 157.70         | 196.60         | —              | —              | —              | —              | —              | —                  | —                  | —              | —          |     |     |

For legends, see Page 1/55, for footnotes, see Page 1/56.

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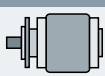
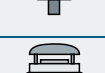
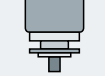
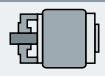
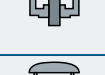
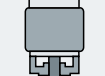
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**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Types of construction | Article No. supplement | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size               |    |    |     |     |     |     |     |     |     |     |     |         |              | Motor version |            |            |
|-----------------------|------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|--------------|---------------|------------|------------|
|                       |                        |                                                              |                                                                                                 | 71                       | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 S/M | 315 L 2-pole |               |            |            |
| 1LE1 .....            | ... (-Z)               | Order code                                                   |                                                                                                 | 1LE1504 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              | IEC           | IE4        | ①          |
|                       |                        |                                                              |                                                                                                 | 1LE1604 Performance Line |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | ②          |
|                       |                        |                                                              |                                                                                                 | 1LE1503 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              | IE3           | IE3        | ③          |
|                       |                        |                                                              |                                                                                                 | 1LE1603 Performance Line |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | ④          |
|                       |                        |                                                              |                                                                                                 | 1LE1583                  |    |    |     |     |     |     |     |     |     |     |     |         |              | IE2           | IE2        | ⑤          |
|                       |                        |                                                              |                                                                                                 | 1LE1501 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | ⑥          |
|                       |                        |                                                              |                                                                                                 | 1LE1601 Performance Line |    |    |     |     |     |     |     |     |     |     |     |         |              | IE1           | IE1        | ⑦          |
|                       |                        |                                                              |                                                                                                 | 1LE1502 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | ⑧          |
|                       |                        |                                                              |                                                                                                 | 1LE1543 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              | APAC Line     | IE3        | ⑨          |
|                       |                        |                                                              |                                                                                                 | 1LE1643 Performance Line |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | ⑩          |
|                       |                        |                                                              |                                                                                                 | 1LE1541 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              | IE2           | IE2        | ⑪          |
|                       |                        |                                                              |                                                                                                 | 1LE1523 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            | Eagle Line |
|                       |                        |                                                              |                                                                                                 | 1LE1623 Performance Line |    |    |     |     |     |     |     |     |     |     |     |         |              | ⑬             |            |            |
|                       |                        |                                                              |                                                                                                 | 1LE1521 Basic Line       |    |    |     |     |     |     |     |     |     |     |     |         |              | NEE (NEMA)    | NEE (NEMA) | ⑭          |
|                       |                        |                                                              |                                                                                                 |                          |    |    |     |     |     |     |     |     |     |     |     |         |              |               |            |            |

|                                       |                                                                                     |            |             |             |             |             |             |             |       |       |        |        |   |   |   |   |          |         |   |
|---------------------------------------|-------------------------------------------------------------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------|-------|--------|--------|---|---|---|---|----------|---------|---|
| With special flange next smaller      | EN 50347 DIN 42948                                                                  | -          | FF130 -     | FF165       | FF165       | FF215       | FF265       | FF265       | FF300 | -     | -      | -      | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM B5 2) 6)                           |    | F          | P02         | -           | 187.80      | -           | 285.30      | 346.-       | 448.- | 578.- | 922.-  | 1122.- | - | - | - | - |          |         |   |
| IM V1 without protective cover 2)     |    | G          | P02         | -           | 187.80      | -           | 285.30      | 346.-       | 448.- | 578.- | 921.-  | 1120.- | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM V1 with protective cover 2) 4) 5)  |   | G          | P02+H00     | -           | 244.50      | -           | 367.70      | 428.40      | 592.- | 722.- | 1113.- | 1409.- | - | - | - | - |          |         |   |
| IM V3 5)                              |  | H          | P02         | -           | 187.80      | -           | 285.30      | 346.-       | 448.- | 578.- | 922.-  | 1122.- | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM B35 3)                             |  | J          | P02         | -           | 190.80      | -           | 293.40      | 355.-       | 453.- | 597.- | 968.-  | 1216.- | - | - | - | - |          |         |   |
| With flange                           | EN 50347 DIN 42948                                                                  | FT85 C 105 | FT100 C 120 | FT115 C 140 | FT130 C 160 | FT130 C 160 | FT165 C 200 | FT215 C 250 | -     | -     | -      | -      | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM B14 2) 7)                          |  | K          | -           | 54.80       | 54.80       | 65.70       | 81.30       | 101.-       | 132.- | 170.- | -      | -      | - | - | - | - |          |         |   |
| IM V19 2)                             |  | L          | -           | 54.80       | 54.80       | 65.70       | 81.30       | 101.-       | 132.- | 170.- | -      | -      | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM V18 without protective cover 2)    |  | M          | -           | 54.80       | 54.80       | 65.70       | 81.30       | 101.-       | 132.- | 170.- | -      | -      | - | - | - | - |          |         |   |
| IM V18 with protective cover 2) 4) 5) |  | M          | H00         | 111.50      | 111.50      | 122.40      | 163.70      | 183.40      | 276.- | 314.- | -      | -      | - | - | - | - | Not for: | IEC IE3 | ⑤ |
| IM B34 3)                             |  | N          | -           | 52.50       | 57.80       | 68.30       | 89.40       | 110.-       | 137.- | 189.- | -      | -      | - | - | - | - |          |         |   |

For legends, see Page 1/55, for footnotes, see Page 1/56.

Standard delivery times in working days:

2

5

10

15

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Types of construction                                                        | Article No. supplement                                                                                                                                                                                                | Frame size                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |             |             |             |        |     |     |     |     |         |              | Motor version      |     |   |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|-----|-----|-----|-----|---------|--------------|--------------------|-----|---|
|                                                                              |                                                                                                                                                                                                                       | 71                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 80          | 90          | 100         | 112         | 132         | 160         | 180    | 200 | 225 | 250 | 280 | 315 S/M | 315 L 2-pole | 315 L 4-... 8-pole |     |   |
| <div> <div>1LE1</div> <div>.....</div> <div>...</div> <div>(-Z)</div> </div> | <div> <div>Type of construction letter 14th position of the Article No.</div> <div>For types of construction with order code(s) Article No. with additional identification code -Z</div> <div>Order code</div> </div> | <div>1LE1504 Basic Line</div> <div>1LE1604 Performance Line</div> <div>1LE1503 Basic Line</div> <div>1LE1603 Performance Line</div> <div>1LE1583</div> <div>1LE1501 Basic Line</div> <div>1LE1601 Performance Line</div> <div>1LE1502 Basic Line</div> <div>1LE1543 Basic Line</div> <div>1LE1643 Performance Line</div> <div>1LE1541 Basic Line</div> <div>1LE1523 Basic Line</div> <div>1LE1623 Performance Line</div> <div>1LE1521 Basic Line</div> |             |             |             |             |             |             |        |     |     |     |     |         |              | IEC                | IE4 | ① |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE3                | ②   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE3                | ③   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ④   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑤   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE1                | ⑥   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE1                | ⑦   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE3                | ⑧   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑨   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑩   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑪   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑫   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑬   |   |
|                                                                              |                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |             |             |             |             |             |        |     |     |     |     |         |              | IE2                | ⑭   |   |
| With special flange next larger                                              |                                                                                                                                                                                                                       | EN 50347 DIN 42948                                                                                                                                                                                                                                                                                                                                                                                                                                     | FT115 C 140 | FT130 C 160 | FT130 C 160 | FT165 C 200 | FT165 C 200 | FT215 C 250 | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM B14 2) 7) 8)                                                              |                                                                                                                                      | K                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P01         | 102.50      | 102.50      | 113.40      | 129.-       | 148.70      | 191.60 | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V19 2) 8)                                                                 |                                                                                                                                      | L                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P01         | 102.50      | 102.50      | 113.40      | 129.-       | 148.70      | 191.60 | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V18 without protective cover 2) 8)                                        |                                                                                                                                     | M                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P01         | 102.50      | 102.50      | 113.40      | 129.-       | 148.70      | 191.60 | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V18 with protective cover 2) 4) 5) 8)                                     |                                                                                                                                    | M                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P01+H00     | 159.20      | 159.20      | 170.10      | 211.40      | 231.10      | 335.60 | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM B34 3) 8)                                                                 |                                                                                                                                    | N                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P01         | 100.20      | 105.50      | 116.-       | 137.10      | 157.70      | 196.60 | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| With special flange next smaller                                             |                                                                                                                                                                                                                       | DIN EN 50347 DIN 42948                                                                                                                                                                                                                                                                                                                                                                                                                                 | -           | -           | -           | FF215 A 250 | -           | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM B14 2) 7)                                                                 |                                                                                                                                    | K                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P02         | -           | -           | -           | 285.30      | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V19 2)                                                                    |                                                                                                                                    | L                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P02         | -           | -           | -           | 285.30      | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V18 ohne Schutzdach 2)                                                    |                                                                                                                                    | M                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P02         | -           | -           | -           | 285.30      | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM V18 mit Schutzdach 2) 4) 5)                                               |                                                                                                                                    | M                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P02+H00     | -           | -           | -           | 367.70      | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |
| IM B34 3)                                                                    |                                                                                                                                    | N                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P02         | -           | -           | -           | 293.40      | -           | -      | -   | -   | -   | -   | -       | -            | -                  | -   | - |

□ Standard version  
- Not possible

For footnotes, see Page 1/56.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

Types of construction · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

1

- 1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 2) The type of construction is stamped on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.
- 3) For North America export version Eagle Line 1LE1521 NEMA Energy Efficient, types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with NEMA MG1 Table 12-11.
- 4) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).
- 5) The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.
- 6) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 7) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 8) With reference to the EN 50347 standard, flanges that are two sizes larger are used in the frame sizes 71 and 80 with option **P01**.
- 9) When ordering the type of construction B7 and desired cable outlet downwards, the option **R12** needs to be ordered additionally.



**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Types of construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div>Article No. supplement</div> <div>Type of construction letter 14th position of the Article No.</div> <div>For types of construction with order code(s)</div> <div>Article No. with additional identification code <b>-Z</b></div> <div>Order code</div> | Frame size         |    |     |     |     |     |         |     |     |     |     |     |     | Motor version |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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Standard delivery times in working days:

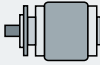
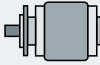
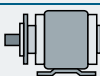
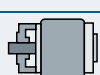
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**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Types of construction                          |    | Article No. supplement<br><br>Type of construction letter 14th position of the Article No.<br><br>For types of construction with order code(s)<br>Article No. with additional identification code <b>-Z</b><br>Order code | Frame size         |        |        |        |        |       |         |        |        |     |     |     | Motor version |     |  |
|------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|--------|--------|--------|-------|---------|--------|--------|-----|-----|-----|---------------|-----|--|
|                                                |                                                                                     |                                                                                                                                                                                                                           | 80                 | 90     | 100    | 112    | 132    | 160   | 180     | 200    | 225    | 250 | 280 | 315 | IEC           | IE3 |  |
|                                                |                                                                                     |                                                                                                                                                                                                                           | 1LE1073 Basic Line |        |        |        |        |       |         |        |        |     |     |     |               |     |  |
|                                                |                                                                                     |                                                                                                                                                                                                                           |                    |        |        |        |        |       | 1LE1573 |        |        |     |     |     |               |     |  |
|                                                |                                                                                     |                                                                                                                                                                                                                           |                    |        |        |        |        |       | 1LE5773 |        |        |     |     |     |               |     |  |
| 1LE.....-.....-...(-Z)                         |                                                                                     |                                                                                                                                                                                                                           |                    |        |        |        |        |       |         |        |        |     |     |     |               |     |  |
| With special flange next smaller               |                                                                                     | DIN EN 50347<br>DIN 42948                                                                                                                                                                                                 | FF130              | –      | FF165  | FF165  | FF215  | FF265 | FF265   | FF300  | –      | –   | –   | –   |               |     |  |
|                                                |                                                                                     |                                                                                                                                                                                                                           | A 160              | –      | A 200  | A 200  | A 250  | A 300 | A 300   | A 350  | –      | –   | –   | –   |               |     |  |
| IM B5<br>2) 6)                                 |    | <b>F</b>                                                                                                                                                                                                                  | <b>P02</b>         | 187.80 | –      | 285.30 | 346.–  | 448.– | 578.–   | 922.–  | 1122.– | –   | –   | –   | –             |     |  |
| IM V1<br>without protective cover<br>2)        |    | <b>G</b>                                                                                                                                                                                                                  | <b>P02</b>         | 187.80 | –      | 285.30 | 346.–  | 448.– | 578.–   | 921.–  | 1120.– | –   | –   | –   | –             |     |  |
| IM V1<br>with protective cover<br>2) 3) 4) 5)  |    | <b>G</b>                                                                                                                                                                                                                  | <b>P02+H00</b>     | 244.50 | –      | 367.70 | 428.40 | 592.– | 722.–   | 1113.– | 1409.– | –   | –   | –   | –             |     |  |
| IM V3<br>3)                                    |   | <b>H</b>                                                                                                                                                                                                                  | <b>P02</b>         | 187.80 | –      | 285.30 | 346.–  | 448.– | 578.–   | 922.–  | 1122.– | –   | –   | –   | –             |     |  |
| IM B35                                         |  | <b>J</b>                                                                                                                                                                                                                  | <b>P02</b>         | 191.10 | –      | 293.80 | 355.–  | 453.– | 597.–   | 968.–  | 1216.– | –   | –   | –   | –             |     |  |
| With flange                                    |                                                                                     | DIN EN 50347<br>DIN 42948                                                                                                                                                                                                 | FT100              | FT115  | FT130  | FT130  | FT165  | FT215 | –       | –      | –      | –   | –   | –   |               |     |  |
|                                                |                                                                                     |                                                                                                                                                                                                                           | C 120              | C 140  | C 160  | C 160  | C 200  | C 250 | –       | –      | –      | –   | –   | –   |               |     |  |
| IM B14<br>2) 7)                                |  | <b>K</b>                                                                                                                                                                                                                  | –                  | 54.80  | 65.70  | 81.30  | 101.–  | 132.– | 170.–   | –      | –      | –   | –   | –   | –             |     |  |
| IM V19<br>2)                                   |  | <b>L</b>                                                                                                                                                                                                                  | –                  | 54.80  | 65.70  | 81.30  | 101.–  | 132.– | 170.–   | –      | –      | –   | –   | –   | –             |     |  |
| IM V18<br>without protective cover<br>2)       |  | <b>M</b>                                                                                                                                                                                                                  | –                  | 54.80  | 65.70  | 81.30  | 101.–  | 132.– | 170.–   | –      | –      | –   | –   | –   | –             |     |  |
| IM V18<br>with protective cover<br>2) 3) 4) 5) |  | <b>M</b>                                                                                                                                                                                                                  | <b>H00</b>         | 111.50 | 122.40 | 163.70 | 183.40 | 276.– | 314.–   | –      | –      | –   | –   | –   | –             |     |  |
| IM B34                                         |  | <b>N</b>                                                                                                                                                                                                                  | –                  | 57.80  | 68.30  | 89.40  | 110.–  | 137.– | 189.–   | –      | –      | –   | –   | –   | –             |     |  |

For legends, see Page 1/60, for footnotes, see Page 1/61.

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Types of construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Article No. supplement<br><br>Type of construction letter 14th position of the Article No.<br><br>For types of construction with order code(s)<br>Article No. with additional identification code <b>-Z</b><br>Order code | Frame size         |    |     |     |     |     |         |     |     |     |     |     |     | Motor version |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                           | 1LE1073 Basic Line |    |     |     |     |     | 1LE1573 |     |     |     |     |     |     |               |  |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                           | 1LE5773            |    |     |     |     |     |         |     |     |     |     |     |     |               |  |
| 1LE.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....-.....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|                                                                                                                                                                                                                           |                    |    |     |     |     |     |         |     |     |     |     |     |     |               |  |

□ Standard version  
 O. R. Possible on request  
 – Not possible

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

Types of construction · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

1

- <sup>1)</sup> The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- <sup>2)</sup> The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.
- <sup>3)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.
- <sup>4)</sup> In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).
- <sup>5)</sup> Not possible for forced-air cooled 1LE1 motors with order code **F90** without external fan and fan cover.
- <sup>6)</sup> The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- <sup>7)</sup> The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- <sup>8)</sup> When ordering the type of construction IM B7 and desired cable outlet downwards, the option **R12** needs to be ordered additionally.
- <sup>9)</sup> With reference to the EN 50347 standard, flanges that are two sizes larger are used in the frame size 80 with option **P01**.

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**Motor protection · Aluminum series 1LE10, 1PC10****Selection and ordering data**

| Motor protection | Article No. supplement |                                                                           | Frame size |    |    |    |         |     |     |         |     |     | Motor version |            |   |
|------------------|------------------------|---------------------------------------------------------------------------|------------|----|----|----|---------|-----|-----|---------|-----|-----|---------------|------------|---|
|                  | Motor protection code  | Additional identification code with order code and plain text if required | 63         | 71 | 80 | 90 | 100     | 112 | 132 | 160     | 180 | 200 |               |            |   |
|                  |                        |                                                                           |            |    |    |    | 1LE1004 |     |     |         |     |     | IEC           | IE4        | ① |
|                  |                        |                                                                           |            |    |    |    | 1LE1003 |     |     |         |     |     |               | IE3        | ② |
|                  |                        |                                                                           |            |    |    |    | 1LE1083 |     |     |         |     |     |               |            | ③ |
|                  |                        |                                                                           |            |    |    |    | 1LE1001 |     |     |         |     |     |               | IE2        | ④ |
|                  |                        |                                                                           |            |    |    |    |         |     |     | 1PC1001 |     |     |               |            | ⑤ |
|                  |                        |                                                                           |            |    |    |    | 1LE1002 |     |     |         |     |     |               | IE1        | ⑥ |
|                  |                        |                                                                           |            |    |    |    |         |     |     | 1PC1002 |     |     |               |            | ⑦ |
|                  |                        |                                                                           |            |    |    |    | 1LE1043 |     |     |         |     |     | APAC Line     | IE3        | ⑧ |
|                  |                        |                                                                           |            |    |    |    | 1LE1041 |     |     |         |     |     |               | IE2        | ⑨ |
|                  |                        |                                                                           |            |    |    |    | 1LE1023 |     |     |         |     |     | Eagle Line    | NPE (NEMA) | ⑩ |
|                  |                        |                                                                           |            |    |    |    | 1LE1021 |     |     |         |     |     |               | NEE (NEMA) | ⑪ |
| 1LE10 . . . . .  |                        |                                                                           |            |    |    |    |         |     |     | 1LE1011 |     |     | Pole-changing |            | ⑫ |
| 1PC10 . . . . .  |                        |                                                                           |            |    |    |    |         |     |     | 1LE1012 |     |     |               |            | ⑬ |

| Motor protection                                                              |   |     |       |       |       |       |        |        |        |        |        |        |           |         |   |
|-------------------------------------------------------------------------------|---|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-----------|---------|---|
| Without (Standard)                                                            | A | –   | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □         | □       |   |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>             | B | –   | 37.80 | 39.20 | 37.10 | 43.50 | 119.–  | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  |           |         |   |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>   | C | –   | 176.– | 176.– | 176.– | 176.– | 205.–  | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  |           |         |   |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                    | F | –   | 105.– | 105.– | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |           |         |   |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                   | G | –   | 211.– | 211.– | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |           |         |   |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>1)</sup>  | H | –   | –     | –     | –     | –     | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– |           |         |   |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)               | J | –   | –     | –     | –     | –     | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | Only for: | IEC IE3 | ③ |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1) 2)</sup>                | K | –   | 105.– | 105.– | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |           |         |   |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>1) 2)</sup>               | L | –   | 211.– | 211.– | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |           |         |   |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) <sup>1)</sup>   | P | –   | –     | –     | –     | –     | 1040.– | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– |           |         |   |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>1)</sup>  | Q | –   | –     | –     | –     | –     | 1310.– | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– |           |         |   |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>1)</sup> | R | –   | –     | –     | –     | –     | 2020.– | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– |           |         |   |
| 3 NTC resistors - for tripping (6 terminals) <sup>1)</sup>                    | Z | Q2A | –     | –     | –     | –     | 241.–  | 241.–  | 357.–  | 357.–  | –      | –      |           |         |   |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>1)</sup>       | Z | Q3A | 117.– | 117.– | 117.– | 117.– | 134.–  | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  |           |         |   |

- Standard version  
– Not possible

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors with two separate windings, double the number of temperature sensors or temperature detectors is required. This also results in a double additional charge.

<sup>2)</sup> Not UL-certified. Not possible in combination with the option D31.

## Standard delivery times in working days:

2

5

10

15

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Motor protection · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

1

## Selection and ordering data

| Motor protection                                                                  | Article No. supplement |                                                                           | Frame size               |        |        |        |        |        |        |        |        |        |        |        |           | Motor version |                                   |                                |   |
|-----------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|---------------|-----------------------------------|--------------------------------|---|
|                                                                                   | Motor protection code  | Additional identification code with order code and plain text if required | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315       |               |                                   |                                |   |
| 1LE1.....                                                                         | A                      | -                                                                         | 1LE1504 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           | IEC           | IE4                               | ①                              |   |
|                                                                                   |                        |                                                                           | 1LE1604 Performance Line |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   | ②                              |   |
|                                                                                   |                        |                                                                           | 1LE1503 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   | IE3                            | ③ |
|                                                                                   |                        |                                                                           | 1LE1603 Performance Line |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   |                                | ④ |
|                                                                                   |                        |                                                                           | 1LE1583                  |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   |                                | ⑤ |
|                                                                                   |                        |                                                                           | 1LE1501 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           | IE2           | ⑥                                 |                                |   |
|                                                                                   |                        |                                                                           | 1LE1601 Performance Line |        |        |        |        |        |        |        |        |        |        |        |           |               | ⑦                                 |                                |   |
|                                                                                   |                        |                                                                           | 1LE1502 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           |               | IE1                               | ⑧                              |   |
|                                                                                   |                        |                                                                           | 1LE1543 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           | APAC Line     |                                   | ⑨                              |   |
|                                                                                   |                        |                                                                           | 1LE1643 Performance Line |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   | ⑩                              |   |
|                                                                                   |                        |                                                                           | 1LE1541 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           | Eagle Line    | IE2                               | ⑪                              |   |
|                                                                                   |                        |                                                                           | 1LE1523 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           |               | NPE (NEMA)                        | ⑫                              |   |
|                                                                                   |                        |                                                                           | 1LE1623 Performance Line |        |        |        |        |        |        |        |        |        |        |        |           |               | ⑬                                 |                                |   |
|                                                                                   |                        |                                                                           | 1LE1521 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |           | NEE (NEMA)    | ⑭                                 |                                |   |
| Motor protection                                                                  |                        |                                                                           |                          |        |        |        |        |        |        |        |        |        |        |        |           |               |                                   |                                |   |
| Without (Standard) <sup>1)</sup>                                                  | A                      | -                                                                         | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □         | Only for:     | Basic Line ①, ③, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |                                |   |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1) 2)</sup>              | B                      | -                                                                         | 39.20                    | 40.5   | 43.5   | 119.–  | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  | 406.–     | Only for:     | Basic Line ①, ③, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |                                |   |
|                                                                                   |                        |                                                                           | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: |               |                                   | Performance Line ②, ④, ⑦, ⑩, ⑬ |   |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>2)</sup>       | C                      | -                                                                         | 176.–                    | 176.–  | 176.–  | 205.–  | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | 679.–     |               |                                   |                                |   |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>2)</sup>                        | F                      | -                                                                         | 105.–                    | 105.–  | 105.–  | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–     |               |                                   |                                |   |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>2)</sup>                       | G                      | -                                                                         | 210.–                    | 210.–  | 210.–  | 242.–  | 242.–  | 357.–  | 357.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.–    |               |                                   |                                |   |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>2)</sup>      | H                      | -                                                                         | 1040.–                   | 1040.– | 1040.– | 1240.– | 1240.– | 1240.– | 1240.– | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– | 1670.–    |               |                                   |                                |   |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>2)</sup>     | J                      | -                                                                         | -                        | -      | -      | -      | -      | -      | -      | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.–    |               |                                   |                                |   |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>2) 3)</sup>                    | K                      | -                                                                         | 105.–                    | 105.–  | 105.–  | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–     |               |                                   |                                |   |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>2) 3)</sup>                   | L                      | -                                                                         | 210.–                    | 210.–  | 210.–  | 242.–  | 242.–  | 357.–  | 357.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.–    |               |                                   |                                |   |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) <sup>2)</sup>       | P                      | -                                                                         | -                        | -      | -      | 1040.– | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.–    |               |                                   |                                |   |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>2)</sup>      | Q                      | -                                                                         | -                        | -      | -      | 1310.– | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.–    |               |                                   |                                |   |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>2)</sup>     | R                      | -                                                                         | -                        | -      | -      | 2020.– | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.–    |               |                                   |                                |   |
| 3 NTC resistors – for tripping (6 terminals) <sup>2)</sup>                        | Z                      | Q2A                                                                       | 210.–                    | 210.–  | 210.–  | 241.–  | 241.–  | 357.–  | 357.–  | -      | -      | -      | -      | -      | -         |               |                                   |                                |   |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>2)</sup>           | Z                      | Q3A                                                                       | 117.–                    | 117.–  | 117.–  | 134.–  | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  | 339.–  | 339.–  | 419.–  | 419.–     |               |                                   |                                |   |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) <sup>2)</sup> | Z                      | Q9A                                                                       | -                        | -      | -      | 241.–  | 241.–  | 352.–  | 352.–  | 477.–  | 477.–  | 647.–  | 647.–  | 801.–  | 801.–     |               |                                   |                                |   |

- Standard version  
– Not possible

## Note:

Options are available specifically for bearing protection –  
For order codes and descriptions, see from Page 1/76.

<sup>1)</sup> For the Performance Line, motor protection by means of PTC thermistors with 3 embedded temperature sensors for tripping (motor protection code B) is already included in the base price. For the Performance Line, the option "Without motor protection" (motor protection code A) is not possible.

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>3)</sup> Not UL-certified. Not possible in combination with the option D31.

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Motor protection · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

1

**Selection and ordering data**

| Motor protection | Article No. supplement           |                                                                           | Frame size         |    |     |     |     |     |     |         |     |     |     | Motor version |         |  |
|------------------|----------------------------------|---------------------------------------------------------------------------|--------------------|----|-----|-----|-----|-----|-----|---------|-----|-----|-----|---------------|---------|--|
|                  | Motor protection code            | Additional identification code with order code and plain text if required | 80                 | 90 | 100 | 112 | 132 | 160 | 180 | 200     | 225 | 250 | 280 | 315           |         |  |
| 1LE .....        | 15th position of the Article No. | Order code                                                                | 1LE1073 Basic Line |    |     |     |     |     |     | 1LE1573 |     |     |     |               | IEC IE3 |  |
|                  |                                  |                                                                           |                    |    |     |     |     |     |     |         |     |     |     |               |         |  |
|                  |                                  |                                                                           |                    |    |     |     |     |     |     | 1LE5773 |     |     |     |               |         |  |
|                  |                                  |                                                                           |                    |    |     |     |     |     |     |         |     |     |     |               |         |  |

| Motor protection                                                                  |          |            |       |       |        |        |        |        |        |        |        |        |        |        |  |  |
|-----------------------------------------------------------------------------------|----------|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|--|
| Without (Standard)                                                                | <b>A</b> | –          | □     | □     | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |  |  |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                 | <b>B</b> | –          | 37.10 | 43.50 | 119.–  | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  | 406.–  |  |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>       | <b>C</b> | –          | 176.– | 176.– | 205.–  | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | 679.–  |  |  |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                        | <b>F</b> | –          | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 601.–  |  |  |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                       | <b>G</b> | –          | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |  |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                    | <b>H</b> | –          | –     | –     | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– | 1670.– |  |  |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)                   | <b>J</b> | –          | –     | –     | –      | –      | –      | –      | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– |  |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>2)</sup>                       | <b>K</b> | –          | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–  |  |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>2)</sup>                      | <b>L</b> | –          | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |  |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) <sup>2)</sup>       | <b>P</b> | –          | –     | –     | 1040.– | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– |  |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                    | <b>Q</b> | –          | –     | –     | 1310.– | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– |  |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                   | <b>R</b> | –          | –     | –     | 2020.– | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– |  |  |
| 3 NTC resistors – for tripping (6 terminals)                                      | <b>Z</b> | <b>Q2A</b> | –     | –     | 241.–  | 241.–  | 357.–  | 357.–  | –      | –      | –      | –      | –      | –      |  |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>1)</sup>           | <b>Z</b> | <b>Q3A</b> | 117.– | 117.– | 134.–  | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  | 339.–  | 339.–  | 419.–  | 419.–  |  |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) <sup>1)</sup> | <b>Z</b> | <b>Q9A</b> | –     | –     | 241.–  | 241.–  | 352.–  | 352.–  | 477.–  | 477.–  | 647.–  | 647.–  | 801.–  | 801.–  |  |  |

- Standard version  
– Not possible

**Note:**

Options are available specifically for bearing protection –  
For order codes and descriptions, see from Page 1/87.

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>2)</sup> Not UL-certified. Not possible in combination with the option **D31**.

Standard delivery times in working days:

2

5

10

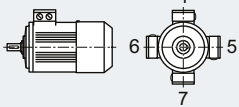
**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

Terminal box position · Aluminum series 1LE10, 1PC10

1

**Selection and ordering data**

| Terminal box position                                                             | Article No. | supplement                                                                | Frame size |    |    |    |         |     |     |     | Motor version |     |                         |
|-----------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------|------------|----|----|----|---------|-----|-----|-----|---------------|-----|-------------------------|
|                                                                                   |             |                                                                           | 63         | 71 | 80 | 90 | 100     | 112 | 132 | 160 | 180           | 200 |                         |
|  |             | Terminal box position code 16th position of the Article No.               |            |    |    |    | 1LE1004 |     |     |     |               |     | IEC IE4 ①               |
|                                                                                   |             | Additional identification code with order code and plain text if required |            |    |    |    | 1LE1003 |     |     |     |               |     | IE3 ②                   |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1083 |     |     |     |               |     | ③                       |
|                                                                                   |             |                                                                           | 1LE1001    |    |    |    |         |     |     |     |               |     | IE2 ④                   |
|                                                                                   |             |                                                                           |            |    |    |    | 1PC1001 |     |     |     |               |     | ⑤                       |
|                                                                                   |             |                                                                           | 1LE1002    |    |    |    |         |     |     |     |               |     | IE1 ⑥                   |
|                                                                                   |             |                                                                           |            |    |    |    | 1PC1002 |     |     |     |               |     | ⑦                       |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1043 |     |     |     |               |     | APAC Line IE3 ⑧         |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1041 |     |     |     |               |     | IE2 ⑨                   |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1023 |     |     |     |               |     | Eagle Line NPE (NEMA) ⑩ |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1021 |     |     |     |               |     | NEE (NEMA) ⑪            |
| 1LE10 .....                                                                       |             |                                                                           |            |    |    |    |         |     |     |     |               |     | Pole-changing ⑫         |
| 1PC10 .....                                                                       |             |                                                                           |            |    |    |    |         |     |     |     |               |     | ⑬                       |
|                                                                                   |             | Order code                                                                |            |    |    |    | 1LE1011 |     |     |     |               |     |                         |
|                                                                                   |             |                                                                           |            |    |    |    | 1LE1012 |     |     |     |               |     |                         |

**Terminal box position**

|                                      |   |   |   |   |       |       |       |       |       |       |       |       |   |
|--------------------------------------|---|---|---|---|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Terminal box top <sup>1)</sup>       | 4 | – | □ | □ | □     | □     | □     | □     | □     | □     | □     | □     | □ |
| Terminal box on RHS <sup>2)</sup>    | 5 | – | – | – | 35.90 | 40.60 | 104.– | 113.– | 123.– | 132.– | 186.– | 218.– | – |
| Terminal box on LHS <sup>2)</sup>    | 6 | – | – | – | 35.90 | 40.60 | 104.– | 113.– | 123.– | 132.– | 186.– | 218.– | – |
| Terminal box bottom <sup>2) 3)</sup> | 7 | – | – | – | –     | –     | 104.– | 113.– | 123.– | 132.– | –     | –     | – |

- Standard version  
– Not possible

<sup>1)</sup> For types of construction with feet up to and including frame size 160, cast feet are standard. Screwed-on feet are available with order code **H01**. Frame sizes 180 and 200 are fitted as standard with screwed-on feet.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>3)</sup> Not generally possible for motors with feet.

## SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

2

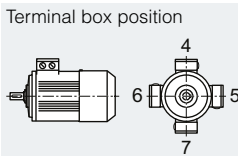
5

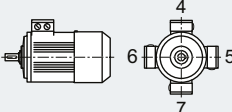
10

15

## Terminal box position · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

## Selection and ordering data



| Terminal box position                                                             | Article No.                                                 | supplement                                                                | Frame size                                              | Motor version           |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------|-------------------------|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | <b>71 80 90 100 112 132 160 180 200 225 250 280 315</b> |                         |
|                                                                                   |                                                             |                                                                           | 1LE1504 Basic Line                                      | IEC IE4 ①               |
|                                                                                   |                                                             |                                                                           | 1LE1604 Performance Line                                | ②                       |
|                                                                                   |                                                             |                                                                           | 1LE1503 Basic Line                                      | IE3 ③                   |
|                                                                                   |                                                             |                                                                           | 1LE1603 Performance Line                                | ④                       |
|                                                                                   |                                                             |                                                                           | 1LE1583                                                 | ⑤                       |
|                                                                                   |                                                             |                                                                           | 1LE1501 Basic Line                                      | IE2 ⑥                   |
|                                                                                   |                                                             |                                                                           | 1LE1601 Performance Line                                | ⑦                       |
|                                                                                   |                                                             |                                                                           | 1LE1502 Basic Line                                      | IE1 ⑧                   |
|                                                                                   |                                                             |                                                                           | 1LE1543 Basic Line                                      | APAC Line IE3 ⑨         |
|                                                                                   |                                                             |                                                                           | 1LE1643 Performance Line                                | ⑩                       |
|                                                                                   |                                                             |                                                                           | 1LE1541 Basic Line                                      | IE2 ⑪                   |
|                                                                                   |                                                             |                                                                           | 1LE1523 Basic Line                                      | Eagle Line NPE (NEMA) ⑫ |
|                                                                                   |                                                             |                                                                           | 1LE1623 Performance Line                                | ⑬                       |
|                                                                                   |                                                             |                                                                           | 1LE1521 Basic Line                                      | NEE (NEMA) ⑭            |

1LE1.....■

Order code

[illegible]

- Standard version
- Not possible

<sup>1)</sup> For types of construction with feet and flange-mounted with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

2) For types of construction with feet and flange-mounted with feet, screwed-on feet are standard. Except for frame sizes 225, 250, 280 and 315: in which case for types of construction with feet and flange-mounted with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

3) Not generally possible for motors with feet.

Standard delivery times in working days:

40

50

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

Terminal box position · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

1

**Selection and ordering data**

| Terminal box position                                  | Article No.                                                 | supplement                                                                | Frame size         |       |       |       |       |       |         |       |       |         |       |       | Motor version |     |  |
|--------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|--------------------|-------|-------|-------|-------|-------|---------|-------|-------|---------|-------|-------|---------------|-----|--|
|                                                        | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | 80                 | 90    | 100   | 112   | 132   | 160   | 180     | 200   | 225   | 250     | 280   | 315   | IEC           | IE3 |  |
|                                                        |                                                             |                                                                           | 1LE1073 Basic Line |       |       |       |       |       |         |       |       |         |       |       |               |     |  |
|                                                        |                                                             |                                                                           |                    |       |       |       |       |       | 1LE1573 |       |       |         |       |       |               |     |  |
|                                                        |                                                             |                                                                           |                    |       |       |       |       |       |         |       |       | 1LE5773 |       |       |               |     |  |
| 1LE .....-.....-....                                   |                                                             |                                                                           |                    |       |       |       |       |       |         |       |       |         |       |       |               |     |  |
| Terminal box position                                  |                                                             |                                                                           |                    |       |       |       |       |       |         |       |       |         |       |       |               |     |  |
| Terminal box base on LHS with terminal box on top      | 0                                                           | –                                                                         | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |
| Terminal box base on RHS with terminal box on top      | 1                                                           | –                                                                         | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |
| Terminal box base on LHS with tilted terminal box 45°  | 2                                                           | –                                                                         | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | O     |               |     |  |
| Terminal box base on RHS with tilted terminal box 45°  | 3                                                           | –                                                                         | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | □     |               |     |  |
| Terminal box top                                       | 4                                                           | –                                                                         | □                  | □     | □     | □     | □     | □     | □       | □     | □     | □       | □     | –     |               |     |  |
| Terminal box on RHS                                    | 5                                                           | –                                                                         | 35.90              | 40.60 | 104.– | 113.– | 123.– | 132.– | 371.–   | 437.– | 517.– | 768.–   | 863.– | 630.– |               |     |  |
| Terminal box on LHS                                    | 6                                                           | –                                                                         | 35.90              | 40.60 | 104.– | 113.– | 123.– | 132.– | 371.–   | 437.– | 517.– | 768.–   | 863.– | 630.– |               |     |  |
| Terminal box bottom <sup>1)</sup>                      | 7                                                           | –                                                                         | –                  | –     | 104.– | 113.– | 123.– | 132.– | –       | –     | –     | –       | –     | –     |               |     |  |
| Terminal box on LHS (base at the bottom) <sup>1)</sup> | 9                                                           | R5L                                                                       | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |
| Terminal box on RHS (base at the bottom) <sup>1)</sup> | 9                                                           | R6R                                                                       | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |
| Terminal box at the bottom on LHS <sup>1)</sup>        | 9                                                           | R7L                                                                       | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |
| Terminal box at the bottom on RHS <sup>1)</sup>        | 9                                                           | R7R                                                                       | –                  | –     | –     | –     | –     | –     | –       | –     | –     | –       | –     | 630.– |               |     |  |

- Standard version  
 ○ Without additional charge  
 – Not possible

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**2****5****10****15****>30****On  
request****Options · Aluminum series 1LE10, 1PC1****Selection and ordering data**

| Special versions | Additional identification code -Z with order code and plain text if required | Frame size |    |         |    |         |     |     |     |     |     | Motor version |            |   |
|------------------|------------------------------------------------------------------------------|------------|----|---------|----|---------|-----|-----|-----|-----|-----|---------------|------------|---|
|                  |                                                                              | 63         | 71 | 80      | 90 | 100     | 112 | 132 | 160 | 180 | 200 |               |            |   |
|                  |                                                                              |            |    |         |    | 1LE1004 |     |     |     |     |     | IEC           | IE4        | ① |
|                  |                                                                              |            |    | 1LE1003 |    |         |     |     |     |     |     |               | IE3        | ② |
|                  |                                                                              |            |    |         |    | 1LE1083 |     |     |     |     |     |               |            | ③ |
|                  |                                                                              | 1LE1001    |    |         |    |         |     |     |     |     |     |               | IE2        | ④ |
|                  |                                                                              |            |    |         |    | 1PC1001 |     |     |     |     |     |               |            | ⑤ |
|                  |                                                                              | 1LE1002    |    |         |    |         |     |     |     |     |     |               | IE1        | ⑥ |
|                  |                                                                              |            |    |         |    | 1PC1002 |     |     |     |     |     |               |            | ⑦ |
|                  |                                                                              |            |    | 1LE1043 |    |         |     |     |     |     |     | APAC Line     | IE3        | ⑧ |
|                  |                                                                              |            |    | 1LE1041 |    |         |     |     |     |     |     |               | IE2        | ⑨ |
|                  |                                                                              |            |    | 1LE1023 |    |         |     |     |     |     |     | Eagle Line    | NPE (NEMA) | ⑩ |
|                  |                                                                              |            |    |         |    | 1LE1021 |     |     |     |     |     |               | NEE (NEMA) | ⑪ |
| 1LE10.....-Z     |                                                                              |            |    |         |    | 1LE1011 |     |     |     |     |     | Pole-changing |            |   |
| 1PC10.....-Z     | Order code                                                                   |            |    |         |    | 1LE1012 |     |     |     |     |     |               |            |   |

| Motor protection                                                                   |     |  |       |       |       |       |        |        |        |        |        |        |               |  |
|------------------------------------------------------------------------------------|-----|--|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|---------------|--|
| 1 or 3 PTC thermistors – for tripping (2 terminals)                                | Q11 |  | 34.70 | 34.70 | 37.10 | 43.50 | 119.–  | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  |               |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals)                      | Q12 |  | 176.– | 176.– | 176.– | 176.– | 205.–  | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  |               |  |
| 1 temperature sensor KTY84-130 (2 terminals)                                       | Q23 |  | 105.– | 105.– | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |               |  |
| 2 temperature sensors KTY84-130 (2 terminals)                                      | Q25 |  | 211.– | 211.– | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |               |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals)                          | Q31 |  | –     | –     | 117.– | 117.– | 134.–  | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  |               |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                | Q32 |  | –     | –     | 210.– | 210.– | 241.–  | 241.–  | 352.–  | 352.–  | 477.–  | 477.–  |               |  |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                          | Q33 |  | –     | –     | –     | –     | –      | –      | –      | –      | 281.–  | 281.–  |               |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)               | Q34 |  | –     | –     | –     | –     | –      | –      | –      | –      | 488.–  | 488.–  |               |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>40)</sup>                       | Q35 |  | 105.– | 105.– | 105.– | 105.– | 119.–  | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |               |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>40)</sup>                      | Q36 |  | 211.– | 211.– | 211.– | 211.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |               |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                     | Q60 |  | –     | –     | –     | –     | 1240.– | 1240.– | 1240.– | 1240.– | 1510.– | 1510.– |               |  |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)                    | Q61 |  | –     | –     | –     | –     | 1920.– | 1920.– | 1920.– | 1920.– | 2470.– | 2470.– |               |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                      | Q62 |  | –     | –     | –     | –     | 1040.– | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– |               |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                     | Q63 |  | –     | –     | –     | –     | 1310.– | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– |               |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                    | Q64 |  | –     | –     | –     | –     | 2020.– | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– |               |  |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)          | Q72 |  | –     | –     | –     | –     | O. R.  | O. R.  | O. R.  | O. R.  | 4300.– | 4300.– |               |  |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)         | Q78 |  | –     | –     | –     | –     | O. R.  | O. R.  | O. R.  | O. R.  | 4730.– | 4730.– |               |  |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) | Q79 |  | –     | –     | –     | –     | O. R.  | O. R.  | O. R.  | O. R.  | 5670.– | 5670.– |               |  |
| Motor connection and terminal box                                                  |     |  |       |       |       |       |        |        |        |        |        |        |               |  |
| External grounding                                                                 | H04 |  | 24.–  | 24.–  | 24.–  | 24.–  | 28.90  | 28.90  | 28.90  | 28.90  | 37.10  | 37.10  |               |  |
| Terminal box on NDE <sup>3)</sup>                                                  | H08 |  | 63.–  | 73.50 | 84.–  | 96.70 | 119.–  | 147.–  | 190.–  | 258.–  | 967.–  | 999.–  |               |  |
| Rotation of the terminal box through 90°, entry from DE <sup>1)</sup>              | R10 |  | O     | O     | O     | O     | O      | O      | O      | O      | 45.10  | 58.40  |               |  |
| Rotation of the terminal box through 90°, entry from NDE                           | R11 |  | O     | O     | O     | O     | O      | O      | O      | O      | 45.10  | 58.40  |               |  |
| Rotation of the terminal box through 180°                                          | R12 |  | O     | O     | O     | O     | O      | O      | O      | O      | 45.10  | 58.40  |               |  |
| Terminal box in position 0°; connection from right <sup>41)</sup>                  | R13 |  | O     | O     | O     | O     | O      | O      | O      | –      | –      | –      | Not for: ③    |  |
| One metal cable gland                                                              | R15 |  | 59.80 | 59.80 | 59.80 | 59.80 | 112.–  | 112.–  | 112.–  | 143.–  | 143.–  | 165.–  |               |  |
| One metal cable gland, maximum configuration                                       | R18 |  | 86.20 | 86.20 | 86.20 | 86.20 | 159.–  | 159.–  | 159.–  | 209.–  | 209.–  | 241.–  |               |  |
| 3 cables protruding, 0.5 m long <sup>4) 5)</sup>                                   | R20 |  | 57.60 | 57.60 | 57.30 | 57.30 | 68.70  | 82.40  | 101.–  | 118.–  | –      | –      | Not for: ⑫, ⑬ |  |

For legends and footnotes, see Page 1/75.

## Standard delivery times in working days:

2

5

10

15

&gt;30

On request

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

## Options · Aluminum series 1LE10, 1PC1

1

| Special versions                                                                                                | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |       |       |       |         |        |        |        |        |       | Motor version |                                    |     |   |   |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|-------|-------|-------|---------|--------|--------|--------|--------|-------|---------------|------------------------------------|-----|---|---|
|                                                                                                                 |                                                                                     | 63                 | 71    | 80    | 90    | 100     | 112    | 132    | 160    | 180    | 200   |               |                                    |     |   |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1004 |        |        |        |        |       | IEC           | IE4                                |     | ① |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1003 |        |        |        |        |       |               | IE3                                |     | ② |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1083 |        |        |        |        |       |               |                                    |     | ③ |   |
|                                                                                                                 |                                                                                     | 1LE1001            |       |       |       |         |        |        |        |        |       |               | IE2                                |     | ④ |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1PC1001 |        |        |        |        |       |               |                                    |     | ⑤ |   |
|                                                                                                                 |                                                                                     | 1LE1002            |       |       |       |         |        |        |        |        |       |               | IE1                                |     | ⑥ |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1PC1002 |        |        |        |        |       |               |                                    |     | ⑦ |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1043 |        |        |        |        |       |               | APAC Line                          | IE3 |   | ⑧ |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1041 |        |        |        |        |       |               |                                    | IE2 |   | ⑨ |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1023 |        |        |        |        |       | Eagle Line    | NPE (NEMA)                         |     | ⑩ |   |
|                                                                                                                 |                                                                                     |                    |       |       |       | 1LE1021 |        |        |        |        |       |               | NEE (NEMA)                         |     | ⑪ |   |
|                                                                                                                 |                                                                                     | 1LE10...-...-...-Z |       |       |       | 1LE1011 |        |        |        |        |       | Pole-changing |                                    |     | ⑫ |   |
|                                                                                                                 |                                                                                     | 1PC10...-...-...-Z |       |       |       | 1LE1012 |        |        |        |        |       |               |                                    |     |   | ⑬ |
| Motor connection and terminal box (continued)                                                                   |                                                                                     |                    |       |       |       |         |        |        |        |        |       |               |                                    |     |   |   |
| 3 cables protruding, 1.5 m long <sup>4) 5)</sup>                                                                | R21                                                                                 |                    | 69.40 | 69.40 | 69.40 | 69.40   | 82.90  | 99.70  | 121.–  | 144.–  | O. R. | O. R.         | Not for: ⑫, ⑬                      |     |   |   |
| 6 cables protruding, 0.5 m long <sup>4)</sup>                                                                   | R22                                                                                 |                    | 88.80 | 88.80 | 88.80 | 88.80   | 106.–  | 128.–  | 158.–  | 186.–  | O. R. | O. R.         |                                    |     |   |   |
| 6 cables protruding, 1.5 m long <sup>4)</sup>                                                                   | R23                                                                                 |                    | 113.– | 113.– | 113.– | 113.–   | 136.–  | 164.–  | 199.–  | 237.–  | O. R. | O. R.         |                                    |     |   |   |
| 6 cables protruding, 3 m long <sup>4)</sup>                                                                     | R24                                                                                 |                    | 181.– | 181.– | 181.– | 181.–   | 218.–  | 257.–  | 322.–  | 386.–  | O. R. | O. R.         |                                    |     |   |   |
| Reduction piece for M cable gland in accordance with British Standard, both cable entries mounted <sup>2)</sup> | R30                                                                                 |                    | –     | –     | –     | –       | 194.–0 | 218.–0 | 218.–0 | 244.–0 | –     | –             |                                    |     |   |   |
| Larger terminal box                                                                                             | R50                                                                                 |                    | 49.50 | 49.50 | 103.– | 103.–   | 214.–  | 214.–  | 274.–  | 313.–  | 475.– | 523.–         | Not for: ⑩, ⑪<br>< frame size 100  |     |   |   |
|                                                                                                                 | –                                                                                   |                    | –     | –     | □     | □       | □      | □      | □      | □      | □     | □             | Only for: ⑩, ⑪<br>< frame size 100 |     |   |   |
| Auxiliary terminal box, aluminum                                                                                | R60                                                                                 |                    | –     | –     | –     | –       | –      | –      | –      | –      | 284.– | 284.–         |                                    |     |   |   |
| Motor connector Han-Drive 10e for 230 VΔ/400 VY <sup>30)</sup>                                                  | R70                                                                                 |                    | 146.– | 146.– | 146.– | 146.–   | 388.–  | 388.–  | 444.–  | –      | –     | –             |                                    |     |   |   |
| Motor connector Han-Drive 10e with EMC for 230 VΔ/400 VY <sup>30)</sup>                                         | R71                                                                                 |                    | 270.– | 270.– | 270.– | 270.–   | 527.–  | 527.–  | 605.–  | –      | –     | –             |                                    |     |   |   |
| Small motor connector CQ12 with EMC                                                                             | R72                                                                                 |                    | –     | –     | 220.– | 220.–   | –      | –      | –      | –      | –     | –             | Not for: ③                         |     |   |   |
| Small motor connector CQ12 without EMC                                                                          | R73                                                                                 |                    | –     | –     | 96.20 | 96.20   | –      | –      | –      | –      | –     | –             | Not for: ③                         |     |   |   |
| Windings and insulation                                                                                         |                                                                                     |                    |       |       |       |         |        |        |        |        |       |               |                                    |     |   |   |
| Temperature class 155 (F), utilized acc. to 155 (F), with service factor (SF)                                   | N01                                                                                 |                    | –     | –     | –     | –       | 48.30  | 48.30  | 64.30  | 64.30  | 82.–  | 82.–          | Not for: ③                         |     |   |   |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased power                                       | N02                                                                                 |                    | –     | –     | –     | –       | 48.30  | 48.30  | 64.30  | 64.30  | 82.–  | 82.–          | Not for: ③                         |     |   |   |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature                         | N03                                                                                 |                    | 42.–  | 42.–  | 41.50 | 41.50   | 48.30  | 48.30  | 64.30  | 64.30  | 82.–  | 82.–          | Not for: ③                         |     |   |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %            | N05                                                                                 |                    | 42.–  | 42.–  | 41.50 | 41.50   | 48.30  | 48.30  | 64.30  | 64.30  | 82.–  | 82.–          |                                    |     |   |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %            | N06                                                                                 |                    | 42.–  | 42.–  | 41.50 | 41.50   | 48.30  | 48.30  | 64.30  | 64.30  | 82.–  | 82.–          |                                    |     |   |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %           | N07                                                                                 |                    | 63.–  | 65.70 | 74.40 | 87.50   | 108.–  | 132.–  | 167.–  | 208.–  | 268.– | 326.–         |                                    |     |   |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %           | N08                                                                                 |                    | 63.–  | 65.70 | 74.40 | 87.50   | 108.–  | 132.–  | 167.–  | 208.–  | 268.– | 326.–         |                                    |     |   |   |
| Temperature class 180 (H) <sup>31)</sup>                                                                        | N10                                                                                 |                    | 158.– | 158.– | 158.– | 158.–   | –      | –      | –      | –      | –     | –             | Not for: ①, ③, ⑧, ⑨, ⑪, ⑬          |     |   |   |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>6) 31)</sup>                                    | N11                                                                                 |                    | 220.– | 220.– | 220.– | 220.–   | 257.–  | 305.–  | 405.–  | 494.–  | 702.– | 982.–         | Not for: ①, ③                      |     |   |   |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                          | N30                                                                                 |                    | 137.– | 137.– | 137.– | 137.–   | 137.–  | 137.–  | 137.–  | 210.–  | 305.– | 420.–         |                                    |     |   |   |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                         | N31                                                                                 |                    | 200.– | 200.– | 220.– | 220.–   | 220.–  | 252.–  | 284.–  | 399.–  | 515.– | 662.–         |                                    |     |   |   |

For legends and footnotes, see Page 1/75.

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**2****5****10****15****>30****On request****Options · Aluminum series 1LE10, 1PC1**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code -Z with order code and plain text if required | Frame size |       |         |        |         |        |         |        |        |        | Motor version |            |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|---------|--------|---------|--------|---------|--------|--------|--------|---------------|------------|---|
|                                                                                                                                                                                                                                                                                             |                                                                              | 63         | 71    | 80      | 90     | 100     | 112    | 132     | 160    | 180    | 200    |               |            |   |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1004 |        |         |        |        |        | IEC           | IE4        | ① |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       | 1LE1003 |        |         |        |         |        |        |        |               | IE3        | ② |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1083 |        |         |        |        |        |               |            | ③ |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1LE1001    |       |         |        |         |        |         |        |        |        |               | IE2        | ④ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1PC1001 |        |         |        |        |        |               |            | ⑤ |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1LE1002    |       |         |        |         |        |         |        |        |        |               | IE1        | ⑥ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        |         |        | 1PC1002 |        |        |        |               |            | ⑦ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1043 |        |         |        |        |        | APAC Line     | IE3        | ⑧ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1041 |        |         |        |        |        |               | IE2        | ⑨ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1023 |        |         |        |        |        | Eagle Line    | NPE (NEMA) | ⑩ |
|                                                                                                                                                                                                                                                                                             |                                                                              |            |       |         |        | 1LE1021 |        |         |        |        |        |               | NEE (NEMA) | ⑪ |
| 1LE10.....-Z                                                                                                                                                                                                                                                                                |                                                                              |            |       |         |        | 1LE1011 |        |         |        |        |        | Pole-changing |            | ⑫ |
| 1PC10.....-Z                                                                                                                                                                                                                                                                                | Order code                                                                   |            |       |         |        | 1LE1012 |        |         |        |        |        |               |            | ⑬ |
| <b>Windings and insulation (continued)</b>                                                                                                                                                                                                                                                  |                                                                              |            |       |         |        |         |        |         |        |        |        |               |            |   |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude                                                                                                                                                                           | <b>Y50 •</b> and spec. power, CT ... °C or IA .... m above sea level         | 94.60      | 103.– | 111.–   | 132.–  | 162.–   | 196.–  | 252.–   | 310.–  | 401.–  | 493.–  |               |            |   |
| Temperature class 155 (F), utilized acc. to 155 (F), other requirements                                                                                                                                                                                                                     | <b>Y52 •</b> and spec. power, CT ... °C or IA .... m above sea level         | 41.50      | 41.50 | 41.50   | 41.50  | 48.30   | 48.30  | 64.30   | 64.30  | 81.90  | 81.90  | Not for:      | ③          |   |
| Temperature class 180 (H), utilized acc. to 155 (F), other requirements                                                                                                                                                                                                                     | <b>Y75 •</b> and spec. power, CT ... °C or IA .... m above sea level         | –          | –     | –       | –      | O. R.   | O. R.  | O. R.   | O. R.  | –      | –      | Not for:      | ①, ③       |   |
| <b>Colors and paint finish</b>                                                                                                                                                                                                                                                              |                                                                              |            |       |         |        |         |        |         |        |        |        |               |            |   |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                              | ■          | ■     | ■       | ■      | ■       | ■      | ■       | ■      | ■      | ■      |               |            |   |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | <b>S00</b>                                                                   | ○          | ○     | ○       | ○      | ○       | ○      | ○       | ○      | ○      | ○      |               |            |   |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | <b>S01</b>                                                                   | 20.90      | 20.90 | 20.90   | 27.80  | 27.80   | 27.80  | 44.40   | 44.40  | 83.30  | 83.30  |               |            |   |
| Special finish C3                                                                                                                                                                                                                                                                           | <b>S02</b>                                                                   | 36.80      | 36.80 | 36.80   | 36.80  | 63.–    | 63.–   | 84.–    | 84.–   | 115.–  | 126.–  |               |            |   |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | <b>S03</b>                                                                   | 504.–      | 504.– | 504.–   | 504.–  | 536.–   | 536.–  | 589.–   | 589.–  | 630.–  | 672.–  |               |            |   |
| Internal coating                                                                                                                                                                                                                                                                            | <b>S05</b>                                                                   | 89.40      | 89.40 | 89.40   | 89.40  | 89.40   | 89.40  | 89.40   | 89.40  | 89.40  | 89.40  |               |            |   |
| Top coat polyurethane <sup>34)</sup>                                                                                                                                                                                                                                                        | <b>S06</b>                                                                   | 31.50      | 31.50 | 31.50   | 51.50  | 73.50   | 101.–  | 150.–   | 210.–  | 252.–  | 309.–  |               |            |   |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | <b>Y53 •</b> and finish RAL....                                              | 26.30      | 26.30 | 26.30   | 26.30  | 42.–    | 42.–   | 57.80   | 57.80  | 84.–   | 115.–  |               |            |   |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                          | <b>Y56 •</b> and finish RAL....                                              | 620.–      | 620.– | 620.–   | 620.–  | 662.–   | 662.–  | 694.–   | 694.–  | 704.–  | 714.–  |               |            |   |
| <b>Modular technology – Basic versions <sup>7)</sup></b>                                                                                                                                                                                                                                    |                                                                              |            |       |         |        |         |        |         |        |        |        |               |            |   |
| Mounting of holding brake (standard assignment) <sup>8) 28)</sup>                                                                                                                                                                                                                           | <b>F01</b>                                                                   | 315.–      | 389.– | 468.–   | 562.–  | 657.–   | 799.–  | 1030.–  | 2040.– | 4510.– | 6300.– | Not for:      | ⑤, ⑦       |   |
| Mounting of brake for higher switching frequency (operating brake)                                                                                                                                                                                                                          | <b>F02</b>                                                                   | O. R.      | O. R. | O. R.   | O. R.  | O. R.   | O. R.  | O. R.   | O. R.  | –      | –      |               |            |   |
| Mounting of separately driven fan <sup>29)</sup>                                                                                                                                                                                                                                            | <b>F70</b>                                                                   | 840.–      | 840.– | 840.–   | 840.–  | 840.–   | 987.–  | 1070.–  | 1240.– | 1370.– | 2050.– | Not for:      | ⑤, ⑦       |   |
| Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I                                                                                                                                                                                                                             | <b>G11</b>                                                                   | 658.–      | 703.– | 748.–   | 793.–  | 838.–   | 895.–  | 941.–   | 986.–  | 1030.– | 1080.– |               |            |   |
| Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I                                                                                                                                                                                                                             | <b>G12</b>                                                                   | 922.–      | 952.– | 1030.–  | 1100.– | 1180.–  | 1250.– | 1330.–  | 1410.– | 1480.– | 1550.– |               |            |   |

For legends and footnotes, see Page 1/75.

Standard delivery times in working days:

2

5

10

15

&gt;30

On request

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

## Options · Aluminum series 1LE10, 1PC1

1

| Special versions                                                                                          | Additional identification code -Z with order code and plain text if required | Frame size |       |         |       |         |        |         |        |         |         | Motor version |                                           |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|---------|-------|---------|--------|---------|--------|---------|---------|---------------|-------------------------------------------|
|                                                                                                           |                                                                              | 63         | 71    | 80      | 90    | 100     | 112    | 132     | 160    | 180     | 200     |               |                                           |
|                                                                                                           |                                                                              |            |       |         |       | 1LE1004 |        |         |        |         |         | IEC           | IE4 ①                                     |
|                                                                                                           |                                                                              |            |       | 1LE1003 |       |         |        |         |        |         |         |               | IE3 ②                                     |
|                                                                                                           |                                                                              |            |       |         |       | 1LE1083 |        |         |        |         |         |               | ③                                         |
|                                                                                                           |                                                                              | 1LE1001    |       |         |       |         |        |         |        |         |         | IE2           | ④                                         |
|                                                                                                           |                                                                              |            |       |         |       | 1PC1001 |        |         |        |         |         |               | ⑤                                         |
|                                                                                                           |                                                                              | 1LE1002    |       |         |       |         |        |         |        |         |         | IE1           | ⑥                                         |
|                                                                                                           |                                                                              |            |       |         |       |         |        | 1PC1002 |        |         |         |               | ⑦                                         |
|                                                                                                           |                                                                              |            |       | 1LE1043 |       |         |        |         |        |         |         | APAC Line     | IE3 ⑧                                     |
|                                                                                                           |                                                                              |            |       | 1LE1041 |       |         |        |         |        |         |         |               | IE2 ⑨                                     |
|                                                                                                           |                                                                              |            |       | 1LE1023 |       |         |        |         |        |         |         | Eagle Line    | NPE (NEMA) ⑩                              |
|                                                                                                           |                                                                              |            |       |         |       | 1LE1021 |        |         |        |         |         |               | NEE (NEMA) ⑪                              |
| 1LE10.....-Z                                                                                              |                                                                              |            |       |         |       | 1LE1011 |        |         |        |         |         | Pole-changing | ⑫                                         |
| 1PC10.....-Z                                                                                              | Order code                                                                   |            |       |         |       | 1LE1012 |        |         |        |         |         |               | ⑬                                         |
| Modular technology – Additional versions                                                                  |                                                                              |            |       |         |       |         |        |         |        |         |         |               |                                           |
| Brake supply voltage 24 V DC                                                                              | F10                                                                          | 35.20      | 35.20 | 35.20   | 35.20 | 52.90   | 52.90  | 52.90   | 52.90  | 70.60   | 70.60   | Not for:      | ⑤, ⑦                                      |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                   | F11                                                                          | 35.20      | 35.20 | 35.20   | 35.20 | O       | O      | O       | O      | O       | O       | Not for:      | ⑤, ⑦                                      |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                   | F12                                                                          | 35.20      | 35.20 | 35.20   | 35.20 | 52.90   | 52.90  | 52.90   | 52.90  | 70.60   | 70.60   | Not for:      | ⑤, ⑦                                      |
| Brake supply voltage 180 V DC                                                                             | F17                                                                          | 35.20      | 35.20 | 35.20   | 35.20 | 52.90   | 52.90  | 52.90   | 52.90  | 70.60   | 70.60   | Not for:      | ⑤, ⑦                                      |
|                                                                                                           |                                                                              |            |       |         |       |         |        |         |        |         |         | Only for:     | Motors in combination with order code F01 |
| Brake supply voltage 205 V DC                                                                             | F18                                                                          | 35.20      | 35.20 | 35.20   | 35.20 | 52.90   | 52.90  | 52.90   | 52.90  | 70.60   | 70.60   | Not for:      | ⑤, ⑦                                      |
|                                                                                                           |                                                                              |            |       |         |       |         |        |         |        |         |         | Only for:     | Motors in combination with order code F01 |
| Mechanical manual brake release with lever (no locking)                                                   | F50                                                                          | 250.–      | 250.– | 250.–   | 250.– | 264.–   | 264.–  | 294.–   | 426.–  | 620.–   | 723.–   | Not for:      | ⑤, ⑦                                      |
| Special technology <sup>7)</sup>                                                                          |                                                                              |            |       |         |       |         |        |         |        |         |         |               |                                           |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>9)</sup>                                             | G04                                                                          | –          | –     | –       | –     | 3000.–  | 3000.– | 3000.–  | 3000.– | 3000.–  | 3000.–  | Not for:      | ⑤, ⑦                                      |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>9)</sup>                                            | G05                                                                          | –          | –     | –       | –     | 3540.–  | 3540.– | 3540.–  | 3540.– | 4570.–  | 4570.–  | Not for:      | ⑤, ⑦                                      |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>9)</sup>                                            | G06                                                                          | –          | –     | –       | –     | 4570.–  | 4570.– | 4570.–  | 4570.– | 4570.–  | 4570.–  | Not for:      | ⑤, ⑦                                      |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                        | G21                                                                          |            |       |         |       | 2540.–  | 2680.– | 2830.–  | 3050.– | 3210.–  | 3330.–  | Only for:     | ③                                         |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                        | G22                                                                          |            |       |         |       | 2940.–  | 3120.– | 3300.–  | 3520.– | 3630.–  | 3750.–  | Only for:     | ③                                         |
| Mounting of HOGS100S-B76.626.01024.1, SIL-2 rotary pulse encoder                                          | G25                                                                          |            |       |         |       | –       | –      | –       | –      | 14000.– | 14000.– | Only for:     | ③                                         |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                            | G27                                                                          |            |       |         |       | –       | –      | –       | –      | 15500.– | 15500.– | Only for:     | ③                                         |
| Mechanical design and degrees of protection                                                               |                                                                              |            |       |         |       |         |        |         |        |         |         |               |                                           |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                  | F77                                                                          | –          | –     | –       | –     | –       | –      | 625.–   | 887.–  | 1150.–  | 1420.–  | Not for:      | ⑤, ⑦                                      |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                          | F78                                                                          | –          | –     | –       | –     | –       | –      | 625.–   | 887.–  | 1150.–  | 1420.–  | Not for:      | ⑤, ⑦                                      |
| Prepared for mountings, center hole only <sup>10)</sup>                                                   | G40                                                                          | –          | –     | 70.10   | 70.10 | 70.10   | 70.10  | 93.–    | 107.–  | □       | □       | Not for:      | ⑤, ⑦                                      |
| Prepared for mountings with D12 shaft <sup>15)</sup>                                                      | G41                                                                          | 143.–      | 143.– | 143.–   | 152.– | 152.–   | 168.–  | 189.–   | 225.–  | 462.–   | 462.–   | Not for:      | ⑤, ⑦                                      |
| Prepared for mountings with D16 shaft <sup>15)</sup>                                                      | G42                                                                          | –          | –     | O. R.   | O. R. | 152.–   | 168.–  | 189.–   | 225.–  | 462.–   | 462.–   | Not for:      | ⑤, ⑦                                      |
| Mechanical protection for encoders                                                                        | G43                                                                          | O. R.      | O. R. | 72.30   | 72.30 | 80.70   | 80.70  | 141.–   | 141.–  | 212.–   | 212.–   | Not for:      | ⑤, ⑦                                      |
| Protective cover <sup>9) 11)</sup>                                                                        | H00                                                                          | 56.70      | 56.70 | 56.70   | 56.70 | 82.40   | 82.40  | 144.–   | 144.–  | 192.–   | 289.–   | Not for:      | ⑤, ⑦                                      |
| Screwed-on (instead of cast) feet                                                                         | H01                                                                          | –          | –     | 90.80   | 90.80 | 104.–   | 113.–  | 123.–   | 132.–  | □       | □       |               |                                           |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 <sup>39)</sup> | H02                                                                          | 115.–      | 130.– | 148.–   | 168.– | 189.–   | 209.–  | 226.–   | 263.–  | 315.–   | 378.–   |               |                                           |
| Condensation drainage holes <sup>14)</sup>                                                                | H03                                                                          | 63.–       | 65.20 | 67.60   | 75.50 | 82.70   | 90.30  | 97.80   | 105.–  | 112.–   | 119.–   |               |                                           |
| Rust-resistant screws (externally)                                                                        | H07                                                                          | 56.70      | 56.70 | 155.–   | 155.– | 82.70   | 82.70  | 97.80   | 97.80  | 112.–   | 128.–   |               |                                           |
| Enclosure with screw mounting <sup>32)</sup>                                                              | H10                                                                          | –          | –     | 49.30   | 49.30 | –       | –      | –       | –      | 52.50   | 52.50   | Only for:     | ②, ④, ⑧, ⑨ (frame sizes 80, 90), ⑩, ⑪     |
| IP66 degree of protection <sup>13)</sup>                                                                  | H19                                                                          | 316.–      | 316.– | 316.–   | 316.– | 316.–   | 316.–  | 316.–   | 471.–  | 630.–   | 787.–   |               |                                           |
| IP65 degree of protection <sup>13)</sup>                                                                  | H20                                                                          | 150.–      | 150.– | 150.–   | 150.– | 150.–   | 150.–  | 150.–   | 224.–  | 302.–   | 374.–   |               |                                           |
| IP56 degree of protection <sup>12)</sup>                                                                  | H22                                                                          | 166.–      | 166.– | 166.–   | 166.– | 166.–   | 166.–  | 166.–   | 247.–  | 328.–   | 413.–   |               |                                           |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>16)</sup>                            | H23                                                                          | 42.–       | 45.80 | 48.30   | 51.70 | 57.50   | 62.90  | 76.80   | 112.–  | 145.–   | 180.–   |               |                                           |

For legends and footnotes, see Page 1/75.

**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**2****5****10****15****>30****On request****Options · Aluminum series 1LE10, 1PC1**

| Special versions                                                                                            | Additional identification code -Z with order code and plain text if required | Frame size |       |         |       |         |       |         |        |        |        | Motor version |            |                                                          |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|---------|-------|---------|-------|---------|--------|--------|--------|---------------|------------|----------------------------------------------------------|
|                                                                                                             |                                                                              | 63         | 71    | 80      | 90    | 100     | 112   | 132     | 160    | 180    | 200    |               |            |                                                          |
|                                                                                                             |                                                                              |            |       |         |       | 1LE1004 |       |         |        |        |        | IEC           | IE4        | ①                                                        |
|                                                                                                             |                                                                              |            |       | 1LE1003 |       |         |       |         |        |        |        |               | IE3        | ②                                                        |
|                                                                                                             |                                                                              |            |       |         |       | 1LE1083 |       |         |        |        |        |               |            | ③                                                        |
|                                                                                                             |                                                                              | 1LE1001    |       |         |       |         |       |         |        |        |        |               | IE2        | ④                                                        |
|                                                                                                             |                                                                              |            |       |         |       | 1PC1001 |       |         |        |        |        |               |            | ⑤                                                        |
|                                                                                                             |                                                                              | 1LE1002    |       |         |       |         |       |         |        |        |        |               | IE1        | ⑥                                                        |
|                                                                                                             |                                                                              |            |       |         |       |         |       | 1PC1002 |        |        |        |               |            | ⑦                                                        |
|                                                                                                             |                                                                              |            |       | 1LE1043 |       |         |       |         |        |        |        | APAC Line     | IE3        | ⑧                                                        |
|                                                                                                             |                                                                              |            |       | 1LE1041 |       |         |       |         |        |        |        |               | IE2        | ⑨                                                        |
|                                                                                                             |                                                                              |            |       | 1LE1023 |       |         |       |         |        |        |        | Eagle Line    | NPE (NEMA) | ⑩                                                        |
|                                                                                                             |                                                                              |            |       |         |       | 1LE1021 |       |         |        |        |        |               | NEE (NEMA) | ⑪                                                        |
| 1LE10.....-Z                                                                                                |                                                                              |            |       |         |       | 1LE1011 |       |         |        |        |        | Pole-changing |            | ⑫                                                        |
| 1PC10.....-Z                                                                                                | Order code                                                                   |            |       |         |       | 1LE1012 |       |         |        |        |        |               |            | ⑬                                                        |
| <b>Coolant temperature and installation altitude</b>                                                        |                                                                              |            |       |         |       |         |       |         |        |        |        |               |            |                                                          |
| Coolant temperature -40 to +40 °C <sup>16) 28)</sup>                                                        | D03                                                                          | 232.-      | 232.- | 257.-   | 322.- | 386.-   | 489.- | 566.-   | 650.-  | 721.-  | 836.-  |               |            |                                                          |
| Coolant temperature -30 to +40 °C <sup>16) 28)</sup>                                                        | D04                                                                          | 43.-       | 43.-  | 56.70   | 56.70 | 70.80   | 70.80 | 85.-    | 85.-   | 113.-  | 142.-  |               |            |                                                          |
| <b>Designs in accordance with standards and specifications</b>                                              |                                                                              |            |       |         |       |         |       |         |        |        |        |               |            |                                                          |
| VIK version                                                                                                 | C02                                                                          | -          | -     | 171.-   | 194.- | 218.-   | 253.- | 323.-   | 409.-  | -      | -      |               | Only for:  | ②                                                        |
| CCC China Compulsory Certification <sup>17)</sup>                                                           | D01                                                                          | 43.-       | 43.-  | 43.-    | 43.-  | -       | -     | -       | -      | -      | -      |               |            |                                                          |
| Motor without CE marking for export outside EEA (see EU Directive 640/2009)                                 | D22                                                                          | -          | O     | O       | O     | O       | O     | O       | O      | O      | O      |               | Only for:  | ④, ⑤, ⑥, ⑦, ⑪                                            |
| Electrical according to NEMA MG1-12 <sup>18)</sup>                                                          | D30                                                                          | 40.60      | 40.60 | 40.60   | 40.60 | 40.60   | 40.60 | 40.60   | 40.60  | 69.40  | 69.40  |               | Not for:   | ⑩, ⑪                                                     |
|                                                                                                             | -                                                                            | -          | -     | □       | □     | □       | □     | □       | □      | □      | □      |               | Only for:  | ⑩, ⑪                                                     |
| Design according to UL with "Recognition Mark" <sup>19)</sup>                                               | D31                                                                          | 72.-       | 76.60 | 81.60   | 91.-  | 101.-   | 119.- | 153.-   | 187.-  | 300.-  | 411.-  |               | Not for:   | ⑩, ⑪                                                     |
|                                                                                                             | -                                                                            | -          | -     | □       | □     | □       | □     | □       | □      | □      | □      |               | Only for:  | ⑩, ⑪                                                     |
| KEMCO Korea Energy Efficiency Label                                                                         | D33                                                                          | -          | -     | 42.70   | 42.70 | 42.70   | 42.70 | 42.70   | 42.70  | 42.70  | 42.70  |               | Only for:  | ⑧, ⑨                                                     |
|                                                                                                             | -                                                                            | -          | -     | -       | -     | O. R.   | O. R. | O. R.   | O. R.  | O. R.  | O. R.  |               | Only for:  | ③ (2- to 6-pole)                                         |
| China Energy Efficiency Label <sup>38)</sup>                                                                | D34                                                                          | -          | -     | O       | O     | O       | O     | O       | O      | O      | O      |               | Not for:   | ①, ⑥, ⑫, ⑬                                               |
|                                                                                                             | -                                                                            | -          | -     | -       | -     | O. R.   | O. R. | O. R.   | O. R.  | O. R.  | O. R.  |               | Only for:  | ③                                                        |
| Canadian regulations (CSA) <sup>33) 37)</sup>                                                               | D40                                                                          | 72.-       | 76.60 | 81.60   | 91.-  | 101.-   | 119.- | 153.-   | 187.-  | 253.-  | 338.-  |               | Not for:   | ⑥, ⑩, ⑪, ⑫, ⑬                                            |
|                                                                                                             | -                                                                            | -          | -     | □       | □     | □       | □     | □       | □      | □      | □      |               | Only for:  | ⑩, ⑪                                                     |
| NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-11, incl. UL and CSA               | D41                                                                          | -          | -     | -       | -     | O. R.   | O. R. | O. R.   | O. R.  | O. R.  | O. R.  |               | Only for:  | ③                                                        |
| TR CU product safety certificate EAC for Eurasian customs union <sup>35)</sup>                              | D47                                                                          | 15.80      | 21.-  | 26.30   | 31.50 | 42.-    | 52.50 | 84.-    | 137.-  | 179.-  | 252.-  |               |            |                                                          |
| MEPS Australia                                                                                              | D70                                                                          | -          | -     | 619.-   | 641.- | 664.-   | 693.- | 743.-   | 819.-  | 878.-  | 941.-  |               | Only for:  | ⑧, ⑩;<br>③ Frame sizes 100 to 200 on request             |
| Train-compatible version IC 411, EN IEC 60349, without EN 45545, with external fan and plastic fan cover    | L90                                                                          | -          | -     | 161.-   | 170.- | 182.-   | 187.- | 300.-   | 357.-  | 391.-  | 462.-  |               | Not for:   | ①, ③                                                     |
| Train-compatible version IC 411, EN IEC 60349, with EN 45545, with external fan and metal fan cover         | L91                                                                          | 368.-      | 368.- | 368.-   | 383.- | 439.-   | 486.- | 641.-   | 744.-  | 814.-  | 940.-  |               | Not for:   | ①, ③                                                     |
| Train-compatible version IC 418, EN IEC 60349, acc. to EN 45545, without external fan and without fan cover | L92                                                                          | 279.-      | 279.- | 279.-   | 289.- | 301.-   | 306.- | 418.-   | 476.-  | 510.-  | 581.-  |               | Not for:   | ①, ③                                                     |
| <b>Bearings and lubrication</b>                                                                             |                                                                              |            |       |         |       |         |       |         |        |        |        |               |            |                                                          |
| Regreasing device with M10 x 1 grease nipple according to DIN 71412-A                                       | L19                                                                          | -          | -     | -       | -     | -       | -     | -       | -      | 383.-  | 220.-  |               |            |                                                          |
| Located bearing DE                                                                                          | L20                                                                          | 39.80      | 39.80 | 39.80   | 42.20 | 72.80   | 86.30 | 106.-   | 145.-  | 306.-  | 424.-  |               |            |                                                          |
| Located bearing NDE                                                                                         | L21                                                                          | 39.80      | 39.80 | 39.80   | 42.20 | 44.20   | 46.50 | 49.30   | □      | □      | □      |               |            |                                                          |
| Bearing design for increased cantilever forces <sup>36)</sup>                                               | L22                                                                          | -          | -     | 80.90   | 89.40 | 101.-   | 117.- | 133.-   | 175.-  | 278.-  | 322.-  |               | Not for:   | Frame sizes 80 and 90 in combination with order code F01 |
| Regreasing device <sup>20)</sup>                                                                            | L23                                                                          | -          | -     | -       | -     | 317.-   | 325.- | 336.-   | 363.-  | 383.-  | 430.-  |               |            |                                                          |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                            | L25                                                                          | -          | -     | 168.-   | 203.- | 203.-   | 237.- | 265.-   | 353.-  | 468.-  | 576.-  |               | Not for:   | Frame sizes 80 and 90 in combination with order code F01 |
| Bearing insulation NDE                                                                                      | L51                                                                          | -          | -     | -       | -     | 530.-   | 550.- | 1230.-  | 1270.- | 1320.- | 1340.- |               |            |                                                          |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>20)</sup>                      | Q01                                                                          | -          | -     | -       | -     | 257.-   | 288.- | 317.-   | 350.-  | 377.-  | 408.-  |               |            |                                                          |

For legends and footnotes, see Page 1/75.

## Standard delivery times in working days:

2

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15

&gt;30

On request

## SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

## Options · Aluminum series 1LE10, 1PC1

1

| Special versions                                                                                                                     | Additional identification code -Z with order code and plain text if required | Frame size |       |         |       |         |       |         |        |        |        | Motor version |                           |   |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|---------|-------|---------|-------|---------|--------|--------|--------|---------------|---------------------------|---|
|                                                                                                                                      |                                                                              | 63         | 71    | 80      | 90    | 100     | 112   | 132     | 160    | 180    | 200    |               |                           |   |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1004 |       |         |        |        |        | IEC           | IE4                       | ① |
|                                                                                                                                      |                                                                              |            |       | 1LE1003 |       |         |       |         |        |        |        |               | IE3                       | ② |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1083 |       |         |        |        |        |               |                           | ③ |
|                                                                                                                                      |                                                                              | 1LE1001    |       |         |       |         |       |         |        |        |        |               | IE2                       | ④ |
|                                                                                                                                      |                                                                              |            |       |         |       | 1PC1001 |       |         |        |        |        |               |                           | ⑤ |
|                                                                                                                                      |                                                                              | 1LE1002    |       |         |       |         |       |         |        |        |        |               | IE1                       | ⑥ |
|                                                                                                                                      |                                                                              |            |       |         |       |         |       | 1PC1002 |        |        |        |               |                           | ⑦ |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1043 |       |         |        |        |        | APAC Line     | IE3                       | ⑧ |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1041 |       |         |        |        |        |               | IE2                       | ⑨ |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1023 |       |         |        |        |        | Eagle Line    | NPE (NEMA)                | ⑩ |
|                                                                                                                                      |                                                                              |            |       |         |       | 1LE1021 |       |         |        |        |        |               | NEE (NEMA)                | ⑪ |
| 1LE10.....-Z                                                                                                                         |                                                                              |            |       |         |       | 1LE1011 |       |         |        |        |        | Pole-changing |                           | ⑫ |
| 1PC10.....-Z                                                                                                                         | Order code                                                                   |            |       |         |       | 1LE1012 |       |         |        |        |        |               |                           | ⑬ |
| Balance and vibration quantity                                                                                                       |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Vibration quantity level A                                                                                                           |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Vibration quantity level B                                                                                                           | L00                                                                          | 232.–      | 242.– | 255.–   | 270.– | 284.–   | 327.– | 419.–   | 519.–  | 814.–  | 819.–  |               |                           |   |
| Half-key balancing (standard)                                                                                                        |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Balancing without key                                                                                                                | L01                                                                          | 21.80      | 21.80 | 21.80   | 21.80 | 28.40   | 28.40 | 33.60   | 33.60  | 43.70  | 43.70  |               |                           |   |
| Full-key balancing                                                                                                                   | L02                                                                          | –          | –     | 96.10   | 111.– | 111.–   | 111.– | 129.–   | 129.–  | 162.–  | 162.–  |               |                           |   |
| Shaft and rotor                                                                                                                      |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                          | –          | –     | –       | –     | 525.–   | 553.– | 580.–   | 610.–  | 708.–  | 779.–  |               |                           |   |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347                                              | L05                                                                          | 84.90      | 84.90 | 97.80   | 97.80 | 143.–   | 143.– | 189.–   | 217.–  | 328.–  | 364.–  | Not for:      | ⑤, ⑦                      |   |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                 | L06                                                                          | 819.–      | 819.– | 838.–   | 838.– | 962.–   | 962.– | 1110.–  | 1390.– | 2470.– | 2860.– |               |                           |   |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                          | 244.–      | 244.– | 244.–   | 244.– | 268.–   | 268.– | 408.–   | 408.–  | 211.–  | 238.–  |               |                           |   |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                          | 120.–      | 151.– | 180.–   | 211.– | 241.–   | 270.– | 302.–   | 374.–  | 452.–  | 527.–  |               |                           |   |
| Non-standard shaft extension, DE <sup>21)</sup>                                                                                      | Y58 • and customer specifications                                            | 399.–      | 439.– | 468.–   | 496.– | 525.–   | 553.– | 580.–   | 610.–  | 708.–  | 779.–  |               |                           |   |
| Non-standard shaft extension, NDE <sup>21)</sup>                                                                                     | Y59 • and customer specifications                                            | 399.–      | 439.– | 468.–   | 496.– | 525.–   | 553.– | 580.–   | 610.–  | 708.–  | 779.–  |               |                           |   |
| Heating and ventilation                                                                                                              |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Sheet metal fan cover                                                                                                                | F74                                                                          | –          | –     | 56.70   | 62.40 | 67.90   | 73.70 | 79.40   | 85.–   | 85.–   | 104.–  | Not for:      | ⑤, ⑦                      |   |
| Fan cover for textile industry <sup>22)</sup>                                                                                        | F75                                                                          | 105.–      | 105.– | 119.–   | 196.– | 316.–   | 452.– | 572.–   | 676.–  | 676.–  | 944.–  | Not for:      | ⑤, ⑦                      |   |
| Metal external fan <sup>23) 29)</sup>                                                                                                | F76                                                                          | 150.–      | 150.– | 150.–   | 150.– | 189.–   | 224.– | 261.–   | 302.–  | 339.–  | 374.–  | Not for:      | ⑤, ⑦                      |   |
| Without external fan and without fan cover                                                                                           | F90                                                                          | 118.–      | 118.– | 118.–   | 118.– | 118.–   | 118.– | 118.–   | 118.–  | 118.–  | 118.–  | Not for:      | ⑤, ⑦, ②, ③                |   |
| Anti-condensation heating for 230 V (2 terminals)                                                                                    | Q02                                                                          | 414.–      | 414.– | 414.–   | 414.– | 430.–   | 459.– | 519.–   | 576.–  | 639.–  | 734.–  |               |                           |   |
| Anti-condensation heating for 115 V (2 terminals)                                                                                    | Q03                                                                          | 414.–      | 414.– | 414.–   | 414.– | 430.–   | 459.– | 519.–   | 576.–  | 639.–  | 734.–  |               |                           |   |
| Rating plate and extra rating plates                                                                                                 |                                                                              |            |       |         |       |         |       |         |        |        |        |               |                           |   |
| Extra rating plate for voltage tolerance <sup>24)</sup>                                                                              | B07                                                                          | 41.50      | 41.50 | 41.50   | 41.50 | 41.50   | 41.50 | 41.50   | 41.50  | 69.40  | 69.40  | Not for:      | ⑤, ⑦, ②, ③, 8-pole motors |   |
| Second rating plate, loose <sup>25)</sup>                                                                                            | M10                                                                          | 21.10      | 21.10 | 21.10   | 21.10 | 21.10   | 21.10 | 21.10   | 21.10  | 67.60  | 67.60  |               |                           |   |
| Rating plate, stainless steel                                                                                                        | M11                                                                          | 42.20      | 42.20 | 42.20   | 42.20 | 42.20   | 42.20 | 42.20   | 42.20  | 51.60  | 51.60  |               |                           |   |
| Extra rating plate with deviating rating plate data                                                                                  | Y80 • and customer specifications                                            | 73.50      | 73.50 | 73.50   | 73.50 | 105.–   | 105.– | 105.–   | 105.–  | 158.–  | 158.–  |               |                           |   |
| Extra rating plate with customer specifications                                                                                      | Y82 • and customer specifications                                            | 41.50      | 41.50 | 41.50   | 41.50 | 41.50   | 41.50 | 41.50   | 41.50  | 69.40  | 69.40  |               |                           |   |
| Additional information on rating plate and on package label (max. 20 characters)                                                     | Y84 • and customer specifications                                            | 41.50      | 41.50 | 41.50   | 41.50 | 41.50   | 41.50 | 41.50   | 41.50  | 69.40  | 69.40  |               |                           |   |
| Adhesive label, supplied loose (contents: Article No., Serial No., 2 lines of text)                                                  | Y85 • and customer specifications                                            | –          | –     | –       | –     | 41.50   | 41.50 | 41.50   | 41.50  | 67.60  | 67.60  |               |                           |   |

For legends and footnotes, see Page 1/75.

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On  
request**SIMOTICS GP 1LE1/1PC1 Standard Motors**

Article No. supplements and special versions

**Options · Aluminum series 1LE10, 1PC1**

| Special versions                                                                                | Additional identification code -Z with order code and plain text if required | Frame size |    |         |        |         |        |         |        |        |        | Motor version |            |   |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|----|---------|--------|---------|--------|---------|--------|--------|--------|---------------|------------|---|
|                                                                                                 |                                                                              | 63         | 71 | 80      | 90     | 100     | 112    | 132     | 160    | 180    | 200    |               |            |   |
|                                                                                                 |                                                                              |            |    |         |        | 1LE1004 |        |         |        |        |        | IEC           | IE4        | ① |
|                                                                                                 |                                                                              |            |    | 1LE1003 |        |         |        |         |        |        |        |               | IE3        | ② |
|                                                                                                 |                                                                              |            |    |         |        | 1LE1083 |        |         |        |        |        |               |            | ③ |
|                                                                                                 |                                                                              | 1LE1001    |    |         |        |         |        |         |        |        |        |               | IE2        | ④ |
|                                                                                                 |                                                                              |            |    |         |        | 1PC1001 |        |         |        |        |        |               |            | ⑤ |
|                                                                                                 |                                                                              | 1LE1002    |    |         |        |         |        |         |        |        |        |               | IE1        | ⑥ |
|                                                                                                 |                                                                              |            |    |         |        |         |        | 1PC1002 |        |        |        |               |            | ⑦ |
|                                                                                                 |                                                                              |            |    | 1LE1043 |        |         |        |         |        |        |        | APAC Line     | IE3        | ⑧ |
|                                                                                                 |                                                                              |            |    | 1LE1041 |        |         |        |         |        |        |        |               | IE2        | ⑨ |
|                                                                                                 |                                                                              |            |    | 1LE1023 |        |         |        |         |        |        |        | Eagle Line    | NPE (NEMA) | ⑩ |
|                                                                                                 |                                                                              |            |    |         |        | 1LE1021 |        |         |        |        |        |               | NEE (NEMA) | ⑪ |
| 1LE10 .....                                                                                     | -Z                                                                           |            |    |         |        | 1LE1011 |        |         |        |        |        | Pole-changing |            | ⑫ |
| 1PC10 .....                                                                                     | -Z                                                                           |            |    |         |        | 1LE1012 |        |         |        |        |        |               |            | ⑬ |
| <b>Packaging, safety notes, documentation and test certificates</b>                             |                                                                              |            |    |         |        |         |        |         |        |        |        |               |            |   |
| With a safety and commissioning instruction enclosed in each wire-lattice pallet <sup>27)</sup> | B01                                                                          |            |    | O       | O      | O       | O      | O       | O      | O      | O      |               |            |   |
| Acceptance test certificate 3.1 according to EN 10204 <sup>28)</sup>                            | B02                                                                          |            |    | 28.70   | 28.70  | 28.70   | 28.70  | 28.70   | 28.70  | 28.70  | 28.70  |               |            |   |
| Document – Electrical data sheet                                                                | B60                                                                          |            |    | 315.–   | 315.–  | 315.–   | 315.–  | 315.–   | 315.–  | 315.–  | 315.–  |               |            |   |
| Document – Order dimensional drawing                                                            | B61                                                                          |            |    | 315.–   | 315.–  | 315.–   | 315.–  | 315.–   | 315.–  | 315.–  | 315.–  |               |            |   |
| Type test with heat run for horizontal motors, with acceptance                                  | B83                                                                          |            |    | 4180.–  | 4960.– | 5730.–  | 6520.– | 7290.–  | 8070.– | 8840.– | 9620.– | 10400.–       | 11200.–    |   |
| Documentation package "Basic"                                                                   | B90                                                                          |            |    | 609.–   | 609.–  | 609.–   | 609.–  | 609.–   | 609.–  | 609.–  | 609.–  | 609.–         | 609.–      |   |
| Documentation package "Advanced"                                                                | B91                                                                          |            |    | 924.–   | 924.–  | 924.–   | 924.–  | 924.–   | 924.–  | 924.–  | 924.–  | 924.–         | 924.–      |   |
| Documentation package "Projects"                                                                | B92                                                                          |            |    | 2520.–  | 2520.– | 2520.–  | 2520.– | 2520.–  | 2520.– | 2520.– | 2520.– | 2520.–        | 2520.–     |   |
| Wire-lattice pallet packaging                                                                   | B99                                                                          |            |    | O. R.   | O. R.  | O       | O      | O       | O      | O      | O      | O             | O          |   |
| Connected in star for dispatch                                                                  | M01                                                                          |            |    | 24.–    | 24.–   | 24.–    | 24.–   | 28.90   | 28.90  | 28.90  | 28.90  | 37.90         | 37.90      |   |
| Connected in delta for dispatch                                                                 | M02                                                                          |            |    | 24.–    | 24.–   | 24.–    | 24.–   | 28.90   | 28.90  | 28.90  | 28.90  | 37.90         | 37.90      |   |

# SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

## Options · Aluminum series 1LE10, 1PC1

1

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

- 1) With IM B5 flange, only possible in combination with the option **H08**.
- 2) Not possible in combination with order code **R15** "One metal cable gland".
- 3) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 4) In combination with motor protection (15th position of the Article No.) or anti-condensation heating option, please inquire before ordering.
- 5) Not possible in combination with voltage code **22** or **34**.
- 6) Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 7) A second shaft extension is not possible. Please inquire for mounted brakes.
- 8) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 9) All encoders are supplied with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 10) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 11) Order code **H00** provides mechanical protection for encoders.
- 12) Not possible in combination with brake 2LM8 – order code **F01**.
- 13) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 14) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 15) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B.
- 16) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 17) CCC certification is required, see chapter 1 in Catalog D 81.1.
- 18) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** do not authorize importing into USA and Mexico. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.
- 19) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 20) Not possible when brake is mounted.
- 21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with EN 50347, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:  
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")  
– Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension.
- 22) The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".
- 23) Converter operation is permitted for 1LE1 motors with metal external fans. The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.
- 24) Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "**22**" or "**34**"). Not possible in combination with order code **D34**.
- 25) As adhesive label for frame sizes 80 and 90.
- 26) The delivery time for the factory test certificate may differ from the delivery time for the motor and it will be dispatched by email.
- 27) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WWW/view/en/40761976>.
- 28) Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.
- 29) Order codes **F70** and **F76** cannot be combined.
- 30) When ordering with order code **R70** and **R71**, order code **R50** is included.
- 31) Not possible for 2-pole and 4-pole motors with increased power (11th position of the Article No.: 6) of frame sizes 80 and 90.
- 32) Possible with frame sizes 180 and 200 with screw-mounted fan cover.
- 33) Possible with frame sizes 180 and 200 with metric entry thread.
- 34) Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.
- 35) Please note the additional use of order code **D22** "Motor without CE marking for export outside EEA (see EU Directive 640/2009)".
- 36) A minimum cantilever force  $F_{\min}$  of  $0.5 \cdot F_{\max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.
- 37) The rated voltage is indicated on the rating plate without voltage range. Order code **D40** does not authorize importing into Canada. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.
- 38) Not possible in combination with voltage codes (12th or 13th position of the Article No.) 17, 18, 30, 31, 60, 61, 62, 63 and 90 with additional identification codes **M1A**; **M2A**; **M2B**; **M1B**; **M1C**; **M2C**; **M1D**; **M2D**; **M1E**; **M2E**; **M1F**; **M2F**; **M1G**; **M2G**; **M1H**; **M2H**; **1K**; **M2K**; **M1J**; **M2J**; **M1L**; **M2L**; **M1M**; **M2M** and **M3A**.
- 39) Not possible in combination with order code **R50**.
- 40) Not UL-certified. Not possible in combination with the option **D31**.
- 41) Only possible in combination with order codes **R70**, **R71**, **R72** and **R73**.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**2****10****15****20****>30**On  
request**Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line****Selection and ordering data**

| Special versions                                                                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size       |       |                          |                          |        |        |        |        |        |        |        |        |        |        | Motor version |            |     |   |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------|-------|--------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|------------|-----|---|
|                                                                                         |                                                                                     | 71               | 80    | 90                       | 100                      | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    |        |               |            |     |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1504 Basic Line       |        |        |        |        |        |        |        |        |        |        | IEC           | IE4        | ①   |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1604 Performance Line |        |        |        |        |        |        |        |        |        |        |               |            | ②   |   |
|                                                                                         |                                                                                     |                  |       | 1LE1503 Basic Line       |                          |        |        |        |        |        |        |        |        |        |        | IE3           |            | ③   |   |
|                                                                                         |                                                                                     |                  |       | 1LE1603 Performance Line |                          |        |        |        |        |        |        |        |        |        |        |               |            | ④   |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1583                  |        |        |        |        |        |        |        |        |        |        |               |            |     | ⑤ |
|                                                                                         |                                                                                     |                  |       | 1LE1501 Basic Line       |                          |        |        |        |        |        |        |        |        |        |        | IE2           |            |     |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1601 Performance Line |        |        |        |        |        |        |        |        |        |        |               | ⑦          |     |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1502 Basic Line       |        |        |        |        |        |        |        |        |        |        |               |            | IE1 |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1543 Basic Line       |        |        |        |        |        |        |        |        |        |        | APAC Line     | IE3        |     |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1643 Performance Line |        |        |        |        |        |        |        |        |        |        |               |            | ⑩   |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1541 Basic Line       |        |        |        |        |        |        |        |        |        | IE2    | ⑪             |            |     |   |
|                                                                                         |                                                                                     |                  |       | 1LE1523 Basic Line       |                          |        |        |        |        |        |        |        |        |        |        | Eagle Line    | NPE (NEMA) | ⑫   |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1623 Performance Line |        |        |        |        |        |        |        |        |        |        |               |            | ⑬   |   |
|                                                                                         |                                                                                     |                  |       |                          | 1LE1521 Basic Line       |        |        |        |        |        |        |        |        |        |        |               | NEE (NEMA) |     | ⑭ |
|                                                                                         |                                                                                     | 1LE1 ...-.....-Z |       | Order code               |                          |        |        |        |        |        |        |        |        |        |        |               |            |     |   |
| Motor protection                                                                        |                                                                                     |                  |       |                          |                          |        |        |        |        |        |        |        |        |        |        |               |            |     |   |
| 1 or 3 PTC thermistors – for tripping (2 terminals)                                     | Q11                                                                                 | –                | –     | –                        | 119.–                    | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  | 406.–  |        |               |            |     |   |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals)                           | Q12                                                                                 | –                | –     | –                        | 205.–                    | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | 679.–  |        |               |            |     |   |
| 1 temperature sensor KTY84-130 (2 terminals)                                            | Q23                                                                                 | –                | –     | –                        | 119.–                    | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–  |        |               |            |     |   |
| 2 temperature sensors KTY84-130 (4 terminals)                                           | Q25                                                                                 | –                | –     | –                        | 241.–                    | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |        |               |            |     |   |
| 3 bimetal sensors (NC contact) for tripping (2 terminals)                               | Q31                                                                                 | –                | –     | –                        | 134.–                    | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  | 365.–  | 365.–  | 453.–  | 453.–  |        |               |            |     |   |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                     | Q32                                                                                 | –                | –     | –                        | 241.–                    | 241.–  | 352.–  | 352.–  | 477.–  | 477.–  | 647.–  | 647.–  | 801.–  | 801.–  |        |               |            |     |   |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                               | Q33                                                                                 | –                | –     | –                        | 144.–                    | 144.–  | 206.–  | 206.–  | 281.–  | 281.–  | 376.–  | 376.–  | 463.–  | 463.–  |        |               |            |     |   |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)                    | Q34                                                                                 | –                | –     | –                        | 251.–                    | 251.–  | 362.–  | 362.–  | 488.–  | 488.–  | 658.–  | 658.–  | 811.–  | 811.–  |        |               |            |     |   |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>40)</sup>                            | Q35                                                                                 | –                | –     | –                        | 119.–                    | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–  |        |               |            |     |   |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>40)</sup>                           | Q36                                                                                 | –                | –     | –                        | 241.–                    | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |        |               |            |     |   |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                          | Q60                                                                                 | –                | –     | –                        | 1240.–                   | 1240.– | 1240.– | 1240.– | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– | 1670.– |        |               |            |     |   |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>27)</sup>          | Q61                                                                                 | –                | –     | –                        | 1920.–                   | 1920.– | 1920.– | 1920.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– |        |               |            |     |   |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                           | Q62                                                                                 | –                | –     | –                        | 1040.–                   | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– |        |               |            |     |   |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>30)</sup>           | Q63                                                                                 | –                | –     | –                        | 1310.–                   | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– |        |               |            |     |   |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>30)</sup>          | Q64                                                                                 | –                | –     | –                        | 2020.–                   | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– |        |               |            |     |   |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>2)</sup> | Q72                                                                                 | –                | –     | –                        | –                        | –      | –      | –      | 4300.– | 4300.– | 4300.– | 4300.– | 4300.– | 4300.– |        |               |            |     |   |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)              | Q78                                                                                 | –                | –     | –                        | –                        | –      | –      | –      | 4730.– | 4730.– | 4730.– | 4730.– | 4730.– | 4730.– |        |               |            |     |   |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)      | Q79                                                                                 | –                | –     | –                        | –                        | –      | –      | –      | 5670.– | 5670.– | 5670.– | 5670.– | 5670.– | 5670.– |        |               |            |     |   |
| Motor connection and terminal box                                                       |                                                                                     |                  |       |                          |                          |        |        |        |        |        |        |        |        |        |        |               |            |     |   |
| External grounding                                                                      | H04                                                                                 |                  | 24.–  | 24.–                     | 24.–                     | 28.90  | 28.90  | 28.90  | 28.90  | □      | □      | □      | □      | □      | □      |               |            |     |   |
| Terminal box on NDE <sup>27)</sup>                                                      | H08                                                                                 |                  | 126.– | 126.–                    | 145.–                    | 180.–  | 220.–  | 286.–  | 388.–  | 967.–  | 999.–  | 1050.– | 1100.– | 1150.– | 1200.– |               |            |     |   |
| Second external grounding                                                               | H70                                                                                 |                  | –     | –                        | –                        | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  |               |            |     |   |
| Rotation of the terminal box through 90°, entry from <sup>41)</sup>                     | R10                                                                                 |                  | ○     | ○                        | ○                        | ○      | ○      | ○      | ○      | 45.10  | 58.40  | 72.10  | 86.60  | 103.–  | 124.–  |               |            |     |   |
| Rotation of the terminal box through 90°, entry from NDE                                | R11                                                                                 |                  | ○     | ○                        | ○                        | ○      | ○      | ○      | ○      | 45.100 | 58.400 | 72.10  | 86.60  | 103.–  | 124.–  |               |            |     |   |

For legends and footnotes, see Page 1/86.

## Standard delivery times in working days:

2

10

15

20

&gt;30

On request

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Special versions | Additional identification code -Z with order code and plain text if required | Frame size |    |    |                          |     |     |     |     |     |     |     |     | Motor version |            |   |
|------------------|------------------------------------------------------------------------------|------------|----|----|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------|------------|---|
|                  |                                                                              | 71         | 80 | 90 | 100                      | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315           |            |   |
|                  |                                                                              |            |    |    | 1LE1504 Basic Line       |     |     |     |     |     |     |     |     | IEC           | IE4        | ① |
|                  |                                                                              |            |    |    | 1LE1604 Performance Line |     |     |     |     |     |     |     |     |               |            | ② |
|                  |                                                                              |            |    |    | 1LE1503 Basic Line       |     |     |     |     |     |     |     |     |               | IE3        | ③ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ④ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ⑤ |
|                  |                                                                              |            |    |    | 1LE1501 Basic Line       |     |     |     |     |     |     |     |     | IE2           |            | ⑥ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ⑦ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               | IE1        | ⑧ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ⑨ |
|                  |                                                                              |            |    |    | 1LE1543 Basic Line       |     |     |     |     |     |     |     |     | APAC Line     | IE3        | ⑩ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ⑪ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               | IE2        | ⑫ |
|                  |                                                                              |            |    |    | 1LE1523 Basic Line       |     |     |     |     |     |     |     |     | Eagle Line    | NPE (NEMA) | ⑬ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               |            | ⑭ |
|                  |                                                                              |            |    |    |                          |     |     |     |     |     |     |     |     |               | NEE (NEMA) | ⑮ |
|                  |                                                                              |            |    |    | 1LE1521 Basic Line       |     |     |     |     |     |     |     |     |               |            |   |

1LE1 ... -Z Order code

| Motor connection and terminal box (continued)                                                        |                                   |  |       |       |       |       |       |       |       |        |        |        |        |        |        |                                      |
|------------------------------------------------------------------------------------------------------|-----------------------------------|--|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------------------------|
| Rotation of the terminal box through 180°                                                            | R12                               |  | O     | O     | O     | O     | O     | O     | O     | 45.100 | 58.400 | 72.10  | 86.60  | 103.–  | 124.–  |                                      |
| One EMC cable gland                                                                                  | R14                               |  | 68.30 | 68.30 | 68.30 | 125.– | 125.– | 125.– | 174.– | 174.–  | 299.–  | 299.–  | 529.–  | 529.–  | 529.–  |                                      |
| One metal cable gland                                                                                | R15                               |  | 59.90 | 59.90 | 59.90 | 112.– | 112.– | 112.– | 143.– | 143.–  | 165.–  | 165.–  | 236.–  | 236.–  | 236.–  |                                      |
| EMC cable gland, maximum configuration                                                               | R16                               |  | 137.– | 137.– | 137.– | 250.– | 250.– | 250.– | 362.– | 362.–  | 610.–  | 610.–  | 1090.– | 1090.– | 1090.– |                                      |
| Stud terminal for cable connection, accessories pack (3 items)                                       | R17                               |  | –     | –     | –     | –     | –     | –     | –     | –      | –      | –      | 150.–  | 150.–  | 189.–  |                                      |
| One metal cable gland, maximum configuration                                                         | R18                               |  | 86.20 | 86.20 | 86.20 | 159.– | 159.– | 159.– | 209.– | 209.–  | 241.–  | 241.–  | 417.–  | 417.–  | 417.–  |                                      |
| Saddle terminal for connection without cable lug, accessories pack                                   | R19                               |  | –     | –     | –     | –     | –     | –     | –     | –      | –      | –      | 735.–  | 735.–  | 735.–  |                                      |
| 3 cables protruding, 0.5 m long                                                                      | R20                               |  | 57.30 | 57.30 | 57.30 | 68.70 | 82.40 | 101.– | 118.– | 143.–  | –      | –      | –      | –      | –      |                                      |
| 3 cables protruding, 1.5 m long                                                                      | R21                               |  | 69.40 | 69.40 | 69.40 | 82.90 | 99.70 | 121.– | 144.– | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  |                                      |
| 6 cables protruding, 0.5 m long                                                                      | R22                               |  | 88.80 | 88.80 | 88.80 | 106.– | 128.– | 158.– | 186.– | 222.–  | –      | –      | –      | –      | –      |                                      |
| 6 cables protruding, 1.5 m long                                                                      | R23                               |  | 113.– | 113.– | 113.– | 136.– | 164.– | 199.– | 237.– | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  |                                      |
| 6 cables protruding, 3 m long                                                                        | R24                               |  | 181.– | 181.– | 181.– | 218.– | 257.– | 322.– | 386.– | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  |                                      |
| Reduction piece for M cable gland in accordance with British Standard, mounted on both cable entries | R30                               |  | –     | –     | –     | 194.– | 218.– | 218.– | 244.– | –      | –      | –      | –      | –      | –      |                                      |
| Larger terminal box                                                                                  | R50                               |  | 49.50 | 103.– | 103.– | 214.– | 214.– | 274.– | 313.– | 475.–  | 523.–  | 1660.– | 1900.– | 1900.– | 2230.– |                                      |
| Terminal box without cable entry opening                                                             | R51                               |  | –     | –     | –     | O     | O     | O     | O     | O      | O      | O      | O      | O      | O      |                                      |
| Drilled removable entry plate                                                                        | R52                               |  | –     | –     | –     | –     | –     | –     | –     | 273.–  | 294.–  | 294.–  | 489.–  | 489.–  | 510.–  |                                      |
| Undrilled removable entry plate                                                                      | R53                               |  | –     | –     | –     | –     | –     | –     | –     | 273.–  | 294.–  | 294.–  | 489.–  | 489.–  | 510.–  |                                      |
| Cast-iron auxiliary terminal box (small) <sup>30)</sup>                                              | R62                               |  | –     | –     | –     | 284.– | 284.– | 284.– | 284.– | 284.–  | 284.–  | 284.–  | 284.–  | 284.–  | 284.–  |                                      |
|                                                                                                      |                                   |  | –     | –     | –     | 270.– | 270.– | 270.– | –     | –      | –      | –      | –      | –      | –      | Only for: Motors with order code R50 |
| Silicon-free version                                                                                 | R74                               |  | –     | –     | –     | □     | □     | □     | □     | □      | □      | □      | 357.–  | 357.–  | 357.–  |                                      |
| Non-standard threaded through hole (NPT or G thread)                                                 | Y61 • and customer specifications |  | –     | –     | –     | 155.– | 155.– | 155.– | 155.– | 203.–  | 270.–  | 338.–  | 402.–  | 541.–  | 670.–  |                                      |

| Windings and insulation                                                                              |     |  |      |      |      |       |       |       |       |       |       |       |       |       |       |            |
|------------------------------------------------------------------------------------------------------|-----|--|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| Temperature class 155 (F), utilized acc. to 155 (F), with service factor                             | N01 |  | 42.– | 42.– | 42.– | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.10 | 93.10 | 109.– | 109.– | Not for: ⑤ |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased power                            | N02 |  | 42.– | 42.– | 42.– | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.10 | 93.10 | 109.– | 109.– | Not for: ⑤ |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature              | N03 |  | 42.– | 42.– | 42.– | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.10 | 93.10 | 109.– | 109.– | Not for: ⑤ |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % | N05 |  | 42.– | 42.– | 42.– | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.10 | 93.10 | 109.– | 109.– |            |

For legends and footnotes, see Page 1/86.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**2****10****15****20****>30****On request****Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Special versions                                                                                                  | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |                          |       |                          |       |       |       |       |       |       |        |        |        | Motor version |                                     |   |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------------------------|-------|--------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------------|-------------------------------------|---|
|                                                                                                                   |                                                                                     | 71                 | 80                       | 90    | 100                      | 112   | 132   | 160   | 180   | 200   | 225   | 250    | 280    | 315    | IEC           | IE4                                 | ① |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1504 Basic Line       |       |       |       |       |       |       |        |        |        |               |                                     | ② |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1604 Performance Line |       |       |       |       |       |       |        |        |        |               |                                     | ③ |
|                                                                                                                   |                                                                                     | 1LE1503 Basic Line |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     | ④ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1603 Performance Line |       |       |       |       |       |       |        |        |        |               |                                     | ⑤ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1583                  |       |       |       |       |       |       |        |        |        |               |                                     | ⑥ |
|                                                                                                                   |                                                                                     | 1LE1501 Basic Line |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     | ⑦ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1601 Performance Line |       |       |       |       |       |       |        |        |        |               |                                     | ⑧ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1502 Basic Line       |       |       |       |       |       |       |        |        |        |               |                                     | ⑨ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1543 Basic Line       |       |       |       |       |       |       |        |        |        |               |                                     | ⑩ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1643 Performance Line |       |       |       |       |       |       |        |        |        |               |                                     | ⑪ |
|                                                                                                                   |                                                                                     |                    |                          |       | 1LE1541 Basic Line       |       |       |       |       |       |       |        |        |        |               |                                     | ⑫ |
|                                                                                                                   |                                                                                     | 1LE1523 Basic Line |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     | ⑬ |
|                                                                                                                   |                                                                                     |                    | 1LE1623 Performance Line |       |                          |       |       |       |       |       |       |        | ⑭      |        |               |                                     |   |
| 1LE1                                                                                                              |                                                                                     |                    | 1LE1521 Basic Line       |       |                          |       |       |       |       |       |       |        | ⑮      |        |               |                                     |   |
| Order code                                                                                                        |                                                                                     |                    |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     |   |
| Windings and insulation (continued)                                                                               |                                                                                     |                    |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %              | N06                                                                                 |                    | 42.–                     | 42.–  | 42.–                     | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.10  | 93.10  | 109.–  | 109.–         |                                     |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %             | N07                                                                                 |                    | 65.70                    | 74.40 | 87.50                    | 108.– | 132.– | 167.– | 208.– | 268.– | 326.– | 483.–  | 609.–  | 779.–  | 1010.–        |                                     |   |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %             | N08                                                                                 |                    | 65.70                    | 74.40 | 87.50                    | 108.– | 132.– | 167.– | 208.– | 268.– | 326.– | 483.–  | 609.–  | 779.–  | 1010.–        |                                     |   |
| Temperature class 180 (H)                                                                                         | N10                                                                                 |                    | 158.–                    | 158.– | 158.–                    | 184.– | 217.– | 289.– | 353.– | 494.– | 702.– | 967.–  | 1260.– | 1520.– | 1790.–        | Not for: ①, ②, ⑤, ⑨, ⑩, ⑪, ⑫, ⑬, ⑭  |   |
| Temperature class 180 (H) at rated power and max. CT 60 °C 4) 5)                                                  | N11                                                                                 |                    | 220.–                    | 220.– | 220.–                    | 257.– | 305.– | 405.– | 494.– | 702.– | 982.– | 1200.– | 1470.– | 1790.– | 2200.–        | Not for: ①, ②, ⑤                    |   |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                            | N30                                                                                 |                    | 137.–                    | 137.– | 137.–                    | 137.– | 137.– | 137.– | 210.– | 305.– | 420.– | 652.–  | 872.–  | 1100.– | 1350.–        |                                     |   |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                           | N31                                                                                 |                    | 200.–                    | 220.– | 220.–                    | 220.– | 252.– | 284.– | 399.– | 515.– | 662.– | 935.–  | 1200.– | 1520.– | 1820.–        |                                     |   |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude | Y50 • and spec. power, CT .. °C or IA .... m above sea level                        |                    | 103.–                    | 111.– | 132.–                    | 162.– | 196.– | 252.– | 310.– | 401.– | 493.– | 725.–  | 912.–  | 1160.– | 1510.–        |                                     |   |
| Temperature class 155 (F), utilized according to 155 (F), other requirements 5)                                   | Y52 • and spec. power, CT .. °C or IA .... m above sea level                        |                    | 41.50                    | 41.50 | 41.50                    | 48.30 | 48.30 | 64.30 | 64.30 | 81.90 | 81.90 | 93.50  | 93.50  | 109.–  | 109.–         | Not for: ⑤                          |   |
| Temperature class 180 (H), utilized according to 155 (F)                                                          | Y75 • and spec. power, CT .. °C or IA .... m above sea level                        |                    | –                        | –     | –                        | 257.– | 305.– | 405.– | 494.– | 909.– | 982.– | 1430.– | 1640.– | 2280.– | 2460.–        | Not for: ①, ②, ⑤                    |   |
| Colors and paint finish                                                                                           |                                                                                     |                    |                          |       |                          |       |       |       |       |       |       |        |        |        |               |                                     |   |
| Standard finish C2 in RAL 7030 stone gray                                                                         |                                                                                     |                    | ■                        | ■     | ■                        | ■     | ■     | ■     | ■     | ■     | ■     | ■      | ■      | ■      | ■             | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |   |
| Unpainted (only cast-iron parts primed)                                                                           | S00                                                                                 |                    | ○                        | ○     | ○                        | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○             |                                     |   |
| Unpainted, only primed                                                                                            | S01                                                                                 |                    | 20.90                    | 20.90 | 27.80                    | 27.80 | 27.80 | 44.40 | 44.40 | 83.30 | 83.30 | 83.30  | 83.30  | 83.30  | 83.30         |                                     |   |
| Special finish C3                                                                                                 | S02                                                                                 |                    | 36.80                    | 36.80 | 36.80                    | 63.–  | 63.–  | 84.–  | 84.–  | 115.– | 126.– | 189.–  | 232.–  | 273.–  | 305.–         | Not for: ②, ④, ⑦, ⑩, ⑬              |   |
|                                                                                                                   | –                                                                                   |                    | ■                        | ■     | ■                        | ■     | ■     | ■     | ■     | ■     | ■     | ■      | ■      | ■      | ■             | Only for: ②, ④, ⑦, ⑩, ⑬             |   |
| Special finish sea air resistant C4                                                                               | S03                                                                                 |                    | 504.–                    | 504.– | 504.–                    | 536.– | 536.– | 589.– | 589.– | 630.– | 672.– | 714.–  | 757.–  | 799.–  | 830.–         |                                     |   |

For legends and footnotes, see Page 1/86.

## Standard delivery times in working days:

2

10

15

20

&gt;30

On request

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Special versions | Additional identification code -Z with order code and plain text if required | Frame size |    |    |                          |     |     |     |     |     |     |     |     | Motor version |            |   |
|------------------|------------------------------------------------------------------------------|------------|----|----|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------|------------|---|
|                  |                                                                              | 71         | 80 | 90 | 100                      | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315           |            |   |
|                  |                                                                              |            |    |    | 1LE1504 Basic Line       |     |     |     |     |     |     |     |     | IEC           | IE4        | ① |
|                  |                                                                              |            |    |    | 1LE1604 Performance Line |     |     |     |     |     |     |     |     |               |            | ② |
|                  |                                                                              |            |    |    | 1LE1503 Basic Line       |     |     |     |     |     |     |     |     |               | IE3        | ③ |
|                  |                                                                              |            |    |    | 1LE1603 Performance Line |     |     |     |     |     |     |     |     |               |            | ④ |
|                  |                                                                              |            |    |    | 1LE1583                  |     |     |     |     |     |     |     |     |               |            | ⑤ |
|                  |                                                                              |            |    |    | 1LE1501 Basic Line       |     |     |     |     |     |     |     |     | IE2           |            | ⑥ |
|                  |                                                                              |            |    |    | 1LE1601 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑦ |
|                  |                                                                              |            |    |    | 1LE1502 Basic Line       |     |     |     |     |     |     |     |     | IE1           |            | ⑧ |
|                  |                                                                              |            |    |    | 1LE1543 Basic Line       |     |     |     |     |     |     |     |     | APAC Line     | IE3        | ⑨ |
|                  |                                                                              |            |    |    | 1LE1643 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑩ |
|                  |                                                                              |            |    |    | 1LE1541 Basic Line       |     |     |     |     |     |     |     |     |               | IE2        | ⑪ |
|                  |                                                                              |            |    |    | 1LE1523 Basic Line       |     |     |     |     |     |     |     |     | Eagle Line    | NPE (NEMA) | ⑫ |
|                  |                                                                              |            |    |    | 1LE1623 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑬ |
|                  |                                                                              |            |    |    | 1LE1521 Basic Line       |     |     |     |     |     |     |     |     |               | NEE (NEMA) | ⑭ |

1LE1 ..... -Z Order code

## Colors and paint finish (continued)

|                                                                                                                                                                                                                                                                                             |                                 |        |        |        |        |        |        |        |        |        |        |        |        |        |                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------------------------|--|
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | <b>S04</b>                      | 2050.- | 2050.- | 2050.- | 2150.- | 2260.- | 2390.- | 2510.- | 2640.- | 2770.- | 3200.- | 4170.- | 5220.- | 8070.- |                                     |  |
| Internal coating                                                                                                                                                                                                                                                                            | <b>S05</b>                      | -      | -      | -      | 89.40  | 89.40  | 89.40  | 89.40  | 89.40  | 89.40  | 89.40  | 110.-0 | 126.-0 | 137.-0 |                                     |  |
| Top coat polyurethane <sup>33)</sup>                                                                                                                                                                                                                                                        | <b>S06</b>                      | 31.50  | 31.50  | 51.50  | 73.50  | 101.-  | 150.-  | 210.-  | 252.-  | 309.-  | 397.-  | 495.-  | 625.-  | 795.-  |                                     |  |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | <b>Y53 •</b> and finish RAL.... | 26.30  | 26.30  | 26.30  | 42.-   | 42.-   | 57.80  | 57.80  | 84.-   | 115.-  | 126.-  | 158.-  | 189.-  | 263.-  | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |  |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                          | <b>Y56 •</b> and finish RAL.... | 620.-  | 620.-  | 620.-  | 662.-  | 662.-  | 694.-  | 694.-  | 704.-  | 714.-  | 725.-  | 735.-  | 746.-  | 757.-  |                                     |  |

Modular technology – Basic versions <sup>6)</sup>

|                                                                       |            |       |        |        |        |        |        |        |        |        |         |         |         |         |                                                    |  |
|-----------------------------------------------------------------------|------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|----------------------------------------------------|--|
| Mounting of holding brake (standard assignment) <sup>7) 31) 32)</sup> | <b>F01</b> | -     | -      | -      | 657.-  | 799.-  | 1030.- | 2040.- | 4510.- | 6300.- | 8010.-  | 25600.- | 31600.- | 37900.- | Not for: Motors in combination with order code F90 |  |
| Mounting of PRECIMA brake                                             | <b>F04</b> | -     | -      | -      | -      | -      | -      | -      | -      | -      | 14600.- | 17600.- | 24800.- | 28900.- |                                                    |  |
| Mounting of separately driven fan <sup>28) 34)</sup>                  | <b>F70</b> | 840.- | 840.-  | 840.-  | 840.-  | 987.-  | 1070.- | 1240.- | 1370.- | 2050.- | 2550.-  | 3180.-  | 3790.-  | 4270.-  | Not for: Motors in combination with order code F90 |  |
| Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 l       | <b>G11</b> | 703.- | 748.-  | 793.-  | 838.-  | 895.-  | 941.-  | 986.-  | 1030.- | 1080.- | 1140.-  | 1190.-  | 1230.-  | 1280.-  |                                                    |  |
| Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 l       | <b>G12</b> | 951.- | 1030.- | 1100.- | 1180.- | 1250.- | 1330.- | 1410.- | 1480.- | 1550.- | 1640.-  | 1710.-  | 1790.-  | 1860.-  |                                                    |  |

## Modular technology – Additional versions

|                                                        |            |   |   |   |       |       |       |       |       |       |       |       |       |       |                                                     |  |
|--------------------------------------------------------|------------|---|---|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------------------------------------|--|
| Brake supply voltage 24 V DC                           | <b>F10</b> | - | - | - | 52.90 | 52.90 | 52.90 | 52.90 | 70.60 | 70.60 | 70.60 | 70.60 | 70.60 | 70.60 | Not for: Motors in combination with order code F90  |  |
| Brake supply voltage 230 V AC, 50/60 Hz                | <b>F11</b> | - | - | - | O     | O     | O     | O     | O     | O     | O     | O     | O     | O     | Not for: Motors in combination with order code F90  |  |
| Brake supply voltage 400 V AC, 50/60 Hz <sup>32)</sup> | <b>F12</b> | - | - | - | 52.90 | 52.90 | 52.90 | 52.90 | 70.60 | 70.60 | 70.60 | 70.60 | 70.60 | 70.60 | Not for: Motors in combination with order code F90  |  |
| Brake supply voltage 180 V DC                          | <b>F17</b> | - | - | - | 52.90 | 52.90 | 52.90 | 52.90 | 70.60 | 70.60 | 70.60 | -     | -     | -     | Only for: Motors in combination with order code F01 |  |
| Brake supply voltage 205 V DC                          | <b>F18</b> | - | - | - | 52.90 | 52.90 | 52.90 | 52.90 | 70.60 | 70.60 | 70.60 | -     | -     | -     | Only for: Motors in combination with order code F01 |  |

For legends and footnotes, see Page 1/86.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

Standard delivery times in working days:

**2****10****15****20****>30****On request****Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Special versions                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |        |                          |                          |        |        |        |                    |         |         |         |         |         | Motor version |                                           |     |            |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------|--------------------------|--------------------------|--------|--------|--------|--------------------|---------|---------|---------|---------|---------|---------------|-------------------------------------------|-----|------------|
|                                                                                                                    |                                                                                     | 71                 | 80     | 90                       | 100                      | 112    | 132    | 160    | 180                | 200     | 225     | 250     | 280     | 315     |               |                                           |     |            |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1504 Basic Line       |        |        |        |                    |         |         |         |         |         | IEC           | IE4                                       | ①   |            |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1604 Performance Line |        |        |        |                    |         |         |         |         |         |               |                                           | ②   |            |
|                                                                                                                    |                                                                                     | 1LE1503 Basic Line |        |                          |                          |        |        |        |                    |         |         |         |         |         |               | IE3                                       | ③   |            |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1603 Performance Line |        |        |        |                    |         |         |         |         |         |               |                                           | ④   |            |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1583                  |        |        |        |                    |         |         |         |         |         |               |                                           | ⑤   |            |
|                                                                                                                    |                                                                                     | 1LE1501 Basic Line |        |                          |                          |        |        |        |                    |         |         |         |         |         |               |                                           | IE2 | ⑥          |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1601 Performance Line |        |        |        |                    |         |         |         |         |         |               |                                           |     | ⑦          |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1502 Basic Line       |        |        |        |                    |         |         |         |         |         |               |                                           | IE1 |            |
|                                                                                                                    |                                                                                     |                    |        | 1LE1543 Basic Line       |                          |        |        |        |                    |         |         |         |         |         | APAC Line     | IE3                                       |     |            |
|                                                                                                                    |                                                                                     |                    |        | 1LE1643 Performance Line |                          |        |        |        |                    |         |         |         |         |         |               |                                           | ⑩   |            |
|                                                                                                                    |                                                                                     |                    |        |                          |                          |        |        |        | 1LE1541 Basic Line |         |         |         |         |         |               |                                           | IE2 | ⑪          |
|                                                                                                                    |                                                                                     | 1LE1523 Basic Line |        |                          |                          |        |        |        |                    |         |         |         |         |         | Eagle Line    |                                           |     | NPE (NEMA) |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1623 Performance Line |        |        |        |                    |         |         |         |         |         |               | ⑬                                         |     |            |
|                                                                                                                    |                                                                                     |                    |        |                          | 1LE1521 Basic Line       |        |        |        |                    |         |         |         |         |         |               | NEE (NEMA)                                | ⑭   |            |
|                                                                                                                    |                                                                                     |                    |        |                          |                          |        |        |        |                    |         |         |         |         |         |               |                                           |     |            |
| 1LE1...-...-...-Z Order code                                                                                       |                                                                                     |                    |        |                          |                          |        |        |        |                    |         |         |         |         |         |               |                                           |     |            |
| Modular technology – Additional versions (continued)                                                               |                                                                                     |                    |        |                          |                          |        |        |        |                    |         |         |         |         |         |               |                                           |     |            |
| Reverse running stop, reverse movement left locked, rotating direction right                                       | F40                                                                                 | –                  | –      | –                        | –                        | –      | 5470.– | 5780.– | 6080.–             | 6080.–  | 6300.–  | 6940.–  | 8040.–  | 9560.–  | Not for:      | Motors in combination with order code Q79 |     |            |
| Reverse running stop, reverse movement right locked, rotating direction left                                       | F41                                                                                 | –                  | –      | –                        | –                        | –      | 5470.– | 5780.– | 6080.–             | 6080.–  | 6300.–  | 6940.–  | 8040.–  | 9560.–  | Not for:      | Motors in combination with order code Q79 |     |            |
| Mechanical manual brake release with lever (no locking)                                                            | F50                                                                                 | –                  | –      | –                        | 264.–                    | 264.–  | 294.–  | 426.–  | 620.–              | 723.–   | 868.–   | 987.–   | 1090.–  | 1390.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Special technology <sup>6)</sup>                                                                                   |                                                                                     |                    |        |                          |                          |        |        |        |                    |         |         |         |         |         |               |                                           |     |            |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>10)</sup>                                                     | G04                                                                                 | –                  | –      | –                        | 3000.–                   | 3000.– | 3000.– | 3000.– | 3000.–             | 3000.–  | 4180.–  | 4180.–  | 4180.–  | 4180.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>10)</sup>                                                    | G05                                                                                 | –                  | –      | –                        | 3540.–                   | 3540.– | 3540.– | 3540.– | 4570.–             | 4570.–  | 4950.–  | 4950.–  | 4950.–  | 4950.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>10)</sup>                                                    | G06                                                                                 | –                  | –      | –                        | 4570.–                   | 4570.– | 4570.– | 4570.– | 4570.–             | 4570.–  | 6000.–  | 6000.–  | 6000.–  | 6000.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) <sup>11)</sup> | G07                                                                                 | –                  | –      | –                        | –                        | –      | –      | –      | 6380.–             | 6410.–  | 6440.–  | 6490.–  | 6530.–  | 6590.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) <sup>11)</sup>    | G08                                                                                 | –                  | –      | –                        | –                        | –      | –      | –      | 14700.–            | 14900.– | 18000.– | 18000.– | 18000.– | 18000.– | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection                                | G15                                                                                 | –                  | –      | –                        | 5580.–                   | 5630.– | 5660.– | 5690.– | 5730.–             | 5760.–  | 5800.–  | 5840.–  | 5900.–  | 5940.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box dust protection                                    | G16                                                                                 | –                  | –      | –                        | 5580.–                   | 5630.– | 5660.– | 5690.– | 5730.–             | 5760.–  | 5800.–  | 5840.–  | 5900.–  | 5940.–  | Not for:      | Motors in combination with order code F90 |     |            |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                 | G21                                                                                 | 2230.–             | 2230.– | 2230.–                   | 2540.–                   | 2680.– | 2830.– | 3050.– | 3210.–             | 3330.–  | 3430.–  | 3430.–  | 3430.–  | 3430.–  | Only for:     | ⑤                                         |     |            |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                 | G22                                                                                 | 2560.–             | 2560.– | 2560.–                   | 2940.–                   | 3120.– | 3300.– | 3520.– | 3630.–             | 3750.–  | 3880.–  | 3880.–  | 3880.–  | 3880.–  | Only for:     | ⑤                                         |     |            |
| Mounting of HOGS100S-B76.626.01024.1, SIL-2 rotary pulse encoder                                                   | G25                                                                                 | –                  | –      | –                        | –                        | –      | –      | –      | 14000.–            | 14000.– | 17400.– | 17400.– | 17400.– | 17400.– | Only for:     | ⑤                                         |     |            |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                     | G27                                                                                 | –                  | –      | –                        | –                        | –      | –      | –      | 15500.–            | 15500.– | 20200.– | 20200.– | 20200.– | 20200.– | Only for:     | ⑤                                         |     |            |

For legends and footnotes, see Page 1/86.

## Standard delivery times in working days:

2

10

15

20

&gt;30

On request

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Special versions                                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |       |       |                          |       |       |       |         |         |         |         |            |         | Motor version |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-------|-------|--------------------------|-------|-------|-------|---------|---------|---------|---------|------------|---------|---------------|-------------------------------------------|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----|---|-----------|-----|---|-----|---|-----|---|------------|------------|---|------------|---|------------|---|
|                                                                                                                                                |                                                                                     | 71         | 80    | 90    | 100                      | 112   | 132   | 160   | 180     | 200     | 225     | 250     | 280        | 315     | IEC           | IE4                                       | ① |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1504 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   | IE3 | ② |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1604 Performance Line |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   | IE3 | ③ |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1503 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   | IE2 | ④ |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1603 Performance Line |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   | IE2 | ⑤ |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1583                  |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   | IE2 | ⑥ |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1501 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   | IE1 | ⑦ |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1601 Performance Line |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   | IE1 | ⑧ |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1502 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   | APAC Line | IE3 | ⑨ |     |   |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1543 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   | IE2 | ⑩ |     |   |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1643 Performance Line |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   | IE2 | ⑪ |            |            |   |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1541 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   | Eagle Line | NPE (NEMA) | ⑫ |            |   |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1523 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   | NPE (NEMA) | ⑬ |            |   |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1623 Performance Line |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   | NEE (NEMA) | ⑭ |
|                                                                                                                                                |                                                                                     |            |       |       | 1LE1521 Basic Line       |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| 1LE1 ..... -Z                                                                                                                                  |                                                                                     |            |       |       |                          |       |       |       |         |         |         |         | Order code |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Special technology <sup>6)</sup> (continued)                                                                                                   |                                                                                     |            |       |       |                          |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mounting a special type of rotary pulse encoder                                                                                                | Y70 • and customer specifications                                                   | –          | –     | –     | O. R.                    |       |       |       | O. R.   | O. R.   | O. R.   | O. R.   | O. R.      | O. R.   |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mounting of HOG 10 DN 1024 I + FSL rotary pulse encoder, (integrated centrifugal switch, speed .... rpm), terminal box moisture protection     | Y74 • and spec. speed .... rpm                                                      | –          | –     | –     | –                        |       |       |       | 8810.–  | 8830.–  | 8870.–  | 8900.–  | 8970.–     | 9020.–  |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mounting of HOG 10 DN 1024 II + FSL rotary pulse encoder, (integrated centrifugal switch, speed .... rpm), terminal box dust protection        | Y76 • and spec. speed .... rpm                                                      | –          | –     | –     | –                        |       |       |       | 8810.–  | 8830.–  | 8870.–  | 8900.–  | 8970.–     | 9020.–  |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mounting of HOG 10 DN 1024 I + ESL 93 rotary pulse encoder, (integrated electronic speed switch, speed .... rpm), terminal box dust protection | Y79 • and spec. speed (max. 3) .... rpm                                             | –          | –     | –     | –                        |       |       |       | 15000.– | 15100.– | 15300.– | 15500.– | 15600.–    | 15800.– |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mechanical design and degrees of protection                                                                                                    |                                                                                     |            |       |       |                          |       |       |       |         |         |         |         |            |         |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                                       | F77                                                                                 | –          | –     | –     | –                        | –     | 625.– | 887.– | 1150.–  | 1420.–  | 1670.–  | 1940.–  | 2200.–     | 2470.–  | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                               | F78                                                                                 | –          | –     | –     | –                        | –     | 625.– | 887.– | 1150.–  | 1420.–  | 1670.–  | 1940.–  | 2200.–     | 2470.–  | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Prepared for mountings, center hole only                                                                                                       | G40                                                                                 | –          | 70.10 | 70.10 | 70.10                    | 70.10 | 93.–  | 107.– | □       | □       | □       | □       | □          | □       | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Prepared for mountings with D12 shaft                                                                                                          | G41                                                                                 | 143.–      | 143.– | 152.– | 152.–                    | 168.– | 189.– | 225.– | 462.–   | 462.–   | 589.–   | 924.–   | 924.–      | 924.–   | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Prepared for mountings with D16 shaft                                                                                                          | G42                                                                                 | –          | 143.– | 143.– | 152.–                    | 168.– | 189.– | 225.– | 462.–   | 462.–   | 589.–   | 924.–   | 924.–      | 924.–   | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Mechanical protection for encoders                                                                                                             | G43                                                                                 | 72.30      | 72.30 | 72.30 | 80.70                    | 80.70 | 141.– | 141.– | 212.–   | 212.–   | 212.–   | 212.–   | 212.–      | 212.–   | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Protective cover <sup>8) 10) 12)</sup>                                                                                                         | H00                                                                                 | 56.70      | 56.70 | 56.70 | 82.40                    | 82.40 | 144.– | 144.– | 192.–   | 289.–   | 383.–   | 478.–   | 573.–      | 766.–   | Not for:      | Motors in combination with order code F90 |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Screwed-on (instead of cast) feet                                                                                                              | H01                                                                                 | –          | –     | –     | 104.–                    | 113.– | 123.– | 132.– | 371.–   | 437.–   | 517.–   | 768.–   | 863.–      | 993.–   |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Vibration-proof version; vibration resistance to Class 3M4 acc. to IEC 60721-3-3:1994 <sup>39)</sup>                                           | H02                                                                                 | 130.–      | 148.– | 168.– | 189.–                    | 209.– | 226.– | 263.– | 315.–   | 378.–   | 442.–   | 525.–   | 609.–      | 694.–   |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |
| Condensation drainage holes <sup>38)</sup>                                                                                                     | H03                                                                                 | 65.20      | 67.60 | 75.50 | □                        | □     | □     | □     | □       | □       | □       | □       | □          | □       |               |                                           |   |     |   |     |   |     |   |     |   |     |   |     |   |     |   |           |     |   |     |   |     |   |            |            |   |            |   |            |   |

For legends and footnotes, see Page 1/86.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**2****10****15****20****>30****On request****Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Special versions | Additional identification code -Z with order code and plain text if required | Frame size |    |    |                          |     |     |     |     |     |     |     |     | Motor version |            |   |
|------------------|------------------------------------------------------------------------------|------------|----|----|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|---------------|------------|---|
|                  |                                                                              | 71         | 80 | 90 | 100                      | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315           |            |   |
|                  |                                                                              |            |    |    | 1LE1504 Basic Line       |     |     |     |     |     |     |     |     | IEC           | IE4        | ① |
|                  |                                                                              |            |    |    | 1LE1604 Performance Line |     |     |     |     |     |     |     |     |               |            | ② |
|                  |                                                                              |            |    |    | 1LE1503 Basic Line       |     |     |     |     |     |     |     |     |               | IE3        | ③ |
|                  |                                                                              |            |    |    | 1LE1603 Performance Line |     |     |     |     |     |     |     |     |               |            | ④ |
|                  |                                                                              |            |    |    | 1LE1583                  |     |     |     |     |     |     |     |     |               |            | ⑤ |
|                  |                                                                              |            |    |    | 1LE1501 Basic Line       |     |     |     |     |     |     |     |     | IE2           |            | ⑥ |
|                  |                                                                              |            |    |    | 1LE1601 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑦ |
|                  |                                                                              |            |    |    | 1LE1502 Basic Line       |     |     |     |     |     |     |     |     | IE1           |            | ⑧ |
|                  |                                                                              |            |    |    | 1LE1543 Basic Line       |     |     |     |     |     |     |     |     | APAC Line     | IE3        | ⑨ |
|                  |                                                                              |            |    |    | 1LE1643 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑩ |
|                  |                                                                              |            |    |    | 1LE1541 Basic Line       |     |     |     |     |     |     |     |     | IE2           |            | ⑪ |
|                  |                                                                              |            |    |    | 1LE1523 Basic Line       |     |     |     |     |     |     |     |     | Eagle Line    | NPE (NEMA) | ⑫ |
|                  |                                                                              |            |    |    | 1LE1623 Performance Line |     |     |     |     |     |     |     |     |               |            | ⑬ |
|                  |                                                                              |            |    |    | 1LE1521 Basic Line       |     |     |     |     |     |     |     |     |               | NEE (NEMA) | ⑭ |

**1LE1 ... -Z** Order code

| Mechanical design and degrees of protection (continued)                                       |            |       |       |       |       |       |       |        |        |        |        |        |        |        |                                                  |  |
|-----------------------------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------------------------------------------------|--|
| Rust-resistant screws (externally)                                                            | <b>H07</b> | 56.70 | 68.30 | 68.30 | 82.70 | 82.70 | 97.80 | 97.80  | 112.–  | 128.–  | 170.–  | 203.–  | 211.–  | 281.–  |                                                  |  |
| IP66 degree of protection                                                                     | <b>H19</b> | 316.– | 316.– | 316.– | 316.– | 316.– | 316.– | 471.–  | 630.–  | 787.–  | 949.–  | 1106.– | 1264.– | 1419.– |                                                  |  |
| IP65 degree of protection <sup>14)</sup>                                                      | <b>H20</b> | 150.– | 150.– | 150.– | 150.– | 150.– | 150.– | 224.–  | 302.–  | 374.–  | 452.–  | 527.–  | 601.–  | 676.–  |                                                  |  |
| IP54 degree of protection                                                                     | <b>H21</b> | –     | –     | –     | –     | –     | –     | –      | 840.–  | 840.–  | 840.–  | 840.–  | 840.–  | 840.–  |                                                  |  |
| IP56 degree of protection <sup>15)</sup>                                                      | <b>H22</b> | 166.– | 166.– | 166.– | 166.– | 166.– | 166.– | 247.–  | 328.–  | 413.–  | 497.–  | 579.–  | 663.–  | 743.–  |                                                  |  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>13) 29)</sup>            | <b>H23</b> | 45.80 | 48.30 | 51.70 | 57.50 | 62.90 | 76.80 | 112.–  | 145.–  | 180.–  | 239.–  | 317.–  | 398.–  | 478.–  |                                                  |  |
| Grounding brush for converter operation                                                       | <b>L52</b> | –     | –     | –     | –     | –     | –     | –      | –      | –      | –      | –      | 2630.– | 2630.– |                                                  |  |
| Coolant temperature and installation altitude                                                 |            |       |       |       |       |       |       |        |        |        |        |        |        |        |                                                  |  |
| Coolant temperature –50 to +40 °C (IP54 degree of protection)                                 | <b>D02</b> | –     | –     | –     | 735.– | 788.– | 946.– | 1100.– | 2590.– | 2770.– | 4000.– | 4460.– | 5400.– | 6400.– |                                                  |  |
| Coolant temperature –40 to +40 °C <sup>16)</sup>                                              | <b>D03</b> | 232.– | 257.– | 322.– | 386.– | 489.– | 566.– | 650.–  | 721.–  | 836.–  | 1070.– | 1330.– | 1890.– | 2440.– |                                                  |  |
| Coolant temperature –30 to +40 °C <sup>17)</sup>                                              | <b>D04</b> | 43.–  | 56.70 | 56.70 | 70.80 | 70.80 | 85.–  | 85.–   | 113.–  | 142.–  | 567.–  | 1330.– | 1890.– | 2440.– |                                                  |  |
| Designs in accordance with standards and specifications                                       |            |       |       |       |       |       |       |        |        |        |        |        |        |        |                                                  |  |
| VIK version                                                                                   | <b>C02</b> | –     | –     | –     | 218.– | 253.– | 323.– | 409.–  | 584.–  | 733.–  | 883.–  | 1130.– | 1530.– | 2040.– | Only for: ③, ④                                   |  |
|                                                                                               |            |       |       |       |       |       |       |        |        |        |        |        |        |        | Not for: ⑤                                       |  |
| China Compulsory Certification                                                                | <b>D01</b> | 43.–  | 43.–  | 43.–  | –     | –     | –     | –      | –      | –      | –      | –      | –      | –      | Only for: Voltage code 21st or 22nd              |  |
|                                                                                               |            |       |       |       |       |       |       |        |        |        |        |        |        |        | Not for: ⑤                                       |  |
| Motor without CE marking for export outside EEA (see EU Directive 640/2009)                   | <b>D22</b> | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      | Not for: ①, ②                                    |  |
| Electrical according to NEMA MG1-12 <sup>18)</sup>                                            | <b>D30</b> | –     | –     | –     | 40.60 | 40.60 | 40.60 | 40.60  | 69.40  | 69.40  | 69.40  | 86.60  | 86.60  | 104.–  | Not for: ⑫, ⑬, ⑭                                 |  |
|                                                                                               | –          | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | Only for: ⑫, ⑬, ⑭                                |  |
| Design according to UL with "Recognition Mark" <sup>18)</sup>                                 | <b>D31</b> | –     | 81.60 | 91.–  | 101.– | 119.– | 153.– | 187.–  | 300.–  | 411.–  | 517.–  | 610.–  | 756.–  | 986.–  | Not for: ⑫, ⑬, ⑭                                 |  |
|                                                                                               | –          | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | Only for: ⑫, ⑬, ⑭                                |  |
| KEMCO Korea Energy Efficiency Label                                                           | <b>D33</b> | –     | 42.70 | 42.70 | 42.70 | 42.70 | 42.70 | 42.70  | 42.70  | 42.70  | 42.70  | 42.70  | 42.70  | 42.70  | Only for: ⑨, ⑩                                   |  |
|                                                                                               | –          | –     | –     | –     | O. R. | O. R. | O. R. | O. R.  | 42.70  | 42.70  | 42.70  | O. R.  | O. R.  | O. R.  | Only for: ⑤                                      |  |
| China Energy Efficiency Label                                                                 | <b>D34</b> | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      | Not for: ①, ②, ⑧ and motors with increased power |  |
|                                                                                               | –          | –     | –     | –     | ○     | ○     | ○     | ○      | ○      | ○      | –      | –      | –      | –      | Only for: ⑤                                      |  |
| Canadian regulations (CSA) <sup>17)</sup>                                                     | <b>D40</b> | 76.60 | 81.60 | 91.–  | 101.– | 119.– | 153.– | 187.–  | 253.–  | 338.–  | 422.–  | 507.–  | 675.–  | 837.–  | Not for: ⑫, ⑬, ⑭                                 |  |
|                                                                                               | –          | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | Only for: ⑫, ⑬, ⑭                                |  |
| NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-11, incl. UL and CSA | <b>D41</b> | –     | –     | –     | 245.– | 275.– | 357.– | 561.–  | 714.–  | 867.–  | 1120.– | 1430.– | 1940.– | 2650.– | Only for: ⑤                                      |  |
| TR CU product safety certificate EAC for Eurasian customs union <sup>35)</sup>                | <b>D47</b> | 21.–  | 26.30 | 31.50 | 42.–  | 52.50 | 84.–  | 137.–  | 179.–  | 252.–  | 325.–  | 430.–  | 630.–  | 735.–  |                                                  |  |
| MEPS Australia                                                                                | <b>D70</b> | –     | –     | –     | O. R. | O. R. | O. R. | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | Only for: ⑤                                      |  |

For legends and footnotes, see Page 1/86.

## Standard delivery times in working days:

2

10

15

20

&gt;30

On request

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Special versions                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |       |       |       |       |        |        |        |        |        |        |        |        | Motor version |                           |            |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|---------------------------|------------|
|                                                                                                                                      |                                                                                     | 71                       | 80    | 90    | 100   | 112   | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    |               |                           |            |
|                                                                                                                                      |                                                                                     | 1LE1504 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | IEC           | IE4                       | ①          |
|                                                                                                                                      |                                                                                     | 1LE1604 Performance Line |       |       |       |       |        |        |        |        |        |        |        |        |               |                           | ②          |
|                                                                                                                                      |                                                                                     | 1LE1503 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | IE3           | ③                         |            |
|                                                                                                                                      |                                                                                     | 1LE1603 Performance Line |       |       |       |       |        |        |        |        |        |        |        |        |               | ④                         |            |
|                                                                                                                                      |                                                                                     | 1LE1583                  |       |       |       |       |        |        |        |        |        |        |        |        | ⑤             |                           |            |
|                                                                                                                                      |                                                                                     | 1LE1501 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | IE2           | ⑥                         |            |
|                                                                                                                                      |                                                                                     | 1LE1601 Performance Line |       |       |       |       |        |        |        |        |        |        |        |        |               | ⑦                         |            |
|                                                                                                                                      |                                                                                     | 1LE1502 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | IE1           | ⑧                         |            |
|                                                                                                                                      |                                                                                     | 1LE1543 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        |               | APAC Line                 | IE3        |
|                                                                                                                                      |                                                                                     | 1LE1643 Performance Line |       |       |       |       |        |        |        |        |        |        |        |        | ⑩             |                           |            |
|                                                                                                                                      |                                                                                     | 1LE1541 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | IE2           | ⑪                         |            |
|                                                                                                                                      |                                                                                     | 1LE1523 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        |               | Eagle Line                | NPE (NEMA) |
|                                                                                                                                      |                                                                                     | 1LE1623 Performance Line |       |       |       |       |        |        |        |        |        |        |        |        | ⑬             |                           |            |
|                                                                                                                                      |                                                                                     | 1LE1521 Basic Line       |       |       |       |       |        |        |        |        |        |        |        |        | NEE (NEMA)    | ⑭                         |            |
|                                                                                                                                      |                                                                                     |                          |       |       |       |       |        |        |        |        |        |        |        |        |               |                           |            |
| <b>Bearings and lubrication</b>                                                                                                      |                                                                                     |                          |       |       |       |       |        |        |        |        |        |        |        |        |               |                           |            |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                                | <b>L19</b>                                                                          | –                        | –     | –     | –     | –     | –      | –      | 383.–  | 430.–  | 478.–  | 573.–  | O      | O      | Only for:     | ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |            |
|                                                                                                                                      |                                                                                     | –                        | –     | –     | –     | –     | –      | –      | O      | O      | O      | O      | O      | O      | Only for:     | ②, ④, ⑦, ⑩, ⑬             |            |
| Located bearing DE                                                                                                                   | <b>L20</b>                                                                          | 39.80                    | 39.80 | 42.20 | 72.80 | 86.30 | 106.–  | 145.–  | 306.–  | 424.–  | 597.–  | 768.–  | 993.–  | 1070.– |               |                           |            |
| Located bearing NDE                                                                                                                  | <b>L21</b>                                                                          | 39.80                    | 39.80 | 42.20 | 44.20 | 46.50 | 49.30  | □      | □      | □      | □      | □      | □      | □      |               |                           |            |
| Bearing design for increased cantilever forces <sup>36)</sup>                                                                        | <b>L22</b>                                                                          | 73.50                    | 80.90 | 89.40 | 101.– | 117.– | 133.–  | 175.–  | 278.–  | 322.–  | 363.–  | 420.–  | 470.–  | 525.–  | Not for:      | ②, ④, ⑦, ⑩, ⑬             |            |
|                                                                                                                                      |                                                                                     | 73.50                    | 80.90 | 89.40 | □     | □     | □      | □      | □      | 322.–  | 363.–  | 420.–  | 470.–  | 525.–  | Only for:     | ②, ④, ⑦, ⑩, ⑬             |            |
| Regreasing device <sup>1)</sup>                                                                                                      | <b>L23</b>                                                                          | –                        | –     | –     | 317.– | 325.– | 336.–  | 363.–  | 383.–  | 430.–  | 478.–  | 573.–  | □      | □      | Not for:      | ②, ④, ⑦, ⑩, ⑬             |            |
|                                                                                                                                      |                                                                                     | –                        | –     | –     | 317.– | 325.– | 336.–  | □      | □      | □      | □      | □      | □      | □      | Only for:     | ②, ④, ⑦, ⑩, ⑬             |            |
| Reinforced bearings at both ends for DE and NDE, bearing size 63 <sup>19)</sup>                                                      | <b>L25</b>                                                                          | 137.–                    | 168.– | 203.– | 203.– | 237.– | 265.–  | 353.–  | 468.–  | 576.–  | 819.–  | 1130.– | □      | □      | Not for:      | ②, ④, ⑦, ⑩, ⑬             |            |
|                                                                                                                                      | –                                                                                   | □                        | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | □      | Only for:     | ②, ④, ⑦, ⑩, ⑬             |            |
| Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces                                                   | <b>L28</b>                                                                          | –                        | –     | –     | –     | –     | –      | –      | 747.–  | 900.–  | 1170.– | 1550.– | –      | –      |               |                           |            |
| Bearing insulation DE                                                                                                                | <b>L50</b>                                                                          | –                        | –     | –     | –     | –     | –      | –      | –      | –      | 1760.– | 1890.– | 1960.– | 2050.– |               |                           |            |
| Bearing insulation NDE                                                                                                               | <b>L51</b>                                                                          | –                        | –     | –     | 541.– | 561.– | 1250.– | 1300.– | 1350.– | 1370.– | 1760.– | 1890.– | 1960.– | 2050.– |               |                           |            |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>1)</sup>                                                | <b>Q01</b>                                                                          | –                        | –     | –     | 257.– | 288.– | 317.–  | 350.–  | 377.–  | 408.–  | 439.–  | 468.–  | 498.–  | 528.–  |               |                           |            |
| <b>Balance and vibration quantity</b>                                                                                                |                                                                                     |                          |       |       |       |       |        |        |        |        |        |        |        |        |               |                           |            |
| Vibration quantity level A                                                                                                           |                                                                                     | □                        | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | □      |               |                           |            |
| Vibration quantity level B <sup>20)</sup>                                                                                            | <b>L00</b>                                                                          | 242.–                    | 255.– | 270.– | 284.– | 327.– | 419.–  | 519.–  | 814.–  | 819.–  | 900.–  | 1140.– | 1340.– | 1710.– |               |                           |            |
| Half-key balancing (standard)                                                                                                        |                                                                                     | □                        | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | □      | □      |               |                           |            |
| Balancing without key                                                                                                                | <b>L01</b>                                                                          | 21.80                    | 21.80 | 21.80 | 28.40 | 28.40 | 33.60  | 33.60  | 43.70  | 43.70  | 59.30  | 59.30  | 72.10  | 83.60  |               |                           |            |
| Full-key balancing                                                                                                                   | <b>L02</b>                                                                          | 96.10                    | 96.10 | 111.– | 111.– | 111.– | 129.–  | 129.–  | 162.–  | 162.–  | 209.–  | 209.–  | 209.–  | 209.–  |               |                           |            |
| <b>Shaft and rotor</b>                                                                                                               |                                                                                     |                          |       |       |       |       |        |        |        |        |        |        |        |        |               |                           |            |
| Shaft extension with standard dimensions, without feather keyway                                                                     | <b>L04</b>                                                                          | 439.–                    | 468.– | 496.– | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.– |               |                           |            |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347                                              | <b>L05</b>                                                                          | 84.90                    | 97.80 | 97.80 | 143.– | 143.– | 189.–  | 217.–  | 328.–  | 364.–  | 384.–  | 400.–  | 473.–  | 519.–  |               |                           |            |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                 | <b>L06</b>                                                                          | 126.–                    | 126.– | 147.– | 168.– | 232.– | 357.–  | 567.–  | 675.–  | 1010.– | 1390.– | 1650.– | 2750.– | 3360.– |               |                           |            |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | <b>L07</b>                                                                          | 244.–                    | 244.– | 244.– | 268.– | 268.– | 408.–  | 408.–  | 211.–  | 238.–  | 283.–  | 370.–  | 370.–  | 565.–  |               |                           |            |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | <b>L08</b>                                                                          | 151.–                    | 180.– | 211.– | 241.– | 270.– | 302.–  | 374.–  | 452.–  | 527.–  | 601.–  | 676.–  | 754.–  | 827.–  |               |                           |            |
| Non-standard shaft extension, DE <sup>21)</sup>                                                                                      | <b>Y58 •</b> and customer specifications                                            | 439.–                    | 468.– | 496.– | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.– |               |                           |            |
| Non-standard shaft extension, NDE <sup>21)</sup>                                                                                     | <b>Y59 •</b> and customer specifications                                            | 439.–                    | 468.– | 496.– | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.– |               |                           |            |
| Special shaft steel as requested by customer                                                                                         | <b>Y60 •</b> and customer specifications                                            | –                        | –     | –     | O. R. | O. R. | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  |               |                           |            |

For legends and footnotes, see Page 1/86.

**SIMOTICS SD 1LE1 Standard Motors**

Article No. supplements and special versions

**2****10****15****20****>30****On request****Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line**

| Special versions                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |       |       |       |       |       |       |       |       |       |       |       |       |        | Motor version                       |            |            |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------------------------------------|------------|------------|
|                                                                                                                    |                                                                                     | 71                       | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   |        |                                     |            |            |
|                                                                                                                    |                                                                                     | 1LE1504 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | IEC                                 | IE4        | ①          |
|                                                                                                                    |                                                                                     | 1LE1604 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     |            | ②          |
|                                                                                                                    |                                                                                     | 1LE1503 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | IE3                                 | ③          |            |
|                                                                                                                    |                                                                                     | 1LE1603 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     | ④          |            |
|                                                                                                                    |                                                                                     | 1LE1583                  |       |       |       |       |       |       |       |       |       |       |       |       |        | ⑤                                   |            |            |
|                                                                                                                    |                                                                                     | 1LE1501 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | IE2                                 | ⑥          |            |
|                                                                                                                    |                                                                                     | 1LE1601 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     | ⑦          |            |
|                                                                                                                    |                                                                                     | 1LE1502 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | IE1                                 | ⑧          |            |
|                                                                                                                    |                                                                                     | 1LE1543 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     | APAC Line  | ⑨          |
|                                                                                                                    |                                                                                     | 1LE1643 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |        | ⑩                                   |            |            |
|                                                                                                                    |                                                                                     | 1LE1541 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | IE2                                 | ⑪          |            |
|                                                                                                                    |                                                                                     | 1LE1523 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     | Eagle Line | NPE (NEMA) |
|                                                                                                                    |                                                                                     | 1LE1623 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |        | ⑬                                   |            |            |
|                                                                                                                    |                                                                                     | 1LE1521 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |        | NEE (NEMA)                          |            |            |
| 1LE1 . . . . . -Z                                                                                                  |                                                                                     | Order code               |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     |            |            |
| Heating and ventilation                                                                                            |                                                                                     |                          |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     |            |            |
| Sheet metal fan cover                                                                                              | F74                                                                                 |                          | □     | □     | □     | 67.90 | 73.70 | 79.40 | 85.–  | 85.–  | 104.– | 116.– | 167.– | 214.– | 236.–  | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |            |            |
|                                                                                                                    | –                                                                                   |                          | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □      | Only for: ②, ④, ⑦, ⑩, ⑬             |            |            |
| Metal external fan <sup>22) 28)</sup>                                                                              | F76                                                                                 |                          | 150.– | 150.– | 150.– | 189.– | 224.– | 261.– | 302.– | 339.– | 374.– | 413.– | 452.– | 489.– | 527.–  |                                     |            |            |
| Without external fan and without fan cover                                                                         | F90                                                                                 |                          | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.– | 118.–  |                                     |            |            |
| Anti-condensation heating for 230 V (2 terminals)                                                                  | Q02                                                                                 |                          | 414.– | 414.– | 414.– | 430.– | 459.– | 519.– | 576.– | 639.– | 734.– | 881.– | 910.– | 910.– | 948.–  |                                     |            |            |
| Anti-condensation heating for 115 V (2 terminals)                                                                  | Q03                                                                                 |                          | 414.– | 414.– | 414.– | 430.– | 459.– | 519.– | 576.– | 639.– | 734.– | 881.– | 910.– | 910.– | 948.–  |                                     |            |            |
| Separately driven fan with non-standard voltage and/or frequency                                                   | Y81 • and customer specifications                                                   |                          | –     | –     | –     | –     | –     | –     | –     | –     | –     | 483.– | 609.– | 779.– | 1010.– |                                     |            |            |
| Rating plate and extra rating plates                                                                               |                                                                                     |                          |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     |            |            |
| Extra rating plate for voltage tolerance <sup>23)</sup>                                                            | B07                                                                                 |                          | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 69.40 | 69.40 | 69.40 | 86.60 | 86.60 | 109.–  | Not for: 8-pole motors              |            |            |
| Second rating plate, loose                                                                                         | M10                                                                                 |                          | 21.10 | 21.10 | 21.10 | 21.10 | 21.10 | 21.10 | 21.10 | 67.60 | 67.60 | 67.60 | 67.60 | 67.60 | 67.60  |                                     |            |            |
| Rating plate, stainless steel                                                                                      | M11                                                                                 |                          | 42.20 | 42.20 | 42.20 | 42.20 | 42.20 | 42.20 | 42.20 | 51.60 | 51.60 | 69.40 | 69.40 | 69.40 | 69.40  | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |            |            |
|                                                                                                                    |                                                                                     |                          | –     | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | Only for: ④, ⑦, ⑩, ⑬                |            |            |
|                                                                                                                    | –                                                                                   |                          | –     | –     | –     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □      | Only for: ②                         |            |            |
| Extra rating plate with deviating rating plate data                                                                | Y80 • and customer specifications                                                   |                          | 73.50 | 73.50 | 73.50 | 105.– | 105.– | 105.– | 105.– | 158.– | 158.– | 210.– | 210.– | 210.– | 210.–  |                                     |            |            |
| Extra rating plate with customer specifications                                                                    | Y82 • and customer specifications                                                   |                          | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 69.40 | 69.40 | 69.40 | 86.30 | 86.30 | 109.–  |                                     |            |            |
| Additional information on rating plate and on package label (max. 20 characters)                                   | Y84 • and customer specifications                                                   |                          | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 41.50 | 69.40 | 69.40 | 69.40 | 86.60 | 86.60 | 109.–  |                                     |            |            |
| Adhesive label, supplied loose (contents: Article No., Serial No.; 2 lines of text)                                | Y85 • and customer specifications                                                   |                          | –     | –     | –     | 41.50 | 41.50 | 41.50 | 41.50 | 67.60 | 67.60 | 67.60 | 67.60 | 67.60 | 67.60  |                                     |            |            |
| Extension of the liability for defects                                                                             |                                                                                     |                          |       |       |       |       |       |       |       |       |       |       |       |       |        |                                     |            |            |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery <sup>24)</sup> | Q80                                                                                 |                          | –     | –     | –     | –     | –     | –     | –     | 2.3 % | 2.3 % | 2.3 % | 2.3 % | 2.3 % | 2.3 %  | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |            |            |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>24)</sup> | Q82                                                                                 |                          | –     | –     | –     | –     | –     | –     | –     | 4.6 % | 4.6 % | 4.6 % | 4.6 % | 4.6 % | 4.6 %  | Only for: ①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭ |            |            |
|                                                                                                                    | –                                                                                   |                          | –     | –     | –     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □      | Only for: ②, ④, ⑦, ⑩, ⑬, 36 months  |            |            |

For legends and footnotes, see Page 1/86.

Standard delivery times in working days:

2

10

15

20

&gt;30

On  
request

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

| Special versions                                                           | Additional identification code -Z with order code and plain text if required | Frame size               |        |        |        |        |        |        |         |         |         |         |         | Motor version |            |   |  |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------------|------------|---|--|
|                                                                            |                                                                              | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180     | 200     | 225     | 250     | 280     | 315           |            |   |  |
|                                                                            |                                                                              | 1LE1504 Basic Line       |        |        |        |        |        |        |         |         |         |         |         | IEC           | IE4        | ① |  |
|                                                                            |                                                                              | 1LE1604 Performance Line |        |        |        |        |        |        |         |         |         |         |         |               |            | ② |  |
|                                                                            |                                                                              | 1LE1503 Basic Line       |        |        |        |        |        |        |         |         |         |         |         |               | IE3        | ③ |  |
|                                                                            |                                                                              | 1LE1603 Performance Line |        |        |        |        |        |        |         |         |         |         |         |               |            | ④ |  |
|                                                                            |                                                                              | 1LE1583                  |        |        |        |        |        |        |         |         |         |         |         |               |            | ⑤ |  |
|                                                                            |                                                                              | 1LE1501 Basic Line       |        |        |        |        |        |        |         |         |         |         |         | IE2           |            | ⑥ |  |
|                                                                            |                                                                              | 1LE1601 Performance Line |        |        |        |        |        |        |         |         |         |         |         |               |            | ⑦ |  |
|                                                                            |                                                                              | 1LE1502 Basic Line       |        |        |        |        |        |        |         |         |         |         |         |               | IE1        | ⑧ |  |
|                                                                            |                                                                              | 1LE1543 Basic Line       |        |        |        |        |        |        |         |         |         |         |         | APAC Line     | IE3        | ⑨ |  |
|                                                                            |                                                                              | 1LE1643 Performance Line |        |        |        |        |        |        |         |         |         |         |         |               |            | ⑩ |  |
|                                                                            |                                                                              | 1LE1541 Basic Line       |        |        |        |        |        |        |         |         |         |         |         |               | IE2        | ⑪ |  |
|                                                                            |                                                                              | 1LE1523 Basic Line       |        |        |        |        |        |        |         |         |         |         |         | Eagle Line    | NPE (NEMA) | ⑫ |  |
|                                                                            |                                                                              | 1LE1623 Performance Line |        |        |        |        |        |        |         |         |         |         |         |               |            | ⑬ |  |
|                                                                            |                                                                              | 1LE1521 Basic Line       |        |        |        |        |        |        |         |         |         |         |         |               | NEE (NEMA) | ⑭ |  |
| 1LE1 ... - ... - ... -Z                                                    |                                                                              | Order code               |        |        |        |        |        |        |         |         |         |         |         |               |            |   |  |
| Packaging, safety notes, documentation and test certificates               |                                                                              |                          |        |        |        |        |        |        |         |         |         |         |         |               |            |   |  |
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>25)</sup> | B02                                                                          | 28.70                    | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  | 28.70   | 28.70   | 28.70   | 28.70   | 28.70   | 28.70         |            |   |  |
| Document – Electrical data sheet                                           | B60                                                                          | 315.–                    | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   | 315.–   | 315.–   | 315.–         |            |   |  |
| Document – Order dimensional drawing                                       | B61                                                                          | 315.–                    | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   | 315.–   | 315.–   | 315.–         |            |   |  |
| Standard test (routine test) with acceptance                               | B65                                                                          | –                        | –      | –      | 3890.– | 3890.– | 3890.– | 3890.– | 3890.–  | 3890.–  | 3890.–  | 3890.–  | 3890.–  | 3890.–        |            |   |  |
| Type test with heat run for horizontal motors, without acceptance          | B82                                                                          | 3390.–                   | 4160.– | 4940.– | 5710.– | 6500.– | 7270.– | 8050.– | 8820.–  | 9600.–  | 10400.– | 11100.– | 11900.– | 12800.–       |            |   |  |
| Type test with heat run for horizontal motors, with acceptance             | B83                                                                          | 4960.–                   | 5730.– | 6520.– | 7290.– | 8070.– | 8840.– | 9620.– | 10400.– | 11200.– | 11900.– | 12800.– | 13500.– | 14300.–       |            |   |  |
| Documentation package “Basic”                                              | B90                                                                          | 609.–                    | 609.–  | 609.–  | 609.–  | 609.–  | 609.–  | 609.–  | 609.–   | 609.–   | 609.–   | 609.–   | 609.–   | 609.–         |            |   |  |
| Documentation package “Advanced”                                           | B91                                                                          | 924.–                    | 924.–  | 924.–  | 924.–  | 924.–  | 924.–  | 924.–  | 924.–   | 924.–   | 924.–   | 924.–   | 924.–   | 924.–         |            |   |  |
| Documentation package “Projects”                                           | B92                                                                          | 2520.–                   | 2520.– | 2520.– | 2520.– | 2520.– | 2520.– | 2520.– | 2520.–  | 2520.–  | 2520.–  | 2520.–  | 2520.–  | 2520.–        |            |   |  |
| Connected in star for dispatch                                             | M01                                                                          | 24.–                     | 24.–   | 24.–   | 28.90  | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   | 46.90   | 46.90   | 46.90         |            |   |  |
| Connected in delta for dispatch                                            | M02                                                                          | 24.–                     | 24.–   | 24.–   | 28.90  | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   | 46.90   | 46.90   | 46.90         |            |   |  |

For legends and footnotes, see Page 1/86.

# SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

1

## Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

- 1) Up to frame size 160 not possible when brake is mounted.
- 2) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 3) Parallel Whitworth pipe thread DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) Pipe thread for connections not sealed in the thread (cylindrical), external = G.
- 4) Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 5) Not possible for 1LE15 and 1LE16 motors with increased power.
- 6) A second shaft extension is not possible. Please inquire for mounted brakes.
- 7) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 8) The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 9) In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 10) The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 11) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB. This option cannot be used in combination with brakes of type 2LM8.
- 12) Order code **H00** provides mechanical protection for encoders.
- 13) Not possible for type of construction IM V3.
- 14) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 15) Not possible in combination with brake 2LM8 – order code **F01**.
- 16) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 17) The rated voltage is indicated on the rating plate without voltage range. Order code **D40** does not authorize importing into Canada. The North America export versions Eagle Line 1LE1521 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient are available for this purpose.
- 18) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** do not authorize importing into USA and Mexico. The North America export versions Eagle Line 1LE1521 NEMA Energy Efficient and 1LE1523/1LE1623 NEMA Premium Efficient are available for this purpose.
- 19) For Performance Line motors (all frame sizes) and Basic Line motors (from frame size 280) in the standard version.
- 20) On request for 2-pole motors (concerns frame sizes 225 to 315).
- 21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with EN 50347, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
  - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
  - Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension.
- 22) Converter operation is permitted for 1LE1 motors with metal external fans.
- 23) Can be ordered for 230 VΔ/400 VY or 400 VD/690 VY (voltage code "**22**" or "**34**"). Not possible for 8-pole motors and in combination with order code **D34**.
- 24) Wear parts (bearings) are excluded from the warranty extension.
- 25) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 26) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WWW/view/en/40761976>.
- 27) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 28) Order codes **F70** and **F76** cannot be combined.
- 29) Not possible in combination with order codes **Q72** and **Q78**.
- 30) For frame sizes 100 to 132 only possible in combination with order code **R50**.
- 31) Not possible in combination with order codes **N05**, **N06**, **N07**, **N08** and **N11**.
- 32) For frame size 315, when combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.
- 33) Order code **S06** cannot be combined with order code **S00**, **S01** and **S02**. It can be combined with **Y53** and **Y56** on request.
- 34) Order codes **F70** (separately driven fan) and **H02** (vibration-proof version) cannot be combined for motors in frame sizes 71, 80 and 90.
- 35) Please note the additional use of order code **D22** "Motor without CE marking for export outside EEA (see EU Directive 640/2009)".
- 36) A minimum cantilever force  $F_{\min}$  of  $0.5 \cdot F_{\max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.
- 37) Order code **R62** is only possible in combination with **R50**.
- 38) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 39) Not possible in combination with order code **R50**.
- 40) Not UL-certified. Not possible in combination with the option **D31**.
- 41) With IM B5 flange, only possible in combination with the option **H08**.

Standard delivery times in working days:

40

50

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

1

**Selection and ordering data**

| Special versions                                                                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |       |       |       |       |       |         |        |        |        |        |        | Motor version |                                                                                         |  |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|-------|-------|-------|-------|-------|---------|--------|--------|--------|--------|--------|---------------|-----------------------------------------------------------------------------------------|--|
|                                                                                         |                                                                                     | 80                 | 90    | 100   | 112   | 132   | 160   | 180     | 200    | 225    | 250    | 280    | 315    | IEC           | IE3                                                                                     |  |
|                                                                                         |                                                                                     | 1LE1073 Basic Line |       |       |       |       |       |         |        |        |        |        |        |               |                                                                                         |  |
|                                                                                         |                                                                                     |                    |       |       |       |       |       | 1LE1573 |        |        |        |        |        |               |                                                                                         |  |
| 1LE .... -Z                                                                             | Order code                                                                          | 1LE5773            |       |       |       |       |       |         |        |        |        |        |        |               |                                                                                         |  |
| Motor protection                                                                        |                                                                                     |                    |       |       |       |       |       |         |        |        |        |        |        |               |                                                                                         |  |
| 1 or 3 PTC thermistors – for tripping (2 terminals)                                     | Q11                                                                                 |                    | 37.10 | 43.50 | 119.– | 119.– | 180.– | 180.–   | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  | 406.–         |                                                                                         |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals)                           | Q12                                                                                 |                    | 176.– | 176.– | 205.– | 205.– | 274.– | 274.–   | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | 679.–         |                                                                                         |  |
| 1 temperature sensor KTY84-130 (2 terminals)                                            | Q23                                                                                 |                    | 105.– | 105.– | 119.– | 119.– | 180.– | 180.–   | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–         |                                                                                         |  |
| 2 temperature sensors KTY84-130 (4 terminals)                                           | Q25                                                                                 |                    | 211.– | 211.– | 241.– | 241.– | 359.– | 359.–   | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.–        |                                                                                         |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals)                               | Q31                                                                                 |                    | 117.– | 117.– | 134.– | 134.– | 196.– | 196.–   | 270.–  | 270.–  | 365.–  | 365.–  | 453.–  | 453.–         |                                                                                         |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                     | Q32                                                                                 |                    | 210.– | 210.– | 241.– | 241.– | 352.– | 352.–   | 477.–  | 477.–  | 647.–  | 647.–  | 801.–  | 801.–         |                                                                                         |  |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                               | Q33                                                                                 |                    | –     | –     | –     | –     | –     | –       | 281.–  | 281.–  | 376.–  | 376.–  | 463.–  | 463.–         |                                                                                         |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)                    | Q34                                                                                 |                    | –     | –     | –     | –     | –     | –       | 488.–  | 488.–  | 658.–  | 658.–  | 811.–  | 811.–         |                                                                                         |  |
| 1 Pt1000 resistance thermometer (2 terminals)                                           | Q35                                                                                 |                    | 105.– | 105.– | 119.– | 119.– | 180.– | 180.–   | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–         |                                                                                         |  |
| 2 Pt1000 resistance thermometers (4 terminals)                                          | Q36                                                                                 |                    | 211.– | 211.– | 241.– | 241.– | 359.– | 359.–   | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.–        |                                                                                         |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                          | Q60                                                                                 |                    | –     | –     | –     | –     | –     | –       | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– | 1670.–        |                                                                                         |  |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>19)</sup>          | Q61                                                                                 |                    | –     | –     | –     | –     | –     | –       | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.–        |                                                                                         |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                           | Q62                                                                                 |                    | –     | –     | –     | –     | –     | –       | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.–        |                                                                                         |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>22)</sup>           | Q63                                                                                 |                    | –     | –     | –     | –     | –     | –       | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.–        |                                                                                         |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>22)</sup>          | Q64                                                                                 |                    | –     | –     | –     | –     | –     | –       | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.–        |                                                                                         |  |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>2)</sup> | Q72                                                                                 |                    | –     | –     | –     | –     | –     | –       | 4300.– | 4300.– | 4300.– | 4300.– | 4300.– | 4300.–        |                                                                                         |  |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)              | Q78                                                                                 |                    | –     | –     | –     | –     | –     | –       | 4730.– | 4730.– | 4730.– | 4730.– | 4730.– | 4730.–        |                                                                                         |  |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)      | Q79                                                                                 |                    | –     | –     | –     | –     | –     | –       | 5670.– | 5670.– | 5670.– | 5670.– | 5670.– | 5670.–        | Not for:<br>Motors in combination with order codes F40 and F41 (frame sizes 225 to 315) |  |
| Motor connection and terminal box                                                       |                                                                                     |                    |       |       |       |       |       |         |        |        |        |        |        |               |                                                                                         |  |
| External grounding                                                                      | H04                                                                                 |                    | 24.–  | 24.–  | 28.90 | 28.90 | 28.90 | 28.90   | □      | □      | □      | □      | □      | □             |                                                                                         |  |
| Terminal box on NDE <sup>19)</sup>                                                      | H08                                                                                 |                    | O. R. | O. R. | O. R. | O. R. | O. R. | O. R.   | O. R.  | O. R.  | 1050.– | 1100.– | 1150.– | 1200.–        |                                                                                         |  |
| Second external grounding                                                               | H70                                                                                 |                    | –     | –     | –     | –     | –     | –       | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80         |                                                                                         |  |
| Rotation of the terminal box through 90°, entry from DE <sup>30)</sup>                  | R10                                                                                 |                    | O     | O     | O     | O     | O     | O       | 45.10  | 58.40  | 72.10  | 86.60  | 103.–  | 124.–         |                                                                                         |  |
| Rotation of the terminal box through 90°, entry from NDE                                | R11                                                                                 |                    | O     | O     | O     | O     | O     | O       | 45.10  | 58.40  | 72.10  | 86.60  | 103.–  | 124.–         |                                                                                         |  |
| Rotation of the terminal box through 180°                                               | R12                                                                                 |                    | O     | O     | O     | O     | O     | O       | 45.10  | 58.40  | 72.10  | 86.60  | 103.–  | 124.–         |                                                                                         |  |
| One EMC cable gland                                                                     | R14                                                                                 |                    | 68.30 | 68.30 | 125.– | 125.– | 125.– | 174.–   | 174.–  | 299.–  | 299.–  | 529.–  | 529.–  | 529.–         |                                                                                         |  |
| One metal cable gland                                                                   | R15                                                                                 |                    | 59.80 | 59.80 | 112.– | 112.– | 112.– | 143.–   | 143.–  | 165.–  | 165.–  | 236.–  | 236.–  | 236.–         |                                                                                         |  |
| EMC cable gland, maximum configuration                                                  | R16                                                                                 |                    | 137.– | 137.– | 250.– | 250.– | 250.– | 362.–   | 362.–  | 610.–  | 610.–  | 1090.– | 1090.– | 1090.–        |                                                                                         |  |
| Stud terminal for cable connection, accessories pack (3 items)                          | R17                                                                                 |                    | –     | –     | –     | –     | –     | –       | –      | –      | –      | 150.–  | 150.–  | 189.–         |                                                                                         |  |
| One metal cable gland, maximum configuration                                            | R18                                                                                 |                    | 86.20 | 86.20 | 159.– | 159.– | 159.– | 209.–   | 209.–  | 241.–  | 241.–  | 417.–  | 417.–  | 417.–         |                                                                                         |  |
| Saddle terminal for connection without cable lug, accessories pack                      | R19                                                                                 |                    | –     | –     | –     | –     | –     | –       | –      | –      | –      | 735.–  | 735.–  | 735.–         |                                                                                         |  |

For legends, see Page 1/92, for footnotes, see Page 1/93.

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**40****50****Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Special versions                                                                                                  | Additional identification code -Z with order code and plain text if required | Frame size                |       |       |       |       |       |                |       |        |                |        |        | Motor version |     |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------|-------|-------|-------|-------|-------|----------------|-------|--------|----------------|--------|--------|---------------|-----|
|                                                                                                                   |                                                                              | 80                        | 90    | 100   | 112   | 132   | 160   | 180            | 200   | 225    | 250            | 280    | 315    | IEC           | IE3 |
|                                                                                                                   |                                                                              | <b>1LE1073 Basic Line</b> |       |       |       |       |       | <b>1LE1573</b> |       |        |                |        |        |               |     |
|                                                                                                                   |                                                                              |                           |       |       |       |       |       |                |       |        | <b>1LE5773</b> |        |        |               |     |
| <b>1LE .... - ..... -Z</b>                                                                                        | Order code                                                                   |                           |       |       |       |       |       |                |       |        |                |        |        |               |     |
| <b>Motor connection and terminal box (continued)</b>                                                              |                                                                              |                           |       |       |       |       |       |                |       |        |                |        |        |               |     |
| 3 cables protruding, 0.5 m long                                                                                   | <b>R20</b>                                                                   | 57.30                     | 57.30 | 68.70 | 82.40 | 101.– | 118.– | 143.–          | –     | –      | –              | –      | –      |               |     |
| 3 cables protruding, 1.5 m long                                                                                   | <b>R21</b>                                                                   | 69.40                     | 69.40 | 82.90 | 99.70 | 121.– | 144.– | O. R.          | O. R. | O. R.  | O. R.          | O. R.  | O. R.  |               |     |
| 6 cables protruding, 0.5 m long                                                                                   | <b>R22</b>                                                                   | 88.80                     | 88.80 | 106.– | 128.– | 158.– | 186.– | 222.–          | –     | –      | –              | –      | –      |               |     |
| 6 cables protruding, 1.5 m long                                                                                   | <b>R23</b>                                                                   | 113.–                     | 113.– | 136.– | 164.– | 199.– | 237.– | O. R.          | O. R. | O. R.  | O. R.          | O. R.  | O. R.  |               |     |
| 6 cables protruding, 3 m long                                                                                     | <b>R24</b>                                                                   | 181.–                     | 181.– | 218.– | 257.– | 322.– | 386.– | O. R.          | O. R. | O. R.  | O. R.          | O. R.  | O. R.  |               |     |
| 12 cables freely brought out with cable lugs                                                                      | <b>R31</b>                                                                   | □                         | □     | □     | □     | □     | □     | □              | □     | □      | □              | □      | □      |               |     |
| Larger terminal box                                                                                               | <b>R50</b>                                                                   | 103.–                     | 103.– | 214.– | 214.– | 274.– | 313.– | 475.–          | 523.– | 1660.– | 1900.–         | 1900.– | 2230.– |               |     |
| Terminal box without cable entry opening                                                                          | <b>R51</b>                                                                   | –                         | –     | –     | –     | –     | –     | O              | O     | O      | O              | O      | O      |               |     |
| Drilled removable entry plate                                                                                     | <b>R52</b>                                                                   | –                         | –     | –     | –     | –     | –     | 273.–          | 294.– | 294.–  | 489.–          | 489.–  | 510.–  |               |     |
| Undrilled removable entry plate                                                                                   | <b>R53</b>                                                                   | –                         | –     | –     | –     | –     | –     | 273.–          | 294.– | 294.–  | 489.–          | 489.–  | 510.–  |               |     |
| Cast-iron auxiliary terminal box (small) <sup>22)</sup>                                                           | <b>R62</b>                                                                   | –                         | –     | –     | –     | –     | 284.– | 284.–          | 284.– | 284.–  | 284.–          | 284.–  | 284.–  |               |     |
| Cast-iron auxiliary terminal box (large)                                                                          | <b>R63</b>                                                                   | –                         | –     | –     | –     | –     | –     | –              | –     | –      | –              | –      | 630.–  |               |     |
| Silicon-free version                                                                                              | <b>R74</b>                                                                   | –                         | –     | □     | □     | □     | □     | □              | □     | □      | 357.–          | 357.–  | 357.–  |               |     |
| Non-standard threaded through hole (NPT or G thread)                                                              | <b>Y61 •</b><br>and customer specifications                                  | –                         | –     | –     | –     | –     | –     | 203.–          | 270.– | 338.–  | 402.–          | 541.–  | 670.–  |               |     |
| <b>Windings and insulation</b>                                                                                    |                                                                              |                           |       |       |       |       |       |                |       |        |                |        |        |               |     |
| Temperature class 155 (F), utilized acc. to 155 (F), with service factor                                          | <b>N01</b>                                                                   | 42.–                      | 42.–  | 48.30 | 48.30 | 64.30 | 64.30 | 81.90          | 81.90 | 93.10  | 93.10          | 109.–  | 109.–  |               |     |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased power                                         | <b>N02</b>                                                                   | 42.–                      | 42.–  | 48.30 | 48.30 | 64.30 | 64.30 | 81.90          | 81.90 | 93.10  | 93.10          | 109.–  | 109.–  |               |     |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature                           | <b>N03</b>                                                                   | 41.50                     | 41.50 | 48.30 | 48.30 | 64.30 | 64.30 | 81.90          | 81.90 | 93.10  | 93.10          | 109.–  | 109.–  |               |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %              | <b>N05</b>                                                                   | 41.50                     | 41.50 | 48.30 | 48.30 | 64.30 | 64.30 | 81.90          | 81.90 | 93.10  | 93.10          | 109.–  | 109.–  |               |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %              | <b>N06</b>                                                                   | 41.50                     | 41.50 | 48.30 | 48.30 | 64.30 | 64.30 | 81.90          | 81.90 | 93.10  | 93.10          | 109.–  | 109.–  |               |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %             | <b>N07</b>                                                                   | 74.40                     | 87.50 | 108.– | 132.– | 167.– | 208.– | 268.–          | 326.– | 483.–  | 609.–          | 779.–  | 1010.– |               |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %             | <b>N08</b>                                                                   | 74.40                     | 87.50 | 108.– | 132.– | 167.– | 208.– | 268.–          | 326.– | 483.–  | 609.–          | 779.–  | 1010.– |               |     |
| Temperature class 180 (H)                                                                                         | <b>N10</b>                                                                   | O. R.                     | O. R. | O. R. | O. R. | O. R. | O. R. | O. R.          | O. R. | 967.–  | 1260.–         | 1520.– | 1790.– |               |     |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>4)</sup>                                          | <b>N11</b>                                                                   | 220.–                     | 220.– | 257.– | 305.– | 405.– | 494.– | 702.–          | 982.– | 1200.– | 1470.–         | 1790.– | 2200.– |               |     |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air                                | <b>N30</b>                                                                   | 137.–                     | 137.– | 137.– | 137.– | 137.– | 210.– | 305.–          | 420.– | 652.–  | 872.–          | 1100.– | 1350.– |               |     |
| Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air                               | <b>N31</b>                                                                   | 220.–                     | 220.– | 220.– | 252.– | 284.– | 399.– | 515.–          | 662.– | 935.–  | 1200.–         | 1520.– | 1820.– |               |     |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude | <b>Y50 •</b><br>and spec. power, CT ... °C or IA .... m above sea level      | –                         | –     | 162.– | 196.– | 252.– | 310.– | 401.–          | 493.– | 725.–  | 912.–          | 1160.– | 1510.– |               |     |

Standard delivery times in working days:

40

50

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |        |        |        |        |        |         |        |        |         |         |         | Motor version |     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------|--------|--------|--------|--------|---------|--------|--------|---------|---------|---------|---------------|-----|--|
|                                                                                                                                                                                                                                                                                             |                                                                                     | 80                 | 90     | 100    | 112    | 132    | 160    | 180     | 200    | 225    | 250     | 280     | 315     | IEC           | IE3 |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE1073 Basic Line |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |                    |        |        |        |        |        | 1LE1573 |        |        |         |         |         |               |     |  |
| 1LE .....-Z                                                                                                                                                                                                                                                                                 |                                                                                     | Order code         |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
| Windings and insulation (continued)                                                                                                                                                                                                                                                         |                                                                                     |                    |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
| Temperature class 155 (F), utilized according to 155 (F), other requirements                                                                                                                                                                                                                | Y52 • and spec. power, CT .. °C or IA ..... m above sea level                       |                    | 41.50  | 41.50  | 48.30  | 48.30  | 64.30  | 64.30   | 81.90  | 81.90  | 93.50   | 93.50   | 109.–   | 109.–         |     |  |
| Temperature class 180 (H), utilized according to 155 (F)                                                                                                                                                                                                                                    | Y75 • and spec. power, CT .. °C or IA ..... m above sea level                       | –                  | –      | O. R.  | O. R.  | O. R.  | O. R.  | 909.–   | 982.–  | 1430.– | 1640.–  | 2280.–  | 2460.–  |               |     |  |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                                     |                    |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                                 |                    | O      | O      | O      | O      | O      | O       | O      | O      | O       | O       | O       |               |     |  |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                                 |                    | 20.90  | 27.80  | 27.80  | 27.80  | 44.40  | 44.40   | 83.30  | 83.30  | 83.30   | 83.30   | 83.30   | 83.30         |     |  |
| Special finish C3                                                                                                                                                                                                                                                                           |                                                                                     |                    | □      | □      | □      | □      | □      | □       | □      | □      | □       | □       | □       |               |     |  |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | S03                                                                                 |                    | 504.–  | 504.–  | 536.–  | 536.–  | 589.–  | 589.–   | 630.–  | 672.–  | 714.–   | 757.–   | 799.–   | 830.–         |     |  |
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | S04                                                                                 |                    | –      | –      | –      | –      | –      | –       | 2640.– | 2770.– | 3200.–  | 4170.–  | 5220.–  | 8070.–        |     |  |
| Internal coating                                                                                                                                                                                                                                                                            | S05                                                                                 |                    | 89.40  | 89.40  | 89.40  | 89.40  | 89.40  | 89.40   | 89.40  | 89.40  | 89.40   | 110.–   | 126.–   | 137.–         |     |  |
| Top coat polyurethane <sup>25)</sup>                                                                                                                                                                                                                                                        | S06                                                                                 |                    | 31.50  | 51.50  | 73.50  | 101.–  | 150.–  | 210.–   | 252.–  | 309.–  | 397.–   | 495.–   | 625.–   | 795.–         |     |  |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 “Introduction”) | Y53 • and finish RAL....                                                            |                    | 26.30  | 26.30  | 42.–   | 42.–   | 57.80  | 57.80   | 84.–   | 115.–  | 126.–   | 158.–   | 189.–   | 263.–         |     |  |
| Finish in special RAL colors: RAL colors, see “Special finish in special RAL colors” (see Catalog D 81.1 Section 1 “Introduction”)                                                                                                                                                          | Y56 • and finish RAL....                                                            |                    | 620.–  | 620.–  | 662.–  | 662.–  | 694.–  | 694.–   | 704.–  | 714.–  | 725.–   | 735.–   | 746.–   | 757.–         |     |  |
| Modular technology – Basic versions <sup>5)</sup>                                                                                                                                                                                                                                           |                                                                                     |                    |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
| Mounting of holding brake (standard assignment) <sup>6) 23) 24)</sup>                                                                                                                                                                                                                       | F01                                                                                 |                    | 468.–  | 562.–  | 657.–  | 799.–  | 1030.– | 2040.–  | 4510.– | 6300.– | 8010.–  | 25600.– | 31600.– | 37900.–       |     |  |
| Mounting of PRECIMA brake                                                                                                                                                                                                                                                                   | F04                                                                                 |                    | –      | –      | –      | –      | –      | –       | –      | –      | 14600.– | 17600.– | 24800.– | –             |     |  |
| Mounting of separately driven fan <sup>20) 26)</sup>                                                                                                                                                                                                                                        | F70                                                                                 |                    | 840.–  | 840.–  | 840.–  | 987.–  | 1070.– | 1240.–  | 1370.– | 2050.– | 2550.–  | 3180.–  | 3790.–  | 4270.–        |     |  |
| Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I                                                                                                                                                                                                                             | G11                                                                                 |                    | 748.–  | 793.–  | 838.–  | 895.–  | 941.–  | 986.–   | 1030.– | 1080.– | 1140.–  | 1190.–  | 1230.–  | 1280.–        |     |  |
| Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I                                                                                                                                                                                                                             | G12                                                                                 |                    | 1030.– | 1100.– | 1180.– | 1250.– | 1330.– | 1410.–  | 1480.– | 1550.– | 1640.–  | 1710.–  | 1790.–  | 1860.–        |     |  |
| Modular technology – Additional versions                                                                                                                                                                                                                                                    |                                                                                     |                    |        |        |        |        |        |         |        |        |         |         |         |               |     |  |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                                | F10                                                                                 |                    | 35.20  | 35.20  | 52.90  | 52.90  | 52.90  | 52.90   | 70.60  | 70.60  | 70.60   | 70.60   | 70.60   | 70.60         |     |  |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                     | F11                                                                                 |                    | 35.20  | 35.20  | O      | O      | O      | O       | O      | O      | O       | O       | O       | O             |     |  |
| Brake supply voltage 400 V AC, 50/60 Hz <sup>24)</sup>                                                                                                                                                                                                                                      | F12                                                                                 |                    | 35.20  | 35.20  | 52.90  | 52.90  | 52.90  | 52.90   | 70.60  | 70.60  | 70.60   | 70.60   | 70.60   | 70.60         |     |  |
| Brake supply voltage DC 180 V                                                                                                                                                                                                                                                               | F17                                                                                 |                    | 35.20  | 35.20  | 52.90  | 52.90  | 52.90  | 52.90   | 70.60  | 70.60  | 70.60   | –       | –       | –             |     |  |
| Brake supply voltage DC 205 V                                                                                                                                                                                                                                                               | F18                                                                                 |                    | 35.20  | 35.20  | 52.90  | 52.90  | 52.90  | 52.90   | 70.60  | 70.60  | 70.60   | –       | –       | –             |     |  |
| Reverse running stop, reverse movement left locked, rotating direction right                                                                                                                                                                                                                | F40                                                                                 |                    | –      | –      | –      | –      | 5470.– | 5780.–  | 6080.– | 6080.– | 6300.–  | 6940.–  | 8040.–  | 9560.–        |     |  |
| Reverse running stop, reverse movement right locked, rotating direction left                                                                                                                                                                                                                | F41                                                                                 |                    | –      | –      | –      | –      | –      | –       | 6080.– | 6080.– | 6300.–  | 6940.–  | 8040.–  | 9560.–        |     |  |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                     | F50                                                                                 |                    | 250.–  | 250.–  | 264.–  | 264.–  | 294.–  | 426.–   | 620.–  | 723.–  | 868.–   | 987.–   | 1090.–  | –             |     |  |

For legends, see Page 1/92, for footnotes, see Page 1/93.

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Special versions                                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |        |        |        |        |        |         |         |         |         |         |         | Motor version |     |  |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------------|-----|--|
|                                                                                                                                                |                                                                                     | 80                 | 90     | 100    | 112    | 132    | 160    | 180     | 200     | 225     | 250     | 280     | 315     | IEC           | IE3 |  |
|                                                                                                                                                |                                                                                     | 1LE1073 Basic Line |        |        |        |        |        |         |         |         |         |         |         |               |     |  |
|                                                                                                                                                |                                                                                     |                    |        |        |        |        |        | 1LE1573 |         |         |         |         |         |               |     |  |
| 1LE .....-Z                                                                                                                                    | Order code                                                                          | 1LE5773            |        |        |        |        |        |         |         |         |         |         |         |               |     |  |
| Special technology <sup>5)</sup>                                                                                                               |                                                                                     |                    |        |        |        |        |        |         |         |         |         |         |         |               |     |  |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>7)</sup>                                                                                  | G04                                                                                 | –                  | –      | 3000.– | 3000.– | 3000.– | 3000.– | 3000.–  | 3000.–  | 4180.–  | 4180.–  | 4180.–  | 4180.–  |               |     |  |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>7)</sup>                                                                                 | G05                                                                                 | –                  | –      | 3540.– | 3540.– | 3540.– | 3540.– | 4570.–  | 4570.–  | 4950.–  | 4950.–  | 4950.–  | 4950.–  |               |     |  |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>7)</sup>                                                                                 | G06                                                                                 | –                  | –      | 4570.– | 4570.– | 4570.– | 4570.– | 4570.–  | 4570.–  | 6000.–  | 6000.–  | 6000.–  | 6000.–  |               |     |  |
| Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) <sup>8)</sup>                              | G07                                                                                 | –                  | –      | –      | –      | –      | –      | 6380.–  | 6410.–  | 6440.–  | 6490.–  | 6530.–  | 6590.–  |               |     |  |
| Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) <sup>8)</sup>                                 | G08                                                                                 | –                  | –      | –      | –      | –      | –      | 14700.– | 14900.– | 18000.– | 18000.– | 18000.– | 18000.– |               |     |  |
| Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection                                                            | G15                                                                                 | –                  | –      | –      | –      | –      | –      | 5730.–  | 5760.–  | 5800.–  | 5840.–  | 5900.–  | 5940.–  |               |     |  |
| Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box dust protection                                                                | G16                                                                                 | –                  | –      | –      | –      | –      | –      | 5730.–  | 5760.–  | 5800.–  | 5840.–  | 5900.–  | 5940.–  |               |     |  |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                                             | G21                                                                                 |                    | 2360.– | 2480.– | 2540.– | 2680.– | 2830.– | 3050.–  | 3210.–  | 3330.–  | 3430.–  | 3430.–  | 3430.–  | 3430.–        |     |  |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                                             | G22                                                                                 |                    | 2710.– | 2860.– | 2940.– | 3120.– | 3300.– | 3520.–  | 3630.–  | 3750.–  | 3880.–  | 3880.–  | 3880.–  | 3880.–        |     |  |
| Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder                                                                                      | G25                                                                                 | –                  | –      | –      | –      | –      | –      | –       | 14000.– | 14000.– | 17400.– | 17400.– | 17400.– | 17400.–       |     |  |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                                                 | G27                                                                                 | –                  | –      | –      | –      | –      | –      | –       | 15500.– | 15500.– | 20200.– | 20200.– | 20200.– | 20200.–       |     |  |
| Mounting of XSI 850 Overspeed rotary pulse encoder                                                                                             | G93                                                                                 | –                  | –      | –      | –      | –      | –      | –       | 6010.–  | 6030.–  | 6070.–  | 6100.–  | 6170.–  | 6220.–        |     |  |
| Mounting of XHI 861 Overspeed rotary pulse encoder                                                                                             | G94                                                                                 | –                  | –      | –      | –      | –      | –      | –       | 6010.–  | 6030.–  | 6070.–  | 6100.–  | 6170.–  | 6220.–        |     |  |
| Mounting of HOG 10 DN 1024 I + FSL rotary pulse encoder, (integrated centrifugal switch, speed .... rpm), terminal box moisture protection     | Y74 • and spec. speed .... rpm                                                      | –                  | –      | –      | –      | –      | –      | –       | 8810.–  | 8830.–  | 8870.–  | 8900.–  | 8970.–  | 9020.–        |     |  |
| Mounting of HOG 10 DN 1024 II + FSL rotary pulse encoder, (integrated centrifugal switch, speed .... rpm), terminal box dust protection        | Y76 • and spec. speed .... rpm                                                      | –                  | –      | –      | –      | –      | –      | –       | 8810.–  | 8830.–  | 8870.–  | 8900.–  | 8970.–  | 9020.–        |     |  |
| Mounting of HOG 10 DN 1024 I + ESL 93 rotary pulse encoder, (integrated electronic speed switch, speed .... rpm), terminal box dust protection | Y79 • and spec. speed (max. 3) .... rpm                                             | –                  | –      | –      | –      | –      | –      | –       | 15000.– | 15100.– | 15300.– | 15500.– | 15600.– | 15800.–       |     |  |
| Mechanical design and degrees of protection                                                                                                    |                                                                                     |                    |        |        |        |        |        |         |         |         |         |         |         |               |     |  |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                                       | F77                                                                                 | –                  | –      | –      | –      | 625.–  | 887.–  | 1150.–  | 1420.–  | 1670.–  | 1940.–  | 2200.–  | 2470.–  |               |     |  |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                               | F78                                                                                 | –                  | –      | –      | –      | 625.–  | 887.–  | 1150.–  | 1420.–  | 1670.–  | 1940.–  | 2200.–  | 2470.–  |               |     |  |
| Prepared for mountings, center hole only                                                                                                       | G40                                                                                 |                    | 70.10  | 70.10  | 70.10  | 70.10  | 93.–   | 107.–   | □       | □       | □       | □       | □       | □             |     |  |
| Prepared for mountings with D12 shaft                                                                                                          | G41                                                                                 |                    | 143.–  | 152.–  | 152.–  | 168.–  | 189.–  | 225.–   | 462.–   | 462.–   | 589.–   | 924.–   | 924.–   | 924.–         |     |  |
| Prepared for mountings with D16 shaft                                                                                                          | G42                                                                                 |                    | 143.–  | 152.–  | 152.–  | 168.–  | 189.–  | 225.–   | 462.–   | 462.–   | 589.–   | 924.–   | 924.–   | 924.–         |     |  |
| Mechanical protection for encoders                                                                                                             | G43                                                                                 |                    | 72.30  | 72.30  | 80.70  | 80.70  | 141.–  | 141.–   | 212.–   | 212.–   | 212.–   | 212.–   | 212.–   | 212.–         |     |  |
| Protective cover <sup>7) 9)</sup>                                                                                                              | H00                                                                                 |                    | 56.70  | 56.70  | 82.40  | 82.40  | 144.–  | 144.–   | 192.–   | 289.–   | 383.–   | 478.–   | 573.–   | 766.–         |     |  |
| Screwed-on (instead of cast) feet                                                                                                              | H01                                                                                 |                    | □      | □      | □      | □      | □      | □       | □       | □       | □       | □       | □       | –             |     |  |
| Vibration-proof version; vibration resistance to Class 3M4 acc. to IEC 60721-3-3:1994 <sup>28)</sup>                                           | H02                                                                                 |                    | 148.–  | 168.–  | 189.–  | 209.–  | 226.–  | 263.–   | 315.–   | 378.–   | 442.–   | 525.–   | 609.–   | 694.–         |     |  |
| Condensation drainage holes <sup>28)</sup>                                                                                                     | H03                                                                                 |                    | 67.60  | 75.50  | 82.70  | 90.30  | 97.80  | 105.–   | □       | □       | □       | □       | □       | □             |     |  |
| Rust-resistant screws (externally)                                                                                                             | H07                                                                                 |                    | 155.–  | 155.–  | 82.70  | 82.70  | 97.80  | 97.80   | 112.–   | 128.–   | 170.–   | 203.–   | 211.–   | 281.–         |     |  |
| IP66 degree of protection                                                                                                                      | H19                                                                                 |                    | 316.–  | 316.–  | 316.–  | 316.–  | 316.–  | 471.–   | 630.–   | 787.–   | 949.–   | 1106.–  | 1264.–  | 1419.–        |     |  |
| IP56 degree of protection <sup>12)</sup>                                                                                                       | H22                                                                                 |                    | 166.–  | 166.–  | 166.–  | 166.–  | 166.–  | 247.–   | 328.–   | 413.–   | 497.–   | 579.–   | 663.–   | 743.–         |     |  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>10) 21)</sup>                                                             | H23                                                                                 |                    | 48.30  | 51.70  | 57.50  | 62.90  | 76.80  | 112.–   | 145.–   | 180.–   | 239.–   | 317.–   | 398.–   | 478.–         |     |  |
| Grounding brush for converter operation                                                                                                        | L52                                                                                 | –                  | –      | –      | –      | –      | –      | –       | –       | –       | –       | –       | 2630.–  | 2630.–        |     |  |

For legends, see Page 1/92, for footnotes, see Page 1/93.

## Standard delivery times in working days:

40

50

## SIMOTICS GP/SD 1LE – ABNT Line Standard Motors

Article No. supplements and special versions

## Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

| Special versions                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size         |       |       |       |       |        |         |        |        |        |        |        | Motor version |     |  |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------|-------|-------|-------|-------|--------|---------|--------|--------|--------|--------|--------|---------------|-----|--|
|                                                                                                                                      |                                                                                     | 80                 | 90    | 100   | 112   | 132   | 160    | 180     | 200    | 225    | 250    | 280    | 315    | IEC           | IE3 |  |
|                                                                                                                                      |                                                                                     | 1LE1073 Basic Line |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
|                                                                                                                                      |                                                                                     |                    |       |       |       |       |        | 1LE1573 |        |        |        |        |        |               |     |  |
| 1LE .....-.....-Z                                                                                                                    | Order code                                                                          | 1LE5773            |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Coolant temperature and installation altitude                                                                                        |                                                                                     |                    |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Coolant temperature –50 to +40 °C (IP54 degree of protection)                                                                        | D02                                                                                 |                    | –     | –     | –     | –     | –      | –       | 2590.– | 2770.– | 4000.– | 4460.– | 5400.– | 6400.–        |     |  |
| Coolant temperature –40 to +40 °C (14)                                                                                               | D03                                                                                 |                    | 257.– | 322.– | 386.– | 489.– | 566.–  | 650.–   | 721.–  | 836.–  | 1070.– | 1330.– | 1890.– | 2440.–        |     |  |
| Coolant temperature –30 to +40 °C                                                                                                    | D04                                                                                 |                    | 56.70 | 56.70 | 70.80 | 70.80 | 85.–   | 85.–    | 113.–  | 142.–  | 567.–  | 1330.– | 1890.– | 2440.–        |     |  |
| Designs in accordance with standards and specifications                                                                              |                                                                                     |                    |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Motor without CE marking for export outside EEA (see EU Directive 640/2009)                                                          | D22                                                                                 |                    | 56.70 | 56.70 | 70.80 | 70.80 | 85.–   | 85.–    | 113.–  | 142.–  | 567.–  | 1330.– | 1890.– | 2440.–        |     |  |
| Bearings and lubrication                                                                                                             |                                                                                     |                    |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Regreasing device with M10 x 1 grease nipple according to DIN 71412-A                                                                | L19                                                                                 |                    | –     | –     | –     | –     | –      | –       | 383.–  | 430.–  | 478.–  | 573.–  | O      | O             |     |  |
| Located bearing DE                                                                                                                   | L20                                                                                 |                    | 39.80 | 42.20 | 72.80 | 86.30 | 106.–  | 145.–   | 306.–  | 424.–  | 597.–  | 768.–  | 993.–  | 1070.–        |     |  |
| Located bearing NDE                                                                                                                  | L21                                                                                 |                    | 39.80 | 42.20 | 44.20 | 46.50 | 49.30  | □       | □      | □      | □      | □      | □      | □             |     |  |
| Bearing design for increased cantilever forces <sup>27)</sup>                                                                        | L22                                                                                 |                    | 80.90 | 89.40 | 101.– | 117.– | 133.–  | 175.–   | 278.–  | 322.–  | 363.–  | 420.–  | 470.–  | 525.–         |     |  |
| Regreasing device <sup>1)</sup>                                                                                                      | L23                                                                                 |                    | –     | –     | 317.– | 325.– | 336.–  | 363.–   | 383.–  | 430.–  | 478.–  | 573.–  | □      | □             |     |  |
| Reinforced bearings at both ends for DE and NDE, bearing size 63 (14)                                                                | L25                                                                                 |                    | 168.– | 203.– | 203.– | 237.– | 265.–  | 353.–   | 468.–  | 576.–  | 819.–  | 1130.– | □      | □             |     |  |
| Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces                                                   | L28                                                                                 |                    | –     | –     | –     | –     | –      | –       | 747.–  | 900.–  | 1170.– | 1550.– | –      | –             |     |  |
| Bearing insulation DE                                                                                                                | L50                                                                                 |                    | –     | –     | –     | –     | –      | –       | –      | –      | 1760.– | 1890.– | 1960.– | 2050.–        |     |  |
| Bearing insulation NDE                                                                                                               | L51                                                                                 |                    | –     | –     | 540.– | 560.– | 1250.– | 1300.–  | 1350.– | 1370.– | 1760.– | 1890.– | 1960.– | 2050.–        |     |  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>1)</sup>                                                | Q01                                                                                 |                    | –     | –     | 257.– | 288.– | 317.–  | 350.–   | 377.–  | 408.–  | 439.–  | 468.–  | 498.–  | 528.–         |     |  |
| Balance and vibration quantity                                                                                                       |                                                                                     |                    |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Vibration quantity level A                                                                                                           |                                                                                     |                    | □     | □     | □     | □     | □      | □       | □      | □      | □      | □      | □      | □             |     |  |
| Vibration quantity level B <sup>15)</sup>                                                                                            | L00                                                                                 |                    | 255.– | 270.– | 284.– | 327.– | 419.–  | 519.–   | 814.–  | 819.–  | 900.–  | 1140.– | 1340.– | 1710.–        |     |  |
| Half-key balancing (standard)                                                                                                        |                                                                                     |                    | □     | □     | □     | □     | □      | □       | □      | □      | □      | □      | □      | □             |     |  |
| Balancing without key                                                                                                                | L01                                                                                 |                    | 21.80 | 21.80 | 28.40 | 28.40 | 33.60  | 33.60   | 43.70  | 43.70  | 59.30  | 59.30  | 72.10  | 83.60         |     |  |
| Full-key balancing                                                                                                                   | L02                                                                                 |                    | 96.10 | 111.– | 111.– | 111.– | 129.–  | 129.–   | 162.–  | 162.–  | 209.–  | 209.–  | 209.–  | 209.–         |     |  |
| Shaft and rotor                                                                                                                      |                                                                                     |                    |       |       |       |       |        |         |        |        |        |        |        |               |     |  |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                                 |                    | 468.– | 496.– | 525.– | 553.– | 580.–  | 610.–   | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–        |     |  |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347                                              | L05                                                                                 |                    | 97.80 | 97.80 | 143.– | 143.– | 189.–  | 217.–   | 328.–  | 364.–  | 384.–  | 400.–  | 473.–  | 519.–         |     |  |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                 | L06                                                                                 |                    | 838.– | 838.– | 962.– | 962.– | 1110.– | 1390.–  | 675.–  | 1010.– | 1390.– | 1650.– | 2750.– | 3360.–        |     |  |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                                 |                    | 244.– | 244.– | 268.– | 268.– | 408.–  | 408.–   | 211.–  | 238.–  | 283.–  | 370.–  | 370.–  | 565.–         |     |  |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 |                    | 180.– | 180.– | 241.– | 270.– | 302.–  | 374.–   | 452.–  | 527.–  | 601.–  | 676.–  | 754.–  | 827.–         |     |  |
| Non-standard shaft extension, DE <sup>16)</sup>                                                                                      | Y58 • and customer specifications                                                   |                    | 468.– | 468.– | 525.– | 553.– | 580.–  | 610.–   | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–        |     |  |
| Non-standard shaft extension, NDE <sup>16)</sup>                                                                                     | Y59 • and customer specifications                                                   |                    | 468.– | 468.– | 525.– | 553.– | 580.–  | 610.–   | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–        |     |  |
| Special shaft steel as requested by customer                                                                                         | Y60 • and customer specifications                                                   |                    | –     | –     | –     | –     | –      | –       | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.         |     |  |

For legends, see Page 1/92, for footnotes, see Page 1/93.

**SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

**Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773**

| Special versions                                                                    | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                |        |        |        |        |        |                |         |         |         |                |         | Motor version |     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------|--------|--------|--------|--------|--------|----------------|---------|---------|---------|----------------|---------|---------------|-----|
|                                                                                     |                                                                                     | 80                        | 90     | 100    | 112    | 132    | 160    | 180            | 200     | 225     | 250     | 280            | 315     | IEC           | IE3 |
|                                                                                     |                                                                                     | <b>1LE1073 Basic Line</b> |        |        |        |        |        | <b>1LE1573</b> |         |         |         |                |         |               |     |
|                                                                                     |                                                                                     |                           |        |        |        |        |        |                |         |         |         | <b>1LE5773</b> |         |               |     |
| <b>1LE .....-.....-Z</b>                                                            | Order code                                                                          |                           |        |        |        |        |        |                |         |         |         |                |         |               |     |
| <b>Heating and ventilation</b>                                                      |                                                                                     |                           |        |        |        |        |        |                |         |         |         |                |         |               |     |
| Sheet metal fan cover                                                               | <b>F74</b>                                                                          | 56.70                     | 62.40  | 67.90  | 73.70  | 79.40  | 85.–   | 85.–           | 104.–   | 116.–   | 167.–   | 214.–          | 236.–   |               |     |
| Metal external fan <sup>17) 20)</sup>                                               | <b>F76</b>                                                                          | 150.–                     | 150.–  | 189.–  | 224.–  | 261.–  | 302.–  | 339.–          | 374.–   | 413.–   | 452.–   | 489.–          | –       |               |     |
| Ohne Außenlüfter und ohne Lüfterhaube                                               | <b>F90</b>                                                                          | 118.–                     | 118.–  | 118.–  | 118.–  | 118.–  | 118.–  | 118.–          | 118.–   | 118.–   | 118.–   | 118.–          | 118.–   |               |     |
| Anti-condensation heating for 230 V (2 terminals)                                   | <b>Q02</b>                                                                          | 414.–                     | 414.–  | 430.–  | 459.–  | 519.–  | 576.–  | 639.–          | 734.–   | 881.–   | 910.–   | 910.–          | 948.–   |               |     |
| Anti-condensation heating for 115 V (2 terminals)                                   | <b>Q03</b>                                                                          | 414.–                     | 414.–  | 430.–  | 459.–  | 519.–  | 576.–  | 639.–          | 734.–   | 881.–   | 910.–   | 910.–          | 948.–   |               |     |
| Separately driven fan with non-standard voltage and/or frequency                    | <b>Y81 •</b> and customer specifications                                            | –                         | –      | –      | –      | –      | –      | –              | –       | 483.–   | 609.–   | 779.–          | 1010.–  |               |     |
| <b>Rating plate and extra rating plates</b>                                         |                                                                                     |                           |        |        |        |        |        |                |         |         |         |                |         |               |     |
| Second rating plate, loose                                                          | <b>M10</b>                                                                          | 21.10                     | 21.10  | 21.10  | 21.10  | 21.10  | 21.10  | 67.60          | 67.60   | 67.60   | 67.60   | 67.60          | 67.60   |               |     |
| Rating plate, stainless steel                                                       | <b>M11</b>                                                                          | □                         | □      | □      | □      | □      | □      | □              | □       | □       | □       | □              | □       |               |     |
| Extra rating plate with deviating rating plate data                                 | <b>Y80 •</b> and customer specifications                                            | 73.50                     | 73.50  | 105.–  | 105.–  | 105.–  | 105.–  | 158.–          | 158.–   | 210.–   | 210.–   | 210.–          | 210.–   |               |     |
| Extra rating plate with customer specifications                                     | <b>Y82 •</b> and customer specifications                                            | 41.50                     | 41.50  | 41.50  | 41.50  | 41.50  | 41.50  | 69.40          | 69.40   | 69.40   | 86.30   | 86.30          | 109.–   |               |     |
| Additional information on rating plate and on package label (max. 20 characters)    | <b>Y84 •</b> and customer specifications                                            | 41.50                     | 41.50  | 41.50  | 41.50  | 41.50  | 41.50  | 69.40          | 69.40   | 69.40   | 86.60   | 86.60          | 109.–   |               |     |
| Adhesive label, supplied loose (contents: Article No., Serial No.; 2 lines of text) | <b>Y85 •</b> and customer specifications                                            | –                         | –      | 41.50  | 41.50  | 41.50  | 41.50  | 67.60          | 67.60   | 67.60   | 67.60   | 67.60          | 67.60   |               |     |
| <b>Packaging, safety notes, documentation and test certificates</b>                 |                                                                                     |                           |        |        |        |        |        |                |         |         |         |                |         |               |     |
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>18)</sup>          | <b>B02</b>                                                                          | 28.70                     | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  | 28.70          | 28.70   | 28.70   | 28.70   | 28.70          | 28.70   |               |     |
| Document – Electrical data sheet                                                    | <b>B60</b>                                                                          | 315.–                     | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–          | 315.–   | 315.–   | 315.–   | 315.–          | 315.–   |               |     |
| Document – Order dimensional drawing                                                | <b>B61</b>                                                                          | 315.–                     | 315.–  | 315.–  | 315.–  | 315.–  | 315.–  | 315.–          | 315.–   | 315.–   | 315.–   | 315.–          | 315.–   |               |     |
| Standard test (routine test) with acceptance                                        | <b>B65</b>                                                                          | 3810.–                    | 3810.– | 3890.– | 3890.– | 3890.– | 3890.– | 3890.–         | 3890.–  | 3890.–  | 3890.–  | 3890.–         | 3890.–  |               |     |
| Type test with heat run for horizontal motors, without acceptance                   | <b>B82</b>                                                                          | 4080.–                    | 4840.– | 5600.– | 6370.– | 7270.– | 7890.– | 8820.–         | 9600.–  | 10400.– | 11100.– | 11900.–        | 12800.– |               |     |
| Type test with heat run for horizontal motors, with acceptance                      | <b>B83</b>                                                                          | 5730.–                    | 6520.– | 7290.– | 8070.– | 8840.– | 9620.– | 10400.–        | 11200.– | 11900.– | 12800.– | 13500.–        | 14300.– |               |     |
| Connected in star for dispatch                                                      | <b>M01</b>                                                                          | –                         | –      | 28.90  | 28.90  | 28.90  | 28.90  | 37.90          | 37.90   | 37.90   | 46.90   | 46.90          | 46.90   |               |     |
| Connected in delta for dispatch                                                     | <b>M02</b>                                                                          | –                         | –      | 28.90  | 28.90  | 28.90  | 28.90  | 37.90          | 37.90   | 37.90   | 46.90   | 46.90          | 46.90   |               |     |

- Standard version
  - Without additional charge
  - This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request  
– Not possible

# SIMOTICS GP/SD 1LE – ABNT Line Standard Motors

Article No. supplements and special versions

Options · Aluminum series 1LE1073 and Cast-iron series 1LE1573/1LE5773

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- 1) Up to frame size 160 not possible when brake is mounted.
- 2) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 3) Parallel Whitworth pipe thread DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) Pipe thread for connections not sealed in the thread (cylindrical), external = G.
- 4) Cannot be used for motors in UL version (order code **D31**). The grease life-time specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 5) A second shaft extension is not possible. Please inquire for mounted brakes.
- 6) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 7) The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 8) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB. This option cannot be used in combination with brakes of type 2LM8.
- 9) Order code **H00** provides mechanical protection for encoders.
- 10) Not possible for type of construction IM V3.
- 11) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 12) Not possible in combination with brake 2LM8 – order code **F01**.
- 13) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 14) From frame size 280 in the standard version.
- 15) On request for 2-pole motors (concerns frame sizes 225 to 315).
- 16) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with EN 50347, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
  - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
  - Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension.
- 17) Converter operation is permitted for 1LE1 motors with metal external fans.
- 18) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 19) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 20) Order codes **F70** and **F76** cannot be combined.
- 21) Not possible in combination with order codes **Q72** and **Q78**.
- 22) For frame sizes 100 to 132 only possible in combination with order code **R50**.
- 23) Not possible in combination with order codes **N05**, **N06**, **N07**, **N08** and **N11**.
- 24) For frame size 315, when combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.
- 25) Order code **S06** cannot be combined with order code **S00**, **S01** and **S02**. It can be combined with **Y53** and **Y56** on request.
- 26) Order codes **F70** (separately driven fan) and **H02** (vibration-proof version) cannot be combined for motors in frame sizes 71, 80 and 90.
- 27) A minimum cantilever force  $F_{\min}$  of  $0.5 \cdot F_{\max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.
- 28) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 29) Not possible in combination with order code **R50**.
- 30) With IM B5 flange, only possible in combination with the option **H08**.

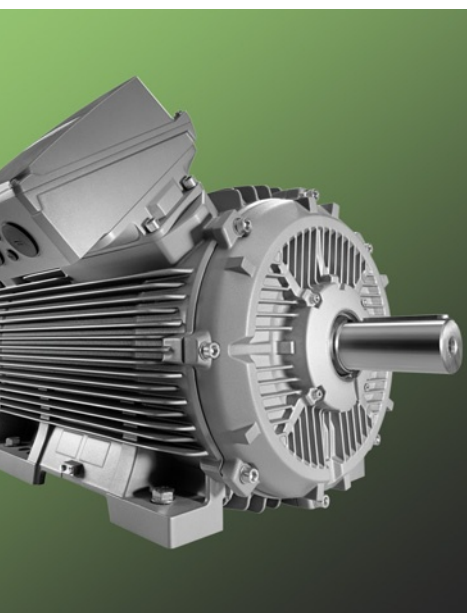
## **SIMOTICS GP/SD 1LE – ABNT Line Standard Motors**

Article No. supplements and special versions

### Notes

1

## SIMOTICS SD standard motors next generation



|             |                                                     |
|-------------|-----------------------------------------------------|
| <b>2/2</b>  | <b>SIMOTICS SD Standard Motors</b>                  |
| 2/2         | <u>Motors with IE4 Super Premium Efficiency</u>     |
| 2/2         | • 1LE5504 Basic Line                                |
| 2/2         | • 1LE5604 Performance Line                          |
| 2/3         | <u>Motors with IE3 Premium Efficiency</u>           |
| 2/3         | • 1LE5503 Basic Line                                |
| 2/3         | • 1LE5603 Performance Line                          |
| <b>2/4</b>  | <b>SIMOTICS SD Add Standard Motors</b>              |
| 2/4         | <u>Motors with IE4 Super Premium Efficiency</u>     |
| 2/4         | • 1LE5534 Basic Line                                |
| 2/4         | • 1LE5634 Performance Line                          |
| 2/5         | • 1LE5534                                           |
| 2/6         | <u>Motors with IE3 Premium Efficiency</u>           |
| 2/6         | • 1LE5533 Basic Line                                |
| 2/6         | • 1LE5633 Performance Line                          |
| 2/7         | • 1LE5533                                           |
| <b>2/2</b>  | <b>SIMOTICS SD Pro Standard Motors</b>              |
| 2/8         | <u>Motors with IE3 Premium Efficiency</u>           |
| 2/8         | • 1LE5583 Basic Line                                |
| 2/8         | • 1LE5683 Performance Line                          |
| 2/9         | • 1LE5583                                           |
| <b>2/10</b> | <b>Article No. supplements and special versions</b> |
| 2/10        | <u>Voltages</u>                                     |
| 2/11        | <u>Types of construction</u>                        |
| 2/13        | <u>Motor protection</u>                             |
| 2/14        | <u>Terminal box position</u>                        |
| 2/15        | <u>Options</u>                                      |

**SIMOTICS SD Standard Motors next generation**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE4 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1LE5504/1LE5604<br/>Basic/Performance Line</b>                                            |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 315 L ... 355 L                                                                                               |
| Rated power at 50 Hz                   | 160 ... 500 kW                                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 800 ... 4048 Nm                                                                                               |
| Efficiency                             | IE4 Super Premium Efficiency                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - - -                                                                                                   |
| Price group (PG)                       | 3F4                                                                                                           |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE4         | 315 L               | 1LE5504-3AA6-....                | 59800.-              | 1LE5604-3AA6-....                      | 61700.-              |
| 315                              | IE4         | 315 L               | 1LE5504-3AA7-....                | 75400.-              | 1LE5604-3AA7-....                      | 77800.-              |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BA3-....                      | 87800.-              |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BA4-....                      | 100000.-             |
| 500                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BA5-....                      | 132000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE4         | 315 L               | 1LE5504-3AB6-....                | 56100.-              | 1LE5604-3AB6-....                      | 57900.-              |
| 315                              | IE4         | 315 L               | 1LE5504-3AB7-....                | 70700.-              | 1LE5604-3AB7-....                      | 72900.-              |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BB3-....                      | 82500.-              |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BB4-....                      | 93400.-              |
| 500                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BB5-....                      | 121000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 200                              | IE4         | 315 L               | 1LE5504-3AC7-....                | 66200.-              | 1LE5604-3AC7-....                      | 68100.-              |
| 250                              | IE4         | 315 L               | 1LE5504-3AC8-....                | 83300.-              | 1LE5604-3AC8-....                      | 85900.-              |
| 315                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BC2-....                      | 110000.-             |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BC3-....                      | 118000.-             |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5604-3BC4-....                      | 127000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 160                              | IE4         | 315 L               | 1LE5504-3AD7-....                | 66200.-              | 1LE5604-3AD7-....                      | 68100.-              |
| 200                              | IE4         | 315 L               | 1LE5504-3AD8-....                | 81400.-              | 1LE5604-3AD8-....                      | 83900.-              |
| 250                              | IE4         | 355 S               |                                  |                      | 1LE5604-3BD1-....                      | 109000.-             |
| 315                              | IE4         | 355 M               |                                  |                      | 1LE5604-3BD2-....                      | 134000.-             |

Standard delivery times in working days:

30

40

# SIMOTICS SD Standard Motors next generation

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1LE5503/1LE5603</b>                                                                       |
| Cooling                                | <b>Basic/Performance Line</b>                                                                                 |
|                                        | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 315 L ... 355 L                                                                                               |
| Rated power at 50 Hz                   | 160 ... 500 kW                                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 800 ... 4048 Nm                                                                                               |
| Efficiency                             | IE3 Premium Efficiency                                                                                        |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3F4                                                                                                           |

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5503-3AA6-.....               | 53200.-              | 1LE5603-3AA6-.....                     | 55000.-              |
| 315                              | IE3         | 315 L               | 1LE5503-3AA7-.....               | 67200.-              | 1LE5603-3AA7-.....                     | 69200.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BA3-.....                     | 78300.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BA4-.....                     | 89500.-              |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BA5-.....                     | 117000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5503-3AB6-.....               | 49900.-              | 1LE5603-3AB6-.....                     | 51500.-              |
| 315                              | IE3         | 315 L               | 1LE5503-3AB7-.....               | 63200.-              | 1LE5603-3AB7-.....                     | 65000.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BB3-.....                     | 73500.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BB4-.....                     | 83300.-              |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BB5-.....                     | 108000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 200                              | IE3         | 315 L               | 1LE5503-3AC7-.....               | 59000.-              | 1LE5603-3AC7-.....                     | 60700.-              |
| 250                              | IE3         | 315 L               | 1LE5503-3AC8-.....               | 74300.-              | 1LE5603-3AC8-.....                     | 76500.-              |
| 315                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BC2-.....                     | 98600.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BC3-.....                     | 105000.-             |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5603-3BC4-.....                     | 114000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 160                              | IE3         | 315 L               | 1LE5503-3AD7-.....               | 59000.-              | 1LE5603-3AD7-.....                     | 60700.-              |
| 200                              | IE3         | 315 L               | 1LE5503-3AD8-.....               | 72700.-              | 1LE5603-3AD8-.....                     | 74800.-              |
| 250                              | IE3         | 355 S               |                                  |                      | 1LE5603-3BD1-.....                     | 96800.-              |
| 315                              | IE3         | 355 M               |                                  |                      | 1LE5603-3BD2-.....                     | 119000.-             |

**SIMOTICS SD Add Standard Motors next generation**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE4 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1LE5534/1LE5634<br/>Basic/Performance Line</b>                                            |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 315 L ... 355 L                                                                                               |
| Rated power at 50 Hz                   | 160 ... 500 kW                                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 801 ... 2574 Nm                                                                                               |
| Efficiency                             | IE4 Super Premium Efficiency                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - - -                                                                                                   |
| Price group (PG)                       | 3F4                                                                                                           |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE4         | 315 L               | 1LE5534-3AA6-.....               | 65900.-              | 1LE5634-3AA6-.....                     | 67700.-              |
| 315                              | IE4         | 315 L               | 1LE5534-3AA7-.....               | 82900.-              | 1LE5634-3AA7-.....                     | 85500.-              |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BA3-.....                     | 96600.-              |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BA4-.....                     | 110000.-             |
| 500                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BA5-.....                     | 138000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE4         | 315 L               | 1LE5534-3AB6-.....               | 61800.-              | 1LE5634-3AB6-.....                     | 63600.-              |
| 315                              | IE4         | 315 L               | 1LE5534-3AB7-.....               | 77900.-              | 1LE5634-3AB7-.....                     | 80200.-              |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BB3-.....                     | 90600.-              |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BB4-.....                     | 103000.-             |
| 500                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BB5-.....                     | 127000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 200                              | IE4         | 315 L               | 1LE5534-3AC7-.....               | 72800.-              | 1LE5634-3AC7-.....                     | 75000.-              |
| 250                              | IE4         | 315 L               | 1LE5534-3AC8-.....               | 91700.-              | 1LE5634-3AC8-.....                     | 94400.-              |
| 315                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BC2-.....                     | 121000.-             |
| 355                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BC3-.....                     | 129000.-             |
| 400                              | IE4         | 355 L               |                                  |                      | 1LE5634-3BC4-.....                     | 143000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 160                              | IE4         | 315 L               | 1LE5534-3AD7-.....               | 72800.-              | 1LE5634-3AD7-.....                     | 75000.-              |
| 200                              | IE4         | 315 L               | 1LE5534-3AD8-.....               | 89500.-              | 1LE5634-3AD8-.....                     | 92200.-              |
| 250                              | IE4         | 355 S               |                                  |                      | 1LE5634-3BD1-.....                     | 119000.-             |
| 315                              | IE4         | 355 M               |                                  |                      | 1LE5634-3BD2-.....                     | 147000.-             |

Standard delivery times in working days:

30

40

# SIMOTICS SD Add Standard Motors next generation

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE4 Super Premium Efficiency (continued)</b>                                                   |
| Series version                         | <b>Cast-iron series 1LE5534</b>                                                                               |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 400 ... 450                                                                                                   |
| Rated power at 50 Hz                   | 355 ... 1000 kW                                                                                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                                              |
| Efficiency                             | IE4 Super Premium Efficiency                                                                                  |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3ZB                                                                                                           |

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE4         | 400                 | 1LE5534-4AA3-.... | 145000.-             |
| 630                              | IE4         | 400                 | 1LE5534-4AA5-.... | 162000.-             |
| 710                              | IE4         | 400                 | 1LE5534-4AA7-.... | 184000.-             |
| 800                              | IE4         | 450                 | 1LE5534-4BA3-.... | 213000.-             |
| 900                              | IE4         | 450                 | 1LE5534-4BA5-.... | 234000.-             |
| 1000                             | IE4         | 450                 | 1LE5534-4BA7-.... | 267000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE4         | 400                 | 1LE5534-4AB3-.... | 135000.-             |
| 630                              | IE4         | 400                 | 1LE5534-4AB5-.... | 152000.-             |
| 710                              | IE4         | 400                 | 1LE5534-4AB7-.... | 172000.-             |
| 800                              | IE4         | 450                 | 1LE5534-4BB3-.... | 194000.-             |
| 900                              | IE4         | 450                 | 1LE5534-4BB5-.... | 220000.-             |
| 1000                             | IE4         | 450                 | 1LE5534-4BB7-.... | 247000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 450                              | IE4         | 400                 | 1LE5534-4AC3-.... | 149000.-             |
| 500                              | IE4         | 400                 | 1LE5534-4AC5-.... | 162000.-             |
| 560                              | IE4         | 400                 | 1LE5534-4AC7-.... | 185000.-             |
| 630                              | IE4         | 450                 | 1LE5534-4BC3-.... | 208000.-             |
| 710                              | IE4         | 450                 | 1LE5534-4BC5-.... | 231000.-             |
| 800                              | IE4         | 450                 | 1LE5534-4BC7-.... | 259000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                   |                      |
| 355                              | IE4         | 400                 | 1LE5534-4AD3-.... | 149000.-             |
| 400                              | IE4         | 400                 | 1LE5534-4AD5-.... | 162000.-             |
| 450                              | IE4         | 400                 | 1LE5534-4AD7-.... | 194000.-             |
| 500                              | IE4         | 450                 | 1LE5534-4BD3-.... | 219000.-             |
| 560                              | IE4         | 450                 | 1LE5534-4BD5-.... | 240000.-             |
| 630                              | IE4         | 450                 | 1LE5534-4BD7-.... | 276000.-             |

**SIMOTICS SD Add Standard Motors next generation**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1LE5533/1LE5633<br/>Basic/Performance Line</b>                                            |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 315 L ... 355 L                                                                                               |
| Rated power at 50 Hz                   | 160 ... 500 kW                                                                                                |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 800 ... 4048 Nm                                                                                               |
| Efficiency                             | IE3 Premium Efficiency                                                                                        |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3F4                                                                                                           |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5533-3AA6-.....               | 58600.-              | 1LE5633-3AA6-.....                     | 60400.-              |
| 315                              | IE3         | 315 L               | 1LE5533-3AA7-.....               | 74000.-              | 1LE5633-3AA7-.....                     | 76100.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BA3-.....                     | 86200.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BA4-.....                     | 98500.-              |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BA5-.....                     | 122000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5533-3AB6-.....               | 55000.-              | 1LE5633-3AB6-.....                     | 56600.-              |
| 315                              | IE3         | 315 L               | 1LE5533-3AB7-.....               | 69600.-              | 1LE5633-3AB7-.....                     | 71600.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BB3-.....                     | 80900.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BB4-.....                     | 91700.-              |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5604-3BB5-.....                     | 114000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 200                              | IE3         | 315 L               | 1LE5533-3AC7-.....               | 64800.-              | 1LE5633-3AC7-.....                     | 66900.-              |
| 250                              | IE3         | 315 L               | 1LE5533-3AC8-.....               | 81600.-              | 1LE5633-3AC8-.....                     | 84100.-              |
| 315                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BC2-.....                     | 108000.-             |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BC3-.....                     | 116000.-             |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5633-3BC4-.....                     | 124000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                      |                                        |                      |
| 160                              | IE3         | 315 L               | 1LE5533-3AD7-.....               | 64800.-              | 1LE5633-3AD7-.....                     | 66900.-              |
| 200                              | IE3         | 315 L               | 1LE5533-3AD8-.....               | 80000.-              | 1LE5633-3AD8-.....                     | 82300.-              |
| 250                              | IE3         | 355 S               |                                  |                      | 1LE5633-3BD1-.....                     | 107000.-             |
| 315                              | IE3         | 355 M               |                                  |                      | 1LE5633-3BD2-.....                     | 132000.-             |

Standard delivery times in working days:

30

40

# SIMOTICS SD Add Standard Motors next generation

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency (continued)</b>                                                         |
| Series version                         | <b>Cast-iron series 1LE5533</b>                                                                               |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 400 ... 450                                                                                                   |
| Rated power at 50 Hz                   | 355 ... 1000 kW                                                                                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                                              |
| Efficiency                             | IE3 Premium Efficiency                                                                                        |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3ZB                                                                                                           |

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE3         | 400                 | 1LE5533-4AA3-.... | 129000.-             |
| 630                              | IE3         | 400                 | 1LE5533-4AA5-.... | 145000.-             |
| 710                              | IE3         | 400                 | 1LE5533-4AA7-.... | 164000.-             |
| 800                              | IE3         | 450                 | 1LE5533-4BA3-.... | 190000.-             |
| 900                              | IE3         | 450                 | 1LE5533-4BA5-.... | 210000.-             |
| 1000                             | IE3         | 450                 | 1LE5533-4BA7-.... | 238000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE3         | 400                 | 1LE5533-4AB3-.... | 120000.-             |
| 630                              | IE3         | 400                 | 1LE5533-4AB5-.... | 137000.-             |
| 710                              | IE3         | 400                 | 1LE5533-4AB7-.... | 152000.-             |
| 800                              | IE3         | 450                 | 1LE5533-4BB3-.... | 174000.-             |
| 900                              | IE3         | 450                 | 1LE5533-4BB5-.... | 197000.-             |
| 1000                             | IE3         | 450                 | 1LE5533-4BB7-.... | 220000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 450                              | IE3         | 400                 | 1LE5533-4AC3-.... | 134000.-             |
| 500                              | IE3         | 400                 | 1LE5533-4AC5-.... | 145000.-             |
| 560                              | IE3         | 400                 | 1LE5533-4AC7-.... | 165000.-             |
| 630                              | IE3         | 450                 | 1LE5533-4BC3-.... | 186000.-             |
| 710                              | IE3         | 450                 | 1LE5533-4BC5-.... | 207000.-             |
| 800                              | IE3         | 450                 | 1LE5533-4BC7-.... | 231000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                   |                      |
| 355                              | IE3         | 400                 | 1LE5533-4AD3-.... | 134000.-             |
| 400                              | IE3         | 400                 | 1LE5533-4AD5-.... | 145000.-             |
| 450                              | IE3         | 400                 | 1LE5533-4AD7-.... | 174000.-             |
| 500                              | IE3         | 450                 | 1LE5533-4BD3-.... | 195000.-             |
| 560                              | IE3         | 450                 | 1LE5533-4BD5-.... | 215000.-             |
| 630                              | IE3         | 450                 | 1LE5533-4BD7-.... | 247000.-             |

**SIMOTICS SD Pro Standard Motors next generation**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Super Premium Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1LE5583/1LE5683<br/>Basic/Performance Line</b>                                            |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6                                                                                                       |
| Frame sizes (FS)                       | 315 L ... 355 L                                                                                               |
| Rated power at 50 Hz                   | 200 ... 500 kW                                                                                                |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                             |
| Rated torque at 50 Hz                  | 800 ... 3847 Nm                                                                                               |
| Efficiency                             | IE3 Premium Efficiency                                                                                        |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3F4                                                                                                           |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5583-3AA6-.....               | 64500.-              | 1LE5683-3AA6-.....                     | 66500.-              |
| 315                              | IE3         | 315 L               | 1LE5583-3AA7-.....               | 81300.-              | 1LE5683-3AA7-.....                     | 83800.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BA3-.....                     | 94800.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BA4-.....                     | 108000.-             |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BA5-.....                     | 135000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 250                              | IE3         | 315 L               | 1LE5583-3AB6-.....               | 60500.-              | 1LE5683-3AB6-.....                     | 62400.-              |
| 315                              | IE3         | 315 L               | 1LE5583-3AB7-.....               | 76500.-              | 1LE5683-3AB7-.....                     | 78700.-              |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BB3-.....                     | 89000.-              |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BB4-.....                     | 101000.-             |
| 500                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BB5-.....                     | 124000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                      |                                        |                      |
| 200                              | IE3         | 315 L               | 1LE5583-3AC7-.....               | 71400.-              | 1LE5683-3AC7-.....                     | 72900.-              |
| 250                              | IE3         | 315 L               | 1LE5583-3AC8-.....               | 89900.-              | 1LE5683-3AC8-.....                     | 91800.-              |
| 315                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BC2-.....                     | 119000.-             |
| 355                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BC3-.....                     | 126000.-             |
| 400                              | IE3         | 355 L               |                                  |                      | 1LE5683-3BC4-.....                     | 138000.-             |

Standard delivery times in working days:

30

40

# SIMOTICS SD Pro Standard Motors next generation

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                               |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency (continued)</b>                                                         |
| Series version                         | <b>Cast-iron series 1LE5583</b>                                                                               |
| Cooling                                | Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 416) |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                 |
| Insulation                             | Thermal class 155 (F)                                                                                         |
| Utilization                            | Thermal class 130 (B)                                                                                         |
| Number of poles                        | 2, 4, 6, 8                                                                                                    |
| Frame sizes (FS)                       | 400 ... 450                                                                                                   |
| Rated power at 50 Hz                   | 355 ... 1000 kW                                                                                               |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                                              |
| Rated torque at 50 Hz                  | 1740 ... 7700 Nm                                                                                              |
| Efficiency                             | IE3 Premium Efficiency                                                                                        |
| Metal factor for metal surcharges (MS) | N - W - -                                                                                                     |
| Price group (PG)                       | 3ZB                                                                                                           |

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 2/10, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE3         | 400                 | 1LE5583-4AA3-.... | 150000.-             |
| 630                              | IE3         | 400                 | 1LE5583-4AA5-.... | 168000.-             |
| 710                              | IE3         | 400                 | 1LE5583-4AA7-.... | 191000.-             |
| 800                              | IE3         | 450                 | 1LE5583-4BA3-.... | 215000.-             |
| 900                              | IE3         | 450                 | 1LE5583-4BA5-.... | 235000.-             |
| 1000                             | IE3         | 450                 | 1LE5583-4BA7-.... | 269000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                   |                      |
| 560                              | IE3         | 400                 | 1LE5583-4AB3-.... | 140000.-             |
| 630                              | IE3         | 400                 | 1LE5583-4AB5-.... | 157000.-             |
| 710                              | IE3         | 400                 | 1LE5583-4AB7-.... | 177000.-             |
| 800                              | IE3         | 450                 | 1LE5583-4BB3-.... | 195000.-             |
| 900                              | IE3         | 450                 | 1LE5583-4BB5-.... | 222000.-             |
| 1000                             | IE3         | 450                 | 1LE5583-4BB7-.... | 248000.-             |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                   |                      |
| 450                              | IE3         | 400                 | 1LE5583-4AC3-.... | 150000.-             |
| 500                              | IE3         | 400                 | 1LE5583-4AC5-.... | 162000.-             |
| 560                              | IE3         | 400                 | 1LE5583-4AC7-.... | 185000.-             |
| 630                              | IE3         | 450                 | 1LE5583-4BC3-.... | 211000.-             |
| 710                              | IE3         | 450                 | 1LE5583-4BC5-.... | 233000.-             |
| 800                              | IE3         | 450                 | 1LE5583-4BC7-.... | 261000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                   |                      |
| 355                              | IE3         | 400                 | 1LE5583-4AD3-.... | 154000.-             |
| 400                              | IE3         | 400                 | 1LE5583-4AD5-.... | 168000.-             |
| 450                              | IE3         | 400                 | 1LE5583-4AD7-.... | 201000.-             |
| 500                              | IE3         | 450                 | 1LE5583-4BD3-.... | 221000.-             |
| 560                              | IE3         | 450                 | 1LE5583-4BD5-.... | 244000.-             |
| 630                              | IE3         | 450                 | 1LE5583-4BD7-.... | 280000.-             |

## SSIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

25

## Selection and ordering data

| Voltages                                           | Article No. supplement                                             |                                                                                        |                                              | Frame size                  |         |         |        |                |                                                                      |                                                                      |        |                         | Motor version                             |                                  |                         |                                           |                                  |
|----------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------|---------|---------|--------|----------------|----------------------------------------------------------------------|----------------------------------------------------------------------|--------|-------------------------|-------------------------------------------|----------------------------------|-------------------------|-------------------------------------------|----------------------------------|
|                                                    | Voltage code<br>12th and<br>13th position<br>of the<br>Article No. | Additional<br>identification<br>code with order<br>code and plain text,<br>if required |                                              | 315                         | 355     | 400     |        |                | 450                                                                  |                                                                      |        |                         | IEC                                       | IE4                              |                         |                                           |                                  |
|                                                    |                                                                    |                                                                                        |                                              | 1LE55.4<br>Basic Line       |         | 1LE5534 |        |                | -4AA3<br>-4AA5                                                       | -4AB3<br>-4AB5<br>-4AC3<br>-4AC5<br>-4AC7<br>-4AD3<br>-4AD5<br>-4AD7 | -4AA7  | -4AB7                   |                                           |                                  | -4BA3<br>-4BA5<br>-4BA7 | -4BB3<br>-4BB5<br>-4BB7<br>-4BC5<br>-4BC7 | -4BC3<br>-4BD3<br>-4BD5<br>-4BD7 |
|                                                    |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
|                                                    |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
|                                                    |                                                                    |                                                                                        | 1LE56.4<br>Performance Line                  |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
|                                                    |                                                                    |                                                                                        | 1LE55.3<br>Basic Line                        |                             | 1LE55.3 |         |        | -4AA3<br>-4AA5 | -4AB3<br>-4AB5<br>-4AC3<br>-4AC5<br>-4AC7<br>-4AD3<br>-4AD5<br>-4AD7 | -4AA7                                                                | -4AB7  | -4BA3<br>-4BA5<br>-4BA7 | -4BB3<br>-4BB5<br>-4BB7<br>-4BC5<br>-4BC7 | -4BC3<br>-4BD3<br>-4BD5<br>-4BD7 | IE3                     |                                           |                                  |
|                                                    |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
|                                                    |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
| 1LE5 . . . . . ■ - ■ . . .                         |                                                                    |                                                                                        | Order code                                   | 1LE56.3<br>Performance Line |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
| Voltage at 50 Hz or 60 Hz                          |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
| 50 Hz 400 VΔ/690 VY,<br>60 Hz 460 VΔ <sup>1)</sup> | 3                                                                  | 4                                                                                      | —                                            | □                           | □       | □       | □      | O. R.          | O. R.                                                                | O. R.                                                                | ○      | □                       |                                           |                                  |                         |                                           |                                  |
| 50 Hz 500 VΔ                                       | 4                                                                  | 0                                                                                      | —                                            | ○                           | ○       | ○       | ○      | ○              | ○                                                                    | ○                                                                    | ○      | ○                       |                                           |                                  |                         |                                           |                                  |
| 60 Hz 575 VΔ                                       |                                                                    |                                                                                        |                                              | —                           | —       | ○       | ○      | ■              | ■                                                                    | O. R.                                                                | ■      | ○                       |                                           |                                  |                         |                                           |                                  |
| 50 Hz 690 VΔ                                       | 4                                                                  | 7                                                                                      | —                                            | 210.—                       | 210.—   | ○       | ○      | ■              | ■                                                                    | ■                                                                    | ■      | ○                       |                                           |                                  |                         |                                           |                                  |
| 50 Hz 380 VΔ/660 VY,<br>60 Hz 440 VΔ <sup>1)</sup> | 3                                                                  | 3                                                                                      | —                                            | 412.—                       | 630.—   | O. R.   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 50 Hz 415 VΔ,<br>60 Hz 480 VΔ                      | 3                                                                  | 5                                                                                      | —                                            | 412.—                       | 630.—   | O. R.   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 60 Hz 380 VΔ/660 VY <sup>1)</sup>                  | 3                                                                  | 0                                                                                      | —                                            | 412.—                       | 630.—   | —       | —      | —              | —                                                                    | —                                                                    | —      | —                       |                                           |                                  |                         |                                           |                                  |
| 60 Hz 400 VΔ/690 VY <sup>1)</sup>                  | 3                                                                  | 1                                                                                      | —                                            | 412.—                       | 630.—   | —       | —      | —              | —                                                                    | —                                                                    | —      | —                       |                                           |                                  |                         |                                           |                                  |
| 50 Hz 600 VΔ,<br>60 Hz 690 VΔ                      | 4                                                                  | 4                                                                                      | —                                            | —                           | —       | O. R.   | 894.—  | O. R.          | 894.—                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 50 Hz 660 VΔ                                       | 4                                                                  | 6                                                                                      | —                                            | —                           | —       | 894.—   | 894.—  | 894.—          | 894.—                                                                | 999.—                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| Voltage at 60 Hz and required power                |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
| 380 VΔ/660 VY; 50 Hz power                         | 9                                                                  | 0                                                                                      | M2B                                          | 412.—                       | 630.—   | —       | —      | —              | —                                                                    | —                                                                    | —      | —                       |                                           |                                  |                         |                                           |                                  |
| 380 VΔ; 50 Hz power                                |                                                                    |                                                                                        |                                              | 412.—                       | 630.—   | —       | —      | —              | —                                                                    | —                                                                    | —      | —                       |                                           |                                  |                         |                                           |                                  |
| 440 VΔ; 50 Hz power                                | 9                                                                  | 0                                                                                      | M2D                                          | 412.—                       | 630.—   | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 440 VΔ; 60 Hz power                                | 9                                                                  | 0                                                                                      | M1D                                          | —                           | —       | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 969.—                   |                                           |                                  |                         |                                           |                                  |
| 460 VΔ; 50 Hz power                                | 9                                                                  | 0                                                                                      | M2F                                          | 412.—                       | 630.—   | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 460 VΔ; 60 Hz power                                | 9                                                                  | 0                                                                                      | M1F                                          | —                           | —       | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 575 VΔ; 50 Hz power                                | 9                                                                  | 0                                                                                      | M2H                                          | 412.—                       | 630.—   | 894.—   | 894.—  | 894.—          | 894.—                                                                | 999.—                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 575 VΔ; 60 Hz power                                | 9                                                                  | 0                                                                                      | M1H                                          | —                           | —       | 894.—   | 894.—  | 894.—          | 894.—                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 400 VΔ/690 VY; 50 Hz power                         | 9                                                                  | 0                                                                                      | M2J                                          | 630.—                       | 630.—   | O. R.   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 400 VΔ; 50 Hz power                                |                                                                    |                                                                                        |                                              | 630.—                       | 630.—   | —       | —      | —              | —                                                                    | —                                                                    | —      | —                       |                                           |                                  |                         |                                           |                                  |
| 400 VΔ/690 VY; 60 Hz power                         | 9                                                                  | 0                                                                                      | M1J                                          | —                           | —       | O. R.   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | 999.—  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 480 VΔ; 50 Hz power                                | 9                                                                  | 0                                                                                      | M2L                                          | 412.—                       | 630.—   | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| 480 VΔ; 60 Hz power                                | 9                                                                  | 0                                                                                      | M1L                                          | —                           | —       | 894.—   | 894.—  | O. R.          | O. R.                                                                | O. R.                                                                | O. R.  | 999.—                   |                                           |                                  |                         |                                           |                                  |
| Non-standard voltage and/or frequencies            |                                                                    |                                                                                        |                                              |                             |         |         |        |                |                                                                      |                                                                      |        |                         |                                           |                                  |                         |                                           |                                  |
| Non-standard winding <sup>2) 3)</sup>              | 9                                                                  | 0                                                                                      | M1Y • and<br>customer<br>specifica-<br>tions | 1010.—                      | 1150.—  | 4930.—  | 4930.— | 4930.—         | 4930.—                                                               | 5790.—                                                               | 5790.— | 5790.—                  |                                           |                                  |                         |                                           |                                  |

- Standard version
  - Without additional charge
  - This order code only determines the price of the version – Additional plain text is required.
- O. R. Possible on request

<sup>1)</sup> Without additional measures not possible for converter operation at 690 VV and 660 VΔ (valid for 1LE5504, 1LE5604, 1LE5534, 1LE5634, 1LE5503, 1LE5603, 1LE5533 and 1LE5633).

2) Plain text must be specified in the order:  
Voltage between 200 and 690 V (voltages outside the range are available on request), frequency, circuit, rated power.

3) 2-pole version, frame size 450 for 60 Hz operation on request.

Standard delivery times in working days:

25

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

Types of construction · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

**Selection and ordering data**

| Types of construction                              | <div>Type of construction letter<br/>14th position of the Article No.</div>         | <div>For types of construction with order code(s)<br/>Article No. with additional identification code <b>-Z</b></div> | Frame size                  |       |         |       | Motor version |     |
|----------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------|-------|---------|-------|---------------|-----|
|                                                    |                                                                                     |                                                                                                                       | 315                         | 355   | 400     | 450   | IEC           | IE4 |
|                                                    |                                                                                     |                                                                                                                       | 1LE55.4<br>Basic Line       |       | 1LE5534 |       |               |     |
|                                                    |                                                                                     |                                                                                                                       | 1LE56.4<br>Performance Line |       |         |       |               |     |
|                                                    |                                                                                     |                                                                                                                       | 1LE55.3<br>Basic Line       |       | 1LE55.3 |       |               |     |
| 1LE56.3<br>Performance Line                        |                                                                                     |                                                                                                                       |                             | IE3   |         |       |               |     |
| 1LE5 ... - ... - ... (-Z)                          |                                                                                     | Order code                                                                                                            |                             |       |         |       |               |     |
| Without flange                                     |                                                                                     |                                                                                                                       |                             |       |         |       |               |     |
| IM B3 <sup>1) 2)</sup>                             |    | A                                                                                                                     | —                           | □     | □       | □     | □             |     |
| IM B6 <sup>2)</sup>                                |    | T                                                                                                                     | —                           | O     | O       | —     | —             |     |
| IM B7 <sup>2)</sup>                                |    | U                                                                                                                     | —                           | O     | O       | —     | —             |     |
| IM B8 <sup>2)</sup>                                |    | V                                                                                                                     | —                           | O     | O       | —     | —             |     |
| IM V6 <sup>2) 7)</sup>                             |   | D                                                                                                                     | —                           | O     | O       | O. R. | O. R.         |     |
| IM V5 without protective cover <sup>2) 7)</sup>    |  | C                                                                                                                     | —                           | O     | O       | O. R. | O. R.         |     |
| IM V5 with protective cover <sup>2) 3) 4) 7)</sup> |  | C                                                                                                                     | H00                         | 766.— | 894.—   | O. R. | O. R.         |     |

For legends and footnotes, see Page 2/12.

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

**25****Types of construction · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

| Types of construction                              | Article No. supplement                                                             |                                                    | Frame size               |                |                 |                  | Motor version |     |
|----------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|----------------|-----------------|------------------|---------------|-----|
|                                                    | Type of construction letter                                                        | For types of construction with order code(s)       | 315                      | 355            | 400             | 450              |               |     |
|                                                    | 14th position of the Article No.                                                   | Article No. with additional identification code -Z | 1LE55.4 Basic Line       |                | 1LE5534         |                  | IEC           | IE4 |
|                                                    |                                                                                    |                                                    | 1LE56.4 Performance Line |                |                 |                  |               |     |
|                                                    |                                                                                    |                                                    | 1LE55.3 Basic Line       |                | 1LE55.3         |                  | IE3           |     |
|                                                    |                                                                                    |                                                    | 1LE56.3 Performance Line |                |                 |                  |               |     |
| 1LE5 ..... -Z                                      |                                                                                    |                                                    | Order code               |                |                 |                  |               |     |
| With flange                                        | DIN EN 50347<br>DIN 42948                                                          |                                                    | FF740<br>A 800           | FF840<br>A 900 | FF940<br>A 1000 | FF1080<br>A 1150 |               |     |
| IM B5 <sup>2) 5) 6)</sup>                          |   | F                                                  | 1050.–                   | 4200.–         | 4300.–          | 5780.–           |               |     |
| IM V1 without protective cover <sup>2) 7)</sup>    |   | G                                                  | 1060.–                   | 4200.–         | 4300.–          | 5780.–           |               |     |
| IM V1 with protective cover <sup>2) 3) 4) 7)</sup> |   | G                                                  | 1826.–                   | 5094.–         | O. R.           | O. R.            |               |     |
| IM V3 <sup>4)</sup>                                |   | H                                                  | 1050.–                   | 4200.–         | –               | –                |               |     |
| IM B35 <sup>3)</sup>                               |  | J                                                  | 1200.–                   | 4420.–         | 4520.–          | 5620.–           |               |     |

- Standard version  
 ○ Without additional charge  
 O. R. Possible on request  
 – Not possible

<sup>1)</sup> The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>2)</sup> The type of construction is stamped on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

<sup>3)</sup> In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

<sup>4)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

<sup>5)</sup> The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>6)</sup> For machines, type of construction IM B5, provide an additional support foot at the NDE. The support foot is not included in the scope of supply. Use an appropriately sized support foot with the appropriate rigidity. The support foot must be able to support the total weight of the machine.

<sup>7)</sup> Not possible for 2-pole 1LE55..-4BA motors.

Standard delivery times in working days:

25

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

Motor protection · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

**Selection and ordering data**

| Motor protection                                                                  | Article No. supplement                                       |                                                                                    | Frame size                  |        |         |        | Motor version              |     |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|--------|---------|--------|----------------------------|-----|
|                                                                                   | Motor protection code<br>15th position<br>of the Article No. | Additional identification code<br>with order code<br>and plain text if<br>required | 315                         | 355    | 400     | 450    | IEC                        | IE4 |
|                                                                                   |                                                              |                                                                                    | 1LE55.4<br>Basic Line       |        | 1LE5534 |        |                            |     |
|                                                                                   |                                                              |                                                                                    | 1LE56.4<br>Performance Line |        |         |        |                            |     |
|                                                                                   |                                                              |                                                                                    | 1LE55.3<br>Basic Line       |        | 1LE55.3 |        |                            | IE3 |
|                                                                                   |                                                              |                                                                                    | 1LE56.3<br>Performance Line |        |         |        |                            |     |
| 1LE5...-...-...-...-...                                                           |                                                              | Order code                                                                         |                             |        |         |        |                            |     |
| <b>Motor protection</b>                                                           |                                                              |                                                                                    |                             |        |         |        |                            |     |
| Without (Standard) <sup>1)</sup>                                                  | A                                                            | –                                                                                  | □                           | □      | □       | □      | Only for: 1LE55.4, 1LE55.3 |     |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1) 2)</sup>              | B                                                            | –                                                                                  | 406.–                       | 406.–  | 935.–   | 935.–  | Only for: 1LE55.4, 1LE55.3 |     |
|                                                                                   |                                                              |                                                                                    | □                           | □      |         |        | Only for: 1LE56.4, 1LE56.3 |     |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>2)</sup>       | C                                                            | –                                                                                  | 679.–                       | 679.–  | 1040.–  | 1040.– |                            |     |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>2)</sup>                        | F                                                            | –                                                                                  | 885.–                       | 885.–  | 1250.–  | 1250.– |                            |     |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>2)</sup>                       | G                                                            | –                                                                                  | 1500.–                      | 1500.– | 1960.–  | 1960.– |                            |     |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                    | H                                                            | –                                                                                  | 1670.–                      | 1670.– | 1670.–  | 1670.– |                            |     |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)                   | J                                                            | –                                                                                  | 2470.–                      | 2470.– | 2470.–  | 2470.– |                            |     |
| 1 Pt1000 resistance thermometer (2 terminals)                                     | K                                                            | –                                                                                  | 885.–                       | 885.–  | 1250.–  | 1250.– |                            |     |
| 2 Pt1000 resistance thermometers (4 terminals)                                    | L                                                            | –                                                                                  | 1500.–                      | 1500.– | 1960.–  | 1960.– |                            |     |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                     | P                                                            | –                                                                                  | 1340.–                      | 1340.– | 1340.–  | 1340.– |                            |     |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                    | Q                                                            | –                                                                                  | 2010.–                      | 2010.– | 2010.–  | 2010.– |                            |     |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                   | R                                                            | –                                                                                  | 2960.–                      | 2960.– | 2960.–  | 2960.– |                            |     |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>2)</sup>           | Z                                                            | Q3A                                                                                | 419.–                       | 419.–  | 1250.–  | 1250.– |                            |     |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) <sup>2)</sup> | Z                                                            | Q9A                                                                                | 683.–                       | 683.–  | 2830.–  | 2830.– |                            |     |

- Standard version  
– Not possible

Note:

Options are available specifically for bearing protection –  
For order codes and descriptions, see from Page 2/15.

<sup>1)</sup> For the Performance Line, motor protection by means of PTC thermistors with 3 embedded temperature sensors for tripping (motor protection code B) is already included in the base price. For the Performance Line, the option "Without motor protection" (motor protection code A) is not possible.

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

## SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

25

**Terminal box position · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

## Selection and ordering data

| Terminal box position | Article No. supplement                                         |                                                                           | Frame size                  |     |         |     | Motor version |     |
|-----------------------|----------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------|-----|---------|-----|---------------|-----|
|                       | Terminal box position code<br>16th position of the Article No. | Additional identification code with order code and plain text if required | 315                         | 355 | 400     | 450 | IEC           | IE4 |
|                       |                                                                |                                                                           | 1LE55.4<br>Basic Line       |     | 1LE5534 |     |               |     |
|                       |                                                                |                                                                           | 1LE56.4<br>Performance Line |     |         |     |               |     |
|                       |                                                                |                                                                           | 1LE55.3<br>Basic Line       |     | 1LE55.3 |     |               |     |
|                       |                                                                |                                                                           | 1LE56.3<br>Performance Line |     |         |     |               |     |
| 1LE5.....             | Order code                                                     |                                                                           |                             |     |         | IE3 |               |     |

| Terminal box position                                   |   |     |       |       |       |       |  |
|---------------------------------------------------------|---|-----|-------|-------|-------|-------|--|
| Terminal box base left with terminal box at the top     | 0 | —   | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box base right with terminal box at the top    | 1 | —   | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box base left with oblique terminal box 45°    | 2 | —   | 0     | 0     | 0     | 0     |  |
| Terminal box base right with oblique terminal box 45°   | 3 | —   | □     | □     | □     | □     |  |
| Terminal box right-hand side <sup>1)</sup>              | 5 | —   | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box left-hand side <sup>1)</sup>               | 6 | —   | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box left-hand side (base below) <sup>2)</sup>  | 9 | R5L | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box right-hand side (base below) <sup>2)</sup> | 9 | R6R | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box bottom left <sup>2) 3)</sup>               | 9 | R7L | 630.— | 630.— | 840.— | 840.— |  |
| Terminal box bottom right <sup>2) 3)</sup>              | 9 | R7R | 630.— | 630.— | 840.— | 840.— |  |

- Standard version
- Without additional charge

Note:

Notes:  
On the motors

1LE5583-4AA3.

1LE5583-4AA5.

1LE5583-4BA3,

1LE5583-4BA5.

1LE5583-4BA7,

1LE5583-4AC7,

1LE5583-4BC3,

1LE5583-4BD7.

terminal box type 1XB1631 is mounted.

<sup>1)</sup> For types of construction with feet and flange-mounted with feet, cast feet are standard. Screwed-on feet are available on request.

<sup>3)</sup> Only possible for Frame sizes 400 and 450 in combination with IM V1 type of construction.

2) Only possible in combination with IM B5 type of construction.

## Standard delivery times in working days:

10

25

30

40

50

60

On  
request

## SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

## Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

## Selection and ordering data

| Special versions                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |        |         |        | Motor version |                                                                                             |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|--------|---------|--------|---------------|---------------------------------------------------------------------------------------------|
|                                                                                    |                                                                                     | 315                         | 355    | 400     | 450    | IEC           | IE4                                                                                         |
|                                                                                    |                                                                                     | 1LE55.4<br>Basic Line       |        | 1LE5534 |        |               |                                                                                             |
|                                                                                    |                                                                                     | 1LE56.4<br>Performance Line |        |         |        |               |                                                                                             |
|                                                                                    |                                                                                     | 1LE55.3<br>Basic Line       |        | 1LE55.3 |        |               |                                                                                             |
| 1LE56.3<br>Performance Line                                                        |                                                                                     |                             |        |         | IE3    |               |                                                                                             |
| 1LE5 . . . - . . . . - . . . . -Z                                                  | Order code                                                                          |                             |        |         |        |               |                                                                                             |
| Motor protection                                                                   |                                                                                     |                             |        |         |        |               |                                                                                             |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                  | Q11                                                                                 | 406.–                       | 406.–  | 935.–   | 935.–  | Not for:      | Combination with motor protection code B (15th position of the Article No.)                 |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>        | Q12                                                                                 | 679.–                       | 679.–  | 1040.–  | 1040.– | Not for:      | Combination with motor protection code C (15th position of the Article No.)                 |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                         | Q23                                                                                 | 885.–                       | 885.–  | 1250.–  | 1250.– | Not for:      | Combination with motor protection code F (15th position of the Article No.)                 |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                        | Q25                                                                                 | 1500.–                      | 1500.– | 1960.–  | 1960.– | Not for:      | Combination with motor protection code G (15th position of the Article No.)                 |
| 3 bimetal sensors (NC contact) for tripping (2 terminals)                          | Q31                                                                                 | 453.–                       | 453.–  | 1250.–  | 1250.– |               |                                                                                             |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                | Q32                                                                                 | 801.–                       | 801.–  | 2410.–  | 2410.– |               |                                                                                             |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                          | Q33                                                                                 | 463.–                       | 463.–  | 1460.–  | 1460.– |               |                                                                                             |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)               | Q34                                                                                 | 811.–                       | 811.–  | 2830.–  | 2830.– |               |                                                                                             |
| 1 Pt1000 resistance thermometer (2 terminals)                                      | Q35                                                                                 | 885.–                       | 885.–  | 1250.–  | 1250.– |               |                                                                                             |
| 2 Pt1000 resistance thermometers (4 terminals)                                     | Q36                                                                                 | 1500.–                      | 1500.– | 1960.–  | 1960.– |               |                                                                                             |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>1)</sup>       | Q60                                                                                 | 1670.–                      | 1670.– | 1670.–  | 1670.– | Not for:      | Combination with motor protection code H (15th position of the Article No.)                 |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>23)</sup>     | Q61                                                                                 | 2470.–                      | 2470.– | 2470.–  | 2470.– | Not for:      | Combination with motor protection code J (15th position of the Article No.)                 |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                      | Q62                                                                                 | 1340.–                      | 1340.– | 1340.–  | 1340.– |               |                                                                                             |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                     | Q63                                                                                 | 2010.–                      | 2010.– | 2010.–  | 2010.– |               |                                                                                             |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                    | Q64                                                                                 | 2960.–                      | 2960.– | 2960.–  | 2960.– |               |                                                                                             |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)          | Q72                                                                                 | 1660.–                      | 1660.– | 1660.–  | 1660.– |               |                                                                                             |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)         | Q78                                                                                 | 2100.–                      | 2100.– | 2100.–  | 2100.– |               |                                                                                             |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) | Q79                                                                                 | 2420.–                      | 2420.– | 2950.–  | 2950.– | Not for:      | Combination with order codes F40, F41                                                       |
| Motor connection and terminal box                                                  |                                                                                     |                             |        |         |        |               |                                                                                             |
| External grounding                                                                 |                                                                                     | –                           | –      | □       | □      |               |                                                                                             |
| Terminal box on NDE                                                                | H08                                                                                 | 1200.–                      | 1260.– | 2710.–  | 2710.– |               |                                                                                             |
| Second external grounding                                                          | H70                                                                                 | 15.80                       | 15.80  | 15.80   | 15.80  |               |                                                                                             |
| Subsequently rotatable main terminal box                                           | R09                                                                                 | –                           | –      | 691.–   | 806.–  |               |                                                                                             |
| Rotation of the terminal box through 90°, entry from DE <sup>38)</sup>             | R10                                                                                 | 124.–                       | 124.–  | 124.–   | 124.–  | Not for:      | Combination with type of construction letters F, G, H, J (14th position of the Article No.) |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

**10****25****30****40****50****60****On  
request****Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

| Special versions                                                                                                         | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |            |            |            | Motor version |                                                                           |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|------------|------------|------------|---------------|---------------------------------------------------------------------------|
|                                                                                                                          |                                                                                     | <b>315</b>                  | <b>355</b> | <b>400</b> | <b>450</b> | IEC           | IE4                                                                       |
|                                                                                                                          |                                                                                     | 1LE55.4<br>Basic Line       |            | 1LE5534    |            |               |                                                                           |
|                                                                                                                          |                                                                                     | 1LE56.4<br>Performance Line |            |            |            |               |                                                                           |
|                                                                                                                          |                                                                                     | 1LE55.3<br>Basic Line       |            | 1LE55.3    |            |               | IE3                                                                       |
|                                                                                                                          |                                                                                     | 1LE56.3<br>Performance Line |            |            |            |               |                                                                           |
| 1LE5 . . . - . . . . - . . . - <b>Z</b>                                                                                  | Order code                                                                          |                             |            |            |            |               |                                                                           |
| Motor connection and terminal box (continued)                                                                            |                                                                                     |                             |            |            |            |               |                                                                           |
| Rotation of the terminal box through 90°, entry from NDE                                                                 | <b>R11</b>                                                                          | 124.–                       | 124.–      | 124.–      | 124.–      |               |                                                                           |
| Rotation of the terminal box through 180°                                                                                | <b>R12</b>                                                                          | 124.–                       | 124.–      | 124.–      | 124.–      |               |                                                                           |
| One EMC cable gland                                                                                                      | <b>R14</b>                                                                          | 529.–                       | 1260.–     | –          | –          | Not for:      | Combination with order codes R51, R53                                     |
| One metal cable gland                                                                                                    | <b>R15</b>                                                                          | 236.–                       | 525.–      | –          | –          | Not for:      | Combination with order codes R51, R53                                     |
| EMC cable gland, maximum configuration                                                                                   | <b>R16</b>                                                                          | 1090.–                      | 2100.–     | 4750.–     | 4750.–     | Not for:      | Combination with order codes R51, R53                                     |
| Stud terminal for cable connection, accessories pack (3 items)                                                           | <b>R17</b>                                                                          | 189.–                       | 232.–      | –          | –          | Not for:      | Combination with order codes R51, R53                                     |
| One metal cable gland, maximum configuration                                                                             | <b>R18</b>                                                                          | 417.–                       | 630.–      | 3270.–     | 3270.–     | Not for:      | Combination with order codes R51, R53                                     |
| Saddle terminal for connection without cable lug, accessories pack                                                       | <b>R19</b>                                                                          | 735.–                       | 1580.–     | 1580.–     | 1580.–     | Not for:      | Combination with order codes R21, R23, R24                                |
| 3 cables protruding, 1.5 m long                                                                                          | <b>R21</b>                                                                          | O. R.                       | O. R.      | O. R.      | O. R.      | Not for:      | Combination with order codes R17, R19, R50                                |
| 6 cables protruding, 1.5 m long                                                                                          | <b>R23</b>                                                                          | O. R.                       | O. R.      | O. R.      | O. R.      | Not for:      | Combination with order codes R17, R19, R50                                |
| 6 cables protruding, 3 m long                                                                                            | <b>R24</b>                                                                          | O. R.                       | O. R.      | O. R.      | O. R.      | Not for:      | Combination with order codes R17, R19, R50                                |
| Larger terminal box <sup>39)</sup>                                                                                       | <b>R50</b>                                                                          | 2230.–                      | –          | 10400.–    | 10400.–    | Not for:      | Combination with order codes R21, R23, R24                                |
| Terminal box without cable entry opening                                                                                 | <b>R51</b>                                                                          | O                           | O          | –          | –          | Not for:      | Combination with order codes R14, R15, R16, R18                           |
| Drilled removable entry plate                                                                                            | <b>R52</b>                                                                          | 510.–                       | 630.–      | □          | □          |               |                                                                           |
| Undrilled removable entry plate                                                                                          | <b>R53</b>                                                                          | 510.–                       | 630.–      | O          | O          | Not for:      | Combination with order codes R14, R15, R16, R18 (frame sizes 315 and 355) |
| Cast-iron auxiliary terminal box (small)                                                                                 | <b>R62</b>                                                                          | 284.–                       | 315.–      | 533.–      | 533.–      |               |                                                                           |
| Larger cast-iron terminal box                                                                                            | <b>R63</b>                                                                          | 630.–                       | 630.–      | 2070.–     | 2070.–     |               |                                                                           |
| Stainless steel auxiliary terminal box (large)                                                                           | <b>R65</b>                                                                          | –                           | –          | 2030.–     | 2030.–     |               |                                                                           |
| Silicon-free version <sup>30)</sup>                                                                                      | <b>R74</b>                                                                          | 357.–                       | 357.–      | 3470.–     | 3470.–     |               |                                                                           |
| Non-standard threaded through hole (NPT or G thread) <sup>2) 30)</sup>                                                   | <b>Y61 •</b><br>and customer specifications                                         | 670.–                       | 788.–      | 1580.–     | 1580.–     |               |                                                                           |
| Windings and insulation                                                                                                  |                                                                                     |                             |            |            |            |               |                                                                           |
| Temperature class 155 (F), utilized acc. to 155 (F), with service factor <sup>33)</sup>                                  | <b>N01</b>                                                                          | 109.–                       | 109.–      | □          | □          | Not for:      | 1LE5583, 1LE5683 (frame sizes 315 and 355)                                |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased power <sup>33)</sup>                                 | <b>N02</b>                                                                          | 109.–                       | 109.–      | 332.–      | 332.–      | Not for:      | 1LE5583, 1LE5683 (frame sizes 315 and 355)                                |
| Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature <sup>33)</sup>                   | <b>N03</b>                                                                          | 109.–                       | 109.–      | 332.–      | 332.–      | Not for:      | 1LE5583, 1LE5683 (frame sizes 315 and 355)                                |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % <sup>40) 43)</sup>  | <b>N05</b>                                                                          | 109.–                       | 109.–      | 109.–      | 109.–      |               |                                                                           |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % <sup>40) 43)</sup>  | <b>N06</b>                                                                          | 109.–                       | 109.–      | 109.–      | 109.–      |               |                                                                           |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % <sup>40) 43)</sup> | <b>N07</b>                                                                          | 109.–                       | 109.–      | 109.–      | 109.–      |               |                                                                           |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

## Standard delivery times in working days:

10

25

30

40

50

60

On  
request

## SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

## Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |         |         |         | Motor version                                                       |                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------|---------|---------|---------------------------------------------------------------------|-----------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                             |                                                                                     | 315                         | 355     | 400     | 450     | IEC                                                                 | IE4                                                             |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE55.4<br>Basic Line       |         | 1LE5534 |         |                                                                     |                                                                 |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE56.4<br>Performance Line |         |         |         |                                                                     |                                                                 |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE55.3<br>Basic Line       |         | 1LE55.3 |         |                                                                     |                                                                 |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE56.3<br>Performance Line |         |         |         | IE3                                                                 |                                                                 |
| 1LE5 .... - ..... -Z                                                                                                                                                                                                                                                                        |                                                                                     | Order code                  |         |         |         |                                                                     |                                                                 |
| Windings and insulation (continued)                                                                                                                                                                                                                                                         |                                                                                     |                             |         |         |         |                                                                     |                                                                 |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 % <sup>40) 43)</sup>                                                                                                                                                                    | N08                                                                                 | 1010.–                      | 109.–   | 109.–   | 109.–   |                                                                     |                                                                 |
| Temperature class 180 (H) <sup>41)</sup>                                                                                                                                                                                                                                                    | N10                                                                                 | 1790.–                      | 2320.–  | 4570.–  | 6220.–  |                                                                     |                                                                 |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>4)</sup>                                                                                                                                                                                                                    | N11                                                                                 | 2200.–                      | 2730.–  | O. R.   | O. R.   |                                                                     |                                                                 |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air                                                                                                                                                                                                          | N30                                                                                 | 1350.–                      | 1470.–  | 4780.–  | 5300.–  |                                                                     |                                                                 |
| Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air                                                                                                                                                                                                         | N31                                                                                 | 1820.–                      | 2000.–  | 5300.–  | 6040.–  |                                                                     |                                                                 |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude <sup>33)</sup>                                                                                                                                                            | Y50 • and spec. power, CT .. °C or IA .... m above sea level                        | 1510.–                      | 2100.–  | 2630.–  | 3150.–  | Not for:                                                            | 1LE5583, 1LE5683 (frame sizes 315 and 355)                      |
| Temperature class 155 (F), utilized according to 155 (F), other requirements <sup>33)</sup>                                                                                                                                                                                                 | Y52 • and spec. power, CT .. °C or IA .... m above sea level                        | 109.–                       | 109.–   | 332.–   | 332.–   |                                                                     |                                                                 |
| Temperature class 180 (H), utilized according to 155 (F) <sup>33)</sup>                                                                                                                                                                                                                     | Y75 • and spec. power, CT .. °C or IA .... m above sea level                        | 2460.–                      | 2940.–  | O. R.   | O. R.   |                                                                     |                                                                 |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                                     |                             |         |         |         |                                                                     |                                                                 |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                                     | □                           | □       | □       | □       | Only for: Basic Line, Add und Pro                                   |                                                                 |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                                 | O                           | O       | O       | O       |                                                                     |                                                                 |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                                 | 83.30                       | 83.30   | 315.–   | 315.–   |                                                                     |                                                                 |
| Special finish C3                                                                                                                                                                                                                                                                           |                                                                                     | □                           | □       | 1360.–  | 1720.–  | Only for: Performance Line                                          |                                                                 |
|                                                                                                                                                                                                                                                                                             | S02                                                                                 | 305.–                       | –       | 1360.–  | 1720.–  | Only for: Basic Line, Add and Pro                                   |                                                                 |
| Special finish sea air resistant C4 <sup>42)</sup>                                                                                                                                                                                                                                          | S03                                                                                 | 830.–                       | 894.–   | 2610.–  | 2990.–  |                                                                     |                                                                 |
| Special paint for use offshore C5 <sup>42)</sup>                                                                                                                                                                                                                                            | S04                                                                                 | 8070.–                      | 8510.–  | 12600.– | 14200.– |                                                                     |                                                                 |
| Internal coating                                                                                                                                                                                                                                                                            | S05                                                                                 | 137.–                       | 158.–   | 1200.–  | 1420.–  |                                                                     |                                                                 |
| Top coat polyurethane <sup>27)</sup>                                                                                                                                                                                                                                                        | S06                                                                                 | 795.–                       | 840.–   | □       | □       |                                                                     |                                                                 |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and finish RAL....                                                            | 263.–                       | 315.–   | 420.–   | 525.–   |                                                                     |                                                                 |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                      | Y56 • and finish RAL....                                                            | 757.–                       | 918.–   | 1840.–  | 2330.–  |                                                                     |                                                                 |
| Modular technology – Basic versions <sup>5)</sup>                                                                                                                                                                                                                                           |                                                                                     |                             |         |         |         |                                                                     |                                                                 |
| Mounting of holding brake (standard assignment) <sup>5) 6) 25) 26) 30)</sup>                                                                                                                                                                                                                | F01                                                                                 | 64100.–                     | 99900.– | –       | –       | Only for: 4-pole motors                                             |                                                                 |
|                                                                                                                                                                                                                                                                                             |                                                                                     | –                           | –       | 63800.– | 69400.– | Only for: Combination with order codes D02, F40, F41, L05, L30, L52 |                                                                 |
| Mounting of separately driven fan <sup>34)</sup>                                                                                                                                                                                                                                            | F70                                                                                 | 4270.–                      | 5250.–  | 12300.– | 14200.– | Not for:                                                            | Combination with order codes L05, Y59 (frame sizes 315 and 355) |
| Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I <sup>5)</sup>                                                                                                                                                                                                               | G11                                                                                 | 1280.–                      | 1950.–  | –       | –       | Not for:                                                            | Combination with order codes D02, L05                           |
| Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I <sup>5)</sup>                                                                                                                                                                                                               | G12                                                                                 | 1860.–                      | O. R.   | –       | –       | Not for:                                                            | Combination with order codes D02, L05                           |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

**10****25****30****40****50****60****On request****Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

| Special versions                                                                                                                                             | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |         |         |         | Motor version                                                                 |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|---------|---------|---------|-------------------------------------------------------------------------------|-----|
|                                                                                                                                                              |                                                                                     | 315                         | 355     | 400     | 450     | IEC                                                                           | IE4 |
|                                                                                                                                                              |                                                                                     | 1LE55.4<br>Basic Line       |         | 1LE5534 |         |                                                                               |     |
|                                                                                                                                                              |                                                                                     | 1LE56.4<br>Performance Line |         |         |         |                                                                               |     |
|                                                                                                                                                              |                                                                                     | 1LE55.3<br>Basic Line       |         | 1LE55.3 |         |                                                                               |     |
|                                                                                                                                                              |                                                                                     | 1LE56.3<br>Performance Line |         |         |         |                                                                               |     |
| 1LE5...-...-...-Z                                                                                                                                            |                                                                                     | Order code                  |         |         |         |                                                                               |     |
| Modular technology – Additional versions                                                                                                                     |                                                                                     |                             |         |         |         |                                                                               |     |
| Brake supply voltage 24 V DC                                                                                                                                 | F10                                                                                 | 70.60                       | 70.60   | –       | –       | Only for: 4-pole motors                                                       |     |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                      | F11                                                                                 | O                           | O       | –       | –       | Only for: 4-pole motors                                                       |     |
|                                                                                                                                                              |                                                                                     | –                           | –       | O       | O       | Only for: Combination with order codes D02, F40, F41, L05, L30, L52           |     |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                      | F12                                                                                 | 70.60                       | 70.60   | –       | –       | Only for: 4-pole motors                                                       |     |
|                                                                                                                                                              |                                                                                     | –                           | –       | 9690.–  | 52000.– | Only for: Combination with order codes D02, F40, F41, L05, L30, L52           |     |
| Reverse running stop, reverse movement left locked, rotating direction right                                                                                 | F40                                                                                 | 9560.–                      | 11500.– | –       | –       | Not for: Combination with order codes F01, F10, F11, F12                      |     |
| Reverse running stop, reverse movement right locked, rotating direction left                                                                                 | F41                                                                                 | 9560.–                      | 11500.– | –       | –       | Not for: Combination with order codes F01, F10, F11, F12                      |     |
| Special technology <sup>5)</sup>                                                                                                                             |                                                                                     |                             |         |         |         |                                                                               |     |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>5) 9)</sup>                                                                                             | G04                                                                                 | 4200.–                      | 6200.–  | 6200.–  | 6200.–  | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>5) 9)</sup>                                                                                            | G05                                                                                 | 4940.–                      | 6620.–  | 6620.–  | 6620.–  | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>5) 9)</sup>                                                                                            | G06                                                                                 | 5990.–                      | 6200.–  | 6200.–  | 6200.–  | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) <sup>5) 10)</sup>                                        | G07                                                                                 | 6620.–                      | 7040.–  | –       | –       | Not for: Combination with order codes D02, L05                                |     |
| Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) <sup>5) 10)</sup>                                           | G08                                                                                 | 18000.–                     | 18000.– | –       | –       | Not for: Combination with order codes D02, L05                                |     |
| Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box moisture protection <sup>5)</sup>                                                            | G15                                                                                 | 5940.–                      | 6300.–  | 9760.–  | 9760.–  | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box dust protection <sup>5)</sup>                                                                | G16                                                                                 | 5940.–                      | 6300.–  | 9760.–  | 9760.–  | Not for: Combination with order codes D02, L04, L05 (frame sizes 315 and 355) |     |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                                                           | G21                                                                                 | 3430.–                      | 3770.–  | –       | –       |                                                                               |     |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                                                           | G22                                                                                 | 3880.–                      | 4240.–  | –       | –       |                                                                               |     |
| Mounting of HOGS100S-B76.626.01024.1, SIL-2 rotary pulse encoder                                                                                             | G25                                                                                 | 17400.–                     | 18700.– | 18300.– | 18300.– |                                                                               |     |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                                                               | G27                                                                                 | 20200.–                     | 21600.– | 21200.– | 21200.– |                                                                               |     |
| Mounting of XSI 850 Overspeed rotary pulse encoder                                                                                                           | G93                                                                                 | 6220.–                      | 6250.–  | 6300.–  | 6350.–  |                                                                               |     |
| Mounting of XHI 861 Overspeed rotary pulse encoder                                                                                                           | G94                                                                                 | 6220.–                      | 6250.–  | 6300.–  | 6350.–  |                                                                               |     |
| Mounting of a special type of rotary pulse encoder                                                                                                           | Y70 • and customer specifications                                                   | –                           | –       | O. R.   | O. R.   |                                                                               |     |
| Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed .... rpm), terminal box moisture protection <sup>5)</sup>     | Y74 • and spec. speed .... rpm                                                      | 9020.–                      | 11500.– | 13900.– | 13900.– | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed .... rpm), terminal box dust protection <sup>5)</sup>         | Y76 • and spec. speed .... rpm                                                      | 9020.–                      | 11500.– | 13900.– | 13900.– | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |
| Mounting of rotary pulse encoder HOG 10 DN 1024 I + ESL 93, (integrated electronic speed switch, speed .... rpm), terminal box dust protection <sup>5)</sup> | Y79 • and spec. speed (max. 3) .... rpm                                             | 15800.–                     | 18900.– | 20000.– | 20000.– | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)      |     |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

## Standard delivery times in working days:

10

25

30

40

50

60

On  
request

## SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

## Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

| Special versions                                                                                                                                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |            |            |            | Motor version                                                                                                                                  |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------|------------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                                                                                         |                                                                                     | <b>315</b>                  | <b>355</b> | <b>400</b> | <b>450</b> | IEC                                                                                                                                            | IE4 |
|                                                                                                                                                         |                                                                                     | 1LE55.4<br>Basic Line       |            | 1LE5534    |            |                                                                                                                                                |     |
|                                                                                                                                                         |                                                                                     | 1LE56.4<br>Performance Line |            |            |            |                                                                                                                                                |     |
|                                                                                                                                                         |                                                                                     | 1LE55.3<br>Basic Line       |            | 1LE55.3    |            |                                                                                                                                                |     |
|                                                                                                                                                         |                                                                                     | 1LE56.3<br>Performance Line |            |            |            | IE3                                                                                                                                            |     |
| 1LE5 ...-...-...-Z                                                                                                                                      |                                                                                     | Order code                  |            |            |            |                                                                                                                                                |     |
| Mechanical design and degrees of protection                                                                                                             |                                                                                     |                             |            |            |            |                                                                                                                                                |     |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                                                | F77                                                                                 | 2470.–                      | 2730.–     | –          | –          | Only for: 2-pole motors                                                                                                                        |     |
|                                                                                                                                                         |                                                                                     | –                           | –          | □          | □          | Only for: Combination with order codes L05, F90                                                                                                |     |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                                        | F78                                                                                 | 2470.–                      | 2730.–     | –          | –          | Only for: 2-pole motors                                                                                                                        |     |
|                                                                                                                                                         |                                                                                     | –                           | –          | O          | O          | Only for: Combination with order codes L05, F90                                                                                                |     |
| Prepared for mounted components, centering hole only                                                                                                    | G40                                                                                 | –                           | –          | □          | □          |                                                                                                                                                |     |
| Prepared for mountings with D12 shaft                                                                                                                   | G41                                                                                 | 924.–                       | 924.–      | –          | –          | Not for: Combination with order codes D02, L05                                                                                                 |     |
| Prepared for mountings with D16 shaft                                                                                                                   | G42                                                                                 | 924.–                       | 924.–      | 4520.–     | 4520.–     | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)                                                                       |     |
| Mechanical protection for encoders <sup>7) 9)</sup>                                                                                                     | G43                                                                                 | 212.–                       | 212.–      | 2150.–     | 2570.–     | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)                                                                       |     |
| Protective cover <sup>7) 9) 11)</sup>                                                                                                                   | H00                                                                                 | 766.–                       | 894.–      | 2150.–     | 2570.–     | Not for: Combination with order codes D02, L05 (frame sizes 315 and 355)                                                                       |     |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                                                              | H02                                                                                 | 694.–                       | 788.–      | –          | –          |                                                                                                                                                |     |
| Condensation drainage holes                                                                                                                             |                                                                                     | □                           | □          | □          | □          |                                                                                                                                                |     |
| Rust-resistant screws (externally)                                                                                                                      | H07                                                                                 | 281.–                       | 315.–      | 1370.–     | 1370.–     |                                                                                                                                                |     |
| IP66 degree of protection                                                                                                                               | H19                                                                                 | 1419.–                      | 2164.–     | –          | –          |                                                                                                                                                |     |
| IP65 degree of protection <sup>13)</sup>                                                                                                                | H20                                                                                 | 676.–                       | 694.–      | 9240.–     | 11100.–    |                                                                                                                                                |     |
| IP54 degree of protection <sup>36)</sup>                                                                                                                | H21                                                                                 | 840.–                       | 840.–      | –          | –          |                                                                                                                                                |     |
| IP56 degree of protection <sup>14)</sup>                                                                                                                | H22                                                                                 | 735.–                       | 1470.–     | 2020.–     | 2700.–     |                                                                                                                                                |     |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>12) 24)</sup>                                                                      | H23                                                                                 | 478.–                       | 557.–      | –          | –          | Not for: Combination with type of construction letters T, U, V (14th position of the Article No.)                                              |     |
| Viton sealing ring                                                                                                                                      | H25                                                                                 | 137.–                       | 232.–      | 473.–      | 735.–      | Not for: Combination with order codes D02, D03, D04 (frame sizes 315 and 355)                                                                  |     |
| Increased corrosion protection for external components <sup>30)</sup>                                                                                   | H90                                                                                 | –                           | –          | 12600.–    | 14200.–    |                                                                                                                                                |     |
| Grounding brush for converter operation <sup>32) 46)</sup>                                                                                              | L52                                                                                 | 4730.–                      | 4730.–     | 7350.–     | 7350.–     | Not for: Combination with order codes F01, F10, F11, F12 (frame sizes 315 and 355)                                                             |     |
| Coolant temperature and installation altitude                                                                                                           |                                                                                     |                             |            |            |            |                                                                                                                                                |     |
| Coolant temperature –50 to +40 °C (IP54 degree of protection) <sup>15) 35)</sup>                                                                        | D02                                                                                 | 6400.–                      | 6830.–     | 71900.–    | 77600.–    | Not for: Combination with order codes F01, F10, F11, F12, G04, G05, G06, G07, G11, G12, G15, G16; H25, Y74, Y76, Y79 (frame sizes 315 and 355) |     |
| Coolant temperature –40 to +40 °C <sup>15)</sup>                                                                                                        | D03                                                                                 | 2630.–                      | 2840.–     | 16700.–    | 18400.–    | Not for: Combination with order code H25 (frame sizes 315 and 355)                                                                             |     |
| Coolant temperature –30 to +40 °C <sup>15)</sup>                                                                                                        | D04                                                                                 | 2440.–                      | 2630.–     | 11200.–    | 13600.–    | Not for: Combination with order code H25 (frame sizes 315 and 355)                                                                             |     |
| Designs in accordance with standards and specifications                                                                                                 |                                                                                     |                             |            |            |            |                                                                                                                                                |     |
| VIK version <sup>46)</sup>                                                                                                                              | C02                                                                                 | –                           | –          | O. R.      | O. R.      |                                                                                                                                                |     |
| Motor without CE marking for export outside EEA (see EU Directive 640/2009)                                                                             | D22                                                                                 | O                           | O          | –          | –          |                                                                                                                                                |     |
| Motor exclusively according to the Energy-related Products Law, Article 1 dated 27.2.2008, motor to be used in means of transport for persons and goods | D23                                                                                 | O                           | O          | –          | –          |                                                                                                                                                |     |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

Standard delivery times in working days:

|    |    |    |    |    |    |            |
|----|----|----|----|----|----|------------|
| 10 | 25 | 30 | 40 | 50 | 60 | On request |
|----|----|----|----|----|----|------------|

**Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

| Special versions                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |         |        | Motor version                                                                                                                                                      |     |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                                                                      |                                                                                     | 315                      | 355    | 400     | 450    | IEC                                                                                                                                                                | IE4 |
|                                                                                                                                      |                                                                                     | 1LE55.4 Basic Line       |        | 1LE5534 |        |                                                                                                                                                                    |     |
|                                                                                                                                      |                                                                                     | 1LE56.4 Performance Line |        |         |        |                                                                                                                                                                    |     |
|                                                                                                                                      |                                                                                     | 1LE55.3 Basic Line       |        | 1LE55.3 |        |                                                                                                                                                                    |     |
| 1LE56.3 Performance Line                                                                                                             |                                                                                     |                          |        |         | IE3    |                                                                                                                                                                    |     |
| 1LE5 .....-Z                                                                                                                         |                                                                                     | Order code               |        |         |        |                                                                                                                                                                    |     |
| Designs in accordance with standards and specifications (continued)                                                                  |                                                                                     |                          |        |         |        |                                                                                                                                                                    |     |
| Electrical according to NEMA MG1-12 <sup>17)</sup>                                                                                   | D30                                                                                 | 104.–                    | 115.–  | □       | □      | Only for: 1LE5504, 1LE5604, 1LE5503, 1LE5603 (frame sizes 315 and 355)                                                                                             |     |
| Design according to UL with "Recognition Mark" <sup>17)</sup>                                                                        | D31                                                                                 | 996.–                    | 1260.– | □       | □      | Only for: 1LE5504, 1LE5604, 1LE5503, 1LE5603 (frame sizes 315 and 355)                                                                                             |     |
| China Energy Efficiency Label                                                                                                        | D34                                                                                 | O                        | O      | –       | –      |                                                                                                                                                                    |     |
| Canadian regulations (CSA) <sup>16)</sup>                                                                                            | D40                                                                                 | 837.–                    | 999.–  | □       | □      | Only for: 1LE5504, 1LE5604, 1LE5503, 1LE5603 (frame sizes 315 and 355)                                                                                             |     |
| TR CU product safety certificate EAC for Eurasian customs union                                                                      | D47                                                                                 | 735.–                    | 1150.– | 1580.–  | 2100.– |                                                                                                                                                                    |     |
| MEPS Australia                                                                                                                       | D70                                                                                 | 1410.–                   | –      | –       | –      | Only for: 1LE5533, 1LE5633, 1LE5583, 1LE5683                                                                                                                       |     |
| Bearings and lubrication                                                                                                             |                                                                                     |                          |        |         |        |                                                                                                                                                                    |     |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                                | L19                                                                                 | O                        | O      | O       | O      |                                                                                                                                                                    |     |
| Located bearing DE                                                                                                                   | L20                                                                                 | 1070.–                   | 1260.– | □       | □      |                                                                                                                                                                    |     |
| Located bearing NDE <sup>37)</sup>                                                                                                   | L21                                                                                 | –                        | –      | 1370.–  | 1470.– |                                                                                                                                                                    |     |
| Bearing design for increased cantilever forces <sup>28) 29)</sup>                                                                    | L22                                                                                 | 630.–                    | 1470.– | O. R.   | O. R.  |                                                                                                                                                                    |     |
| Regreasing device                                                                                                                    |                                                                                     | –                        | –      | □       | □      |                                                                                                                                                                    |     |
| High-temperature grease                                                                                                              | L24                                                                                 | O. R.                    | O. R.  | –       | –      |                                                                                                                                                                    |     |
| Drain for used grease                                                                                                                |                                                                                     | □                        | □      | –       | –      | Only for: Performance Line                                                                                                                                         |     |
|                                                                                                                                      | L30                                                                                 | 189.–                    | –      | O. R.   | O. R.  | Only for: Basic Line, Add and Pro                                                                                                                                  |     |
| Special version with higher speeds                                                                                                   | L37                                                                                 | O. R.                    | O. R.  | O. R.   | O. R.  |                                                                                                                                                                    |     |
| Bearing insulation DE <sup>46)</sup>                                                                                                 | L50                                                                                 | 2050.–                   | 2200.– | 2630.–  | 3050.– |                                                                                                                                                                    |     |
| Bearing insulation NDE <sup>32) 46)</sup>                                                                                            | L51                                                                                 | 2050.–                   | 2200.– | 2630.–  | 3050.– |                                                                                                                                                                    |     |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                                              | Q01                                                                                 | 528.–                    | 564.–  | 564.–   | 564.–  |                                                                                                                                                                    |     |
| Balance and vibration quantity                                                                                                       |                                                                                     |                          |        |         |        |                                                                                                                                                                    |     |
| Vibration quantity level A                                                                                                           |                                                                                     | □                        | □      | □       | □      |                                                                                                                                                                    |     |
| Vibration quantity level B <sup>18)</sup>                                                                                            | L00                                                                                 | 1710.–                   | 1890.– | 4470.–  | 5300.– | Only for: 4-pole motors (frame sizes 315 and 355)                                                                                                                  |     |
| Half-key balancing (standard)                                                                                                        |                                                                                     | □                        | □      | □       | □      |                                                                                                                                                                    |     |
| Balancing without key <sup>44)</sup>                                                                                                 | L01                                                                                 | 83.60                    | 89.40  | 210.–   | 210.–  | Not for: Combination with order code L04 (frame sizes 315 and 355)                                                                                                 |     |
| Full-key balancing <sup>44)</sup>                                                                                                    | L02                                                                                 | 209.–                    | 209.–  | 597.–   | 856.–  | Not for: Combination with order code L04 (frame sizes 315 and 355)                                                                                                 |     |
| Shaft and rotor                                                                                                                      |                                                                                     |                          |        |         |        |                                                                                                                                                                    |     |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                                 | 1060.–                   | 1100.– | 1150.–  | 1200.– | Not for: Combination with order codes L01, L02 (frame sizes 315 and 355)                                                                                           |     |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                        | L05                                                                                 | 519.–                    | 557.–  | 1580.–  | 1790.– | Not for: Combination with order codes F01, F10, F11, F12, F70, F77, F78, G04, G05, G06, G07, G15, G16, G41, G42, G43, H00, Y74, Y76, Y79 (frame sizes 315 and 355) |     |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                 | L06                                                                                 | 5890.–                   | 7040.– | –       | –      |                                                                                                                                                                    |     |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                                 | 565.–                    | 565.–  | 1100.–  | 1100.– |                                                                                                                                                                    |     |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 | 827.–                    | 827.–  | 1370.–  | 1370.– | Not for: Combination with type of construction letters A, T, U, V (14th position of the Article No.) (frame sizes 315 and 355)                                     |     |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

## Standard delivery times in working days:

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25

30

40

50

60

On request

## SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

## Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

| Special versions                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |         |        | Motor version |                                                                      |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|---------|--------|---------------|----------------------------------------------------------------------|
|                                                                                                                      |                                                                                     | 315                      | 355    | 400     | 450    | IEC           | IE4                                                                  |
|                                                                                                                      |                                                                                     | 1LE55.4 Basic Line       |        | 1LE5534 |        |               |                                                                      |
|                                                                                                                      |                                                                                     | 1LE56.4 Performance Line |        |         |        |               |                                                                      |
|                                                                                                                      |                                                                                     | 1LE55.3 Basic Line       |        | 1LE55.3 |        |               |                                                                      |
|                                                                                                                      |                                                                                     | 1LE56.3 Performance Line |        |         |        |               |                                                                      |
| 1LE5 ...-...-...-Z                                                                                                   | Order code                                                                          |                          |        |         |        |               |                                                                      |
| Shaft and rotor (continued)                                                                                          |                                                                                     |                          |        |         |        |               |                                                                      |
| Non-standard shaft extension, DE <sup>19)</sup>                                                                      | Y58 • and customer specifications                                                   | 1060.–                   | 1370.– | 5100.–  | 5100.– |               |                                                                      |
| Non-standard shaft extension, NDE <sup>19)</sup>                                                                     | Y59 • and customer specifications                                                   | 1060.–                   | 1370.– | 5100.–  | 5100.– | Not for:      | Combination with order code F70 (frame sizes 315 and 355)            |
| Special shaft steel as requested by customer                                                                         | Y60 • and customer specifications                                                   | O. R.                    | O. R.  | O. R.   | O. R.  |               |                                                                      |
| Heating and ventilation                                                                                              |                                                                                     |                          |        |         |        |               |                                                                      |
| Sheet metal fan cover                                                                                                |                                                                                     | □                        | □      | □       | □      | Only for:     | Performance Line, Add and Pro                                        |
|                                                                                                                      | F74                                                                                 | 236.–                    | –      | –       | –      | Only for:     | Basic Line                                                           |
| Metal external fan                                                                                                   | F76                                                                                 | –                        | –      | 6320.–  | 6320.– |               |                                                                      |
| Without external fan and without fan cover                                                                           | F90                                                                                 | 118.–                    | 118.–  | 210.–   | 210.–  | Only for:     | Combination with order codes F74, F77, F78 (frame sizes 315 and 355) |
| Anti-condensation heating for 230 V (2 terminals)                                                                    | Q02                                                                                 | 948.–                    | 1200.– | 1350.–  | 1500.– | Not for:      | Combination with order codes Q03, Q06                                |
| Anti-condensation heating for 115 V (2 terminals)                                                                    | Q03                                                                                 | 948.–                    | 1200.– | 1350.–  | 1500.– | Not for:      | Combination with order codes Q02, Q06                                |
| Anti-condensation heating for 400 V (2 terminals)                                                                    | Q06                                                                                 | 2760.–                   | 3350.– | 4020.–  | 4710.– | Not for:      | Combination with order codes Q02, Q03                                |
| Separately driven fan with non-standard voltage and/or frequency                                                     | Y81 • and customer specifications                                                   | 1010.–                   | 1150.– | 6170.–  | 6940.– |               |                                                                      |
| Rating plate and extra rating plates                                                                                 |                                                                                     |                          |        |         |        |               |                                                                      |
| Extra rating plate for voltage tolerance <sup>20)</sup>                                                              | B07                                                                                 | 109.–                    | 109.–  | 204.–   | 204.–  |               |                                                                      |
| Second rating plate, loose                                                                                           | M10                                                                                 | 67.60                    | 67.60  | 204.–   | 204.–  |               |                                                                      |
| Rating plate, stainless steel                                                                                        | M11                                                                                 | 69.40                    | –      | –       | –      | Only for:     | Basic Line                                                           |
|                                                                                                                      | –                                                                                   | □                        | □      | □       | □      | Only for:     | Performance Line, Add and Pro                                        |
| Extra rating plate with deviating rating plate data <sup>45)</sup>                                                   | Y80 • and customer specifications                                                   | 210.–                    | 210.–  | 349.–   | 349.–  |               |                                                                      |
| Extra rating plate with customer specifications                                                                      | Y82 • and customer specifications                                                   | 109.–                    | 109.–  | 204.–   | 204.–  |               |                                                                      |
| Additional information on rating plate and on package label (max. 20 charaters)                                      | Y84 • and customer specifications                                                   | 109.–                    | 109.–  | 204.–   | 204.–  |               |                                                                      |
| Adhesive label, supplied loose (contents: Article No., Serial No.; 2 lines of text)                                  | Y85 • and customer specifications                                                   | 67.60                    | 67.60  | –       | –      |               |                                                                      |
| Extension of the liability for defects                                                                               |                                                                                     |                          |        |         |        |               |                                                                      |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery <sup>21)</sup>   | Q80                                                                                 | 2.3%                     | 2.3%   | 2.3%    | 2.3%   |               |                                                                      |
| Extension of the liability for defects by 18 months to a total of 30 months (2.5 years) from delivery <sup>21)</sup> | Q81                                                                                 | 3.4%                     | 3.4%   | 3.4%    | 3.4%   |               |                                                                      |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>21)</sup>   | Q82                                                                                 | 4.4%                     | □      | 4.4%    | 4.4%   |               |                                                                      |
| Extension of the liability for defects by 30 months to a total of 42 months (3.5 years) from delivery <sup>21)</sup> | Q83                                                                                 | 6.2%                     | 6.2%   | 6.2%    | 6.2%   |               |                                                                      |
| Extension of the liability for defects by 36 months to a total of 48 months (4 years) from delivery <sup>21)</sup>   | Q84                                                                                 | 8.0%                     | 8.0%   | 8.0%    | 8.0%   |               |                                                                      |
| Extension of the liability for defects by 42 months to a total of 60 months (5 years) from delivery <sup>21)</sup>   | Q85                                                                                 | 11.2%                    | 11.2%  | 11.2%   | 11.2%  |               |                                                                      |

For legends, see Page 2/22 and for footnotes, see Page 2/23.

Standard delivery times in working days:

**SSIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

**10****25****30****40****50****60****On  
request****Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro**

| Special versions         | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                  |     |         |     | Motor version |     |
|--------------------------|-------------------------------------------------------------------------------------|-----------------------------|-----|---------|-----|---------------|-----|
|                          |                                                                                     | 315                         | 355 | 400     | 450 | IEC           | IE4 |
|                          |                                                                                     | 1LE55.4<br>Basic Line       |     | 1LE5534 |     |               |     |
|                          |                                                                                     | 1LE56.4<br>Performance Line |     |         |     |               |     |
|                          |                                                                                     | 1LE55.3<br>Basic Line       |     | 1LE55.3 |     |               |     |
|                          |                                                                                     | 1LE56.3<br>Performance Line |     |         |     |               |     |
| 1LE5 ..... -Z Order code |                                                                                     |                             |     |         |     |               |     |

| Packaging, safety notes, documentation and test certificates               |            |  |         |         |         |         |  |
|----------------------------------------------------------------------------|------------|--|---------|---------|---------|---------|--|
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>21)</sup> | <b>B02</b> |  | 28.70   | 28.70   | 28.70   | 28.70   |  |
| Printed German/English Operating Instructions enclosed <sup>22)</sup>      | <b>B04</b> |  | 68.30   | 68.30   | 68.30   | 68.30   |  |
| Without marking "Made in country of origin"                                | <b>B13</b> |  | O       | O       | –       | –       |  |
| Starting curves (torque-speed and current-speed)                           | <b>B50</b> |  | 1580.–  | 1580.–  | 1580.–  | 1580.–  |  |
| Equivalent circuit diagram                                                 | <b>B51</b> |  | 1100.–  | 1100.–  | 1100.–  | 1100.–  |  |
| Start-up diagram (torque-speed and current-speed)                          | <b>B52</b> |  | 1580.–  | 1580.–  | 1580.–  | 1580.–  |  |
| Document – Electrical data sheet                                           | <b>B60</b> |  | 315.–   | 315.–   | 1190.–  | 1190.–  |  |
| Document – Order dimensional drawing                                       | <b>B61</b> |  | 315.–   | 315.–   | 315.–   | 315.–   |  |
| Standard test (routine test) with acceptance                               | <b>B65</b> |  | 3890.–  | 7350.–  | 7350.–  | 8190.–  |  |
| Temperature test without acceptance                                        | <b>B67</b> |  | 16600.– | 18200.– | 18200.– | 21400.– |  |
| Temperature test with acceptance                                           | <b>B68</b> |  | 19800.– | 21300.– | 21300.– | 24600.– |  |
| Type test with heat run for vertical motors, without acceptance            | <b>B80</b> |  | 19700.– | 19700.– | 19700.– | 19700.– |  |
| Type test with heat run for vertical motors, with acceptance               | <b>B81</b> |  | 23100.– | 23100.– | 23100.– | 23100.– |  |
| Type test with heat run for horizontal motors, without acceptance          | <b>B82</b> |  | 12800.– | 12800.– | 27100.– | 27100.– |  |
| Type test with heat run for horizontal motors, with acceptance             | <b>B83</b> |  | 14300.– | 14300.– | 28700.– | 28700.– |  |
| Documentation package "Basic"                                              | <b>B90</b> |  | 609.–   | 609.–   | 609.–   | 609.–   |  |
| Documentation package "Advanced"                                           | <b>B91</b> |  | 924.–   | 924.–   | 924.–   | 924.–   |  |
| Documentation package "Projects"                                           | <b>B92</b> |  | 2520.–  | 2520.–  | 2520.–  | 2520.–  |  |
| Connected in star for dispatch                                             | <b>M01</b> |  | 46.90   | 52.50   | 94.60   | O. R.   |  |
| Connected in delta for dispatch                                            | <b>M02</b> |  | 46.90   | 52.50   | 94.60   | O. R.   |  |

- Standard version
  - Without additional charge
  - This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

# SIMOTICS SD Standard Motors next generation

## Article No. supplements and special versions

Options · Cast-iron series 1LE55 Basic Line, 1LE56 Performance Line, 1LE55 Add and 1LE55 Pro

2

- <sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- <sup>2)</sup> Parallel Whitworth pipe thread DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) Pipe thread for connections not sealed in the thread (cylindrical), external = G.
- <sup>3)</sup> The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- <sup>4)</sup> Not possible for 1LE5 motors with increased power.
- <sup>5)</sup> A second shaft extension is not possible. Please inquire for mounted brakes.
- <sup>6)</sup> For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- <sup>7)</sup> The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- <sup>8)</sup> In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- <sup>9)</sup> The LL and HOG rotary pulse encoders in frame sizes 315 and 355 are fitted without a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover. Protective cover (order code **G43**) is possible.
- <sup>10)</sup> Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB and SFB. This option cannot be used in combination with brakes of type 2LM8!
- <sup>11)</sup> Order code **H00** provides mechanical protection for encoders.
- <sup>12)</sup> Not possible for type of construction IM V3.
- <sup>13)</sup> Not possible in combination with HOG 9 D 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- <sup>14)</sup> Not possible in combination with brake 2LM8 (order code **F01**).
- <sup>15)</sup> In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- <sup>16)</sup> The rated voltage is indicated on the rating plate without voltage range.
- <sup>17)</sup> Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** does not authorize importing into USA and Mexico.
- <sup>18)</sup> On request for 2-pole motors
- <sup>19)</sup> When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with EN 50347 are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:  
–Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")  
–Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension.
- <sup>20)</sup> Can be ordered for 400 VA/690VY (voltage code "**34**").
- <sup>21)</sup> The delivery time for the factory test certificate may differ from the delivery time for the motor.
- <sup>22)</sup> The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- <sup>23)</sup> With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- <sup>24)</sup> Not possible in combination with order code **Q72** and **Q78**.
- <sup>25)</sup> Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.
- <sup>26)</sup> When combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.
- <sup>27)</sup> Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** on request.
- <sup>28)</sup> A minimum cantilever force  $F_{min}$  of  $0.5 \cdot F_{max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.
- <sup>29)</sup> Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- <sup>30)</sup> For frame sizes 400 and 450, permissible cantilever forces for motors with reinforced bearings are available on request. Please specify cantilever force and lever arm.
- <sup>31)</sup> For frame sizes 400 and 450, UL/CSA approval is not required.
- <sup>32)</sup> For insulated bearings at the DE, and non-insulated bearings at the NDE, the motor coupling must be insulated.
- <sup>33)</sup> For insulated bearings at the DE and NDE, a grounding brush (**L52**) is essential if no grounding is provided in the drive train. Otherwise, it should be omitted.
- <sup>34)</sup> Only possible for line operation.
- <sup>35)</sup> The separately driven fan motor is implemented with voltage code **34** (400 V/50 Hz; 460 V/60 Hz).
- <sup>36)</sup> For frame sizes 400 to 450, the degree of protection changes to IP54.
- <sup>37)</sup> For frame size 450, not possible in the vertical type of construction.
- <sup>38)</sup> For motors with flange (IM B5, IM B35, IM V1), only possible in conjunction with order code **H08**.
- <sup>39)</sup> Restrictions can apply when mounting the terminal box.
- <sup>40)</sup> Only possible in conjunction with SIMOTICS SD Add motors (6th position of the Article No.: **3**). Not available for 8-pole motors, frame size 450.
- <sup>41)</sup> When compared to utilization, temperature class 155 (F), the power is increased by 5 %.
- <sup>42)</sup> Only available for 1LE5 and 1MB551 (Ex tc for Zone 21) and 1MB552 (Ex tc for Zone 22). Not available for 1MB553 (Ex ec for Zone 2).
- <sup>43)</sup> Not available for 8-pole motors, frame size 450.
- <sup>44)</sup> Not possible in combination with order code **C02**.
- <sup>45)</sup> Customer specifications: Voltage between 380 and 690 V (voltages outside this range are available on request), frequency, circuit, required rated power in kW.
- <sup>46)</sup> For 1LE5, only available for line operation (DOL).  
Not available for 1LE5 in combination with order code **L50** or **L51** (converter operation).

## **SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

Notizen

2

## SIMOTICS VSD motors for converter operation


**3/2 Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

3/2 Aluminum series 1FP1014  
3/3 Cast-iron series 1FP1514

**3/4 Article No. supplements and special versions**

3/4 Voltages  
3/4 Aluminum series 1FP1014  
3/5 Cast-iron series 1FP1514  
3/6 Types of construction  
3/6 Aluminum series 1FP1014  
3/10 Cast-iron series 1FP1514  
3/13 Motor protection  
3/13 Aluminum series 1FP1014  
3/14 Cast-iron series 1FP1514  
3/15 Terminal box position  
3/15 Aluminum series 1FP1014  
3/16 Cast-iron series 1FP1514  
3/17 Options  
3/17 Aluminum series 1FP1014  
3/21 Cast-iron series 1FP1514

**3/26 Standard induction motors optimized for converter operation – VSD10 line**

3/26 Aluminum series 1LE1092  
3/27 Cast-iron series 1LE1592

**3/28 Article No. supplements and special versions**

3/28 Voltages  
3/28 Aluminum series 1LE1092  
3/29 Cast-iron series 1LE1592  
3/30 Types of construction  
3/30 Aluminum series 1LE1092  
3/34 Cast-iron series 1LE1592  
3/38 Motor protection  
3/38 Aluminum series 1LE1092  
3/39 Cast-iron series 1LE1592  
3/40 Terminal box position  
3/40 Aluminum series 1LE1092  
3/41 Cast-iron series 1LE1592  
3/42 Options  
3/42 Aluminum series 1LE1092  
3/46 Cast-iron series 1LE1592

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line****20**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                            |
|----------------------------------------|--------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with Super Premium Efficiency</b>                                                |
| Series version                         | <b>Aluminum series 1FP1014</b>                                                             |
| Motor mode                             | Synchronous reluctance motors                                                              |
| Cooling                                | Self-ventilated (IC 411)                                                                   |
| Degree of protection                   | IP55                                                                                       |
| Insulation                             | Thermal class F (155)                                                                      |
| Number of poles                        | 4                                                                                          |
| Frame sizes (FS)                       | 80 M ... 200 L                                                                             |
| Rated power at 50 Hz                   | 0.55 ... 30 kW                                                                             |
| Synchronous speed at 50 Hz             | 1500 rpm                                                                                   |
| Rated torque at 50 Hz                  | 3.5 ... 191 Nm                                                                             |
| Efficiency                             | Super Premium Efficiency                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - -                                                                                |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1<br>Frame sizes 100 ... 160: 3F2<br>Frame sizes 180 ... 200: 3F3 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 3/28, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|----------------------------------|---------------------|-------------------|----------------------|
| <b>4-pole: 1500 rpm at 50 Hz</b> |                     |                   |                      |
| 0.55                             | 80 M                | 1FP1014-0DB2-.... | 920.-                |
| 0.75                             | 80 M                | 1FP1014-0DB3-.... | 1000.-               |
| 1.1                              | 90 S                | 1FP1014-0EB0-.... | 1170.-               |
| 1.5                              | 90 L                | 1FP1014-0EB4-.... | 1390.-               |
| 2.2                              | 112 M               | 1FP1014-1BB0-.... | 1440.-               |
| 3                                | 112 M               | 1FP1014-1BB1-.... | 1710.-               |
| 4                                | 112 M               | 1FP1014-1BB2-.... | 1990.-               |
| 5.5                              | 132 S               | 1FP1014-1CB0-.... | 2300.-               |
| 7.5                              | 132 M               | 1FP1014-1CB2-.... | 2890.-               |
| 11                               | 160 M               | 1FP1014-1DB2-.... | 3770.-               |
| 15                               | 160 L               | 1FP1014-1DB4-.... | 4890.-               |
| 18.5                             | 180 M               | 1FP1014-1EB2-.... | 5010.-               |
| 22                               | 180 L               | 1FP1014-1EB4-.... | 5790.-               |
| 30                               | 200 L               | 1FP1014-2AB5-.... | 7480.-               |

Standard delivery times in working days:

20

# Synchronous reluctance motors for SINAMICS converters – VSD4000 line

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                            |
|----------------------------------------|--------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with Super Premium Efficiency (continued)</b>                                    |
| Series version                         | <b>Cast-iron series 1FP1514</b>                                                            |
| Motor mode                             | Synchronous reluctance motors                                                              |
| Cooling                                | Self-ventilated (IC 411)                                                                   |
| Degree of protection                   | IP55                                                                                       |
| Insulation                             | Thermal class F (155)                                                                      |
| Number of poles                        | 4                                                                                          |
| Frame sizes (FS)                       | 80 M ... 225 M                                                                             |
| Rated power at 50/100 Hz               | 0.55/0.75 ... 45/45 kW                                                                     |
| Synchronous speed at 50/100 Hz         | 1500/3000 rpm                                                                              |
| Rated torque at 50 Hz                  | 3.5 ... 286 Nm                                                                             |
| Efficiency                             | Super Premium Efficiency                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - -                                                                                |
| Price group (PG)                       | Frame sizes 80 ... 90: 3F1<br>Frame sizes 100 ... 160: 3F2<br>Frame sizes 180 ... 225: 3F3 |

### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 3/28, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW      | Frame<br>size<br>FS | Article No.       | Base<br>price<br>EUR |
|-----------------------------------|---------------------|-------------------|----------------------|
| <b>4-pole: 3000 rpm at 100 Hz</b> |                     |                   |                      |
| 0.75                              | 80 M                | 1FP1514-0DF2-.... | 1280.-               |
| 1.1                               | 80 M                | 1FP1514-0DF3-.... | 1500.-               |
| 1.5                               | 90 S                | 1FP1514-0EF0-.... | 1600.-               |
| 2.2                               | 90 L                | 1FP1514-0EF4-.... | 1610.-               |
| 3                                 | 112 M               | 1FP1514-1BF1-.... | 1750.-               |
| 4                                 | 112 M               | 1FP1514-1BF2-.... | 2140.-               |
| 5.5                               | 132 S               | 1FP1514-1CF0-.... | 2470.-               |
| 7.5                               | 132 S               | 1FP1514-1CF1-.... | 3130.-               |
| 11                                | 160 M               | 1FP1514-1DF2-.... | 4110.-               |
| 15                                | 160 M               | 1FP1514-1DF3-.... | 5280.-               |
| 18.5                              | 160 L               | 1FP1514-1DF4-.... | 5760.-               |
| 22                                | 180 M               | 1FP1514-1EF2-.... | 5170.-               |
| 30                                | 200 L               | 1FP1514-2AF4-.... | 7710.-               |
| 37                                | 200 L               | 1FP1514-2AF5-.... | 8950.-               |
| 45                                | 225 M               | 1FP1514-2BF2-.... | 11500.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b>  |                     |                   |                      |
| 0.55                              | 80 M                | 1FP1514-0DB2-.... | 1170.-               |
| 0.75                              | 80 M                | 1FP1514-0DB3-.... | 1280.-               |
| 1.1                               | 90 S                | 1FP1514-0EB0-.... | 1500.-               |
| 1.5                               | 90 L                | 1FP1514-0EB4-.... | 1600.-               |
| 2.2                               | 112 M               | 1FP1514-1BB0-.... | 1580.-               |
| 3                                 | 112 M               | 1FP1514-1BB1-.... | 1750.-               |
| 4                                 | 112 M               | 1FP1514-1BB2-.... | 2140.-               |
| 5.5                               | 132 S               | 1FP1514-1CB0-.... | 2470.-               |
| 7.5                               | 132 M               | 1FP1514-1CB2-.... | 3130.-               |
| 11                                | 160 M               | 1FP1514-1DB2-.... | 4110.-               |
| 15                                | 160 L               | 1FP1514-1DB4-.... | 5280.-               |
| 18.5                              | 180 M               | 1FP1514-1EB2-.... | 5170.-               |
| 22                                | 180 L               | 1FP1514-1EB4-.... | 5980.-               |
| 30                                | 200 L               | 1FP1514-2AB5-.... | 7710.-               |
| 37                                | 225 S               | 1FP1514-2BB0-.... | 9740.-               |
| 45                                | 225 M               | 1FP1514-2BB2-.... | 11500.-              |

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line****40**On  
request

Article No. supplements and special versions

**Voltages · Aluminum series 1FP1014****Selection and ordering data**

| Voltages                                  | Article No. supplement                    |                                                                           | Frame size |    |     |     |     |     |     | Motor version            |
|-------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------|------------|----|-----|-----|-----|-----|-----|--------------------------|
|                                           | Voltage code                              | Additional identification code with order code and plain text if required | 80         | 90 | 112 | 132 | 160 | 180 | 200 |                          |
|                                           | 12th and 13th position of the Article No. |                                                                           | 1FP1014    |    |     |     |     |     |     | Super Premium Efficiency |
|                                           |                                           |                                                                           |            |    |     |     |     |     |     |                          |
|                                           | 1FP1014- . . . .                          | - - . . .                                                                 |            |    |     |     |     |     |     |                          |
|                                           |                                           | Order code                                                                |            |    |     |     |     |     |     |                          |
| Voltage at 50 Hz or 60 Hz                 |                                           |                                                                           |            |    |     |     |     |     |     |                          |
| Line voltage/<br>converter input voltage: | 2                                         | 1                                                                         | -          | □  | □   | □   | □   | □   | □   |                          |
| 50 Hz, 400 V                              |                                           |                                                                           |            |    |     |     |     |     |     |                          |
| 60 Hz, 480 V                              |                                           |                                                                           |            |    |     |     |     |     |     |                          |

☐ Standard version

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

Voltages · Cast-iron series 1FP1514

**Selection and ordering data**

| Voltages                                  | Article No. supplement                                          |                                                                                          | Frame size |                          |                          |                          |                          |                          |                          |                          |                          | Motor version |
|-------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------|
|                                           | Voltage code<br>12th and<br>13th position of the<br>Article No. | Additional<br>identification<br>code with order<br>code and<br>plain text if<br>required | 80         | 90                       | 112                      | 132                      | 160                      | 180                      | 200                      | 225                      | Super Premium Efficiency |               |
|                                           |                                                                 |                                                                                          | 1FP1514    |                          |                          |                          |                          |                          |                          |                          |                          |               |
| 1FP1514- .... ■ - ■ ...                   |                                                                 | Order code                                                                               |            |                          |                          |                          |                          |                          |                          |                          |                          |               |
| Voltage at 50 Hz or 60 Hz                 |                                                                 |                                                                                          |            |                          |                          |                          |                          |                          |                          |                          |                          |               |
| Line voltage/<br>converter input voltage: | 2                                                               | 1                                                                                        | —          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |
| 50 Hz, 400 V                              |                                                                 |                                                                                          |            |                          |                          |                          |                          |                          |                          |                          |                          |               |
| 60 Hz, 480 V                              |                                                                 |                                                                                          |            |                          |                          |                          |                          |                          |                          |                          |                          |               |

☐ Standard version

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Types of construction · Aluminum series 1FP1014****Selection and ordering data**

| Types of construction                           | <div>Article No. supplement</div> <div>Type of construction letter 14th position of the Article No.</div> | <div>For types of construction with order code(s) Article No. with additional identification code <b>-Z</b></div> <div>Order code</div> | Frame size |                |                |                |                |                |                |                          | Motor version |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------|---------------|
|                                                 |                                                                                                           |                                                                                                                                         | 80         | 90             | 112            | 132            | 160            | 180            | 200            | Super Premium Efficiency |               |
|                                                 |                                                                                                           |                                                                                                                                         | 1FP1014    |                |                |                |                |                |                |                          |               |
| 1FP1014-.....-..                                | ..(-Z)                                                                                                    |                                                                                                                                         |            |                |                |                |                |                |                |                          |               |
| Without flange                                  |                                                                                                           |                                                                                                                                         |            |                |                |                |                |                |                |                          |               |
| IM B3 <sup>1) 2)</sup>                          |                          | A                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM B6 <sup>2)</sup>                             |                          | T                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM B7 <sup>2)</sup>                             |                          | U                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM B8 <sup>2)</sup>                             |                          | V                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM V6 <sup>2)</sup>                             |                         | D                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM V5 without protective cover <sup>2)</sup>    |                        | C                                                                                                                                       | –          | □              | □              | □              | □              | □              | □              | □                        |               |
| IM V5 with protective cover <sup>2) 3) 4)</sup> |                        | C                                                                                                                                       | H00        | 56.70          | 56.70          | 82.40          | 144.–          | 144.–          | 192.–          | 289.–                    |               |
| With flange                                     |                                                                                                           |                                                                                                                                         |            |                |                |                |                |                |                |                          |               |
|                                                 |                                                                                                           | acc. to EN 50347<br>acc. to DIN 42948                                                                                                   |            | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400           |               |
| IM B5 <sup>2) 5)</sup>                          |                        | F                                                                                                                                       | –          | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 269.–          | 326.–                    |               |
| IM V1 without protective cover <sup>2)</sup>    |                        | G                                                                                                                                       | –          | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 268.–          | 324.–                    |               |
| IM V1 with protective cover <sup>2) 4)</sup>    |                        | G                                                                                                                                       | H00        | 111.50         | 122.40         | 183.40         | 276.–          | 314.–          | 460.–          | 613.–                    |               |
| IM V3 <sup>3)</sup>                             |                        | H                                                                                                                                       | –          | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 269.–          | 326.–                    |               |
| IM B35                                          |                        | J                                                                                                                                       | –          | 57.80          | 68.30          | 110.–          | 137.–          | 189.–          | 315.–          | 420.–                    |               |

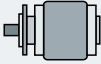
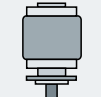
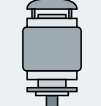
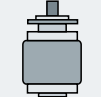
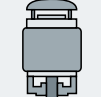
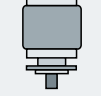
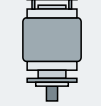
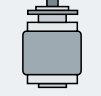
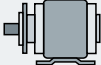
For legends and footnotes, see Page 3/9.

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**Types of construction · Aluminum series 1FP1014**

| Types of construction                               | Article No. supplement                                                                                 | Frame size     |        |        |        |        |       |        | Motor version            |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|--------|--------|--------|--------|-------|--------|--------------------------|
|                                                     |                                                                                                        | 80             | 90     | 112    | 132    | 160    | 180   | 200    |                          |
|                                                     | Type of construction letter 14th position of the Article No.                                           | <b>1FP1014</b> |        |        |        |        |       |        | Super Premium Efficiency |
|                                                     | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> |                |        |        |        |        |       |        |                          |
| <b>1FP1014-.....-.. (-Z)</b>                        | Order code                                                                                             |                |        |        |        |        |       |        |                          |
| <b>With special flange next larger</b>              | acc. to DIN EN 50347                                                                                   | –              | FF215  | FF265  | FF300  | –      | –     | –      |                          |
|                                                     | acc. to DIN 42948                                                                                      | –              | A 250  | A 300  | A 350  | –      | –     | –      |                          |
| IM B5 <sup>2) 5)</sup>                              |  <b>F</b>             | <b>P01</b>     | –      | 113.40 | 148.70 | 189.80 | –     | –      | –                        |
| IM V1 without protective cover <sup>2)</sup>        |  <b>G</b>             | <b>P01</b>     | –      | 113.40 | 148.70 | 189.80 | –     | –      | –                        |
| IM V1 with protective cover <sup>2) 4) 5) 6)</sup>  |  <b>G</b>             | <b>P01+H00</b> | –      | 170.10 | 231.10 | 333.80 | –     | –      | –                        |
| IM V3 <sup>4)</sup>                                 |  <b>H</b>             | <b>P01</b>     | –      | 113.40 | 148.70 | 189.80 | –     | –      | –                        |
| IM V18 with protective cover <sup>2) 3) 4) 5)</sup> |  <b>M</b>            | <b>H00</b>     | –      | 122.40 | 183.40 | 276.–  | –     | –      | –                        |
| <b>With special flange next smaller</b>             | acc. to DIN EN 50347                                                                                   | FF130          | –      | FF165  | FF215  | FF265  | FF265 | FF300  |                          |
|                                                     | acc. to DIN 42948                                                                                      | A 160          | –      | A 200  | A 250  | A 300  | A 300 | A 350  |                          |
| IM B5 <sup>2) 6)</sup>                              |  <b>F</b>           | <b>P02</b>     | 187.80 | –      | 346.–  | 448.–  | 578.– | 922.–  | 1122.–                   |
| IM V1 without protective cover <sup>2)</sup>        |  <b>G</b>           | <b>P02</b>     | 187.80 | –      | 346.–  | 448.–  | 578.– | 921.–  | 1120.–                   |
| IM V1 with protective cover <sup>2) 4) 5) 6)</sup>  |  <b>G</b>           | <b>P02+H00</b> | 244.50 | –      | 428.40 | 592.–  | 722.– | 1113.– | 1409.–                   |
| IM V3 <sup>4)</sup>                                 |  <b>H</b>           | <b>P02</b>     | 187.80 | –      | 346.–  | 448.–  | 578.– | 922.–  | 1122.–                   |
| IM B35 <sup>3)</sup>                                |  <b>J</b>           | <b>P02</b>     | 190.80 | –      | 355.–  | 453.–  | 597.– | 968.–  | 1216.–                   |

For legends and footnotes, see Page 3/9.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line****40****On  
request**

Article No. supplements and special versions

**Types of construction · Aluminum series 1FP1014**

| Types of construction                               | Article No. supplement                                                                       | Frame size                                                                                      | Motor version  |              |              |              |          |          |          |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|--------------|--------------|--------------|----------|----------|----------|
|                                                     |                                                                                              |                                                                                                 | 80             | 90           | 112          | 132          | 160      | 180      | 200      |
|                                                     | Type of construction letter 14th position of the Article No.                                 | For types of construction with order code(s) Article No. with additional identification code -Z | <b>1FP1014</b> |              |              |              |          |          |          |
| <b>1FP1014-.....-.. (-Z)</b>                        | <b>.. (-Z)</b>                                                                               | <b>Order code</b>                                                                               |                |              |              |              |          |          |          |
| <b>With flange</b>                                  | <b>acc. to EN 50347</b>                                                                      | <b>FT100</b>                                                                                    | <b>FT115</b>   | <b>FT130</b> | <b>FT165</b> | <b>FT215</b> | <b>-</b> | <b>-</b> | <b>-</b> |
|                                                     | <b>acc. to DIN 42948</b>                                                                     | <b>C 120</b>                                                                                    | <b>C 140</b>   | <b>C 160</b> | <b>C 200</b> | <b>C 250</b> | <b>-</b> | <b>-</b> | <b>-</b> |
| IM B14 <sup>2) 6)</sup>                             |  <b>K</b>   | -                                                                                               | 54.80          | 64.40        | 101.-        | 132.-        | 170.-    | -        | -        |
| IM V19 <sup>2)</sup>                                |  <b>L</b>   | -                                                                                               | 54.80          | 64.40        | 101.-        | 132.-        | 170.-    | -        | -        |
| IM V18 without protective cover <sup>2)</sup>       |  <b>M</b>   | -                                                                                               | 54.80          | 64.40        | 101.-        | 132.-        | 170.-    | -        | -        |
| IM V18 with protective cover <sup>2) 4) 5) 6)</sup> |  <b>M</b>   | <b>H00</b>                                                                                      | 111.50         | 121.10       | 183.40       | 276.-        | 314.-    | -        | -        |
| IM B34 <sup>3)</sup>                                |  <b>N</b>  | -                                                                                               | 57.80          | 67.-         | 110.-        | 137.-        | 189.-    | -        | -        |
| <b>With special flange next larger</b>              | <b>acc. to EN 50347</b>                                                                      | <b>FT130</b>                                                                                    | <b>FT130</b>   | <b>FT165</b> | <b>FT215</b> | <b>-</b>     | <b>-</b> | <b>-</b> | <b>-</b> |
|                                                     | <b>acc. to DIN 42948</b>                                                                     | <b>C 160</b>                                                                                    | <b>C 160</b>   | <b>C 200</b> | <b>C 250</b> | <b>-</b>     | <b>-</b> | <b>-</b> | <b>-</b> |
| IM B14 <sup>2) 6)</sup>                             |  <b>K</b> | <b>P01</b>                                                                                      | 102.50         | 112.10       | 148.70       | 179.70       | -        | -        | -        |
| IM V19 <sup>2)</sup>                                |  <b>L</b> | <b>P01</b>                                                                                      | 102.50         | 112.10       | 148.70       | 179.70       | -        | -        | -        |
| IM V18 without protective cover <sup>2)</sup>       |  <b>M</b> | <b>P01</b>                                                                                      | 102.50         | 112.10       | 148.70       | 179.70       | -        | -        | -        |
| IM V18 with protective cover <sup>2) 4) 5) 6)</sup> |  <b>M</b> | <b>P01+H00</b>                                                                                  | 159.20         | 168.80       | 231.10       | 333.80       | -        | -        | -        |
| IM B34 <sup>3)</sup>                                |  <b>N</b> | <b>P01</b>                                                                                      | 105.50         | 114.70       | 157.70       | 194.80       | -        | -        | -        |

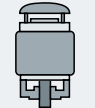
For legends and footnotes, see Page 3/9.

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**Types of construction · Aluminum series 1FP1014**

| Types of construction                            | Article No. supplement                                                                                 | Frame size     |    |                |                |                |       |     | Motor version            |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|----|----------------|----------------|----------------|-------|-----|--------------------------|
|                                                  |                                                                                                        | 80             | 90 | 112            | 132            | 160            | 180   | 200 |                          |
|                                                  | Type of construction letter 14th position of the Article No.                                           | <b>1FP1014</b> |    |                |                |                |       |     | Super Premium Efficiency |
|                                                  | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> |                |    |                |                |                |       |     |                          |
| <b>1FP1014-.....-.. (-Z)</b>                     | Order code                                                                                             |                |    |                |                |                |       |     |                          |
| With special flange next smaller                 | acc. to EN 50347<br>acc. to DIN 42948                                                                  | –              | –  | FT165<br>C 200 | FT215<br>C 250 | FT265<br>C 300 | –     | –   |                          |
| IM B14 <sup>2) 7)</sup>                          |  <b>K</b>             | <b>P02</b>     | –  | –              | 346.–          | 448.–          | 578.– | –   | –                        |
| IM V19 <sup>2)</sup>                             |  <b>L</b>             | <b>P02</b>     | –  | –              | 346.–          | 448.–          | 578.– | –   | –                        |
| IM V18 without protective cover <sup>2)</sup>    |  <b>M</b>             | <b>P02</b>     | –  | –              | 346.–          | 448.–          | 578.– | –   | –                        |
| IM V18 with protective cover <sup>2) 3) 4)</sup> |  <b>M</b>             | <b>P02+H00</b> | –  | –              | 428.40         | 592.–          | 722.– | –   | –                        |
| IM B34                                           |  <b>N</b>            | <b>P02</b>     | –  | –              | 355.–          | 453.–          | 597.– | –   | –                        |

- Standard version  
– Not possible

<sup>1)</sup> The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>2)</sup> The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

<sup>3)</sup> The "Second shaft extension" option (order code **L05**) is not possible.

<sup>4)</sup> In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

<sup>5)</sup> The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>6)</sup> The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Types of construction · Cast-iron series 1FP1514****Selection and ordering data**

| Types of construction                                 |    | Article No. supplement<br>Type of construction letter<br>14th position<br>of the<br>Article No. | For types of construction<br>with order code(s)<br>Article No. with additional<br>identification<br>code <b>-Z</b><br><br>Order code | Frame size     |                |                |                |                |                |                |                | Motor version            |
|-------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------------|
|                                                       |                                                                                     |                                                                                                 |                                                                                                                                      | <b>80</b>      | <b>90</b>      | <b>112</b>     | <b>132</b>     | <b>160</b>     | <b>180</b>     | <b>200</b>     | <b>225</b>     |                          |
|                                                       |                                                                                     |                                                                                                 |                                                                                                                                      | <b>1FP1514</b> |                |                |                |                |                |                |                | Super Premium Efficiency |
| <b>1FP1514-.....-...(-Z)</b>                          |                                                                                     |                                                                                                 |                                                                                                                                      |                |                |                |                |                |                |                |                |                          |
| Without flange                                        |                                                                                     |                                                                                                 |                                                                                                                                      |                |                |                |                |                |                |                |                |                          |
| IM B3 <sup>1) 2)</sup>                                |    | <b>A</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM B6 <sup>2)</sup>                                   |    | <b>T</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM B7 <sup>2)</sup>                                   |    | <b>U</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM B8 <sup>2)</sup>                                   |    | <b>V</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM V6 <sup>2)</sup>                                   |   | <b>D</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM V5<br>without protective<br>cover <sup>2)</sup>    |  | <b>C</b>                                                                                        | –                                                                                                                                    | □              | □              | □              | □              | □              | □              | □              | □              |                          |
| IM V5<br>with protective cover<br><sup>2) 3) 4)</sup> |  | <b>C</b>                                                                                        | <b>H00</b>                                                                                                                           | 56.70          | 56.70          | 82.40          | 144.–          | 144.–          | 192.–          | 289.–          | 383.–          |                          |
| With flange                                           |                                                                                     | acc. to EN 50347<br>acc. to DIN 42948                                                           |                                                                                                                                      | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 |                          |
| IM B5 <sup>2) 5)</sup>                                |  | <b>F</b>                                                                                        | –                                                                                                                                    | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 269.–          | 326.–          | 422.–          |                          |
| IM V1<br>without protective<br>cover <sup>2)</sup>    |  | <b>G</b>                                                                                        | –                                                                                                                                    | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 268.–          | 324.–          | 424.–          |                          |
| IM V1<br>with protective cover<br><sup>2) 3) 4)</sup> |  | <b>G</b>                                                                                        | <b>H00</b>                                                                                                                           | 111.50         | 122.40         | 183.40         | 276.–          | 314.–          | 460.–          | 613.–          | 424.–          |                          |
| IM V3 <sup>4)</sup>                                   |  | <b>H</b>                                                                                        | –                                                                                                                                    | 54.80          | 65.70          | 101.–          | 132.–          | 170.–          | 269.–          | 326.–          | 422.–          |                          |
| IM B35                                                |  | <b>J</b>                                                                                        | –                                                                                                                                    | 57.80          | 68.30          | 110.–          | 137.–          | 189.–          | 315.–          | 420.–          | 525.–          |                          |

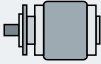
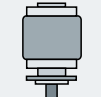
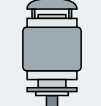
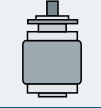
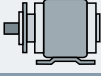
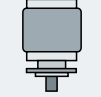
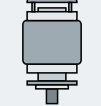
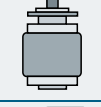
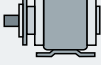
For legends and footnotes, see Page 3/12.

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**Types of construction · Cast-iron series 1FP1514**

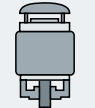
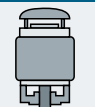
| Types of construction                           | Article No. supplement                                                              | Frame size                                                                                      | Motor version            |        |        |        |        |       |        |        |
|-------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|-------|--------|--------|
|                                                 |                                                                                     |                                                                                                 | 80                       | 90     | 112    | 132    | 160    | 180   | 200    | 225    |
|                                                 | Type of construction letter 14th position of the Article No.                        | For types of construction with order code(s) Article No. with additional identification code -Z | 1FP1514                  |        |        |        |        |       |        |        |
|                                                 | Order code                                                                          |                                                                                                 | Super Premium Efficiency |        |        |        |        |       |        |        |
| <b>1FP1514-.....-...(-Z)</b>                    |                                                                                     |                                                                                                 |                          |        |        |        |        |       |        |        |
| <b>With special flange next larger</b>          | acc. to EN 50347                                                                    | –                                                                                               | FF215                    | FF265  | FF300  | –      | –      | –     | –      | –      |
|                                                 | acc. to DIN 42948                                                                   | –                                                                                               | A 250                    | A 300  | A 350  | –      | –      | –     | –      | –      |
| IM B5 <sup>2) 6)</sup>                          |    | <b>F</b>                                                                                        | <b>P01</b>               | –      | 113.40 | 148.70 | 191.60 | –     | –      | –      |
| IM V1 without protective cover <sup>2)</sup>    |    | <b>G</b>                                                                                        | <b>P01</b>               | –      | 113.40 | 148.70 | 191.60 | –     | –      | –      |
| IM V1 with protective cover <sup>2) 4) 5)</sup> |    | <b>G</b>                                                                                        | <b>P01+H00</b>           | –      | 170.10 | 231.10 | 335.60 | –     | –      | –      |
| IM V3 <sup>3)</sup>                             |    | <b>H</b>                                                                                        | <b>P01</b>               | –      | 113.40 | 148.70 | 191.60 | –     | –      | –      |
| IM B35 <sup>3)</sup>                            |   | <b>J</b>                                                                                        | <b>P01</b>               | –      | 116.–  | 157.70 | 196.60 | –     | –      | –      |
| <b>With special flange next smaller</b>         | acc. to EN 50347                                                                    | FF130                                                                                           | –                        | FF165  | FF215  | FF265  | FF265  | FF300 | –      | –      |
|                                                 | acc. to DIN 42948                                                                   | A 160                                                                                           | –                        | A 200  | A 250  | A 300  | A 300  | A 350 | –      | –      |
| IM B5 <sup>2) 6)</sup>                          |  | <b>F</b>                                                                                        | <b>P02</b>               | 187.80 | –      | 346.–  | 448.–  | 578.– | 922.–  | 1122.– |
| IM V1 without protective cover <sup>2)</sup>    |  | <b>G</b>                                                                                        | <b>P02</b>               | 187.80 | –      | 101.–  | 448.–  | 578.– | 921.–  | 1120.– |
| IM V1 with protective cover <sup>2) 4) 5)</sup> |  | <b>G</b>                                                                                        | <b>P02+H00</b>           | 244.50 | –      | 183.40 | 592.–  | 722.– | 1113.– | 1409.– |
| IM V3 <sup>4)</sup>                             |  | <b>H</b>                                                                                        | <b>P02</b>               | 187.80 | –      | 101.–  | 132.–  | 170.– | 922.–  | 1122.– |
| IM B35 <sup>3)</sup>                            |  | <b>J</b>                                                                                        | <b>P02</b>               | 190.80 | –      | 110.–  | 137.–  | 189.– | 968.–  | 1216.– |

For legends and footnotes, see Page 3/12.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Types of construction · Cast-iron series 1FP1514**

| Types of construction                            | Article No. supplement                                                              | Frame size                                                                                             | Motor version  |                |                |                |                |     |     |     |
|--------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|-----|-----|-----|
|                                                  |                                                                                     |                                                                                                        | 80             | 90             | 112            | 132            | 160            | 180 | 200 | 225 |
|                                                  | Type of construction letter 14th position of the Article No.                        | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> | <b>1FP1514</b> |                |                |                |                |     |     |     |
|                                                  |                                                                                     | Order code                                                                                             |                |                |                |                |                |     |     |     |
| <b>1FP1514-.....-.. (-Z)</b>                     |                                                                                     |                                                                                                        |                |                |                |                |                |     |     |     |
| <b>With flange</b>                               | acc. to DIN EN 50347<br>acc. to DIN 42948                                           |                                                                                                        | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT165<br>C 200 | FT215<br>C 250 | –   | –   | –   |
| IM B14 <sup>2) 6)</sup>                          |    | <b>K</b>                                                                                               | –              | –              | 101.–          | 132.–          | 170.–          | –   | –   | –   |
| IM V19 <sup>2)</sup>                             |    | <b>L</b>                                                                                               | –              | –              | 101.–          | 132.–          | 170.–          | –   | –   | –   |
| IM V18 without protective cover <sup>2)</sup>    |    | <b>M</b>                                                                                               | –              | –              | 101.–          | 132.–          | 170.–          | –   | –   | –   |
| IM V18 with protective cover <sup>2) 3) 4)</sup> |    | <b>M</b>                                                                                               | –              | –              | 183.–          | 276.–          | 314.–          | –   | –   | –   |
| IM B34                                           |   | <b>N</b>                                                                                               | 57.80          | 68.30          | 110.–          | 137.–          | 189.–          | –   | –   | –   |
| <b>With special flange next larger</b>           | acc. to DIN EN 50347<br>acc. to DIN 42948                                           |                                                                                                        | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT215<br>C 250 | –              | –   | –   | –   |
| IM B14 <sup>2) 6)</sup>                          |  | <b>K</b>                                                                                               | 102.50         | 113.40         | 202.–          | 264.–          | –              | –   | –   | –   |
| IM V19 <sup>2)</sup>                             |  | <b>L</b>                                                                                               | 102.50         | 113.40         | 202.–          | 264.–          | –              | –   | –   | –   |
| IM V18 without protective cover <sup>2)</sup>    |  | <b>M</b>                                                                                               | 102.50         | 113.40         | 202.–          | 264.–          | –              | –   | –   | –   |
| IM V18 with protective cover <sup>2) 3) 4)</sup> |  | <b>M</b>                                                                                               | 159.20         | 170.10         | 284.40         | 408.–          | –              | –   | –   | –   |
| IM B34                                           |  | <b>N</b>                                                                                               | 105.50         | 116.–          | 211.–          | 269.–          | –              | –   | –   | –   |

- Standard version  
– Not possible

<sup>1)</sup> The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>2)</sup> The type of construction is stamped on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

<sup>3)</sup> In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

<sup>4)</sup> The "Second shaft extension" option (order code **L05**) is not possible.

<sup>5)</sup> The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

<sup>6)</sup> The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

## Selection and ordering data

|                  |                                  |                                                                           |            |    |     |     |     |     |     |                          |
|------------------|----------------------------------|---------------------------------------------------------------------------|------------|----|-----|-----|-----|-----|-----|--------------------------|
| Motor protection | Article No. supplement           |                                                                           | Frame size |    |     |     |     |     |     | Motor version            |
|                  | Motor protection code            | Additional identification code with order code and plain text if required | 80         | 90 | 112 | 132 | 160 | 180 | 200 | Super Premium Efficiency |
|                  | 15th position of the Article No. |                                                                           |            |    |     |     |     |     |     |                          |
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| Motor protection                                                             |          |            |       |       |        |        |        |        |        |  |
|------------------------------------------------------------------------------|----------|------------|-------|-------|--------|--------|--------|--------|--------|--|
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>            | <b>B</b> | –          | 37.10 | 43.50 | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>  | <b>C</b> | –          | 176.– | 176.– | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  |  |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                   | <b>F</b> | –          | 105.– | 105.– | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |  |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                  | <b>G</b> | –          | 211.– | 211.– | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>1)</sup> | <b>H</b> | –          | –     | –     | 1240.– | 359.–  | 359.–  | 1510.– | 1510.– |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1) 2)</sup>               | <b>K</b> | –          | 105.– | 105.– | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>1) 2)</sup>              | <b>L</b> | –          | 211.– | 211.– | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                | <b>P</b> | –          | –     | –     | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)               | <b>Q</b> | –          | –     | –     | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)              | <b>R</b> | –          | –     | –     | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>1)</sup>      | <b>Z</b> | <b>Q3A</b> | 117.– | 117.– | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  |  |

- Not possible

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Motor protection · Cast-iron series 1FP1514****Selection and ordering data**

| Motor protection                                                                  | Article No. supplement | Motor protection code 15th position of the Article No. | Additional identification code with order code and plain text if required | Frame size     |       |        |        |        |        |        |        | Motor version            |
|-----------------------------------------------------------------------------------|------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|----------------|-------|--------|--------|--------|--------|--------|--------|--------------------------|
|                                                                                   |                        |                                                        |                                                                           | 80             | 90    | 112    | 132    | 160    | 180    | 200    | 225    |                          |
|                                                                                   |                        |                                                        |                                                                           | <b>1FP1514</b> |       |        |        |        |        |        |        | Super Premium Efficiency |
| <b>1FP1514- . . . . .</b>                                                         |                        |                                                        | Order code                                                                |                |       |        |        |        |        |        |        |                          |
| <b>Motor protection</b>                                                           |                        |                                                        |                                                                           |                |       |        |        |        |        |        |        |                          |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                 | <b>B</b>               | –                                                      |                                                                           | 40.50          | 43.50 | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  |                          |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>       | <b>C</b>               | –                                                      |                                                                           | 176.–          | 176.0 | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  |                          |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                        | <b>F</b>               | –                                                      |                                                                           | 105.–          | 105.– | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  |                          |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                       | <b>G</b>               | –                                                      |                                                                           | 210.–          | 210.– | 242.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  |                          |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1) 2)</sup>                    | <b>K</b>               | –                                                      |                                                                           | 105.–          | 105.– | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  |                          |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>1) 2)</sup>                   | <b>L</b>               | –                                                      |                                                                           | 211.–          | 211.– | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  |                          |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) <sup>1)</sup>       | <b>P</b>               | –                                                      |                                                                           | –              | –     | 1050.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– |                          |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>1)</sup>      | <b>Q</b>               | –                                                      |                                                                           | –              | –     | 1300.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– |                          |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>1)</sup>     | <b>R</b>               | –                                                      |                                                                           | –              | –     | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– |                          |
| 3 NTC thermistors – for tripping (6 terminals) <sup>2)</sup>                      | <b>Z</b>               |                                                        | <b>Q2A</b>                                                                | 210.–          | 210.– | 241.–  | 357.–  | 357.–  | –      | –      | –      |                          |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>1)</sup>           | <b>Z</b>               |                                                        | <b>Q3A</b>                                                                | 117.–          | 117.– | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  | 339.–  |                          |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) <sup>1)</sup> | <b>Z</b>               |                                                        | <b>Q9A</b>                                                                | –              | –     | 241.–  | 352.–  | 352.–  | 477.–  | 477.–  | 647.–  |                          |

– Not possible

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.<sup>2)</sup> Not UL-certified. Not possible in combination with the option **D39**.

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

Terminal box position · Aluminum series 1FP1014

**Selection and ordering data**

| Terminal box position                                                             | Article No. supplement                                                                                                                                         | Frame size                                         | Motor version            |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|
|  | Terminal box position code 16th position of the Article No.<br><br>Additional identification code with order code and plain text if required<br><br>Order code | <b>80    90    112    132    160    180    200</b> |                          |
|                                                                                   |                                                                                                                                                                | <b>1FP1014</b>                                     | Super Premium Efficiency |
| <b>1FP1014-.....-...</b>                                                          |                                                                                                                                                                |                                                    |                          |

| Terminal box position             |   |   |       |       |       |       |       |       |       |  |
|-----------------------------------|---|---|-------|-------|-------|-------|-------|-------|-------|--|
| Terminal box top <sup>1)</sup>    | 4 | – | □     | □     | □     | □     | □     | □     | □     |  |
| Terminal box on RHS <sup>2)</sup> | 5 | – | 35.90 | 40.60 | 113.– | 123.– | 132.– | 186.– | 218.– |  |
| Terminal box on LHS <sup>2)</sup> | 6 | – | 35.90 | 40.60 | 113.– | 123.– | 132.– | 186.– | 218.– |  |
| Terminal box bottom <sup>2)</sup> | 7 | – | –     | –     | 113.– | 123.– | –     | –     | –     |  |

- Standard version  
– Not possible

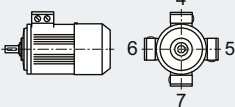
<sup>1)</sup> For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line****40**On  
request

Article No. supplements and special versions

**Terminal box position · Cast-iron series 1FP1514****Selection and ordering data**

| Terminal box position                                                             | Article No.                                                 | supplement                                                                | Frame size |       |       |       |       |       |       |       | Motor version            |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|--------------------------|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | 80         | 90    | 112   | 132   | 160   | 180   | 200   | 225   | Super Premium Efficiency |
|                                                                                   | 1FP1514-.....-...                                           | Order code                                                                | 1FP1514    |       |       |       |       |       |       |       |                          |
|                                                                                   |                                                             |                                                                           |            |       |       |       |       |       |       |       |                          |
|                                                                                   |                                                             |                                                                           |            |       |       |       |       |       |       |       |                          |
| Terminal box position                                                             |                                                             |                                                                           |            |       |       |       |       |       |       |       |                          |
| Terminal box top <sup>1)</sup>                                                    | 4                                                           | –                                                                         | □          | □     | □     | □     | □     | □     | □     | □     |                          |
| Terminal box on RHS <sup>2)</sup>                                                 | 5                                                           | –                                                                         | 52.50      | 73.50 | 113.– | 123.– | 132.– | 371.– | 437.– | 517.– |                          |
| Terminal box on LHS <sup>2)</sup>                                                 | 6                                                           | –                                                                         | 52.50      | 73.50 | 113.– | 123.– | 132.– | 371.– | 437.– | 517.– |                          |
| Terminal box bottom <sup>2)</sup>                                                 | 7                                                           | –                                                                         | –          | –     | 114.– | 123.– | 132.– | –     | –     | –     |                          |

- Standard version  
– Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

Standard delivery times in working days:

40

On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

Options · Aluminum series 1FP1014

**Selection and ordering data**

| Special versions                                                                    | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size     |           |            |            |            |            |            |        | Motor version            |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-----------|------------|------------|------------|------------|------------|--------|--------------------------|--|
|                                                                                     |                                                                                     | <b>80</b>      | <b>80</b> | <b>112</b> | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> |        |                          |  |
|                                                                                     |                                                                                     | <b>1FP1014</b> |           |            |            |            |            |            |        | Super Premium Efficiency |  |
| <b>1FP1014- ..... -Z</b>                                                            | Order code                                                                          |                |           |            |            |            |            |            |        |                          |  |
| Motor protection                                                                    |                                                                                     |                |           |            |            |            |            |            |        |                          |  |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>2)3)</sup>                 | <b>Q11</b>                                                                          |                | 36.–      | 42.20      | 119.–      | 119.–      | 180.–      | 180.–      | 239.–  |                          |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>3)</sup>         | <b>Q12</b>                                                                          |                | 176.–     | 176.–      | 205.–      | 176.–      | 274.–      | 421.–      | 421.–  |                          |  |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>3)</sup>                          | <b>Q23</b>                                                                          |                | 105.–     | 105.–      | 119.–      | 274.–      | 180.–      | 339.–      | 339.–  |                          |  |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>3)</sup>                         | <b>Q25</b>                                                                          |                | 211.–     | 211.–      | 241.–      | 359.–      | 359.–      | 550.–      | 550.–  |                          |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>3)</sup>             | <b>Q31</b>                                                                          |                | 134.–     | 134.–      | 196.–      | 196.–      | 196.–      | 270.–      | 270.–  |                          |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                 | <b>Q32</b>                                                                          |                | 241.–     | 241.–      | 352.–      | 477.–      | 477.–      | 647.–      | 647.–  |                          |  |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                           | <b>Q33</b>                                                                          |                | –         | –          | –          | –          | –          | 281.–      | 281.–  |                          |  |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)                | <b>Q34</b>                                                                          |                | –         | –          | –          | –          | –          | 488.–      | 488.–  |                          |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>19)</sup>                        | <b>Q35</b>                                                                          |                | 105.–     | 105.–      | 119.–      | 180.–      | 180.–      | 339.–      | 339.–  |                          |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>19)</sup>                       | <b>Q36</b>                                                                          |                | 211.–     | 211.–      | 241.–      | 359.–      | 359.–      | 550.–      | 550.–  |                          |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                      | <b>Q60</b>                                                                          |                | –         | –          | 1240.–     | 1240.–     | 1240.–     | 1510.–     | 1510.– |                          |  |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)                     | <b>Q61</b>                                                                          |                | –         | –          | 1920.–     | 1920.–     | 1920.–     | 2470.–     | 2470.– |                          |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                       | <b>Q62</b>                                                                          |                | –         | –          | 1040.–     | 1040.–     | 1040.–     | 1340.–     | 1340.– |                          |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                      | <b>Q63</b>                                                                          |                | –         | –          | 1310.–     | 1310.–     | 1310.–     | 2010.–     | 2010.– |                          |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                     | <b>Q64</b>                                                                          |                | –         | –          | 2020.–     | 2020.–     | 2020.–     | 2960.–     | 2960.– |                          |  |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)           | <b>Q72</b>                                                                          |                | –         | –          | O. R.      | O. R.      | O. R.      | 4300.–     | 4300.– |                          |  |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)          | <b>Q78</b>                                                                          |                | –         | –          | O. R.      | O. R.      | O. R.      | 4730.–     | 4730.– |                          |  |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)  | <b>Q79</b>                                                                          |                | –         | –          | O. R.      | O. R.      | O. R.      | 5670.–     | 5670.– |                          |  |
| Motor connection and terminal box                                                   |                                                                                     |                |           |            |            |            |            |            |        |                          |  |
| External grounding                                                                  | <b>H04</b>                                                                          |                | 24.–      | 24.–       | 28.90      | 28.90      | 28.90      | 37.10      | 37.10  |                          |  |
| Terminal box on NDE <sup>1)</sup>                                                   | <b>H08</b>                                                                          |                | 84.–      | 96.70      | 147.–      | 286.–      | 388.–      | 967.–      | 999.–  |                          |  |
| Rotation of the terminal box through 90°, entry from DE <sup>2)</sup>               | <b>R10</b>                                                                          |                | O         | O          | O          | O          | O          | 45.10      | 58.40  |                          |  |
| Rotation of the terminal box through 90°, entry from NDE                            | <b>R11</b>                                                                          |                | O         | O          | O          | O          | O          | 45.10      | 58.40  |                          |  |
| Rotation of the terminal box through 180°                                           | <b>R12</b>                                                                          |                | O         | O          | O          | O          | O          | 45.10      | 58.40  |                          |  |
| Terminal box in position 0°; connection from right <sup>20)</sup>                   | <b>R13</b>                                                                          |                | O         | O          | O          | O          | –          | –          | –      |                          |  |
| One metal cable gland                                                               | <b>R15</b>                                                                          |                | 59.80     | 59.80      | 112.–      | 112.–      | 143.–      | 143.–      | 165.–  |                          |  |
| One metal cable gland, maximum configuration                                        | <b>R18</b>                                                                          |                | 86.20     | 86.20      | 159.–      | 159.–      | 209.–      | 209.–      | 241.–  |                          |  |
| 3 cables protruding, 0.5 m long                                                     | <b>R20</b>                                                                          |                | 57.30     | 57.30      | 82.40      | 101.–      | 118.–      | –          | –      |                          |  |
| 3 cables protruding, 1.5 m long                                                     | <b>R21</b>                                                                          |                | 69.40     | 69.40      | 99.70      | 121.–      | 144.–      | a.A.       | a.A.   |                          |  |
| 6 cables protruding, 0.5 m long                                                     | <b>R22</b>                                                                          |                | 88.80     | 88.80      | 128.–      | a.A.       | a.A.       | a.A.       | a.A.   |                          |  |
| 6 cables protruding, 1.5 m long                                                     | <b>R23</b>                                                                          |                | 113.–     | 113.–      | 164.–      | 199.–      | 237.–      | a.A.       | a.A.   |                          |  |
| 6 cables protruding, 3 m long                                                       | <b>R24</b>                                                                          |                | 181.–     | 181.–      | 257.–      | 322.–      | 386.–      | a.A.       | a.A.   |                          |  |
| Larger terminal box                                                                 | <b>R50</b>                                                                          |                | 103.–     | 103.–      | 214.–      | 274.–      | 313.–      | 475.–      | 523.–  |                          |  |
| Motor connector Han-Drive 10e for 230 VΔ/400 VY                                     | <b>R70</b>                                                                          |                | 146.–     | 146.–      | 388.–      | 444.–      | –          | –          | –      |                          |  |
| Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY                                 | <b>R71</b>                                                                          |                | 270.–     | 270.–      | 527.–      | 605.–      | –          | –          | –      |                          |  |
| Windings and insulation                                                             |                                                                                     |                |           |            |            |            |            |            |        |                          |  |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>3)</sup>            | <b>N11</b>                                                                          |                | 220.–     | 220.–      | 305.–      | 405.–      | 494.–      | 702.–      | 982.–  |                          |  |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air  | <b>N30</b>                                                                          |                | 137.–     | 137.–      | 137.–      | 137.–      | 210.–      | 305.–      | 420.–  |                          |  |
| Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air | <b>N31</b>                                                                          |                | 220.–     | 220.–      | 252.–      | 284.–      | 399.–      | 515.–      | 662.–  |                          |  |

For legends and footnotes, see Page 3/20.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Options · Aluminum series 1FP1014**

| Special versions                                                                                                                                                                                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size     |           |            |            |            |            |            | Motor version            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-----------|------------|------------|------------|------------|------------|--------------------------|--|
|                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>80</b>      | <b>80</b> | <b>112</b> | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> |                          |  |
|                                                                                                                                                                                                                                                                                                      |                                                                                     | <b>1FP1014</b> |           |            |            |            |            |            | Super Premium Efficiency |  |
| <b>1FP1014-.....-.....-Z</b>                                                                                                                                                                                                                                                                         | Order code                                                                          |                |           |            |            |            |            |            |                          |  |
| Colors and paint finish                                                                                                                                                                                                                                                                              |                                                                                     |                |           |            |            |            |            |            |                          |  |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                            |                                                                                     |                | □         | □          | □          | □          | □          | □          | □                        |  |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                              | <b>S00</b>                                                                          |                | O         | O          | O          | O          | O          | O          | O                        |  |
| Unpainted, only primed                                                                                                                                                                                                                                                                               | <b>S01</b>                                                                          |                | 20.90     | 20.90      | 27.80      | 44.40      | 44.40      | 83.30      | 83.30                    |  |
| Special finish C3                                                                                                                                                                                                                                                                                    | <b>S02</b>                                                                          |                | 36.80     | 36.80      | 63.–       | 84.–       | 84.–       | 115.–      | 126.–                    |  |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                                  | <b>S03</b>                                                                          |                | 504.–     | 504.–      | 536.–      | 589.–      | 589.–      | 630.–      | 672.–                    |  |
| Internal coating                                                                                                                                                                                                                                                                                     | <b>S05</b>                                                                          |                | 89.40     | 89.40      | 89.40      | 89.40      | 89.40      | 89.40      | 89.40                    |  |
| Standard finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | <b>Y53 •</b> and standard finish RAL....                                            |                | 26.30     | 26.30      | 42.–       | 57.80      | 57.80      | 84.–       | 115.–                    |  |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                               | <b>Y56 •</b> and special finish RAL....                                             |                | 620.–     | 620.–      | 662.–      | 694.–      | 694.–      | 704.–      | 714.–                    |  |
| Modular technology – Basic versions <sup>4)</sup>                                                                                                                                                                                                                                                    |                                                                                     |                |           |            |            |            |            |            |                          |  |
| Mounting of brake <sup>5)</sup>                                                                                                                                                                                                                                                                      | <b>F01</b>                                                                          |                | 468.–     | 562.–      | 799.–      | 1030.–     | 2040.–     | 4510.–     | 6300.–                   |  |
| Mounting of brake for higher switching frequency                                                                                                                                                                                                                                                     | <b>F02</b>                                                                          |                | O. R.     | O. R.      | O. R.      | O. R.      | O. R.      | –          | –                        |  |
| Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                                      | <b>G11</b>                                                                          |                | 748.–     | 793.–      | 895.–      | 941.–      | 986.–      | 1030.–     | 1080.–                   |  |
| Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                                      | <b>G12</b>                                                                          |                | 1030.–    | 1100.–     | 1250.–     | 1330.–     | 1410.–     | 1480.–     | 1550.–                   |  |
| Modular technology – Additional versions                                                                                                                                                                                                                                                             |                                                                                     |                |           |            |            |            |            |            |                          |  |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                                         | <b>F10</b>                                                                          |                | 35.20     | 35.20      | 52.90      | 52.90      | 52.90      | 70.60      | 70.60                    |  |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                              | <b>F11</b>                                                                          |                | 35.20     | 35.20      | O          | O          | O          | O          | O                        |  |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                                                                                                                                                              | <b>F12</b>                                                                          |                | 35.20     | 35.20      | 52.90      | 52.90      | 52.90      | 70.60      | 70.60                    |  |
| Brake supply voltage 180 V AC                                                                                                                                                                                                                                                                        | <b>F17</b>                                                                          |                | 35.20     | 35.20      | 52.90      | 52.90      | 52.90      | 70.60      | 70.60                    |  |
| Brake supply voltage 205 V AC                                                                                                                                                                                                                                                                        | <b>F18</b>                                                                          |                | 35.20     | 35.20      | 52.90      | 52.90      | 52.90      | 70.60      | 70.60                    |  |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                              | <b>F50</b>                                                                          |                | 250.–     | 250.–      | 264.–      | 294.–      | 426.–      | 620.–      | 723.–                    |  |
| Special technology <sup>3)</sup>                                                                                                                                                                                                                                                                     |                                                                                     |                |           |            |            |            |            |            |                          |  |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                        | <b>G04</b>                                                                          |                | –         | –          | 3000.–     | 3000.–     | 3000.–     | 3000.–     | 3000.–                   |  |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                       | <b>G05</b>                                                                          |                | –         | –          | 3540.–     | 3540.–     | 3540.–     | 4570.–     | 4570.–                   |  |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                       | <b>G06</b>                                                                          |                | –         | –          | 4570.–     | 4570.–     | 4570.–     | 4570.–     | 4570.–                   |  |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                                                                                                                                                                                                   | <b>G21</b>                                                                          |                | –         | –          | –          | –          | –          | 3210.–     | 3330.–                   |  |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                                                                                                                                                                                                   | <b>G22</b>                                                                          |                | –         | –          | –          | –          | –          | 3630.–     | 3750.–                   |  |
| Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder                                                                                                                                                                                                                                            | <b>G25</b>                                                                          |                | –         | –          | –          | –          | –          | 14000.–    | 14000.–                  |  |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                                                                                                                                                                                                       | <b>G27</b>                                                                          |                | –         | –          | –          | –          | –          | 15500.–    | 15500.–                  |  |
| Mechanical design and degrees of protection                                                                                                                                                                                                                                                          |                                                                                     |                |           |            |            |            |            |            |                          |  |
| Prepared for mountings, center hole only <sup>7)</sup>                                                                                                                                                                                                                                               | <b>G40</b>                                                                          |                | 70.10     | 70.10      | 70.10      | 93         | 107.–      | □          | □                        |  |
| Prepared for mountings with D12 shaft <sup>12)</sup>                                                                                                                                                                                                                                                 | <b>G41</b>                                                                          |                | 143.–     | 152.–      | 168.–      | 189.–      | 225.–      | 462.–      | 462.–                    |  |
| Prepared for mountings with D16 shaft <sup>12)</sup>                                                                                                                                                                                                                                                 | <b>G42</b>                                                                          |                | O. R.     | O. R.      | 168.–      | 189.–      | 225.–      | 462.–      | 462.–                    |  |
| Mechanical protection for encoders                                                                                                                                                                                                                                                                   | <b>G43</b>                                                                          |                | 72.30     | 72.30      | 80.70      | 141.–      | 141.–      | 212.–      | 212.–                    |  |
| Protective cover <sup>6) 8)</sup>                                                                                                                                                                                                                                                                    | <b>H00</b>                                                                          |                | 56.70     | 56.70      | 82.40      | 144.–      | 144.–      | 192.–      | 289.–                    |  |
| Screwed-on (instead of cast) feet                                                                                                                                                                                                                                                                    | <b>H01</b>                                                                          |                | 90.80     | 90.80      | 113.–      | 123.–      | 132.–      | □          | □                        |  |
| Vibration-proof version                                                                                                                                                                                                                                                                              | <b>H02</b>                                                                          |                | 148.–     | 168.–      | 209.–      | 226.–      | 263.–      | 315.–      | 378.–                    |  |
| Condensation drainage holes <sup>9)</sup>                                                                                                                                                                                                                                                            | <b>H03</b>                                                                          |                | 67.60     | 75.50      | 90.30      | 97.80      | 105.–      | 112.–      | 119.–                    |  |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                                   | <b>H07</b>                                                                          |                | 155.–     | 155.–      | 82.70      | 97.80      | 97.80      | 112.–      | 128.–                    |  |
| Enclosure with screw down possibility                                                                                                                                                                                                                                                                | <b>H10</b>                                                                          |                | 50.70     | 50.70      | –          | –          | –          | 52.50      | 52.50                    |  |

For legends and footnotes, see Page 3/20.

Standard delivery times in working days:

40

On  
request

## Synchronous reluctance motors for SINAMICS converters – VSD4000 line

Article No. supplements and special versions

## Options · Aluminum series 1FP1014

| Special versions                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |       |       |       |        |        |        | Motor version            |  |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-------|-------|-------|--------|--------|--------|--------------------------|--|
|                                                                                                                                      |                                                                                     | 80         | 80    | 112   | 132   | 160    | 180    | 200    |                          |  |
|                                                                                                                                      |                                                                                     | 1FP1014    |       |       |       |        |        |        | Super Premium Efficiency |  |
| 1FP1014-.....-.....-Z                                                                                                                | Order code                                                                          |            |       |       |       |        |        |        |                          |  |
| Mechanical design and degrees of protection (continued)                                                                              |                                                                                     |            |       |       |       |        |        |        |                          |  |
| IP66 degree of protection                                                                                                            | H19                                                                                 |            | 316.– | 316.– | 316.– | 316.–  | 471.–  | 630.–  | 787.–                    |  |
| IP65 degree of protection <sup>10)</sup>                                                                                             | H20                                                                                 |            | 150.– | 150.– | 150.– | 150.–  | 224.–  | 302.–  | 374.–                    |  |
| IP56 degree of protection <sup>11)</sup>                                                                                             | H22                                                                                 |            | 166.– | 166.– | 166.– | 166.–  | 247.–  | 328.–  | 413.–                    |  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>8)</sup>                                                        | H23                                                                                 |            | 48.30 | 51.70 | 62.90 | 76.80  | 112.–  | 145.–  | 180.–                    |  |
| Coolant temperature and installation altitude                                                                                        |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Coolant temperature –40 to +40 °C <sup>13)</sup>                                                                                     | D03                                                                                 |            | 257.– | 322.– | 489.– | 566.–  | 650.–  | 721.–  | 836.–                    |  |
| Coolant temperature –30 to +40 °C <sup>13)</sup>                                                                                     | D04                                                                                 |            | 56.70 | 56.70 | 70.80 | 85.–   | 85.–   | 113.–  | 142.–                    |  |
| Designs in accordance with standards and specifications                                                                              |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Design according to UL and CSA (Canadian regulations)                                                                                | D39                                                                                 |            | 81.60 | 91.20 | 119.– | 153.–  | 187.–  | 300.–  | 411.–                    |  |
| TR CU product safety certificate EAC for Eurasian Customs Union                                                                      | D47                                                                                 |            | 26.30 | 31.50 | 52.50 | 84.–   | 137.–  | 179.–  | 252.–                    |  |
| Bearings and lubrication                                                                                                             |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Located bearing DE                                                                                                                   | L20                                                                                 |            | 39.80 | 42.20 | 86.30 | 106.–  | 145.–  | 306.–  | 424.–                    |  |
| Located bearing NDE                                                                                                                  | L21                                                                                 |            | 39.80 | 42.20 | 46.50 | 49.30  | □      | □      | □                        |  |
| Bearing design for increased cantilever forces                                                                                       | L22                                                                                 |            | 80.90 | 89.40 | 117.– | 133.–  | 175.–  | 278.–  | 322.–                    |  |
| Regreasing device <sup>14)</sup>                                                                                                     | L23                                                                                 |            | –     | –     | 325.– | 336.–  | 363.–  | 383.–  | 430.–                    |  |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                                     | L25                                                                                 |            | 168.– | 203.– | 237.– | 265.–  | 353.–  | 468.–  | 576.–                    |  |
| Bearing insulation NDE                                                                                                               | L51                                                                                 |            | –     | –     | 557.– | 1250.– | 1300.– | 1350.– | 1370.–                   |  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>14)</sup>                                               | Q01                                                                                 |            | –     | –     | 288.– | 317.–  | 350.–  | 377.–  | 408.–                    |  |
| Balance and vibration quantity                                                                                                       |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Half-key balancing (standard)                                                                                                        |                                                                                     |            | □     | □     | □     | □      | □      | □      | □                        |  |
| Balancing without key                                                                                                                | L01                                                                                 |            | 21.80 | 21.80 | 28.40 | 33.60  | 33.60  | 43.70  | 43.70                    |  |
| Full-key balancing                                                                                                                   | L02                                                                                 |            | 96.10 | 111.– | 111.– | 129.–  | 129.–  | 162.–  | 162.–                    |  |
| Shaft and rotor                                                                                                                      |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                                 |            | 468.– | 496.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–                    |  |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                        | L05                                                                                 |            | 97.80 | 97.80 | 143.– | 189.–  | 217.–  | 328.–  | 364.–                    |  |
| Standard shaft made of stainless steel                                                                                               | L06                                                                                 |            | 838.– | 838.– | –     | 1110.– | 1390.– | 2470.– | 2860.–                   |  |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                                 |            | 244.– | 244.– | 244.– | 408.–  | 408.–  | 211.–  | 238.–                    |  |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 |            | 180.– | 211.– | 211.– | 302.–  | 374.–  | 452.–  | 527.–                    |  |
| Non-standard cylindrical shaft extension, DE <sup>15)</sup>                                                                          | Y58 • and customer specifications                                                   |            | 468.– | 496.– | 496.– | 580.–  | 610.–  | 687.–  | 757.–                    |  |
| Non-standard cylindrical shaft extension, NDE <sup>15)</sup>                                                                         | Y59 • and customer specifications                                                   |            | 468.– | 496.– | 496.– | 580.–  | 610.–  | 687.–  | 757.–                    |  |
| Heating and ventilation                                                                                                              |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Mounting of separately driven fan                                                                                                    | F70                                                                                 |            | 840.– | 840.– | 987.– | 1070.– | 1240.– | 1370.– | 2050.–                   |  |
| Sheet metal fan cover                                                                                                                | F74                                                                                 |            | 56.70 | 62.40 | 73.70 | 79.40  | 85.–   | 85.–   | 104.–                    |  |
| Fan cover for textile industry <sup>16)</sup>                                                                                        | F75                                                                                 |            | 119.– | 196.– | 452.– | 572.–  | 676.–  | 676.–  | 944.–                    |  |
| Metal external fan                                                                                                                   | F76                                                                                 |            | 150.– | 150.– | 224.– | 261.–  | 302.–  | 339.–  | 374.–                    |  |
| Without external fan and without fan cover                                                                                           | F90                                                                                 |            | 118.– | 118.– | 118.– | 118.–  | 118.–  | 118.–  | 118.–                    |  |
| Anti-condensation heating for 230 V (2 terminals)                                                                                    | Q02                                                                                 |            | 414.– | 414.– | 459.– | 519.–  | 576.–  | 639.–  | 734.–                    |  |
| Anti-condensation heating for 115 V (2 terminals)                                                                                    | Q03                                                                                 |            | 414.– | 414.– | 459.– | 519.–  | 576.–  | 639.–  | 734.–                    |  |
| Rating plate and extra rating plates                                                                                                 |                                                                                     |            |       |       |       |        |        |        |                          |  |
| Second rating plate, loose                                                                                                           | M10                                                                                 |            | 21.10 | 21.10 | 21.10 | 21.10  | 21.10  | 67.60  | 67.60                    |  |
| Rating plate, stainless steel                                                                                                        | M11                                                                                 |            | 42.20 | 42.20 | 42.20 | 42.20  | 42.20  | 51.60  | 51.60                    |  |
| Extra rating plate with customer specifications                                                                                      | Y82 • and customer specifications                                                   |            | 41.50 | 41.50 | 41.50 | 41.50  | 41.50  | 69.40  | 69.40                    |  |

For legends and footnotes, see Page 3/20.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40****On  
request****Options · Aluminum series 1FP1014**

| Special versions                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Order code | Frame size     |           |            |            |            |            |            | Motor version            |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|----------------|-----------|------------|------------|------------|------------|------------|--------------------------|
|                                                                                                                    |                                                                                     |            | <b>80</b>      | <b>80</b> | <b>112</b> | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> |                          |
|                                                                                                                    |                                                                                     |            | <b>1FP1014</b> |           |            |            |            |            |            | Super Premium Efficiency |
| <b>1FP1014-.....-.....-Z</b>                                                                                       |                                                                                     |            |                |           |            |            |            |            |            |                          |
| <b>Rating plate and extra rating plates</b> (continued)                                                            |                                                                                     |            |                |           |            |            |            |            |            |                          |
| Additional information on rating plate and on package label (max. 20 characters)                                   | <b>Y84</b> • and customer specifications                                            |            | 41.50          | 41.50     | 41.50      | 41.50      | 41.50      | 69.40      | 69.40      |                          |
| Adhesive label, supplied loose                                                                                     | <b>Y85</b> • and customer specifications                                            |            | –              | –         | 41.50      | 41.50      | 41.50      | 67.60      | 67.60      |                          |
| <b>Extension of the liability for defects</b>                                                                      |                                                                                     |            |                |           |            |            |            |            |            |                          |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>21)</sup> |                                                                                     |            | □              | □         | □          | □          | □          | □          | □          |                          |
| <b>Packaging, safety notes, documentation and test certificates</b>                                                |                                                                                     |            |                |           |            |            |            |            |            |                          |
| With a safety and commissioning instruction enclosed in each wire-lattice pallet <sup>17)</sup>                    | <b>B01</b>                                                                          |            | O              | O         | O          | O          | O          | O          | O          |                          |
| Acceptance test certificate 3.1 according to EN 10204 <sup>18)</sup>                                               | <b>B02</b>                                                                          |            | 28.70          | 28.70     | 28.70      | 28.70      | 28.70      | 28.70      | 28.70      |                          |
| Document – Electrical data sheet                                                                                   | <b>B60</b>                                                                          |            | 315.–          | 315.–     | 315.–      | 315.–      | 315.–      | 315.–      | 315.–      |                          |
| Document – Order dimensional drawing                                                                               | <b>B61</b>                                                                          |            | 315.–          | 315.–     | 315.–      | 315.–      | 315.–      | 315.–      | 315.–      |                          |
| Type test with heat run for horizontal motors, with acceptance                                                     | <b>B83</b>                                                                          |            | 5730.–         | 6520.–    | 8070.–     | 8840.–     | 9620.–     | 10400.–    | 11200.–    |                          |
| Documentation package “Basic”                                                                                      | <b>B90</b>                                                                          |            | 609.–          | 609.–     | 609.–      | 609.–      | 609.–      | 609.–      | 609.–      |                          |
| Documentation package “Advanced”                                                                                   | <b>B91</b>                                                                          |            | 924.–          | 924.–     | 924.–      | 924.–      | 924.–      | 924.–      | 924.–      |                          |
| Documentation package “Projects”                                                                                   | <b>B92</b>                                                                          |            | 2520.–         | 2520.–    | 2520.–     | 2520.–     | 2520.–     | 2520.–     | 2520.–     |                          |
| Wire-lattice pallet packaging                                                                                      | <b>B99</b>                                                                          |            | O              | O         | O          | O          | O          | O          | O          |                          |
| Connected in star for dispatch                                                                                     | <b>M01</b>                                                                          |            | –              | –         | 28.90      | 28.90      | 28.90      | 37.90      | 37.90      |                          |
| Connected in delta for dispatch                                                                                    | <b>M02</b>                                                                          |            | –              | –         | 28.90      | 28.90      | 28.90      | 37.90      | 37.90      |                          |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

<sup>1)</sup> With order code **H08** feet dimensions differ from EN 50347. Further information is available in DT Configurator (see Appendix, "Tools and Configuring").

<sup>2)</sup> With IM B5 flange, only possible in combination with order code **H08**.

<sup>3)</sup> The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.

<sup>4)</sup> A second shaft extension is not possible. Please inquire for mounted brakes.

<sup>5)</sup> For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.

<sup>6)</sup> In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.

<sup>7)</sup> Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.

<sup>8)</sup> Order code **H00** provides mechanical protection for encoders.

<sup>9)</sup> Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.

<sup>10)</sup> Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).

<sup>11)</sup> Not possible in combination with brake 2LM8 (order code **F01**).

<sup>12)</sup> Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B.

<sup>13)</sup> Not possible for type of construction IM V3.

<sup>14)</sup> Not possible when brake is mounted.

<sup>15)</sup> When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:

- Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
- Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension. For explanation of the order codes, see Catalog Section 1 "Introduction".

<sup>16)</sup> The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".

<sup>17)</sup> The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/40761976>

<sup>18)</sup> The delivery time for the factory test certificate may differ from the delivery time for the motor and it will be dispatched by email.

<sup>19)</sup> Not UL-certified. Not possible in combination with the option **D31**.

<sup>20)</sup> Only possible in combination with order codes **R70** and **R71**.

<sup>21)</sup> Wearing parts (bearings) are excluded from the warranty extension.

Standard delivery times in working days:

40

On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

**Selection and ordering data**

| Special versions                                                                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |       |       |        |        |        |        |        |        | Motor version            |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------------------------|
|                                                                                         |                                                                                     | 80         | 90    | 112   | 132    | 160    | 180    | 200    | 225    |        |                          |
|                                                                                         |                                                                                     | 1FP1514    |       |       |        |        |        |        |        |        | Super Premium Efficiency |
| 1FP1514-.....-.....-Z                                                                   | Order code                                                                          |            |       |       |        |        |        |        |        |        |                          |
| Motor protection                                                                        |                                                                                     |            |       |       |        |        |        |        |        |        |                          |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>2) 3)</sup>                    | Q11                                                                                 |            | 40.50 | 43.50 | 119.–  | 119.–  | 119.–  | 180.–  | 180.–  | 325.–  |                          |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>3)</sup>             | Q12                                                                                 |            | 176.– | 176.– | 205.–  | 205.–  | 176.–  | 274.–  | 421.–  | 548.–  |                          |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>3)</sup>                              | Q23                                                                                 |            | 105.– | 105.– | 119.–  | 119.–  | 274.–  | 180.–  | 339.–  | 463.–  |                          |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>3)</sup>                             | Q25                                                                                 |            | 201.– | 210.– | 241.–  | 241.–  | 359.–  | 359.–  | 550.–  | 756.–  |                          |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>3)</sup>                 | Q31                                                                                 |            | 117.– | 117.– | 134.–  | 196.–  | 196.–  | 196.–  | 270.–  | 365.–  |                          |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                     | Q32                                                                                 |            | –     | –     | –      | –      | 352.–  | 477.–  | 477.–  | 647.–  |                          |
| 6 bimetal sensors (NC contact) for tripping (6 terminals)                               | Q33                                                                                 |            | –     | –     | 144.–  | 206.–  | 206.–  | 281.–  | 281.–  | 376.–  |                          |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)                    | Q34                                                                                 |            | –     | –     | 251.–  | 362.–  | 362.–  | 488.–  | 488.–  | 658.–  |                          |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>19)</sup>                            | Q35                                                                                 |            | 105.– | 105.– | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  |                          |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>19)</sup>                           | Q36                                                                                 |            | 211.– | 211.– | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  |                          |
| Installation of 3 Pt100 resistance thermometers in stator winding, 2-wire circuit       | Q60                                                                                 |            | –     | –     | 1240.– | 1240.– | 1250.– | 1510.– | 1510.– | 1510.– |                          |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                           | Q62                                                                                 |            | –     | –     | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– |                          |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                          | Q63                                                                                 |            | –     | –     | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– |                          |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                         | Q64                                                                                 |            | –     | –     | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– |                          |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>1)</sup> | Q72                                                                                 |            | –     | –     | –      | –      | –      | 4300.– | 4300.– | 4300.– |                          |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)              | Q78                                                                                 |            | –     | –     | –      | –      | –      | 4730.– | 4730.– | 4730.– |                          |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)      | Q79                                                                                 |            | –     | –     | –      | –      | –      | 5670.– | 5670.– | 5670.– |                          |
| Motor connection and terminal box                                                       |                                                                                     |            |       |       |        |        |        |        |        |        |                          |
| External grounding                                                                      | H04                                                                                 |            | 24.–  | 24.–  | 28.90  | 28.90  | 28.90  | □      | □      | □      |                          |
| Terminal box on NDE <sup>2)</sup>                                                       | H08                                                                                 |            | 126.– | 145.– | 220.–  | 286.–  | 388.–  | 967.–  | 999.–  | 1050.– |                          |
| Second external grounding                                                               | H70                                                                                 |            | –     | –     | O      | O      | O      | 15.80  | 15.80  | 15.80  |                          |
| Rotation of the terminal box through 90°, entry from DE                                 | R10                                                                                 |            | O     | O     | O      | O      | O      | 45.10  | 58.40  | 72.10  |                          |
| Rotation of the terminal box through 90°, entry from NDE                                | R11                                                                                 |            | O     | O     | O      | O      | O      | 45.10  | 58.40  | 72.10  |                          |
| Rotation of the terminal box through 180°                                               | R12                                                                                 |            | O     | O     | O      | O      | O      | 45.10  | 58.40  | 72.10  |                          |
| One EMC cable gland                                                                     | R14                                                                                 |            | 68.30 | 68.30 | 125.–  | 125.–  | 174.–  | 174.–  | 299.–  | 299.–  |                          |
| One metal cable gland                                                                   | R15                                                                                 |            | 59.90 | 59.90 | 112.–  | 112.–  | 143.–  | 143.–  | 165.–  | 165.–  |                          |
| EMC cable gland, maximum configuration                                                  | R16                                                                                 |            | 137.– | 137.– | 250.–  | 250.–  | 362.–  | 362.–  | 610.–  | 610.–  |                          |
| Larger terminal box                                                                     | R50                                                                                 |            | 103.– | 103.– | 214.–  | 274.–  | 313.–  | 475.–  | 523.–  | 1660.– |                          |
| Terminal box without cable entry opening                                                | R51                                                                                 |            | –     | –     | O      | O      | O      | O      | O      | O      |                          |
| Drilled removable entry plate                                                           | R52                                                                                 |            | –     | –     | –      | –      | –      | 273.–  | 294.–  | 294.–  |                          |
| Undrilled removable entry plate                                                         | R53                                                                                 |            | –     | –     | –      | –      | –      | 273.–  | 294.–  | 294.–  |                          |
| Cast-iron auxiliary terminal box (small)                                                | R62                                                                                 |            | –     | –     | 284.–  | 284.–  | 284.–  | 284.–  | 284.–  | 284.–  |                          |
| Silicon-free version                                                                    |                                                                                     |            | –     | –     | □      | □      | □      | □      | □      | □      |                          |
| Non-standard threaded through hole (NPT or G thread)                                    | Y61 • and customer specifications                                                   |            | –     | –     | 155.–  | 155.–  | 155.–  | 203.–  | 270.–  | 338.–  |                          |

For legends, see Page 3/24, for footnotes, see Page 3/25.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40**On  
request**Options · Cast-iron series 1FP1514**

| Special versions                                                                                                                                                                                                                                                                           | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size     |        |        |        |        |         |         |         | Motor version            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|--------|--------|--------|--------|---------|---------|---------|--------------------------|
|                                                                                                                                                                                                                                                                                            |                                                                                     | 80             | 90     | 112    | 132    | 160    | 180     | 200     | 225     |                          |
|                                                                                                                                                                                                                                                                                            |                                                                                     | <b>1FP1514</b> |        |        |        |        |         |         |         | Super Premium Efficiency |
| <b>1FP1514-.....-.....-Z</b>                                                                                                                                                                                                                                                               | Order code                                                                          |                |        |        |        |        |         |         |         |                          |
| <b>Windings and insulation</b>                                                                                                                                                                                                                                                             |                                                                                     |                |        |        |        |        |         |         |         |                          |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>3)</sup>                                                                                                                                                                                                                   | <b>N11</b>                                                                          | 220.–          | 220.–  | 305.–  | 405.–  | 494.–  | 702.–   | 982.–   | 1200.–  |                          |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air                                                                                                                                                                                                         | <b>N30</b>                                                                          | 137.–          | 137.–  | 137.–  | 137.–  | 210.–  | 305.–   | 420.–   | 652.–   |                          |
| Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air                                                                                                                                                                                                        | <b>N31</b>                                                                          | 220.–          | 220.–  | 252.–  | 284.–  | 399.–  | 515.–   | 662.–   | 935.–   |                          |
| <b>Colors and paint finish</b>                                                                                                                                                                                                                                                             |                                                                                     |                |        |        |        |        |         |         |         |                          |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                  |                                                                                     | □              | □      | □      | □      | □      | □       | □       | □       |                          |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                    | <b>S00</b>                                                                          | O              | O      | O      | O      | O      | O       | O       | O       |                          |
| Unpainted, only primed                                                                                                                                                                                                                                                                     | <b>S01</b>                                                                          | 20.90          | 27.80  | 27.80  | 44.40  | 44.40  | 83.30   | 83.30   | 83.30   |                          |
| Special finish C3                                                                                                                                                                                                                                                                          | <b>S02</b>                                                                          | 36.80          | 36.80  | 63.–   | 84.–   | 84.–   | 115.–   | 126.–   | 189.–   |                          |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                        | <b>S03</b>                                                                          | 504.–          | 504.–  | 536.–  | 589.–  | 589.–  | 630.–   | 672.–   | 714.–   |                          |
| Special paint for use offshore C5                                                                                                                                                                                                                                                          | <b>S04</b>                                                                          | 2050.–         | 2050.– | 2260.– | 2390.– | 2510.– | 2640.–  | 2770.–  | 3200.–  |                          |
| Internal coating                                                                                                                                                                                                                                                                           | <b>S05</b>                                                                          | –              | –      | 89.40  | 89.40  | 89.40  | 63.–    | 68.30   | 89.40   |                          |
| Standard finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 "Introduction") | <b>Y53 •</b> and standard finish RAL....                                            | 26.30          | 26.30  | 42.–   | 57.80  | 57.80  | 84.–    | 115.–   | 126.–   |                          |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                     | <b>Y56 •</b> and special finish RAL....                                             | 620.–          | 620.–  | 662.–  | 694.–  | 694.–  | 704.–   | 714.–   | 725.–   |                          |
| <b>Modular technology – Basic versions<sup>4)</sup></b>                                                                                                                                                                                                                                    |                                                                                     |                |        |        |        |        |         |         |         |                          |
| Mounting of brake <sup>5)</sup>                                                                                                                                                                                                                                                            | <b>F01</b>                                                                          | –              | –      | 799.–  | 1030.– | 2040.– | 4510.–  | 6300.–  | 8010.–  |                          |
| Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                            | <b>G11</b>                                                                          | 748.–          | 793.–  | 895.–  | 941.–  | 986.–  | 1030.–  | 1080.–  | 1140.–  |                          |
| Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                            | <b>G12</b>                                                                          | 1030.–         | 1100.– | 1250.– | 1330.– | 1410.– | 1480.–  | 1550.–  | 1640.–  |                          |
| <b>Modular technology – Additional versions</b>                                                                                                                                                                                                                                            |                                                                                     |                |        |        |        |        |         |         |         |                          |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                               | <b>F10</b>                                                                          | –              | –      | 52.90  | 52.90  | 52.90  | 70.60   | 70.60   | 70.60   |                          |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                    | <b>F11</b>                                                                          | –              | –      | O      | O      | O      | O       | O       | O       |                          |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                                                                                                                                                    | <b>F12</b>                                                                          | –              | –      | 52.90  | 52.90  | 52.90  | 70.60   | 70.60   | 70.60   |                          |
| Brake supply voltage 180 V AC                                                                                                                                                                                                                                                              | <b>F17</b>                                                                          | –              | –      | 52.90  | 52.90  | 52.90  | 70.60   | 70.60   | 70.60   |                          |
| Brake supply voltage 205 V AC                                                                                                                                                                                                                                                              | <b>F18</b>                                                                          | –              | –      | 52.90  | 52.90  | 52.90  | 70.60   | 70.60   | 70.60   |                          |
| Reverse running stop, reverse movement left locked, rotating direction right                                                                                                                                                                                                               | <b>F40</b>                                                                          | –              | –      | –      | 5470.– | 5780.– | 6080.–  | 6080.–  | 6300.–  |                          |
| Reverse running stop, reverse movement right locked, rotating direction left                                                                                                                                                                                                               | <b>F41</b>                                                                          | –              | –      | –      | 5470.– | 5780.– | 6080.–  | 6080.–  | 6300.–  |                          |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                    | <b>F50</b>                                                                          | –              | –      | 264.–  | 294.–  | 426.–  | 620.–   | 723.–   | 868.–   |                          |
| <b>Special technology<sup>5)</sup></b>                                                                                                                                                                                                                                                     |                                                                                     |                |        |        |        |        |         |         |         |                          |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>8)</sup>                                                                                                                                                                                                                              | <b>G04</b>                                                                          | –              | –      | 3000.– | 3000.– | 3000.– | 3000.–  | 3000.–  | 4180.–  |                          |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>8)</sup>                                                                                                                                                                                                                             | <b>G05</b>                                                                          | –              | –      | 3540.– | 3540.– | 3540.– | 4570.–  | 4570.–  | 4950.–  |                          |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>8)</sup>                                                                                                                                                                                                                             | <b>G06</b>                                                                          | –              | –      | 4570.– | 4570.– | 4570.– | 4570.–  | 4570.–  | 6000.–  |                          |
| Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) <sup>19)</sup>                                                                                                                                                                         | <b>G07</b>                                                                          | –              | –      | –      | –      | –      | 6380.–  | 6410.–  | 6440.–  |                          |
| Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) <sup>19)</sup>                                                                                                                                                                            | <b>G08</b>                                                                          | –              | –      | –      | –      | –      | 14700.– | 14900.– | 18000.– |                          |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                                                                                                                                                                                         | <b>G21</b>                                                                          | 2360.–         | 2480.– | 2680.– | 2830.– | 3050.– | 3210.–  | 3330.–  | 3430.–  |                          |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                                                                                                                                                                                         | <b>G22</b>                                                                          | 2710.–         | 2860.– | 3120.– | 3300.– | 3520.– | 3630.–  | 3750.–  | 3880.–  |                          |
| Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder                                                                                                                                                                                                                                  | <b>G25</b>                                                                          | –              | –      | –      | –      | –      | 14000.– | 14000.– | 17400.– |                          |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                                                                                                                                                                                             | <b>G27</b>                                                                          | –              | –      | –      | –      | –      | 15500.– | 15500.– | 20200.– |                          |
| Mounting a special type of rotary pulse encoder                                                                                                                                                                                                                                            | <b>Y70 •</b> and customer specifications                                            | –              | –      | –      | –      | –      | O. R.   | O. R.   | O. R.   |                          |

For legends, see Page 3/24, for footnotes, see Page 3/25.

Standard delivery times in working days:

40

On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**Options · Cast-iron series 1FP1514**

| Special versions                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size     |           |            |            |            |            |            |            | Motor version            |  |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-----------|------------|------------|------------|------------|------------|------------|--------------------------|--|
|                                                                                                                                |                                                                                     | <b>80</b>      | <b>90</b> | <b>112</b> | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> | <b>225</b> |                          |  |
|                                                                                                                                |                                                                                     | <b>1FP1514</b> |           |            |            |            |            |            |            | Super Premium Efficiency |  |
| <b>1FP1514-.....-.....-Z</b>                                                                                                   | Order code                                                                          |                |           |            |            |            |            |            |            |                          |  |
| Mechanical design and degrees of protection                                                                                    |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Prepared for mountings, center hole only                                                                                       | <b>G40</b>                                                                          |                | 70.10     | 70.10      | 70.10      | 93.–       | 107.–      | □          | □          | □                        |  |
| Prepared for mountings with D12 shaft                                                                                          | <b>G41</b>                                                                          |                | 143.–     | 152.–      | 168.–      | 189.–      | 225.–      | 462.–      | 462.–      | 589.–                    |  |
| Prepared for mountings with D16 shaft                                                                                          | <b>G42</b>                                                                          |                | 143.–     | 143.–      | 168.–      | 189.–      | 225.–      | 462.–      | 462.–      | 589.–                    |  |
| Mechanical protection for encoders                                                                                             | <b>G43</b>                                                                          |                | 72.30     | 72.30      | 80.70      | 141.–      | 141.–      | 212.–      | 212.–      | 212.–                    |  |
| Protective cover <sup>6) 8) 9)</sup>                                                                                           | <b>H00</b>                                                                          |                | 56.70     | 56.70      | 82.40      | 144.–      | 144.–      | 192.–      | 289.–      | 383.–                    |  |
| Screwed-on (instead of cast) feet                                                                                              | <b>H01</b>                                                                          |                | –         | –          | 113.–      | 123.–      | 132.–      | 371.–      | 437.–      | 517.–                    |  |
| Vibration-proof version (continuous vibration resistance to Class 3M4 according to IEC721-3-3:1994)                            | <b>H02</b>                                                                          |                | 148.–     | 168.–      | 209.–      | 226.–      | 263.–      | 315.–      | 378.–      | 442.–                    |  |
| Condensation drainage holes                                                                                                    |                                                                                     |                | 67.60     | 75.50      | □          | □          | □          | □          | □          | □                        |  |
| Rust-resistant screws (externally)                                                                                             | <b>H07</b>                                                                          |                | 68.30     | 68.30      | 82.70      | 97.80      | 97.80      | 112.–      | 128.–      | 170.–                    |  |
| IP66 degree of protection                                                                                                      | <b>H19</b>                                                                          |                | 316.–     | 316.–      | 316.–      | 316.–      | 471.–      | 630.–      | 787.–      | 949.–                    |  |
| IP65 degree of protection <sup>10)</sup>                                                                                       | <b>H20</b>                                                                          |                | 150.–     | 150.–      | 150.–      | 150.–      | 224.–      | 302.–      | 374.–      | 452.–                    |  |
| IP54 degree of protection                                                                                                      | <b>H21</b>                                                                          |                | –         | –          | –          | –          | –          | 840.–      | 840.–      | 840.–                    |  |
| IP56 degree of protection <sup>11)</sup>                                                                                       | <b>H22</b>                                                                          |                | 166.–     | 166.–      | 166.–      | 166.–      | 247.–      | 328.–      | 413.–      | 497.–                    |  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>12)</sup>                                                 | <b>H23</b>                                                                          |                | 48.30     | 52.–       | 62.90      | 76.80      | 112.–      | 145.–      | 180.–      | 239.–                    |  |
| Coolant temperature and installation altitude                                                                                  |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Coolant temperature –50 to +40 °C                                                                                              | <b>D02</b>                                                                          |                | –         | –          | 788.–      | 946.–      | 1100.–     | 2590.–     | 2770.–     | 4000.–                   |  |
| Coolant temperature –40 to +40 °C <sup>13)</sup>                                                                               | <b>D03</b>                                                                          |                | 257.–     | 322.–      | 489.–      | 566.–      | 650.–      | 721.–      | 836.–      | 1070.–                   |  |
| Coolant temperature –30 to +40 °C                                                                                              | <b>D04</b>                                                                          |                | 56.70     | 56.70      | 70.80      | 85.–       | 85.–       | 113.–      | 142.–      | 567.–                    |  |
| Designs in accordance with standards and specifications                                                                        |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Design according to UL and CSA (Canadian regulations)                                                                          | <b>D39</b>                                                                          |                | 81.90     | 91.–       | 119.–      | 153.–      | 187.–      | 300.–      | 411.–      | 517.–                    |  |
| TR CU product safety certificate EAC for Eurasian Customs Union                                                                | <b>D47</b>                                                                          |                | 26.30     | 31.50      | 52.50      | 84.–       | 137.–      | 179.–      | 252.–      | 325.–                    |  |
| Bearings and lubrication                                                                                                       |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A <sup>14)</sup>                                           | <b>L19</b>                                                                          |                | –         | –          | –          | –          | –          | 383.–      | 430.–      | 478.–                    |  |
| Located bearing DE                                                                                                             | <b>L20</b>                                                                          |                | 39.80     | 42.20      | 86.30      | 106.–      | 145.–      | 306.–      | 424.–      | 597.–                    |  |
| Located bearing NDE                                                                                                            | <b>L21</b>                                                                          |                | 39.80     | 42.20      | 46.50      | 49.30      | □          | □          | □          | □                        |  |
| Bearing design for increased cantilever forces                                                                                 | <b>L22</b>                                                                          |                | 80.90     | 89.40      | 117.–      | 133.–      | 175.–      | 278.–      | 322.–      | 363.–                    |  |
| Regreasing device <sup>14)</sup>                                                                                               | <b>L23</b>                                                                          |                | –         | –          | 325.–      | 336.–      | 363.–      | 383.–      | 430.–      | 478.–                    |  |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                               | <b>L25</b>                                                                          |                | 168.–     | 203.–      | 237.–      | 265.–      | 353.–      | 468.–      | 576.–      | 819.–                    |  |
| Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces                                             | <b>L28</b>                                                                          |                | –         | –          | –          | –          | –          | 747.–      | 900.–      | 1170.–                   |  |
| Bearing insulation NDE                                                                                                         | <b>L51</b>                                                                          |                | –         | –          | 530.–      | 1190.–     | 1230.–     | 1280.–     | 1300.–     | 1760.–                   |  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>14)</sup>                                         | <b>Q01</b>                                                                          |                | –         | –          | 288.–      | 317.–      | 317.–      | 377.–      | 408.–      | 439.–                    |  |
| Balance and vibration quantity                                                                                                 |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Half-key balancing (standard)                                                                                                  |                                                                                     |                | □         | □          | □          | □          | □          | □          | □          | □                        |  |
| Balancing without key                                                                                                          | <b>L01</b>                                                                          |                | 21.80     | 21.80      | 28.40      | 33.60      | 33.60      | 43.70      | 43.70      | 59.30                    |  |
| Full-key balancing                                                                                                             | <b>L02</b>                                                                          |                | 96.10     | 111.–      | 111.–      | 129.–      | 129.–      | 162.–      | 162.–      | 209.–                    |  |
| Shaft and rotor                                                                                                                |                                                                                     |                |           |            |            |            |            |            |            |                          |  |
| Shaft extension with standard dimensions, without feather keyway                                                               | <b>L04</b>                                                                          |                | 468.–     | 496.–      | 553.–      | 580.–      | 610.–      | 708.–      | 779.–      | 850.–                    |  |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                  | <b>L05</b>                                                                          |                | 97.80     | 97.80      | 143.–      | 189.–      | 217.–      | 328.–      | 364.–      | 384.–                    |  |
| Standard shaft made of stainless steel                                                                                         | <b>L06</b>                                                                          |                | 126.–     | 147.–      | 232.–      | 357.–      | 567.–      | 675.–      | 1010.–     | 1390.–                   |  |
| Concentricity of shaft extension in acc. with DIN 42955 Tolerance R                                                            | <b>L07</b>                                                                          |                | 244.–     | 244.–      | 268.–      | 408.–      | 408.–      | 211.–      | 238.–      | 283.–                    |  |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors | <b>L08</b>                                                                          |                | 180.–     | 211.–      | 270.–      | 302.–      | 374.–      | 452.–      | 527.–      | 601.–                    |  |
| Non-standard cylindrical shaft extension, DE <sup>15)</sup>                                                                    | <b>Y58 •</b> and customer specifications                                            |                | 468.–     | 496.–      | 553.–      | 580.–      | 610.–      | 708.–      | 779.–      | 850.–                    |  |
| Non-standard cylindrical shaft extension, NDE <sup>15)</sup>                                                                   | <b>Y59 •</b> and customer specifications                                            |                | 468.–     | 496.–      | 553.–      | 580.–      | 610.–      | 708.–      | 779.–      | 850.–                    |  |
| Special shaft steel                                                                                                            | <b>Y60 •</b> and customer specifications                                            |                | –         | –          | O. R.      | O. R.      | O. R.      | O. R.      | O. R.      | O. R.                    |  |

For legends, see Page 3/24, for footnotes, see Page 3/25.

**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

**40****On  
request****Options · Cast-iron series 1FP1514**

| Special versions                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |        |        |        |        |         |         |         |  | Motor version            |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|--------|--------|--------|---------|---------|---------|--|--------------------------|
|                                                                                                                    |                                                                                     | 80         | 90     | 112    | 132    | 160    | 180     | 200     | 225     |  |                          |
|                                                                                                                    |                                                                                     | 1FP1514    |        |        |        |        |         |         |         |  | Super Premium Efficiency |
| 1FP1514-.....-.....-Z                                                                                              | Order code                                                                          |            |        |        |        |        |         |         |         |  |                          |
| Heating and ventilation                                                                                            |                                                                                     |            |        |        |        |        |         |         |         |  |                          |
| Mounting of separately driven fan                                                                                  | F70                                                                                 | –          | –      | –      | 1070.– | 1240.– | 1370.–  | 2050.–  | 2550.–  |  |                          |
| Sheet metal fan cover                                                                                              | F74                                                                                 | □          | □      | 73.70  | 79.40  | 85.–   | 85.–    | 104.–   | 116.–   |  |                          |
| Metal external fan                                                                                                 | F76                                                                                 | 150.–      | 150.–  | 224.–  | 261.–  | 302.–  | 339.–   | 374.–   | 413.–   |  |                          |
| Anti-condensation heating for 230 V                                                                                | Q02                                                                                 | 414.–      | 414.–  | 459.–  | 519.–  | 576.–  | 639.–   | 734.–   | 881.–   |  |                          |
| Anti-condensation heating for 115 V                                                                                | Q03                                                                                 | 414.–      | 414.–  | 459.–  | 519.–  | 576.–  | 639.–   | 734.–   | 881.–   |  |                          |
| Rating plate and extra rating plates                                                                               |                                                                                     |            |        |        |        |        |         |         |         |  |                          |
| Second rating plate, loose                                                                                         | M10                                                                                 | 21.10      | 21.10  | 21.10  | 21.10  | 21.10  | 67.60   | 67.60   | 67.60   |  |                          |
| Rating plate, stainless steel                                                                                      | M11                                                                                 | 42.20      | 42.20  | 42.20  | 42.20  | 42.20  | 51.60   | 51.60   | 69.40   |  |                          |
| Extra rating plate with customer specifications                                                                    | Y82 • and customer specifications                                                   | 41.50      | 41.50  | 41.50  | 41.50  | 41.50  | 69.40   | 69.40   | 69.40   |  |                          |
| Additional information on rating plate and on package label (max. 20 characters)                                   | Y84 • and customer specifications                                                   | 41.50      | 41.50  | 41.50  | 41.50  | 41.50  | 69.40   | 69.40   | 69.40   |  |                          |
| Adhesive label, supplied loose                                                                                     | Y85 • and customer specifications                                                   | –          | –      | 41.50  | 41.50  | 41.50  | 67.60   | 67.60   | 67.60   |  |                          |
| Extension of the liability for defects                                                                             |                                                                                     |            |        |        |        |        |         |         |         |  |                          |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>18)</sup> |                                                                                     | □          | □      | □      | □      | □      | □       | □       | □       |  |                          |
| Packaging, safety notes, documentation and test certificates                                                       |                                                                                     |            |        |        |        |        |         |         |         |  |                          |
| Acceptance test certificate 3.1 according to EN 10204 <sup>17)</sup>                                               | B02                                                                                 | 28.10      | 28.10  | 28.10  | 28.10  | 28.10  | 28.10   | 28.10   | 28.10   |  |                          |
| Document – Electrical data sheet                                                                                   | B60                                                                                 | 315.–      | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   |  |                          |
| Document – Order dimensional drawing                                                                               | B61                                                                                 | 315.–      | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   |  |                          |
| Standard test (routine test) with acceptance                                                                       | B65                                                                                 | –          | –      | 3890.– | 3890.– | 3890.– | 3890.–  | 3890.–  | 3890.–  |  |                          |
| Type test with heat run for horizontal motors, with acceptance                                                     | B83                                                                                 | 5730.–     | 6520.– | 8070.– | 8840.– | 9620.– | 10400.– | 11200.– | 11900.– |  |                          |
| Documentation package “Basic”                                                                                      | B90                                                                                 | 609.–      | 609.–  | 609.–  | 609.–  | 609.–  | 609.–   | 609.–   | 609.–   |  |                          |
| Documentation package “Advanced”                                                                                   | B91                                                                                 | 924.–      | 924.–  | 924.–  | 924.–  | 924.–  | 924.–   | 924.–   | 924.–   |  |                          |
| Documentation package “Projects”                                                                                   | B92                                                                                 | 2520.–     | 2520.– | 2520.– | 2520.– | 2520.– | 2520.–  | 2520.–  | 2520.–  |  |                          |
| Connected in star for dispatch                                                                                     | M01                                                                                 | 24.–       | 24.–   | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   |  |                          |
| Connected in delta for dispatch                                                                                    | M02                                                                                 | 24.–       | 24.–   | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   |  |                          |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

Standard delivery times in working days:

**40**On  
request**Synchronous reluctance motors for SINAMICS converters – VSD4000 line**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

**3**

- 1) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 2) With order code **H08** feet dimensions differ from EN 50347. Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 3) The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 4) A second shaft extension is not possible. Please inquire for mounted brakes.
- 5) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 6) The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 7) In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 8) The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 9) Order code **H00** provides mechanical protection for encoders.
- 10) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 11) Not possible in combination with brake 2LM8 – order code **F01**.
- 12) Not possible for type of construction IM V3.
- 13) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 14) Up to frame size 160 not possible when brake is mounted.
- 15) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:  
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")  
– Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension. For explanation of the order codes, see Catalog Section 1 "Introduction".
- 16) Wear parts (bearings) are excluded from the warranty extension.
- 17) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 18) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB! This option cannot be used in combination with brakes of type 2LM8!
- 19) Not UL-certified. Not possible in combination with the option **D31**.

**Standard induction motors optimized for converter operation – VSD10 line****20**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                         |
|----------------------------------------|---------------------------------------------------------|
| Category                               | <b>Motors with Basic Efficiency</b>                     |
| Series version                         | <b>Aluminum series 1LE1092</b>                          |
| Motor mode                             | Three-phase asynchronous motor with squirrel-cage rotor |
| Cooling                                | Self-ventilated (IC 411)                                |
| Degree of protection                   | IP55                                                    |
| Insulation                             | Thermal class F (155)                                   |
| Number of poles                        | 2, 4                                                    |
| Frame sizes (FS)                       | 100 L ... 160 L                                         |
| Rated power at 50 Hz                   | 2.2 ... 18.5 kW                                         |
| Synchronous speed at 50 Hz             | 1500 ... 3000 rpm                                       |
| Rated torque at 50 Hz                  | 9.6 ... 95 Nm                                           |
| Efficiency                             | Basic Efficiency                                        |
| Metal factor for metal surcharges (MS) | N - W - - -                                             |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2                            |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 3/4, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | Frame<br>size<br>FS | Article No.              | Base<br>price<br>EUR |
|-------------------------------------|---------------------|--------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |                     |                          |                      |
| <b>3</b>                            | <b>100 L</b>        | <b>1LE1092-1AA4-....</b> | <b>907.-</b>         |
| <b>4</b>                            | <b>112 M</b>        | <b>1LE1092-1BA2-....</b> | <b>1150.-</b>        |
| <b>5.5</b>                          | <b>132 S</b>        | <b>1LE1092-1CA0-....</b> | <b>1480.-</b>        |
| <b>7.5</b>                          | <b>132 S</b>        | <b>1LE1092-1CA1-....</b> | <b>1900.-</b>        |
| <b>11</b>                           | <b>160 M</b>        | <b>1LE1092-1DA2-....</b> | <b>2480.-</b>        |
| <b>15</b>                           | <b>160 M</b>        | <b>1LE1092-1DA3-....</b> | <b>3220.-</b>        |
| <b>18.5</b>                         | <b>160 L</b>        | <b>1LE1092-1DA4-....</b> | <b>3770.-</b>        |
| <b>4-pole: 1500 rpm at 50 Hz</b>    |                     |                          |                      |
| <b>2.2</b>                          | <b>100 L</b>        | <b>1LE1092-1AB4-....</b> | <b>788.-</b>         |
| <b>3</b>                            | <b>100 L</b>        | <b>1LE1092-1AB5-....</b> | <b>907.-</b>         |
| <b>4</b>                            | <b>112 M</b>        | <b>1LE1092-1BB2-....</b> | <b>1150.-</b>        |
| <b>5.5</b>                          | <b>132 S</b>        | <b>1LE1092-1CB0-....</b> | <b>1480.-</b>        |
| <b>7.5</b>                          | <b>132 M</b>        | <b>1LE1092-1CB2-....</b> | <b>1900.-</b>        |
| <b>11</b>                           | <b>160 M</b>        | <b>1LE1092-1DB2-....</b> | <b>2480.-</b>        |
| <b>15</b>                           | <b>160 L</b>        | <b>1LE1092-1DB4-....</b> | <b>3220.-</b>        |

Standard delivery times in working days:

20

## Standard induction motors optimized for converter operation – VSD10 line

Orientation

Overview of selection and ordering data with base prices and standard delivery times

### Overview

|                                        |                                                                                               |
|----------------------------------------|-----------------------------------------------------------------------------------------------|
| Category                               | <b>Motors with Basic Efficiency (continued)</b>                                               |
| Series version                         | <b>Cast-iron series 1LE1592</b>                                                               |
| Motor mode                             | Three-phase asynchronous motor with squirrel-cage rotor                                       |
| Cooling                                | Self-ventilated (IC 411)                                                                      |
| Degree of protection                   | IP55                                                                                          |
| Insulation                             | Thermal class F (155)                                                                         |
| Number of poles                        | 2, 4                                                                                          |
| Frame sizes (FS)                       | 100 L ... 315 L                                                                               |
| Rated power at 50 Hz                   | 2.2 ... 200 kW                                                                                |
| Synchronous speed at 50 Hz             | 1500 ... 3000 rpm                                                                             |
| Rated torque at 50 Hz                  | 9.6 ... 1273 Nm                                                                               |
| Efficiency                             | Basic Efficiency                                                                              |
| Metal factor for metal surcharges (MS) | N - W - - -                                                                                   |
| Price group (PG)                       | Frame sizes 100 ... 160: 3F2<br>Frame sizes 180 ... 225: 3F3,<br>Frame sizes 250 ... 315: 3F4 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 3/4, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|---------------------|--------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |                     |                    |                      |
| 3                                | 100 L               | 1LE1592-1AA4-..... | 1110.-               |
| 4                                | 112 M               | 1LE1592-1BA2-..... | 1430.-               |
| 5.5                              | 132 S               | 1LE1592-1CA0-..... | 1750.-               |
| 7.5                              | 132 S               | 1LE1592-1CA1-..... | 2240.-               |
| 11                               | 160 M               | 1LE1592-1DA2-..... | 2930.-               |
| 15                               | 160 M               | 1LE1592-1DA3-..... | 3780.-               |
| 18.5                             | 160 L               | 1LE1592-1DA4-..... | 4210.-               |
| 22                               | 180 M               | 1LE1592-1EA2-..... | 4970.-               |
| 30                               | 200 L               | 1LE1592-2AA4-..... | 6430.-               |
| 37                               | 200 L               | 1LE1592-2AA5-..... | 7820.-               |
| 45                               | 225 M               | 1LE1592-2BA2-..... | 9140.-               |
| 55                               | 250 M               | 1LE1592-2CA2-..... | 11100.-              |
| 75                               | 280 S               | 1LE1592-2DA0-..... | 16200.-              |
| 90                               | 280 M               | 1LE1592-2DA2-..... | 19000.-              |
| <b>4-pole: 1500 rpm at 50 Hz</b> |                     |                    |                      |
| 2.2                              | 100 L               | 1LE1592-1AB4-..... | 971.-                |
| 3                                | 100 L               | 1LE1592-1AB5-..... | 1110.-               |
| 4                                | 112 M               | 1LE1592-1BB2-..... | 1430.-               |
| 5.5                              | 132 S               | 1LE1592-1CB0-..... | 1750.-               |
| 7.5                              | 132 M               | 1LE1592-1CB2-..... | 2240.-               |
| 11                               | 160 M               | 1LE1592-1DB2-..... | 2930.-               |
| 15                               | 160 L               | 1LE1592-1DB4-..... | 3780.-               |
| 18.5                             | 180 M               | 1LE1592-1EB2-..... | 4210.-               |
| 22                               | 180 L               | 1LE1592-1EB4-..... | 4970.-               |
| 30                               | 200 L               | 1LE1592-2AB5-..... | 6430.-               |
| 37                               | 225 S               | 1LE1592-2BB0-..... | 7570.-               |
| 45                               | 225 M               | 1LE1592-2BB2-..... | 9140.-               |
| 55                               | 250 M               | 1LE1592-2CB2-..... | 11100.-              |
| 75                               | 280 S               | 1LE1592-2DB0-..... | 16200.-              |
| 90                               | 280 M               | 1LE1592-2DB2-..... | 19000.-              |
| 110                              | 315 S               | 1LE1592-3AB0-..... | 22800.-              |
| 132                              | 315 M               | 1LE1592-3AB2-..... | 27100.-              |
| 160                              | 315 L               | 1LE1592-3AB4-..... | 32400.-              |
| 200                              | 315 L               | 1LE1592-3AB5-..... | 40400.-              |

**Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**20****Voltages · Aluminum series 1LE1092****Selection and ordering data**

| Voltages                                                           | Article No. supplement                                 |                                                                           | Frame size     |       |       |        | Motor version       |
|--------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|----------------|-------|-------|--------|---------------------|
|                                                                    | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 100            | 112   | 132   | 160    |                     |
|                                                                    |                                                        |                                                                           | <b>1LE1092</b> |       |       |        | Standard Efficiency |
| <b>1LE1092- . . . .</b>                                            | <b>■ - ■ . . .</b>                                     | Order code                                                                |                |       |       |        |                     |
| <b>Voltage at 50 Hz or 60 Hz</b>                                   |                                                        |                                                                           |                |       |       |        |                     |
| Line voltage:<br>50 Hz, 400 V<br>60 Hz, 480 V                      | <b>2 1</b>                                             | –                                                                         | □              | □     | □     | □      |                     |
| Line voltage:<br>50 Hz, 690 V                                      | <b>3 3</b>                                             | –                                                                         | 315.–          | 420.– | 567.– | 1050.– |                     |
| <b>Non-standard voltage and/or frequencies</b>                     |                                                        |                                                                           |                |       |       |        |                     |
| Non-standard winding<br>Reinforced insulation system<br>(Advanced) | <b>9 0</b>                                             | <b>M1Y •</b><br>and customer specifications                               | 108.–          | 132.– | 167.– | 208.–  |                     |
| Non-standard winding<br>Special insulation system<br>(Premium)     | <b>9 0</b>                                             | <b>M2Y •</b><br>and customer specifications                               | 420.–          | 552.– | 725.– | 1260.– |                     |

- Standard version
- This order code only determines the price of the version – additional plain text is required.

Standard delivery times in working days:

**20****Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

Voltages · Cast-iron series 1LE1592

**Selection and ordering data**

| Voltages                                                           | Article No. supplement                                 |                                                                           | Frame size                                             |                |       |       |        |        |        |        |        |        |        | Motor version       |
|--------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------------------|
|                                                                    | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required |                                                        | 100            | 112   | 132   | 160    | 180    | 200    | 225    | 250    | 280    | 315    |                     |
|                                                                    |                                                        |                                                                           |                                                        | <b>1LE1592</b> |       |       |        |        |        |        |        |        |        | Standard Efficiency |
| <b>1LE1592-....</b>                                                | <b>■ - ■ ...</b>                                       | <b>Order code</b>                                                         |                                                        |                |       |       |        |        |        |        |        |        |        |                     |
| <b>Voltage at 50 Hz or 60 Hz</b>                                   |                                                        |                                                                           |                                                        |                |       |       |        |        |        |        |        |        |        |                     |
| Line voltage:<br>50 Hz, 400 V<br>60 Hz, 480 V                      | <b>2</b>                                               | <b>1</b>                                                                  | –                                                      | □              | □     | □     | □      | □      | □      | □      | □      | □      | □      |                     |
| Line voltage:<br>50 Hz, 500 V<br>60 Hz, 600 V                      | <b>2</b>                                               | <b>6</b>                                                                  | –                                                      | 315.–          | 420.– | 567.– | 1050.– | 1260.– | 1680.– | 1890.– | 2100.– | 2630.– | 2630.– |                     |
| Line voltage:<br>50 Hz, 690 V                                      | <b>3</b>                                               | <b>3</b>                                                                  | –                                                      | 315.–          | 420.– | 567.– | 1050.– | 1260.– | 1680.– | 1890.– | 2100.– | 2630.– | 2630.– |                     |
| <b>Non-standard voltage and/or frequencies</b>                     |                                                        |                                                                           |                                                        |                |       |       |        |        |        |        |        |        |        |                     |
| Non-standard winding<br>Reinforced insulation system<br>(Advanced) | <b>9</b>                                               | <b>0</b>                                                                  | <b>M1Y •</b><br>and<br>customer<br>specifica-<br>tions | 108.–          | 132.– | 167.– | 208.–  | 268.–  | 326.–  | 483.–  | 609.–  | 779.–  | 1010.– |                     |
| Non-standard winding<br>Special insulation system<br>(Premium)     | <b>9</b>                                               | <b>0</b>                                                                  | <b>M2Y •</b><br>and<br>customer<br>specifica-<br>tions | 420.–          | 552.– | 725.– | 1260.– | 1520.– | 2000.– | 2320.– | 2570.– | 3150.– | 5620.– |                     |

- Standard version
- This order code only determines the price of the version – additional plain text is required.

**Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**20****Types of construction · Aluminum series 1LE1092****Selection and ordering data**

| Types of construction                                                                                                                  | Article No. supplement<br>Type of construction letter<br>14th position of the<br>Article No. | For types of construction with order code(s)<br>Article No. with additional identification code <b>-Z</b><br>Order code | Frame size     |                |                |                | Motor version       |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|---------------------|
|                                                                                                                                        |                                                                                              |                                                                                                                         | 100            | 112            | 132            | 160            |                     |
|                                                                                                                                        |                                                                                              |                                                                                                                         | <b>1LE1092</b> |                |                |                | Standard Efficiency |
| <b>1LE1092-.....-...(-Z)</b>                                                                                                           |                                                                                              |                                                                                                                         |                |                |                |                |                     |
| <b>Without flange</b>                                                                                                                  |                                                                                              |                                                                                                                         |                |                |                |                |                     |
| IM B3 <sup>1) 2)</sup>                                | <b>A</b>                                                                                     | –                                                                                                                       | □              | □              | □              | □              |                     |
| IM B6 <sup>2)</sup>                                   | <b>T</b>                                                                                     | –                                                                                                                       | □              | □              | □              | □              |                     |
| IM B7 <sup>2)</sup>                                   | <b>U</b>                                                                                     | –                                                                                                                       | □              | □              | □              | □              |                     |
| IM B8 <sup>2)</sup>                                   | <b>V</b>                                                                                     | <b>H00</b>                                                                                                              | □              | □              | □              | □              |                     |
| IM V6 <sup>2)</sup>                                  | <b>D</b>                                                                                     | –                                                                                                                       | □              | □              | □              | □              |                     |
| IM V5 without protective cover <sup>2)</sup>        | <b>C</b>                                                                                     | –                                                                                                                       | □              | □              | □              | □              |                     |
| IM V5 with protective cover <sup>2) 3) 4) 5)</sup>  | <b>C</b>                                                                                     | <b>H00</b>                                                                                                              | 82.40          | 82.40          | 144.–          | 144.–          |                     |
| <b>With flange</b>                                                                                                                     | acc. to EN 50347<br>acc. to DIN 42948                                                        |                                                                                                                         | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 |                     |
| IM B5 <sup>2) 6)</sup>                              | <b>F</b>                                                                                     | –                                                                                                                       | 81.30          | 101.–          | 132.–          | 170.–          |                     |
| IM V1 without protective cover <sup>2)</sup>        | <b>G</b>                                                                                     | –                                                                                                                       | 81.30          | 101.–          | 132.–          | 170.–          |                     |
| IM V1 with protective cover <sup>2) 3) 4) 5)</sup>  | <b>G</b>                                                                                     | <b>H00</b>                                                                                                              | 163.70         | 183.40         | 276.–          | 314.–          |                     |
| IM V3 <sup>3)</sup>                                 | <b>H</b>                                                                                     | –                                                                                                                       | 81.30          | 101.–          | 132.–          | 170.–          |                     |
| IM B35                                              | <b>J</b>                                                                                     | –                                                                                                                       | 89.40          | 110.–          | 137.–          | 189.–          |                     |

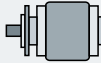
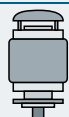
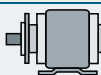
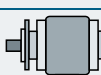
For legends and footnotes, see Page 3/33.

Standard delivery times in working days:

**20****Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**Types of construction · Aluminum series 1LE1092**

| Types of construction                                                                                                                  | Article No. supplement                                       |                                                                                                                   | Frame size                   |                |                |                | Motor version       |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------|----------------|----------------|----------------|---------------------|
|                                                                                                                                        | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> Order code | <b>100</b><br><b>1LE1092</b> | <b>112</b>     | <b>132</b>     | <b>160</b>     |                     |
| <b>1LE1092-.....-...(-Z)</b>                                                                                                           |                                                              |                                                                                                                   |                              |                |                |                | Standard Efficiency |
| <b>With special flange next larger</b>                                                                                                 | acc. to EN 50347<br>acc. to DIN 42948                        |                                                                                                                   | FF265<br>A 300               | FF265<br>A 300 | FF300<br>A 350 | –              |                     |
| IM B5 <sup>2) 6)</sup>                                | <b>F</b>                                                     | <b>P01</b>                                                                                                        | 129.–                        | 148.70         | 191.60         | –              |                     |
| IM V1 without protective cover <sup>2)</sup>          | <b>G</b>                                                     | <b>P01</b>                                                                                                        | 129.–                        | 148.70         | 191.60         | –              |                     |
| IM V1 with protective cover <sup>2) 3) 4) 5)</sup>    | <b>G</b>                                                     | <b>P01+H00</b>                                                                                                    | 211.40                       | 231.10         | 335.60         | –              |                     |
| IM V3 <sup>3)</sup>                                   | <b>H</b>                                                     | <b>P01</b>                                                                                                        | 129.–                        | 148.70         | 191.60         | –              |                     |
| IM B35                                               | <b>J</b>                                                     | <b>P01</b>                                                                                                        | 137.10                       | 157.70         | 196.60         | –              |                     |
| <b>With special flange next smaller</b>                                                                                                | acc. to EN 50347<br>acc. to DIN 42948                        |                                                                                                                   | FF165<br>A 200               | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 |                     |
| IM B5 <sup>2) 6)</sup>                              | <b>F</b>                                                     | <b>P02</b>                                                                                                        | 285.30                       | 346.–          | 448.–          | 578.–          |                     |
| IM V1 without protective cover <sup>2)</sup>        | <b>G</b>                                                     | <b>P02</b>                                                                                                        | 285.30                       | 346.–          | 448.–          | 578.–          |                     |
| IM V1 with protective cover <sup>2) 3) 4) 5)</sup>  | <b>G</b>                                                     | <b>P02+H00</b>                                                                                                    | 367.70                       | 428.40         | 592.–          | 722.–          |                     |
| IM V3 <sup>3)</sup>                                 | <b>H</b>                                                     | <b>P02</b>                                                                                                        | 285.30                       | 346.–          | 448.–          | 578.–          |                     |
| IM B35                                              | <b>J</b>                                                     | <b>P02</b>                                                                                                        | 293.40                       | 355.–          | 453.–          | 597.–          |                     |

For legends and footnotes, see Page 3/33.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Types of construction · Aluminum series 1LE1092

| Types of construction                                        | Article No. supplement                                                                       | Frame size                                                                                             | Motor version       |        |        |       |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------|--------|--------|-------|
|                                                              |                                                                                              |                                                                                                        | 100                 | 112    | 132    | 160   |
|                                                              | Type of construction letter 14th position of the Article No.                                 | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> | 1LE1092             |        |        |       |
|                                                              |                                                                                              | Order code                                                                                             | Standard Efficiency |        |        |       |
| <b>1LE1092-.....-...(-Z)</b>                                 |                                                                                              |                                                                                                        |                     |        |        |       |
| <b>With flange</b>                                           | acc. to EN 50347                                                                             | FT130                                                                                                  | FT130               | FT165  | –      |       |
|                                                              | acc. to DIN 42948                                                                            | C 160                                                                                                  | C 160               | C 200  | –      |       |
| IM B14<br>2) 7)                                              |  <b>K</b>   | –                                                                                                      | 81.30               | 101.–  | 132.–  | 170.– |
| IM V19 <sup>2)</sup>                                         |  <b>L</b>   | –                                                                                                      | 81.30               | 101.–  | 132.–  | 170.– |
| IM V18<br>without<br>protective<br>cover <sup>2)</sup>       |  <b>M</b>   | –                                                                                                      | 81.30               | 101.–  | 132.–  | 170.– |
| IM V18<br>with<br>protective<br>cover <sup>2) 3) 4) 5)</sup> |  <b>M</b>   | <b>H00</b>                                                                                             | 163.70              | 183.4  | 276.–  | 314.– |
| IM B34                                                       |  <b>N</b>   | –                                                                                                      | 89.40               | 110.–  | 137.–  | 189.– |
| <b>With special flange<br/>next larger</b>                   | acc. to EN 50347                                                                             | FT165                                                                                                  | FT165               | FT215  | –      |       |
|                                                              | acc. to DIN 42948                                                                            | C 200                                                                                                  | C 200               | C 250  | –      |       |
| IM B14<br>2) 7)                                              |  <b>K</b> | <b>P01</b>                                                                                             | 129.–               | 148.70 | 179.7  | –     |
| IM V19 <sup>2)</sup>                                         |  <b>L</b> | <b>P01</b>                                                                                             | 129.–               | 148.7  | 179.7  | –     |
| IM V18<br>without<br>protective<br>cover <sup>2)</sup>       |  <b>M</b> | <b>P01</b>                                                                                             | 129.–               | 148.7  | 179.7  | –     |
| IM V18<br>with<br>protective<br>cover <sup>2) 3) 4) 5)</sup> |  <b>M</b> | <b>P01+H00</b>                                                                                         | 211.40              | 231.10 | 335.60 | –     |
| IM B34                                                       |  <b>N</b> | <b>P01</b>                                                                                             | 137.10              | 157.70 | 196.60 | –     |

For legends and footnotes, see Page 3/33.

Standard delivery times in working days:

**20**

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

### Types of construction · Aluminum series 1LE1092

| Types of construction                    | Article No. supplement                                                             |                                                                                                                   | Frame size     |        |       |       | Motor version       |  |
|------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|--------|-------|-------|---------------------|--|
|                                          | Type of construction letter 14th position of the Article No.                       | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> Order code | 100            | 112    | 132   | 160   | Standard Efficiency |  |
|                                          |                                                                                    |                                                                                                                   | 1LE1092        |        |       |       |                     |  |
| 1LE1092-.....                            | ... (-Z)                                                                           |                                                                                                                   |                |        |       |       |                     |  |
| With special flange next smaller         | acc. to EN 50347                                                                   |                                                                                                                   | FT115          | FT115  | FT130 | –     |                     |  |
|                                          | acc. to DIN 42948                                                                  |                                                                                                                   | C 140          | C 140  | C 160 | –     |                     |  |
| IM B14<br>2) 7)                          |   | <b>K</b>                                                                                                          | <b>P02</b>     | 285.30 | O. R. | O. R. | –                   |  |
| IM V19 2)                                |   | <b>L</b>                                                                                                          | <b>P02</b>     | 285.30 | O. R. | O. R. | –                   |  |
| IM V18 without protective cover 2)       |   | <b>M</b>                                                                                                          | <b>P02</b>     | 285.30 | O. R. | O. R. | –                   |  |
| IM V18 with protective cover 2) 3) 4) 5) |   | <b>M</b>                                                                                                          | <b>P02+H00</b> | 367.70 | O. R. | O. R. | –                   |  |
| IM B34                                   |  | <b>N</b>                                                                                                          | <b>P02</b>     | 293.40 | O. R. | O. R. | –                   |  |

□ Standard version  
 – Not possible  
 O. R. Possible on request

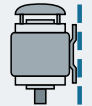
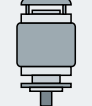
- 1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 2) The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.
- 3) The "Second shaft extension" option (order code **L05**) is not possible.
- 4) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

- 5) Not possible for forced-air cooled motors with order code **F90** without external fan and fan cover.
- 6) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 7) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

**Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**Types of construction · Cast-iron series 1LE1592****Selection and ordering data**

| Types of construction                | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> | Frame size |       |       |       |       |       |       |       |        |         |        | Motor version |
|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|--------|---------|--------|---------------|
|                                      |                                                                                     |                                                              |                                                                                                        | 100        | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280    | 315 S/M | 315 L  |               |
|                                      |                                                                                     |                                                              |                                                                                                        | 1LE1592    |       |       |       |       |       |       |       |        |         |        |               |
| 1LE1592-.....                        | ... (-Z)                                                                            |                                                              | Order code                                                                                             |            |       |       |       |       |       |       |       |        |         |        |               |
| Without flange                       |                                                                                     |                                                              |                                                                                                        |            |       |       |       |       |       |       |       |        |         |        |               |
| IM B3<br>1) 2)                       |    | A                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM B6 2)                             |    | T                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM B7 2)                             |    | U                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM B8 2)                             |    | V                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM V6 2)                             |   | D                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM V5 without protective cover 2)    |  | C                                                            | –                                                                                                      | □          | □     | □     | □     | □     | □     | □     | □     | □      | □       | □      |               |
| IM V5 with protective cover 2) 3) 4) |  | C                                                            | H00                                                                                                    | 82.40      | 82.40 | 144.– | 144.– | 192.– | 289.– | 383.– | 478.– | 573.–  | 766.–   | 766.–  |               |
| With flange                          |                                                                                     |                                                              |                                                                                                        |            |       |       |       |       |       |       |       |        |         |        |               |
|                                      |                                                                                     | acc. to EN 50347                                             |                                                                                                        | FF215      | FF215 | FF265 | FF300 | FF300 | FF350 | FF400 | FF500 | FF500  | FF600   | –      |               |
|                                      |                                                                                     | acc. to DIN 42948                                            |                                                                                                        | A 250      | A 250 | A 300 | A 350 | A 350 | A 400 | A 450 | A 550 | A 550  | A 660   | A 660  |               |
| IM B5 2) 5)                          |  | F                                                            | –                                                                                                      | 81.30      | 101.– | 132.– | 170.– | 269.– | 326.– | 422.– | 507.– | 738.–  | 1050.–  | –      |               |
| IM V1 without protective cover 2)    |  | G                                                            | –                                                                                                      | 81.30      | 101.– | 132.– | 170.– | 268.– | 324.– | 424.– | 517.– | 742.–  | 1060.–  | 1060.– |               |
| IM V1 with protective cover 2) 3) 4) |  | G                                                            | H00                                                                                                    | 163.70     | 183.4 | 276.– | 314.– | 460.– | 613.– | 807.– | 995.– | 1315.– | 1826.–  | 1826.– |               |
| IM V3 4)                             |  | H                                                            | –                                                                                                      | 81.30      | 101.– | 132.– | 170.– | 269.– | 326.– | 422.– | 507.– | 738.–  | 1050.–  | –      |               |
| IM B35                               |  | J                                                            | –                                                                                                      | 89.40      | 110.– | 137.– | 189.– | 315.– | 420.– | 525.– | 735.– | 946.–  | 1200.–  | 1200.– |               |

For legends and footnotes, see Page 3/37.

Standard delivery times in working days:

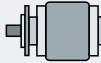
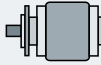
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## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Types of construction · Cast-iron series 1LE1592

| Types of construction                      | Article No. supplement                                                                | Frame size | Motor version  |                |                |                |                |                |                |                |                |                |            |                     |
|--------------------------------------------|---------------------------------------------------------------------------------------|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|---------------------|
|                                            |                                                                                       |            | 100            | 112            | 132            | 160            | 180            | 200            | 225            | 250            | 280            | 315 S/M        | 315 L      | Standard Efficiency |
|                                            |                                                                                       |            | 1LE1592        |                |                |                |                |                |                |                |                |                |            |                     |
|                                            |                                                                                       |            |                |                |                |                |                |                |                |                |                |                |            |                     |
| 1LE1592-.....                              | ... (-Z)                                                                              | Order code |                |                |                |                |                |                |                |                |                |                |            |                     |
| With special flange next larger            | acc. to EN 50347<br>acc. to DIN 42948                                                 |            | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 | FF600<br>A 660 | –<br>A 660 |                     |
| IM B5<br>2) 5)                             |  F   | P01        | 129.–          | 148.70         | 191.60         | –              | –              | –              | –              | –              | –              | –              | –          |                     |
| IM V1<br>without protective cover<br>2)    |  G   | P01        | 129.–          | 148.70         | 191.60         | –              | –              | –              | –              | –              | –              | –              | –          |                     |
| IM V1<br>with protective cover<br>2) 3) 4) |  G   | P01+H00    | 211.40         | 231.10         | 335.60         | –              | –              | –              | –              | –              | –              | –              | –          |                     |
| IM V3 4)                                   |  H   | P01        | 129.–          | 148.70         | 191.60         | –              | –              | –              | –              | –              | –              | –              | –          |                     |
| IM B35                                     |  J  | P01        | 137.10         | 157.70         | 196.60         | –              | –              | –              | –              | –              | –              | –              | –          |                     |
| With special flange next smaller           | acc. to EN 50347<br>acc. to DIN 42948                                                 |            | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | –              | –              | –              | –              | –          |                     |
| IM B5<br>2) 5)                             |  F | P02        | 285.30         | 346.–          | 448.–          | 578.–          | 935.–          | 1122.–         | –              | –              | –              | –              | –          |                     |
| IM V1<br>without protective cover<br>2)    |  G | P02        | 285.30         | 346.–          | 448.–          | 578.–          | 934.–          | 1120.–         | –              | –              | –              | –              | –          |                     |
| IM V1<br>with protective cover<br>2) 3) 4) |  G | P02+H00    | 367.70         | 428.40         | 592.–          | 722.–          | 1126.–         | 1409.–         | –              | –              | –              | –              | –          |                     |
| IM V3 4)                                   |  H | P02        | 285.30         | 346.–          | 448.–          | 578.–          | 935.–          | 1122.–         | –              | –              | –              | –              | –          |                     |
| IM B35                                     |  J | P02        | 293.40         | 355.–          | 453.–          | 597.–          | 981.–          | 1216.–         | –              | –              | –              | –              | –          |                     |

For legends and footnotes, see Page 3/37.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Types of construction · Cast-iron series 1LE1592

| Types of construction                          | Article No. supplement                                                              | Frame size |                |        |        |        |       |     |     |     |     |         |       | Motor version       |
|------------------------------------------------|-------------------------------------------------------------------------------------|------------|----------------|--------|--------|--------|-------|-----|-----|-----|-----|---------|-------|---------------------|
|                                                |                                                                                     |            | 100            | 112    | 132    | 160    | 180   | 200 | 225 | 250 | 280 | 315 S/M | 315 L |                     |
|                                                |                                                                                     |            | <b>1LE1592</b> |        |        |        |       |     |     |     |     |         |       | Standard Efficiency |
|                                                |                                                                                     |            |                |        |        |        |       |     |     |     |     |         |       |                     |
| <b>1LE1592-.....</b>                           | <b>... (-Z)</b>                                                                     | Order code |                |        |        |        |       |     |     |     |     |         |       |                     |
| <b>With flange</b>                             |                                                                                     |            |                |        |        |        |       |     |     |     |     |         |       |                     |
| acc. to EN 50347                               |                                                                                     |            | FT130          | FT130  | FT165  | FT215  | –     | –   | –   | –   | –   | –       | –     |                     |
| acc. to DIN 42948                              |                                                                                     |            | C 160          | C 160  | C 200  | C 250  | –     | –   | –   | –   | –   | –       | –     |                     |
| IM B14<br>2) 6)                                |    | <b>K</b>   | 81.30          | 101.–  | 132.–  | 170.–  | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V19 <sup>2)</sup>                           |    | <b>L</b>   | 81.30          | 101.–  | 132.–  | 170.–  | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V18<br>without<br>protective<br>cover 2)    |    | <b>M</b>   | 81.30          | 101.–  | 132.–  | 170.–  | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V18<br>with<br>protective<br>cover 2) 3) 4) |    | <b>M</b>   | <b>H00</b>     | 163.70 | 183.40 | 276.–  | 314.– | –   | –   | –   | –   | –       | –     |                     |
| IM B34                                         |    | <b>N</b>   | 89.40          | 110.–  | 137.–  | 189.–  | –     | –   | –   | –   | –   | –       | –     |                     |
| <b>With special flange<br/>next larger</b>     |                                                                                     |            |                |        |        |        |       |     |     |     |     |         |       |                     |
| acc. to EN 50347                               |                                                                                     |            | FT165          | FT165  | FT215  | –      | –     | –   | –   | –   | –   | –       | –     |                     |
| acc. to DIN 42948                              |                                                                                     |            | C 200          | C 200  | C 250  | –      | –     | –   | –   | –   | –   | –       | –     |                     |
| IM B14<br>2) 6)                                |  | <b>P01</b> | 129.–          | 148.70 | 191.60 | –      | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V19 <sup>2)</sup>                           |  | <b>P01</b> | 129.–          | 148.70 | 191.60 | –      | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V18<br>without<br>protective<br>cover 2)    |  | <b>P01</b> | 129.–          | 148.70 | 191.60 | –      | –     | –   | –   | –   | –   | –       | –     |                     |
| IM V18<br>with<br>protective<br>cover 2) 3) 4) |  | <b>P01</b> | <b>P01+H00</b> | 211.40 | 231.10 | 335.60 | –     | –   | –   | –   | –   | –       | –     |                     |
| IM B34                                         |  | <b>P01</b> | 137.10         | 157.70 | 196.60 | –      | –     | –   | –   | –   | –   | –       | –     |                     |

For legends and footnotes, see Page 3/37.

Standard delivery times in working days:

10

20

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Types of construction · Cast-iron series 1LE1592

| Types of construction                            | Article No. supplement                                                                      | Frame size                                                                                             |                |     |     |     |     |     |     |     |     |         |       | Motor version       |
|--------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|---------|-------|---------------------|
|                                                  |                                                                                             |                                                                                                        | 100            | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 S/M | 315 L |                     |
|                                                  | Type of construction letter 14th position of the Article No.                                | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> | <b>1LE1592</b> |     |     |     |     |     |     |     |     |         |       | Standard Efficiency |
| <b>1LE1592-.....</b>                             | <b>... (-Z)</b>                                                                             | Order code                                                                                             |                |     |     |     |     |     |     |     |     |         |       |                     |
| With special flange next smaller                 | acc. to EN 50347<br>acc. to DIN 42948                                                       | FT115<br>C 140                                                                                         | -              | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |
| IM B14<br>2) 6)                                  |  <b>K</b>  | <b>P02</b>                                                                                             | 285.30         | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |
| IM V19 <sup>2)</sup>                             |  <b>L</b>  | <b>P02</b>                                                                                             | 285.30         | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |
| IM V18 without protective cover <sup>2)</sup>    |  <b>M</b>  | <b>P02</b>                                                                                             | 129.-          | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |
| IM V18 with protective cover <sup>2) 3) 4)</sup> |  <b>M</b>  | <b>P02+H00</b>                                                                                         | 367.70         | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |
| IM B34                                           |  <b>N</b> | <b>P02</b>                                                                                             | 293.40         | -   | -   | -   | -   | -   | -   | -   | -   | -       | -     |                     |

□ Standard version  
 – Not possible

- 1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 2) The type of construction is stamped on the rating plate. If mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.
- 3) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

- 4) The "Second shaft extension" option (order code **L05**) is not possible.
- 5) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 6) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

**Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**20****Motor protection · Aluminum series 1LE1092****Selection and ordering data**

| Motor protection                                                              | Article No. supplement           |                                                                           | Frame size     |        |        |        | Motor version                                                          |
|-------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------|----------------|--------|--------|--------|------------------------------------------------------------------------|
|                                                                               | Motor protection code            | Additional identification code with order code and plain text if required | 100            | 112    | 132    | 160    |                                                                        |
|                                                                               | 15th position of the Article No. |                                                                           | <b>1LE1092</b> |        |        |        | Standard Efficiency                                                    |
| <b>1LE1092- . . . . .</b>                                                     | <b>■</b>                         | Order code                                                                |                |        |        |        |                                                                        |
| <b>Motor protection</b>                                                       |                                  |                                                                           |                |        |        |        |                                                                        |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>             | <b>B</b>                         | –                                                                         | 119.–          | 119.–  | 180.–  | 180.–  |                                                                        |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>   | <b>C</b>                         | –                                                                         | 205.–          | 205.–  | 274.–  | 274.–  |                                                                        |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                    | <b>F</b>                         | –                                                                         | 119.–          | 119.–  | 180.–  | 180.–  |                                                                        |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                   | <b>G</b>                         | –                                                                         | 241.–          | 241.–  | 359.–  | 359.–  |                                                                        |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>1)</sup>  | <b>H</b>                         | –                                                                         | 241.–          | 241.–  | 359.–  | 359.–  |                                                                        |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1) 2)</sup>                | <b>K</b>                         | –                                                                         | 119.–          | 119.–  | 180.–  | 180.–  |                                                                        |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>1) 2)</sup>               | <b>L</b>                         | –                                                                         | 241.–          | 241.–  | 359.–  | 359.–  |                                                                        |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) <sup>1)</sup>   | <b>P</b>                         | –                                                                         | 1040.–         | 1040.– | 1040.– | 1040.– |                                                                        |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>1)</sup>  | <b>Q</b>                         | –                                                                         | 1310.–         | 1310.– | 1310.– | 1310.– |                                                                        |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) <sup>1)</sup> | <b>R</b>                         | –                                                                         | 2020.–         | 2020.– | 2020.– | 2020.– |                                                                        |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>1)</sup>       | <b>Z</b>                         | <b>Q3A</b>                                                                | 134.–          | 134.–  | 196.–  | 196.–  | Only for: Voltage code 2-1 (12th and 13th position of the Article No.) |

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>2)</sup> Not UL-certified. Not possible in combination with the option **D39**.

## Selection and ordering data

| Motor protection                                                             | Article No. supplement                                 |                                                                           | Frame size |        |        |        |        |        |        |        |        |        |           | Motor version                                                |  |
|------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------------------------------------------------------------|--|
|                                                                              | Motor protection code 15th position of the Article No. | Additional identification code with order code and plain text if required | 100        | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    |           |                                                              |  |
|                                                                              |                                                        |                                                                           | 1LE1592    |        |        |        |        |        |        |        |        |        |           | Standard Efficiency                                          |  |
| 1LE1592- . . . . . ■ .                                                       |                                                        | Order code                                                                |            |        |        |        |        |        |        |        |        |        |           |                                                              |  |
| Motor protection                                                             |                                                        |                                                                           |            |        |        |        |        |        |        |        |        |        |           |                                                              |  |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>            | B                                                      | –                                                                         | 119.–      | 119.–  | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  | 406.–  |           |                                                              |  |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>  | C                                                      | –                                                                         | 205.–      | 205.–  | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | 679.–  |           |                                                              |  |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                   | F                                                      | –                                                                         | 119.–      | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–  |           |                                                              |  |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                  | G                                                      | –                                                                         | 241.–      | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |           |                                                              |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)               | H                                                      | –                                                                         | 1510.–     | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– | 1670.– |           |                                                              |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>3)</sup>                  | K                                                      | –                                                                         | 119.–      | 119.–  | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  | 885.–  |           |                                                              |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>3)</sup>                 | L                                                      | –                                                                         | 241.–      | 241.–  | 359.–  | 359.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– | 1500.– |           |                                                              |  |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                | P                                                      | –                                                                         | 1040.–     | 1040.– | 1040.– | 1040.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– | 1340.– |           |                                                              |  |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) <sup>3)</sup> | Q                                                      | –                                                                         | 1310.–     | 1310.– | 1310.– | 1310.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– | 2010.– |           |                                                              |  |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)              | R                                                      | –                                                                         | 2020.–     | 2020.– | 2020.– | 2020.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– | 2960.– |           |                                                              |  |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>2)</sup>      | Z                                                      | Q3A                                                                       | 134.–      | 134.–  | 196.–  | 196.–  | 270.–  | 270.–  | 365.–  | 365.–  | 453.–  | 453.–  | Only for: | Voltage code 2-1 (12th and 13th position of the Article No.) |  |

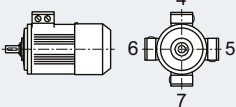
<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

2) Not UL-certified. Not in combination with option **D39**..

**Standard induction motors optimized for converter operation – VSD10 line**

Article No. supplements and special versions

**Terminal box position · Aluminum series 1LE1092****Selection and ordering data**

|                                                                                   |                                   |                                                                           |                |            |            |            |                     |
|-----------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------|----------------|------------|------------|------------|---------------------|
| Terminal box position                                                             | Article No. supplement            |                                                                           | Frame size     |            |            |            | Motor version       |
|  | Terminal box position code        | Additional identification code with order code and plain text if required | <b>100</b>     | <b>112</b> | <b>132</b> | <b>160</b> | Standard Efficiency |
|                                                                                   | 16th position of the Article No.  | Order code                                                                | <b>1LE1092</b> |            |            |            |                     |
|                                                                                   | <b>1LE1092- . . . . . - . . .</b> |                                                                           |                |            |            |            |                     |
|                                                                                   |                                   |                                                                           |                |            |            |            |                     |
| Terminal box position                                                             |                                   |                                                                           |                |            |            |            |                     |
| Terminal box top <sup>1)</sup>                                                    | <b>4</b>                          | –                                                                         | □              | □          | □          | □          |                     |
| Terminal box on RHS <sup>2)</sup>                                                 | <b>5</b>                          | –                                                                         | 104.–          | 113.–      | 123.–      | 132.–      |                     |
| Terminal box on LHS <sup>2)</sup>                                                 | <b>6</b>                          | –                                                                         | 104.–          | 113.–      | 123.–      | 132.–      |                     |
| Terminal box bottom <sup>2)</sup>                                                 | <b>7</b>                          | –                                                                         | 104.–          | 113.–      | 123.–      | 132.–      |                     |

□ Standard version

<sup>1)</sup> For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

Standard delivery times in working days:

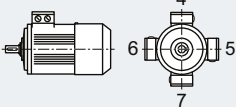
20

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

Terminal box position · Cast-iron series 1LE1592

## Selection and ordering data

| Terminal box position                                                             | Article No.                      | supplement                                                                | Frame size |     |     |     |     |     |     |     |     |     | Motor version       |
|-----------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------------|
|  | Terminal box position code       | Additional identification code with order code and plain text if required | 100        | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 | Standard Efficiency |
|                                                                                   | 16th position of the Article No. |                                                                           | 1LE1592    |     |     |     |     |     |     |     |     |     |                     |
|                                                                                   | 1LE1592-.....-....               | Order code                                                                |            |     |     |     |     |     |     |     |     |     |                     |

| Terminal box position             |   |   |       |       |       |       |       |       |       |       |       |       |   |
|-----------------------------------|---|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Terminal box top <sup>1)</sup>    | 4 | – | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □ |
| Terminal box on RHS <sup>2)</sup> | 5 | – | 104.– | 113.– | 123.– | 132.– | 371.– | 437.– | 517.– | 768.– | 863.– | 993.– | – |
| Terminal box on LHS <sup>2)</sup> | 6 | – | 104.– | 113.– | 123.– | 132.– | 371.– | 437.– | 517.– | 768.– | 863.– | 993.– | – |
| Terminal box bottom <sup>2)</sup> | 7 | – | 104.– | 113.– | 123.– | 132.– | –     | –     | –     | –     | –     | –     | – |

- Standard version  
– Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

20

On  
request

## Options · Aluminum series 1LE1092

## Selection and ordering data

| Special versions                                                                   | Additional identification code -Z with order code and plain text if required | Frame size |        |        |        | Motor version                                                             |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|--------|--------|--------|---------------------------------------------------------------------------|
|                                                                                    |                                                                              | 100        | 112    | 132    | 160    |                                                                           |
|                                                                                    |                                                                              | 1LE1092    |        |        |        | Standard Efficiency                                                       |
| 1LE1092- ..... -Z                                                                  | Order code                                                                   |            |        |        |        |                                                                           |
| <b>Motor protection</b>                                                            |                                                                              |            |        |        |        |                                                                           |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>2) 3)</sup>               | Q11                                                                          | 119.–      | 119.–  | 180.–  | 180.–  |                                                                           |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>3)</sup>        | Q12                                                                          | 205.–      | 205.–  | 274.–  | 274.–  |                                                                           |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>3)</sup>                         | Q23                                                                          | 119.–      | 119.–  | 180.–  | 180.–  |                                                                           |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>3)</sup>                        | Q25                                                                          | 241.–      | 241.–  | 363.–  | 363.–  |                                                                           |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>3)</sup>            | Q31                                                                          | 196.–      | 196.–  | 270.–  | 270.–  |                                                                           |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                | Q32                                                                          | 241.–      | 241.–  | 352.–  | 352.–  |                                                                           |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                          | Q33                                                                          | O. R.      | O. R.  | O. R.  | O. R.  |                                                                           |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>20)</sup>                       | Q35                                                                          | O          | O      | O      | O      |                                                                           |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>20)</sup>                      | Q36                                                                          | 241.–      | 241.–  | 359.–  | 359.–  |                                                                           |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                     | Q60                                                                          | 1240.–     | 1240.– | 1240.– | 1240.– |                                                                           |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)                    | Q61                                                                          | 1920.–     | 1920.– | 1920.– | 1920.– |                                                                           |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                      | Q62                                                                          | 1040.–     | 1040.– | 1040.– | 1040.– |                                                                           |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                     | Q63                                                                          | 1310.–     | 1310.– | 1310.– | 1310.– |                                                                           |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                    | Q64                                                                          | 2020.–     | 2020.– | 2020.– | 2020.– |                                                                           |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)          | Q72                                                                          | O. R.      | O. R.  | O. R.  | O. R.  |                                                                           |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)         | Q78                                                                          | O. R.      | O. R.  | O. R.  | O. R.  |                                                                           |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) | Q79                                                                          | O. R.      | O. R.  | O. R.  | O. R.  | Not for: Combination with order code F40 and F41 (frame sizes 225 to 315) |
| <b>Motor connection and terminal box</b>                                           |                                                                              |            |        |        |        |                                                                           |
| External grounding                                                                 | H04                                                                          | 28.90      | 28.90  | 28.90  | 28.90  |                                                                           |
| Terminal box on NDE <sup>1)</sup>                                                  | H08                                                                          | 119.–      | 147.–  | 190.–  | 258.–  |                                                                           |
| Rotation of the terminal box through 90°, entry from DE <sup>2)</sup>              | R10                                                                          | O          | O      | O      | O      |                                                                           |
| Rotation of the terminal box through 90°, entry from NDE                           | R11                                                                          | O          | O      | O      | O      |                                                                           |
| Rotation of the terminal box through 180°                                          | R12                                                                          | O          | O      | O      | O      |                                                                           |
| Terminal box in position 0°; connection from right <sup>21)</sup>                  | R13                                                                          | O          | O      | O      | –      |                                                                           |
| One metal cable gland                                                              | R15                                                                          | 112.–      | 112.–  | 112.–  | 143.–  |                                                                           |
| Metal cable gland, maximum configuration                                           | R18                                                                          | 159.–      | 159.–  | 159.–  | 209.–  |                                                                           |
| 3 cables protruding, 0.5 m long                                                    | R20                                                                          | 68.70      | 82.40  | 101.–  | 118.–  |                                                                           |
| 6 cables protruding, 0.5 m long                                                    | R22                                                                          | 106.–      | 128.–  | 158.–  | 186.–  |                                                                           |
| Larger terminal box                                                                | R50                                                                          | 214.–      | 214.–  | 274.–  | 313.–  |                                                                           |
| Motor connector Han-Drive 10e for 230 VΔ/400 VY                                    | R70                                                                          | 388.–      | 388.–  | 444.–  | –      |                                                                           |
| Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY                                | R71                                                                          | 527.–      | 527.–  | 605.–  | –      |                                                                           |
| <b>Windings and insulation</b>                                                     |                                                                              |            |        |        |        |                                                                           |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air | N30                                                                          | 137.–      | 137.–  | 137.–  | 210.–  |                                                                           |

For legends and footnotes, see Page 3/45.

## Standard delivery times in working days:

**20**On  
request

# Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Options · Aluminum series 1LE1092

| Special versions                                                                                                                                                                                                                                                                                    | Additional identification code -Z with order code and plain text if required | Frame size     |        |        |        | Motor version                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------|--------|--------|--------|-------------------------------------------|
|                                                                                                                                                                                                                                                                                                     |                                                                              | 100            | 112    | 132    | 160    |                                           |
|                                                                                                                                                                                                                                                                                                     |                                                                              | <b>1LE1092</b> |        |        |        | Standard Efficiency                       |
| <b>1LE1092-.....-.....-Z</b>                                                                                                                                                                                                                                                                        | Order code                                                                   |                |        |        |        |                                           |
| <b>Colors and paint finish</b>                                                                                                                                                                                                                                                                      |                                                                              |                |        |        |        |                                           |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                           |                                                                              | □              | □      | □      | □      |                                           |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                             | <b>S00</b>                                                                   | O              | O      | O      | O      |                                           |
| Unpainted, only primed                                                                                                                                                                                                                                                                              | <b>S01</b>                                                                   | 27.80          | 27.80  | 44.40  | 44.40  |                                           |
| Special finish C3                                                                                                                                                                                                                                                                                   | <b>S02</b>                                                                   | 63.–           | 63.–   | 84.–   | 84.–   |                                           |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                                 | <b>S03</b>                                                                   | 536.–          | 536.–  | 589.–  | 589.–  |                                           |
| Internal coating                                                                                                                                                                                                                                                                                    | <b>S05</b>                                                                   | 89.40          | 89.40  | 89.40  | 89.40  |                                           |
| Special finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | <b>Y53 •</b> and special finish RAL....                                      | 42.–           | 42.–   | 57.80  | 57.80  |                                           |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                              | <b>Y56 •</b> and special finish RAL....                                      | 662.–          | 662.–  | 694.–  | 694.–  |                                           |
| <b>Modular technology – Basic versions <sup>4)</sup></b>                                                                                                                                                                                                                                            |                                                                              |                |        |        |        |                                           |
| Mounting of brake <sup>5)</sup>                                                                                                                                                                                                                                                                     | <b>F01</b>                                                                   | 657.–          | 799.–  | 1030.– | 2040.– |                                           |
| Mounting of brake for higher switching frequency                                                                                                                                                                                                                                                    | <b>F02</b>                                                                   | a. A.          | a. A.  | a. A.  | a. A.  |                                           |
| Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                                     | <b>G11</b>                                                                   | 838.–          | 895.–  | 941.–  | 986.–  |                                           |
| Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                                     | <b>G12</b>                                                                   | 1180.–         | 1250.– | 1330.– | 1410.– |                                           |
| <b>Modular technology – Additional versions</b>                                                                                                                                                                                                                                                     |                                                                              |                |        |        |        |                                           |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                                        | <b>F10</b>                                                                   | 52.90          | 52.90  | 52.90  | 52.90  |                                           |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                             | <b>F11</b>                                                                   | O              | O      | O      | O      |                                           |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                                                                                                                                                             | <b>F12</b>                                                                   | 52.90          | 52.90  | 52.90  | 52.90  |                                           |
| Brake supply voltage 180 V AC                                                                                                                                                                                                                                                                       | <b>F17</b>                                                                   | 52.90          | 52.90  | 52.90  | 52.90  | Only for: Combination with order code F01 |
| Brake supply voltage 205 V AC                                                                                                                                                                                                                                                                       | <b>F18</b>                                                                   | 52.90          | 52.90  | 52.90  | 52.90  | Only for: Combination with order code F01 |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                             | <b>F50</b>                                                                   | 264.–          | 264.–  | 294.–  | 426.–  |                                           |
| <b>Special technology <sup>3)</sup></b>                                                                                                                                                                                                                                                             |                                                                              |                |        |        |        |                                           |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                       | <b>G04</b>                                                                   | 3000.–         | 3000.– | 3000.– | 3000.– |                                           |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                      | <b>G05</b>                                                                   | 3540.–         | 3540.– | 3540.– | 3540.– |                                           |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>6)</sup>                                                                                                                                                                                                                                      | <b>G06</b>                                                                   | 4570.–         | 4570.– | 4570.– | 4570.– |                                           |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                                                                                                                                                                                                  | <b>G21</b>                                                                   | 2540.–         | 2680.– | 2830.– | 3050.– |                                           |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                                                                                                                                                                                                  | <b>G22</b>                                                                   | 2940.–         | 3120.– | 3300.– | 3520.– |                                           |
| <b>Mechanical design and degrees of protection</b>                                                                                                                                                                                                                                                  |                                                                              |                |        |        |        |                                           |
| Prepared for mountings, center hole only <sup>7)</sup>                                                                                                                                                                                                                                              | <b>G40</b>                                                                   | 70.10          | 70.10  | 93.–   | 107.–  |                                           |
| Prepared for mountings with D12 shaft <sup>12)</sup>                                                                                                                                                                                                                                                | <b>G41</b>                                                                   | 152.–          | 168.–  | 189.–  | 225.–  |                                           |
| Prepared for mountings with D16 shaft <sup>12)</sup>                                                                                                                                                                                                                                                | <b>G42</b>                                                                   | 152.–          | 168.–  | 189.–  | 225.–  |                                           |
| Mechanical protection for encoders                                                                                                                                                                                                                                                                  | <b>G43</b>                                                                   | 80.70          | 80.70  | 141.–  | 141.–  |                                           |
| Protective cover <sup>6) 8)</sup>                                                                                                                                                                                                                                                                   | <b>H00</b>                                                                   | 82.40          | 82.40  | 144.–  | 144.–  |                                           |
| Screwed-on (instead of cast) feet                                                                                                                                                                                                                                                                   | <b>H01</b>                                                                   | 104.–          | 113.–  | 123.–  | 132.–  |                                           |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                                                                                                                                                                                                          | <b>H02</b>                                                                   | 189.–          | 209.–  | 226.–  | 263.–  |                                           |
| Condensation drainage holes <sup>9)</sup>                                                                                                                                                                                                                                                           | <b>H03</b>                                                                   | 82.70          | 90.30  | 97.80  | 105.–  |                                           |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                                  | <b>H07</b>                                                                   | 82.70          | 82.70  | 97.80  | 97.80  |                                           |
| IP66 degree of protection                                                                                                                                                                                                                                                                           | <b>H19</b>                                                                   | 316.–          | 316.–  | 316.–  | 471.–  |                                           |
| IP65 degree of protection <sup>10)</sup>                                                                                                                                                                                                                                                            | <b>H20</b>                                                                   | 150.–          | 150.–  | 150.–  | 224.–  |                                           |
| IP56 degree of protection <sup>11)</sup>                                                                                                                                                                                                                                                            | <b>H22</b>                                                                   | 166.–          | 166.–  | 166.–  | 247.–  |                                           |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>13)</sup>                                                                                                                                                                                                                      | <b>H23</b>                                                                   | 57.50          | 62.90  | 76.80  | 112.–  |                                           |

For legends and footnotes, see Page 3/45.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

20

On request

## Options · Aluminum series 1LE1092

| Special versions                                                                                                                     | Additional identification code -Z with order code and plain text if required | Frame size |       |        |        | Motor version       |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|--------|--------|---------------------|
|                                                                                                                                      |                                                                              | 100        | 112   | 132    | 160    |                     |
|                                                                                                                                      |                                                                              | 1LE1092    |       |        |        | Standard Efficiency |
| 1LE1092-.....-.....-Z                                                                                                                | Order code                                                                   |            |       |        |        |                     |
| <b>Coolant temperature and installation altitude</b>                                                                                 |                                                                              |            |       |        |        |                     |
| Coolant temperature -40 to +40 °C <sup>19)</sup>                                                                                     | D03                                                                          | 386.–      | 489.– | 566.–  | 650.–  |                     |
| Coolant temperature -30 to +40 °C <sup>19)</sup>                                                                                     | D04                                                                          | 70.80      | 70.80 | 85.–   | 85.–   |                     |
| <b>Designs in accordance with standards and specifications</b>                                                                       |                                                                              |            |       |        |        |                     |
| Design according to UL and CSA (Canadian regulations)                                                                                | D39                                                                          | 99.–       | 117.– | 150.–  | 183.–  |                     |
| TR CU product safety certificate EAC for Eurasian customs union                                                                      | D47                                                                          | 42.–       | 52.50 | 84.–   | 137.–  |                     |
| <b>Bearings and lubrication</b>                                                                                                      |                                                                              |            |       |        |        |                     |
| Located bearing DE                                                                                                                   | L20                                                                          | 72.80      | 86.30 | 106.–  | 145.–  |                     |
| Located bearing NDE                                                                                                                  | L21                                                                          | 44.20      | 46.50 | 49.30  | □      |                     |
| Bearing design for increased cantilever forces                                                                                       | L22                                                                          | 101.–      | 117.– | 133.–  | 175.–  |                     |
| Regreasing device <sup>14)</sup>                                                                                                     | L23                                                                          | 317.–      | 325.– | 336.–  | 363.–  |                     |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                                     | L25                                                                          | 203.–      | 237.– | 265.–  | 353.–  |                     |
| Bearing insulation NDE                                                                                                               | L51                                                                          | New! 541.– | 561.– | 1250.– | 1300.– |                     |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>14)</sup>                                               | Q01                                                                          | 257.–      | 288.– | 317.–  | 350.–  |                     |
| <b>Balance and vibration quantity</b>                                                                                                |                                                                              |            |       |        |        |                     |
| Vibration quantity level A                                                                                                           |                                                                              | □          | □     | □      | □      |                     |
| Half-key balancing (standard)                                                                                                        |                                                                              | □          | □     | □      | □      |                     |
| Balancing without key                                                                                                                | L01                                                                          | 28.40      | 28.40 | 33.60  | 33.60  |                     |
| Full-key balancing                                                                                                                   | L02                                                                          | 111.–      | 111.– | 129.–  | 129.–  |                     |
| <b>Shaft and rotor</b>                                                                                                               |                                                                              |            |       |        |        |                     |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                          | 525.–      | 553.– | 580.–  | 610.–  |                     |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                        | L05                                                                          | 143.–      | 143.– | 189.–  | 217.–  |                     |
| Standard shaft made of stainless steel                                                                                               | L06                                                                          | 962.–      | 962.– | 1110.– | 1390.– |                     |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                          | 268.–      | 268.– | 408.–  | 408.–  |                     |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                          | 241.–      | 270.– | 302.–  | 374.–  |                     |
| Non-standard shaft extension, DE <sup>15)</sup>                                                                                      | Y58 • and customer specifications                                            | 525.–      | 553.– | 580.–  | 610.–  |                     |
| Non-standard shaft extension, NDE <sup>15)</sup>                                                                                     | Y59 • and customer specifications                                            | 525.–      | 553.– | 580.–  | 610.–  |                     |
| <b>Heating and ventilation</b>                                                                                                       |                                                                              |            |       |        |        |                     |
| Mounting of separately driven fan                                                                                                    | F70                                                                          | 840.–      | 987.– | 1070.– | 1240.– |                     |
| Sheet metal fan cover                                                                                                                | F74                                                                          | 67.90      | 73.70 | 79.40  | 85.–   |                     |
| Fan cover for textile industry <sup>16)</sup>                                                                                        | F75                                                                          | 316.–      | 452.– | 572.–  | 676.–  |                     |
| Metal external fan                                                                                                                   | F76                                                                          | 189.–      | 224.– | 261.–  | 302.–  |                     |
| Without external fan and without fan cover                                                                                           | F90                                                                          | 118.–      | 118.– | 118.–  | 118.–  |                     |
| Anti-condensation heating for 230 V                                                                                                  | Q02                                                                          | 430.–      | 459.– | 519.–  | 576.–  |                     |
| Anti-condensation heating for 115 V                                                                                                  | Q03                                                                          | 430.–      | 459.– | 519.–  | 576.–  |                     |
| <b>Rating plate and extra rating plates</b>                                                                                          |                                                                              |            |       |        |        |                     |
| Second rating plate, loose                                                                                                           | M10                                                                          | 21.10      | 21.10 | 21.10  | 21.10  |                     |
| Rating plate, stainless steel                                                                                                        | M11                                                                          | 42.20      | 42.20 | 42.20  | 42.20  |                     |
| Extra rating plate with customer specifications                                                                                      | Y82 • and customer specifications                                            | 41.50      | 41.50 | 41.50  | 41.50  |                     |
| Additional information on rating plate and on package label (max. 20 characters)                                                     | Y84 • and customer specifications                                            | 41.50      | 41.50 | 41.50  | 41.50  |                     |
| Adhesive label, supplied loose                                                                                                       | Y85 • and customer specifications                                            | 41.50      | 41.50 | 41.50  | 41.50  |                     |

For legends and footnotes, see Page 3/45.

## Standard delivery times in working days:

**20**On  
request

# Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Options · Aluminum series 1LE1092

| Special versions                                                                                | Additional identification code -Z with order code and plain text if required | Frame size     |        |        |        | Motor version       |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------|--------|--------|--------|---------------------|
|                                                                                                 |                                                                              | 100            | 112    | 132    | 160    |                     |
|                                                                                                 |                                                                              | <b>1LE1092</b> |        |        |        | Standard Efficiency |
| <b>1LE1092-.....-.....-Z</b>                                                                    | Order code                                                                   |                |        |        |        |                     |
| <b>Packaging, safety notes, documentation and test certificates</b>                             |                                                                              |                |        |        |        |                     |
| With a safety and commissioning instruction enclosed in each wire-lattice pallet <sup>17)</sup> | <b>B01</b>                                                                   | O              | O      | O      | O      |                     |
| Acceptance test certificate 3.1 according to EN 10204 <sup>18)</sup>                            | <b>B02</b>                                                                   | 28.70          | 28.70  | 28.70  | 28.70  |                     |
| Document – Electrical data sheet                                                                | <b>B60</b>                                                                   | 315.–          | 315.–  | 315.–  | 315.–  |                     |
| Document – Order dimensional drawing                                                            | <b>B61</b>                                                                   | 315.–          | 315.–  | 315    | 315.–  |                     |
| Type test with heat run for horizontal motors, with acceptance                                  | <b>B83</b>                                                                   | 7290.–         | 8070.– | 8840.– | 9620.– |                     |
| Documentation Package "Basic"                                                                   | <b>B90</b>                                                                   | 609.–          | 609.–  | 609.–  | 609.–  |                     |
| Documentation Package "Advanced"                                                                | <b>B91</b>                                                                   | 924.–          | 924.–  | 924.–  | 924.–  |                     |
| Documentation Package "Projects"                                                                | <b>B92</b>                                                                   | 2520.–         | 2520.– | 2520.– | 2520.– |                     |
| Wire-lattice pallet packaging                                                                   | <b>B99</b>                                                                   | O              | O      | O      | O      |                     |
| Connected in star for dispatch                                                                  | <b>M01</b>                                                                   | 28.90          | 28.90  | 28.90  | 28.90  |                     |
| Connected in delta for dispatch                                                                 | <b>M02</b>                                                                   | 28.90          | 28.90  | 28.90  | 28.90  |                     |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

3

- 1) With order code **H08** feet dimensions differ from EN 50347. Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 2) With IM B5 flange, only possible in combination with order code **H08**.
- 3) The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 4) A second shaft extension is not possible. Please inquire for mounted brakes.
- 5) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 6) In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 7) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 8) Order code **H00** provides mechanical protection for encoders.
- 9) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 10) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 11) Not possible in combination with brake 2LM8 (order code **F01**).
- 12) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**.

- 13) Not possible for type of construction IM V3.
- 14) Not possible when brake is mounted.
- 15) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
  - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
  - Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension. For explanation of the order codes, see Catalog Section 1 "Introduction".
- 16) The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".
- 17) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/40761976>.
- 18) The delivery time for the factory test certificate may differ from the delivery time for the motor and it will be dispatched by email.
- 19) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 20) Not possible in combination with UL.
- 21) Only possible in combination with order codes **R70** and **R71**.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

20

30

40

50

On  
request

## Options · Cast-iron series 1LE1592

## Selection and ordering data

| Special versions                                                                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size     |            |            |            |            |            |            |            |            |            | Motor version       |                                                                               |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------------|-------------------------------------------------------------------------------|
|                                                                                         |                                                                                     | <b>100</b>     | <b>112</b> | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> | <b>225</b> | <b>250</b> | <b>280</b> | <b>315</b> |                     |                                                                               |
|                                                                                         |                                                                                     | <b>1LE1592</b> |            |            |            |            |            |            |            |            |            | Standard Efficiency |                                                                               |
| <b>1LE1592-.....-Z</b>                                                                  | Order code                                                                          |                |            |            |            |            |            |            |            |            |            |                     |                                                                               |
| Motor protection                                                                        |                                                                                     |                |            |            |            |            |            |            |            |            |            |                     |                                                                               |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>2) 3)</sup>                    | <b>Q11</b>                                                                          |                | 119.–      | 119.–      | 180.–      | 180.–      | 239.–      | 239.–      | 325.–      | 325.–      | 406.–      | 406.–               | Only for:<br><br>Voltage code 2-1 (12th and 13th position of the Article No.) |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>3)</sup>             | <b>Q12</b>                                                                          |                | 205.–      | 205.–      | 274.–      | 274.–      | 421.–      | 421.–      | 548.–      | 548.–      | 679.–      | 679.–               |                                                                               |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>3)</sup>                              | <b>Q23</b>                                                                          |                | 119.–      | 119.–      | 180.–      | 180.–      | 339.–      | 339.–      | 463.–      | 601.–      | 601.–      | 885.–               |                                                                               |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>3)</sup>                             | <b>Q25</b>                                                                          |                | 241.–      | 241.–      | 359.–      | 359.–      | 550.–      | 550.–      | 756.–      | 1020.–     | 1020.–     | 1500.–              |                                                                               |
| 3 bimetal sensors (NC contact) for tripping (2 terminals) <sup>3)</sup>                 | <b>Q31</b>                                                                          |                | 134.–      | 134.–      | 196.–      | 196.–      | 270.–      | 270.–      | 365.–      | 365.–      | 453.–      | 453.–               |                                                                               |
| 6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)                     | <b>Q32</b>                                                                          |                | 241.–      | 241.–      | 352.–      | 352.–      | 477.–      | 477.–      | 647.–      | 647.–      | 801.–      | 801.–               |                                                                               |
| 3 bimetal sensors (NC contact) for tripping (6 terminals)                               | <b>Q33</b>                                                                          |                | 144.–      | 144.–      | 206.–      | 206.–      | 281.–      | 281.–      | 376.–      | 376.–      | 463.–      | 463.–               |                                                                               |
| 6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)                    | <b>Q34</b>                                                                          |                | 251.–      | 251.–      | 262.–      | 362.–      | 488.–      | 488.–      | 658.–      | 658.–      | 811.–      | 811.–               |                                                                               |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>20)</sup>                            | <b>Q35</b>                                                                          |                | 119.–      | 119.–      | 180.–      | 180.–      | 339.–      | 339.–      | 463.–      | 601.–      | 601.–      | 885.–               |                                                                               |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>20)</sup>                           | <b>Q36</b>                                                                          |                | 241.–      | 241.–      | 359.–      | 359.–      | 550.–      | 550.–      | 756.–      | 1020.–     | 1020.–     | 1500.–              |                                                                               |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)                          | <b>Q60</b>                                                                          |                | 1240.–     | 1240.–     | 1240.–     | 1240.–     | 1510.–     | 1510.–     | 1510.–     | 1670.–     | 1670.–     | 1670.–              |                                                                               |
| 1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)                           | <b>Q62</b>                                                                          |                | 1040.–     | 1040.–     | 1040.–     | 1040.–     | 1340.–     | 1340.–     | 1340.–     | 1340.–     | 1340.–     | 1340.–              |                                                                               |
| 3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)                          | <b>Q63</b>                                                                          |                | 1310.–     | 1310.–     | 1310.–     | 1310.–     | 2010.–     | 2010.–     | 2010.–     | 2010.–     | 2010.–     | 2010.–              |                                                                               |
| 6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)                         | <b>Q64</b>                                                                          |                | 2020.–     | 2020.–     | 2020.–     | 2020.–     | 2960.–     | 2960.–     | 2960.–     | 2960.–     | 2960.–     | 2960.–              |                                                                               |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>1)</sup> | <b>Q72</b>                                                                          |                | –          | –          | –          | –          | 4300.–     | 4300.–     | 4300.–     | 4300.–     | 4300.–     | 4300.–              |                                                                               |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)              | <b>Q78</b>                                                                          |                | –          | –          | –          | –          | 4730.–     | 4730.–     | 4730.–     | 4730.–     | 4730.–     | 4730.–              |                                                                               |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)      | <b>Q79</b>                                                                          |                | –          | –          | –          | –          | 5670.–     | 5670.–     | 5670.–     | 5670.–     | 5670.–     | 5670.–              |                                                                               |
| Motor connection and terminal box                                                       |                                                                                     |                |            |            |            |            |            |            |            |            |            |                     |                                                                               |
| External grounding                                                                      | <b>H04</b>                                                                          |                | 28.90      | 28.90      | 28.90      | 28.90      | □          | □          | □          | □          | □          | □                   |                                                                               |
| Terminal box on NDE <sup>2)</sup>                                                       | <b>H08</b>                                                                          |                | 180.–      | 220.–      | 286.–      | 388.–      | 967.–      | 999.–      | 1050.–     | 1100.–     | 1150.–     | 1200.–              |                                                                               |
| Second external grounding                                                               | <b>H70</b>                                                                          |                | 15.80      | 15.80      | 15.80      | 15.80      | 15.80      | 15.80      | 15.80      | 15.80      | 15.80      | 15.80               |                                                                               |
| Rotation of the terminal box through 90°, entry from DE                                 | <b>R10</b>                                                                          |                | 23.40      | 23.40      | 23.40      | 23.40      | 45.10      | 58.40      | 72.10      | 86.60      | 103.–      | 124.–               |                                                                               |
| Rotation of the terminal box through 90°, entry from NDE                                | <b>R11</b>                                                                          |                | 23.40      | 23.40      | 23.40      | 23.40      | 45.10      | 58.40      | 72.10      | 86.60      | 103.–      | 124.–               |                                                                               |
| Rotation of the terminal box through 180 °                                              | <b>R12</b>                                                                          |                | O          | O          | O          | O          | 45.10      | 58.40      | 72.10      | 86.60      | 103.–      | 124.–               |                                                                               |
| One EMC cable gland                                                                     | <b>R14</b>                                                                          |                | –          | –          | –          | –          | 174.–      | 299.–      | 299.–      | 529.–      | 529.–      | 529.–               |                                                                               |
| One metal cable gland                                                                   | <b>R15</b>                                                                          |                | 112.–      | 112.–      | 112.–      | 143.–      | 143.–      | 165.–      | 165.–      | 236.–      | 236.–      | 236.–               |                                                                               |
| EMC cable gland, maximum configuration                                                  | <b>R16</b>                                                                          |                | –          | –          | –          | –          | 362.–      | 610.–      | 610.–      | 1090.–     | 1090.–     | 1090.–              |                                                                               |
| Stud terminal for cable connection, accessories pack (3 items)                          | <b>R17</b>                                                                          |                | –          | –          | –          | –          | –          | –          | –          | 150.–      | 150.–      | 189.–               |                                                                               |
| Saddle terminal for connection without cable lug, accessories pack                      | <b>R19</b>                                                                          |                | –          | –          | –          | –          | –          | –          | –          | 735.–      | 735.–      | 735.–               |                                                                               |

For legends and footnotes, see Page 3/50.

## Standard delivery times in working days:

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On  
request

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Options · Cast-iron series 1LE1592

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |        |        |        |        |        |        |        |         |         | Motor version       |                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------------------|-------------------------------------------|
|                                                                                                                                                                                                                                                                                             |                                                                                     | 100        | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280     | 315     |                     |                                           |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1LE1592    |        |        |        |        |        |        |        |         |         | Standard Efficiency |                                           |
| 1LE1592-.....-Z                                                                                                                                                                                                                                                                             |                                                                                     | Order code |        |        |        |        |        |        |        |         |         |                     |                                           |
| Motor connection and terminal box (continued)                                                                                                                                                                                                                                               |                                                                                     |            |        |        |        |        |        |        |        |         |         |                     |                                           |
| Larger terminal box                                                                                                                                                                                                                                                                         | R50                                                                                 |            | 214.–  | 214.–  | 274.–  | 313.–  | 475.–  | 523.–  | 1660.– | 1900.–  | 1900.–  | 2230                |                                           |
| Terminal box without cable entry opening                                                                                                                                                                                                                                                    | R51                                                                                 |            | O      | O      | O      | O      | O      | O      | O      | O       | O       | O                   |                                           |
| Drilled removable entry plate                                                                                                                                                                                                                                                               | R52                                                                                 |            | –      | –      | –      | –      | 273.–  | 294.–  | 294.–  | 489.–   | 489.–   | 510.–               |                                           |
| Undrilled removable entry plate                                                                                                                                                                                                                                                             | R53                                                                                 |            | –      | –      | –      | –      | 273.–  | 294.–  | 294.–  | 489.–   | 489.–   | 510.–               |                                           |
| Cast-iron auxiliary terminal box (small)                                                                                                                                                                                                                                                    | R62                                                                                 |            | 278.–  | 278.–  | 278.–  | 278.–  | 284.–  | 284.–  | 284.–  | 284.–   | 284.–   | 284.–               |                                           |
| Silicon-free version                                                                                                                                                                                                                                                                        | R74                                                                                 |            | □      | □      | □      | □      | □      | □      | □      | 357.–   | 357.–   | 357.–               |                                           |
| Non-standard threaded through hole (NPT or G thread)                                                                                                                                                                                                                                        | Y61 • and customer specifications                                                   |            | 152.–  | 152.–  | 152.–  | 152.–  | 203.–  | 270.–  | 338.–  | 402.–   | 541.–   | 670.–               |                                           |
| Windings and insulation                                                                                                                                                                                                                                                                     |                                                                                     |            |        |        |        |        |        |        |        |         |         |                     |                                           |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                                                                                                                                                                                                      | N30                                                                                 |            | 137.–  | 137.–  | 137.–  | 210.–  | 305.–  | 420.–  | 652.–  | 872.–   | 1100.–  | 1350.–              |                                           |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                                                                                                                                                                                                     | N31                                                                                 |            | 216.–  | 247.–  | 278.–  | 391.–  | 515.–  | 662.–  | 935.–  | 1200.–  | 1520.–  | 1820.–              |                                           |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                                     |            |        |        |        |        |        |        |        |         |         |                     |                                           |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                                     |            | □      | □      | □      | □      | □      | □      | □      | □       | □       | □                   |                                           |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                                 |            | O      | O      | O      | O      | O      | O      | O      | O       | O       | O                   |                                           |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                                 |            | 27.80  | 27.80  | 44.40  | 44.40  | 83.30  | 83.30  | 83.30  | 83.30   | 83.30   | 83.30               |                                           |
| Special finish C3                                                                                                                                                                                                                                                                           | S02                                                                                 |            | 63.–   | 63.–   | 84.–   | 84.–   | 115.–  | 126.–  | 189.–  | 232.–   | 273.–   | 305.–               |                                           |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | S03                                                                                 |            | 536.–  | 536.–  | 589.–  | 589.–  | 630.–  | 672.–  | 714.–  | 757.–   | 799.–   | 830.–               |                                           |
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | S04                                                                                 |            | 2150.– | 2260.– | 2390.– | 2510.– | 2640.– | 2770.– | 3200.– | 4170.–  | 5220.–  | 8070.–              |                                           |
| Internal coating                                                                                                                                                                                                                                                                            | S05                                                                                 |            | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 89.40  | 110.–   | 126.–   | 137.–               |                                           |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and standard finish RAL.....                                                  |            | 42.–   | 42.–   | 57.80  | 57.80  | 84.–   | 115.–  | 126.–  | 158.–   | 189.–   | 263.–               |                                           |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                      | Y56 • and special finish RAL.....                                                   |            | 662.–  | 662.–  | 694.–  | 694.–  | 704.–  | 714.–  | 725.–  | 735.–   | 746.–   | 757.–               |                                           |
| Modular technology – Basic versions <sup>4)</sup>                                                                                                                                                                                                                                           |                                                                                     |            |        |        |        |        |        |        |        |         |         |                     |                                           |
| Mounting of brake <sup>5)</sup>                                                                                                                                                                                                                                                             | F01                                                                                 |            | 657.–  | 799.–  | 1030.– | 2040.– | 4510.– | 6300.– | 8010.– | 25600.– | 31600.– | 37900.–             |                                           |
| Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                             | G11                                                                                 |            | 838.–  | 895.–  | 941.–  | 986.–  | 1030.– | 1080.– | 1140.– | 1190.–  | 1230.–  | 1280.–              |                                           |
| Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder                                                                                                                                                                                                                             | G12                                                                                 |            | 1180.– | 1250.– | 1330.– | 1410.– | 1480.– | 1550.– | 1640.– | 1710.–  | 1790.–  | 1860.–              |                                           |
| Modular technology – Additional versions                                                                                                                                                                                                                                                    |                                                                                     |            |        |        |        |        |        |        |        |         |         |                     |                                           |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                                | F10                                                                                 |            | 52.90  | 52.90  | 52.90  | 52.90  | 70.60  | 70.60  | 70.60  | 70.60   | 70.60   | 70.60               |                                           |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                     | F11                                                                                 |            | O      | O      | O      | O      | O      | O      | O      | O       | O       | O                   |                                           |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                                                                                                                                                     | F12                                                                                 |            | 52.90  | 52.90  | 52.90  | 52.90  | 70.60  | 70.60  | 70.60  | 70.60   | 70.60   | 70.60               |                                           |
| Brake supply voltage 180 V DC                                                                                                                                                                                                                                                               | F17                                                                                 |            | 52.90  | 52.90  | 52.90  | 52.90  | 70.60  | 70.60  | 70.60  | 70.60   | 70.60   | 70.60               | Only for: Combination with order code F01 |
| Brake supply voltage 205 V DC                                                                                                                                                                                                                                                               | F18                                                                                 |            | 52.90  | 52.90  | 52.90  | 52.90  | 70.60  | 70.60  | 70.60  | 70.60   | 70.60   | 70.60               | Only for: Combination with order code F01 |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                     | F50                                                                                 |            | 264.–  | 264.–  | 294.–  | 426.–  | 620.–  | 723.–  | 868.–  | 987.–   | 1090.–  | 1390.–              |                                           |

For legends and footnotes, see Page 3/50.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

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On request

## Options · Cast-iron series 1LE1592

| Special versions                                                                                                  | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |        |        |        |        |         |         |         |         |         | Motor version       |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------------------|
|                                                                                                                   |                                                                                     | 100        | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     |                     |
|                                                                                                                   |                                                                                     | 1LE1592    |        |        |        |        |         |         |         |         |         | Standard Efficiency |
| 1LE1592-.....-Z                                                                                                   | Order code                                                                          |            |        |        |        |        |         |         |         |         |         |                     |
| Special technology <sup>5)</sup>                                                                                  |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>8)</sup>                                                     | G04                                                                                 |            | 3000.– | 3000.– | 3000.– | 3000.– | 3000.–  | 3000.–  | 4180.–  | 4180.–  | 4180.–  | 4180.–              |
| Mounting of HOG 9 DN 1024 I rotary pulse encoder <sup>8)</sup>                                                    | G05                                                                                 |            | 3540.– | 3540.– | 3540.– | 3540.– | 4570.–  | 4570.–  | 4950.–  | 4950.–  | 4950.–  | 4950.–              |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>8)</sup>                                                    | G06                                                                                 |            | 4570.– | 4570.– | 4570.– | 4570.– | 4570.–  | 4570.–  | 6000.–  | 6000.–  | 6000.–  | 6000.–              |
| Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) <sup>9)</sup> | G07                                                                                 |            | –      | –      | –      | –      | 6380.–  | 6410.–  | 6440.–  | 6490.–  | 6530.–  | 6590.–              |
| Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) <sup>9)</sup>    | G08                                                                                 |            | –      | –      | –      | –      | 14700.– | 14900.– | 18000.– | 18000.– | 18000.– | 18000.–             |
| Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder                                                | G21                                                                                 |            | 2540.– | 2680.– | 2830.– | 3050.– | 3210.–  | 3300.–  | 3430.–  | 3430.–  | 3430.–  | 3430.–              |
| Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder                                                | G22                                                                                 |            | 2940.– | 3120.– | 3300.– | 3520.– | 3630.–  | 3750.–  | 3880.–  | 3880.–  | 3880.–  | 3880.–              |
| Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder                                                         | G25                                                                                 |            | –      | –      | –      | –      | 14000.– | 14000.– | 17400.– | 17400.– | 17400.– | 17400.–             |
| Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder                                                    | G27                                                                                 |            | –      | –      | –      | –      | 15500.– | 15500.– | 20200.– | 20200.– | 20200.– | 20200.–             |
| Mounting a special type of rotary pulse encoder                                                                   | Y70 • and customer specifications                                                   |            | –      | –      | –      | –      | O. R.   | O. R.   | O. R.   | O. R.   | O. R.   | O. R.               |
| Mechanical design and degrees of protection                                                                       |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |
| Prepared for mountings, center hole only                                                                          | G40                                                                                 |            | 70.10  | 70.10  | 93.–   | 107.–  | □       | □       | □       | □       | □       | □                   |
| Prepared for mountings with D12 shaft                                                                             | G41                                                                                 |            | 152.–  | 168.–  | 189.–  | 225.–  | 462.–   | 462.–   | 589.–   | 924.–   | 924.–   | 924.–               |
| Prepared for mountings with D16 shaft                                                                             | G42                                                                                 |            | 152.–  | 168.–  | 189.–  | 225.–  | 462.–   | 462.–   | 589.–   | 924.–   | 924.–   | 924.–               |
| Mechanical protection for encoders                                                                                | G43                                                                                 |            | 80.70  | 80.70  | 141.–  | 141.–  | 212.–   | 212.–   | 212.–   | 212.–   | 212.–   | 212.–               |
| Protective cover <sup>6) 8) 10)</sup>                                                                             | H00                                                                                 |            | 82.40  | 82.40  | 144.–  | 144.–  | 192.–   | 289.–   | 383.–   | 478.–   | 573.–   | 766.–               |
| Screwed-on (instead of cast) feet                                                                                 | H01                                                                                 |            | 104.–  | 113.–  | 123.–  | 132.–  | 371.–   | 437.–   | 517.–   | 768.–   | 863.–   | 993.–               |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                        | H02                                                                                 |            | 185.–  | 205.–  | 222.–  | 258.–  | 315.–   | 378.–   | 442.–   | 525.–   | 609.–   | 694.–               |
| Condensation drainage holes                                                                                       |                                                                                     |            | □      | □      | □      | □      | □       | □       | □       | □       | □       | □                   |
| Rust-resistant screws (externally)                                                                                | H07                                                                                 |            | 82.70  | 82.70  | 97.80  | 97.80  | 112.–   | 128.–   | 170.–   | 203.–   | 211.–   | 281.–               |
| IP66 degree of protection                                                                                         | H19                                                                                 |            | 316.–  | 316.–  | 316.–  | 471.–  | 630.–   | 787.–   | 949.–   | 1106.–  | 1264.–  | 1419.–              |
| IP65 degree of protection <sup>11)</sup>                                                                          | H20                                                                                 |            | 150.–  | 150.–  | 150.–  | 224.–  | 302.–   | 374.–   | 452.–   | 527.–   | 601.–   | 676.–               |
| IP54 degree of protection                                                                                         | H21                                                                                 |            | –      | –      | –      | –      | 840.–   | 840.–   | 840.–   | 840.–   | 840.–   | 840.–               |
| IP56 degree of protection <sup>12)</sup>                                                                          | H22                                                                                 |            | 166.–  | 166.–  | 166.–  | 247.–  | 328.–   | 413.–   | 497.–   | 579.–   | 663.–   | 743.–               |
| Drive-end seal for flange mounting motors, oil-tight to 0.1 bar <sup>13)</sup>                                    | H23                                                                                 |            | 57.50  | 62.90  | 76.80  | 112.–  | 145.–   | 180.–   | 239.–   | 204.–   | 398.–   | 478.–               |
| Grounding brush for converter operation                                                                           | L52                                                                                 |            | –      | –      | –      | –      | –       | –       | –       | –       | 2630.–  | 2630.–              |
| Coolant temperature and installation altitude                                                                     |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |
| Coolant temperature –50 to +40 °C                                                                                 | D02                                                                                 |            | 735.–  | 788.–  | 946.–  | 1100.– | 2590.–  | 2770.–  | 4000.–  | 4460.–  | 5400.–  | 6400.–              |
| Coolant temperature –40 to +40 °C <sup>14)</sup>                                                                  | D03                                                                                 |            | 386.–  | 489.–  | 566.–  | 650.–  | 721.–   | 836.–   | 1070.–  | 1330.–  | 1890.–  | 2440.–              |
| Coolant temperature –30 to +40 °C                                                                                 | D04                                                                                 |            | 70.80  | 70.80  | 85.–   | 85.–   | 113.–   | 142.–   | 567.–   | 1330.–  | 1890.–  | 2440.–              |
| Designs in accordance with standards and specifications                                                           |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |
| Design according to UL and CSA (Canadian regulations)                                                             | D39                                                                                 |            | 101.–  | 119.–  | 153.–  | 187.–  | 300.–   | 411.–   | 517.–   | 610.–   | 756.–   | 986.–               |
| TR CU product safety certificate EAC for Eurasian customs union                                                   | D47                                                                                 |            | 42.–   | 52.50  | 84.–   | 137.–  | 179.–   | 252.–   | 325.–   | 430.–   | 630.–   | 735.–               |

For legends and footnotes, see Page 3/50.

## Standard delivery times in working days:

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On  
request

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

## Options · Cast-iron series 1LE1592

| Special versions                                                                                                                     | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |       |       |        |        |        |        |        |        |        | Motor version       |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------------------|
|                                                                                                                                      |                                                                                     | 100        | 112   | 132   | 160    | 180    | 200    | 225    | 250    | 280    | 315    |                     |
|                                                                                                                                      |                                                                                     | 1LE1592    |       |       |        |        |        |        |        |        |        | Standard Efficiency |
| 1LE1592-.....-Z                                                                                                                      | Order code                                                                          |            |       |       |        |        |        |        |        |        |        |                     |
| Bearings and lubrication                                                                                                             |                                                                                     |            |       |       |        |        |        |        |        |        |        |                     |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                                | L19                                                                                 | –          | –     | –     | –      | 383.–  | 430.–  | 478.–  | 573.–  | O      | O      |                     |
| Located bearing DE                                                                                                                   | L20                                                                                 |            | 72.80 | 86.30 | 106.–  | 145.–  | 306.–  | 424.–  | 597.–  | 768.–  | 993.–  | 1070.–              |
| Located bearing NDE                                                                                                                  | L21                                                                                 |            | 43.30 | 45.60 | 48.30  | □      | □      | □      | □      | □      | □      |                     |
| Bearing design for increased cantilever forces                                                                                       | L22                                                                                 |            | 101.– | 117.– | 133.–  | 175.–  | 278.–  | 322.–  | 363.–  | 420.–  | 470.–  | 525.–               |
| Regreasing device <sup>15)</sup>                                                                                                     | L23                                                                                 |            | 317.– | 325.– | 336.–  | 363.–  | 383.–  | 430.–  | 478.–  | 573.–  | □      | □                   |
| Reinforced bearings at both ends for DE and NDE, bearing size 63 <sup>16)</sup>                                                      | L25                                                                                 |            | 203.– | 237.– | 265.–  | 353.–  | 468.–  | 576.–  | 819.–  | 1130.– | □      | □                   |
| Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces                                                   | L28                                                                                 |            | –     | –     | –      | –      | 747.–  | 900.–  | 1170.– | 1550.– | –      | –                   |
| Bearing insulation DE                                                                                                                | L50                                                                                 |            | –     | –     | –      | –      | –      | –      | 1760.– | 1890.– | 1960.– | 2050.–              |
| Bearing insulation NDE                                                                                                               | L51                                                                                 |            | 510.– | 530.– | 1190.– | 1230.– | 1280.– | 1300.– | 1760.– | 1890.– | □      | □                   |
| Measuring nipple for SPM shock pulse measurement for bearing inspection <sup>15)</sup>                                               | Q01                                                                                 |            | 257.– | 288.– | 317.–  | 350.–  | 377.–  | 408.–  | 439.–  | 468.–  | 498.–  | 528.–               |
| Balance and vibration quantity                                                                                                       |                                                                                     |            |       |       |        |        |        |        |        |        |        |                     |
| Vibration quantity level A                                                                                                           |                                                                                     |            | □     | □     | □      | □      | □      | □      | □      | □      | □      | □                   |
| Half-key balancing (standard)                                                                                                        |                                                                                     |            | □     | □     | □      | □      | □      | □      | □      | □      | □      | □                   |
| Balancing without key                                                                                                                | L01                                                                                 |            | 28.40 | 28.40 | 33.60  | 33.60  | 43.70  | 43.70  | 59.30  | 59.30  | 72.10  | 83.60               |
| Full-key balancing                                                                                                                   | L02                                                                                 |            | 111.– | 111.– | 129.–  | 129.–  | 162.–  | 162.–  | 209.–  | 209.–  | 209.–  | 209.–               |
| Shaft and rotor                                                                                                                      |                                                                                     |            |       |       |        |        |        |        |        |        |        |                     |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                                 |            | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–              |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                        | L05                                                                                 |            | 143.– | 143.– | 189.–  | 217.–  | 328.–  | 364.–  | 384.–  | 400.–  | 473.–  | 519.–               |
| Standard shaft made of stainless steel                                                                                               | L06                                                                                 |            | 165.– | 227.– | 350.–  | 556.–  | 675.–  | 1010.– | 1390.– | 1650.– | 2750.– | 3360.–              |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                                 |            | 268.– | 268.– | 408.–  | 408.–  | 211.–  | 238.–  | 283.–  | 370.–  | 370.–  | 565.–               |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 |            | 241.– | 270.– | 302.–  | 374.–  | 452.–  | 527.–  | 601.–  | 676.–  | 754.–  | 827.–               |
| Non-standard shaft extension, DE <sup>17)</sup>                                                                                      | Y58 • and customer specifications                                                   |            | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–              |
| Non-standard shaft extension, NDE <sup>17)</sup>                                                                                     | Y59 • and customer specifications                                                   |            | 525.– | 553.– | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  | 1060.–              |
| Special shaft steel                                                                                                                  | Y60 • and customer specifications                                                   |            | O. R. | O. R. | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.               |
| Heating and ventilation                                                                                                              |                                                                                     |            |       |       |        |        |        |        |        |        |        |                     |
| Mounting of separately driven fan                                                                                                    | F70                                                                                 |            | 840.– | 987.– | 1070.– | 1240.– | 1370.– | 2050.– | 2550.– | 3180.– | 3790.– | 4270.–              |
| Sheet metal fan cover                                                                                                                | F74                                                                                 |            | 67.90 | 73.70 | 79.40  | 85.–   | 84.70  | 104.–  | 116.–  | 167.–  | 214.–  | 236.–               |
| Metal external fan                                                                                                                   | F76                                                                                 |            | 189.– | 224.– | 261.–  | 302.–  | 339.–  | 374.–  | 413.–  | 452.–  | 489.–  | 527.–               |
| Anti-condensation heating for 230 V (2 terminals)                                                                                    | Q02                                                                                 |            | 430.– | 459.– | 519.–  | 576.–  | 639.–  | 734.–  | 881.–  | 910.–  | 910.–  | 948.–               |
| Anti-condensation heating for 115 V (2 terminals)                                                                                    | Q03                                                                                 |            | 430.– | 459.– | 519.–  | 576.–  | 639.–  | 734.–  | 881.–  | 910.–  | 910.–  | 948.–               |
| Separately driven fan with non-standard voltage and/or frequency                                                                     | Y81 • and customer specifications                                                   |            | –     | –     | –      | –      | –      | –      | 483.–  | 609.–  | 779.–  | 1010.–              |
| Rating plate and extra rating plates                                                                                                 |                                                                                     |            |       |       |        |        |        |        |        |        |        |                     |
| Second rating plate, loose                                                                                                           | M10                                                                                 |            | 21.10 | 21.10 | 21.10  | 21.10  | 67.60  | 67.60  | 67.60  | 67.60  | 67.60  | 67.60               |
| Rating plate, stainless steel                                                                                                        | M11                                                                                 |            | 42.20 | 42.20 | 42.20  | 42.20  | 51.60  | 51.60  | 69.40  | 69.40  | 69.40  | 69.40               |

For legends and footnotes, see Page 3/50.

## Standard induction motors optimized for converter operation – VSD10 line

Article No. supplements and special versions

Standard delivery times in working days:

|    |    |    |    |            |
|----|----|----|----|------------|
| 20 | 30 | 40 | 50 | On request |
|----|----|----|----|------------|

## Options · Cast-iron series 1LE1592

| Special versions                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |        |        |        |        |         |         |         |         |         | Motor version       |  |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------------------|--|
|                                                                                                                    |                                                                                     | 100        | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     | Standard Efficiency |  |
|                                                                                                                    |                                                                                     | 1LE1592    |        |        |        |        |         |         |         |         |         |                     |  |
| 1LE1592- . . . . . - . . . . -Z                                                                                    | Order code                                                                          |            |        |        |        |        |         |         |         |         |         |                     |  |
| Rating plate and extra rating plates (continued)                                                                   |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |  |
| Extra rating plate with customer specifications                                                                    | Y82 • and customer specifications                                                   |            | 41.50  | 41.50  | 41.50  | 41.50  | 69.40   | 69.40   | 69.40   | 86.60   | 86.60   | 109.–               |  |
| Additional information on rating plate and on package label (max. 20 characters)                                   | Y84 • and customer specifications                                                   |            | 41.50  | 41.50  | 41.50  | 41.50  | 69.40   | 69.40   | 69.40   | 86.60   | 86.60   | 109.–               |  |
| Adhesive label, supplied loose                                                                                     | Y85 • and customer specifications                                                   |            | 41.50  | 41.50  | 41.50  | 41.50  | 67.60   | 67.60   | 67.60   | 67.60   | 67.60   | 67.60               |  |
| Extension of the liability for defects                                                                             |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |  |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery <sup>18)</sup> | Q80                                                                                 |            | –      | –      | –      | –      | 2.3 %   | 2.3 %   | 2.3 %   | 2.3 %   | 2.3 %   | 2.3 %               |  |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>18)</sup> | Q82                                                                                 |            | –      | –      | –      | –      | 4.6 %   | 4.6 %   | 4.6 %   | 4.6 %   | 4.6 %   | 4.6 %               |  |
| Packaging, safety notes, documentation and test certificates                                                       |                                                                                     |            |        |        |        |        |         |         |         |         |         |                     |  |
| Acceptance test certificate 3.1 according to EN 10204 <sup>19)</sup>                                               | B02                                                                                 |            | 28.70  | 28.70  | 28.70  | 28.70  | 28.70   | 28.70   | 28.70   | 28.70   | 28.70   | 28.70               |  |
| Document – Electrical data sheet                                                                                   | B60                                                                                 |            | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   | 315.–   | 315.–   | 315.–               |  |
| Document – Order dimensional drawing                                                                               | B61                                                                                 |            | 315.–  | 315.–  | 315.–  | 315.–  | 315.–   | 315.–   | 315.–   | 315.–   | 315.–   | 315.–               |  |
| Standard test (routine test) with acceptance                                                                       | B65                                                                                 |            | 3890.– | 3890.– | 3890.– | 3890.– | 3890.–  | 3890.–  | 3890.–  | 3890.–  | 3890.–  | 3890.–              |  |
| Type test with heat run for horizontal motors, with acceptance                                                     | B83                                                                                 |            | 7290.– | 8070.– | 8840.– | 9620.– | 10400.– | 11200.– | 11900.– | 12800.– | 13500.– | 14300.–             |  |
| Documentation package "Basic"                                                                                      | B90                                                                                 |            | 609.–  | 609.–  | 609.–  | 609.–  | 609.–   | 609.–   | 609.–   | 609.–   | 609.–   | 609.–               |  |
| Documentation package "Advanced"                                                                                   | B91                                                                                 |            | 924.–  | 924.–  | 924.–  | 924.–  | 924.–   | 924.–   | 924.–   | 924.–   | 924.–   | 924.–               |  |
| Documentation package "Projects"                                                                                   | B92                                                                                 |            | 2520.– | 2520.– | 2520.– | 2520.– | 2520.–  | 2520.–  | 2520.–  | 2520.–  | 2520.–  | 2520.–              |  |
| Connected in star for dispatch                                                                                     | M01                                                                                 |            | 28.90  | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   | 46.90   | 46.90   | 46.90               |  |
| Connected in delta for dispatch                                                                                    | M02                                                                                 |            | 28.90  | 28.90  | 28.90  | 28.90  | 37.90   | 37.90   | 37.90   | 46.90   | 46.90   | 46.90               |  |

- Standard version
- Without additional charge
- O. R. Possible on request
- Not possible

- This order code only determines the price of the version – additional plain text is required.

- 1) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 2) With order code **H08** feet dimensions differ from EN 50347. Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 3) The grease lifetime specified in Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 4) A second shaft extension is not possible. Please inquire for mounted brakes.
- 5) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 6) The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 7) In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 8) The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 9) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without a separately driven fan). This option can be used in combination with brakes of type KFB! This option cannot be used in combination with brakes of type 2LM8!

- 10) Order code **H00** provides mechanical protection for encoders.
- 11) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 12) Not possible in combination with brake 2LM8 (order code **F01**).
- 13) Not possible for type of construction IM V3.
- 14) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 15) Up to frame size 160 not possible when brake is mounted.
- 16) For motors from frame size 280 upwards standard version.
- 17) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
  - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
  - Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension. For explanation of the order codes, see Catalog Section 1 "Introduction".
- 18) Wear parts (bearings) are excluded from the warranty extension.
- 19) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 20) Not possible in combination with UL.

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

4



## 4/2 Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec

|      |                                     |
|------|-------------------------------------|
| 4/2  | <u>IE4 Super Premium Efficiency</u> |
| 4/2  | Cast-iron series                    |
|      | MB5514/1MB5524/1MB5534              |
| 4/4  | <u>IE3 Premium Efficiency</u>       |
| 4/4  | Aluminum series                     |
|      | 1MB1013/1MB1023/1MB1033             |
| 4/5  | Cast-iron series                    |
|      | MB5513/1MB5523/1MB5533              |
| 4/7  | Cast-iron series                    |
|      | MB5813/1MB5823/1MB5833              |
| 4/8  | <u>IE2 High Efficiency</u>          |
| 4/8  | Aluminum series                     |
|      | 1MB1011/1MB1021/1MB1031             |
| 4/10 | <u>IE1 Standard Efficiency</u>      |
| 4/10 | Aluminum series                     |
|      | 1MB1012/1MB1022/1MB1032             |

## 4/11 Motors for zone 21 in type of protection Ex tb

|      |                                   |
|------|-----------------------------------|
| 4/11 | <u>IE3 Premium Efficiency</u>     |
| 4/11 | Cast-iron series 1MB1513, 1MB1613 |
|      | Basic/Performance Line            |
| 4/13 | <u>IE2 High Efficiency</u>        |
| 4/13 | Cast-iron series 1MB1511, 1MB1611 |
|      | Basic/Performance Line            |

## 4/15 Motors for zone 22 in type of protection Ex tc

|      |                                   |
|------|-----------------------------------|
| 4/15 | <u>IE3 Premium Efficiency</u>     |
| 4/15 | Cast-iron series 1MB1523, 1MB1623 |
|      | Basic/Performance Line            |
| 4/17 | <u>IE2 High Efficiency</u>        |
| 4/17 | Cast-iron series 1MB1521, 1MB1621 |
|      | Basic/Performance Line            |

## 4/19 Motors for zone 2 in type of protection Ex ec

|      |                                   |
|------|-----------------------------------|
| 4/19 | <u>IE3 Premium Efficiency</u>     |
| 4/19 | Cast-iron series 1MB1533, 1MB1633 |
|      | Basic/Performance Line            |
| 4/21 | <u>IE2 High Efficiency</u>        |
| 4/21 | Cast-iron series 1MB1531, 1MB1631 |
|      | Basic/Performance Line            |

## 4/23 Motors for zone 1 in type of protection Ex eb

|      |                                 |
|------|---------------------------------|
| 4/23 | <u>IE3 Premium Efficiency</u>   |
| 4/23 | Cast-iron series                |
|      | 1MB1543/1MB5543/1MB1643/1MB5643 |
|      | Basic/Performance Line          |

## 4/26 Motors for zone 1 in types of protection Ex db, Ex db eb

|      |                                  |
|------|----------------------------------|
| 4/26 | <u>IE3 Premium Efficiency</u>    |
| 4/26 | Cast-iron series 1MB1553/1MB5553 |
| 4/30 | Cast-iron series 1MB1556/1MB5556 |
| 4/33 | Cast-iron series 1MB1557/1MB5557 |
| 4/36 | Cast-iron series 1MB1853/1MB5853 |

## 4/40 Article No. supplements and special versions

|      |                                          |
|------|------------------------------------------|
| 4/40 | <u>Voltages</u>                          |
| 4/40 | Aluminum series 1MB10                    |
| 4/41 | Cast-iron series 1MB15, 1MB16            |
|      | Basic/Performance Line                   |
| 4/42 | Aluminum serie 1MB1024; Cast-iron series |
|      | 1MB1543, 1MB5543 Basic Line;             |
|      | 1MB1643, 1MB5643 Performance Line        |
| 4/43 | Cast-iron series 1MB15.3, 1MB15.6,       |
|      | 1MB15.7, 1MB1853, 1MB5553, 1MB5556,      |
|      | 1MB5557, 1MB5853                         |
| 4/44 | Cast-iron series 1MB5514, 1MB5524,       |
|      | 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33       |
| 4/45 | <u>Types of construction</u>             |
| 4/45 | Aluminum series 1MB10                    |
| 4/48 | Cast-iron series 1MB15, 1MB16            |
|      | Basic/Performance Line                   |
| 4/51 | Aluminum serie 1MB1024; Cast-iron series |
|      | 1MB1543, 1MB5543 Basic Line;             |
|      | 1MB1643, 1MB5643 Performance Line        |
| 4/55 | Cast-iron series 1MB15.3, 1MB15.6,       |
|      | 1MB15.7, 1MB1853, 1MB5553, 1MB5556,      |
|      | 1MB5557, 1MB5853                         |
| 4/57 | Cast-iron series 1MB5514, 1MB5524,       |
|      | 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33       |
| 4/59 | <u>Motor protection</u>                  |
| 4/59 | Aluminum series 1MB10                    |
| 4/60 | Cast-iron series 1MB15, 1MB16            |
|      | Basic/Performance Line                   |
| 4/61 | Aluminum serie 1MB1024; Cast-iron series |
|      | 1MB1543, 1MB5543 Basic Line;             |
|      | 1MB1643, 1MB5643 Performance Line        |
| 4/62 | Cast-iron series 1MB15.3, 1MB15.6,       |
|      | 1MB15.7, 1MB1853, 1MB5553, 1MB5556,      |
|      | 1MB5557, 1MB5853                         |
| 4/63 | Cast-iron series 1MB5514, 1MB5524,       |
|      | 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33       |
| 4/64 | <u>Terminal box position</u>             |
| 4/64 | Aluminum series 1MB10                    |
| 4/65 | Cast-iron series 1MB15, 1MB16            |
|      | Basic/Performance Line                   |
| 4/66 | Aluminum serie 1MB1024; Cast-iron series |
|      | 1MB1543, 1MB5543 Basic Line;             |
|      | 1MB1643, 1MB5643 Performance Line        |
| 4/67 | Cast-iron series 1MB15.3, 1MB15.6,       |
|      | 1MB15.7, 1MB1853, 1MB5553, 1MB5556,      |
|      | 1MB5557, 1MB5853                         |
| 4/68 | Cast-iron series 1MB5514, 1MB5524,       |
|      | 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33       |
| 4/69 | <u>Options</u>                           |
| 4/69 | Aluminum series 1MB10                    |
| 4/73 | Cast-iron series 1MB15, 1MB16            |
|      | Basic/Performance Line                   |
| 4/78 | Aluminum serie 1MB1024; Cast-iron series |
|      | 1MB1543, 1MB5543 Basic Line;             |
|      | 1MB1643, 1MB5643 Performance Line        |
| 4/82 | Cast-iron series 1MB15.3, 1MB15.6,       |
|      | 1MB15.7, 1MB1853, 1MB5553, 1MB5556,      |
|      | 1MB5557, 1MB5853                         |
| 4/87 | Cast-iron series 1MB5514, 1MB5524,       |
|      | 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33       |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE4 Super Premium Efficiency</b>                                                |
| Series version                         | <b>Cast-iron series 1MB5514/1MB5524/1MB5534</b> (continued on next page)           |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 315 ... 450                                                                        |
| Rated power at 50 Hz                   | 160 ... 1000 kW                                                                    |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                                   |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 250                              | IE4         | 315                 | ▲ 1MB5514-3AA6-....                     | 65700.-              | ▲ 1MB5524-3AA6-....                     | 64500.-              | ▲ 1MB5534-3AA6-....                    | 64100.-              |
| 315                              | IE4         | 315                 | ▲ 1MB5514-3AA7-....                     | 82800.-              | ▲ 1MB5524-3AA7-....                     | 81200.-              | ▲ 1MB5534-3AA7-....                    | 80500.-              |
| 355                              | IE4         | 355                 | ▲ 1MB5514-3BA3-....                     | 96300.-              | ▲ 1MB5524-3BA3-....                     | 90000.-              | ▲ 1MB5534-3BA3-....                    | 89200.-              |
| 400                              | IE4         | 355                 | ▲ 1MB5514-3BA4-....                     | 110000.-             | ▲ 1MB5524-3BA4-....                     | 103000.-             | ▲ 1MB5534-3BA4-....                    | 102000.-             |
| 500                              | IE4         | 355                 | ▲ 1MB5514-3BA5-....                     | 143000.-             | ▲ 1MB5524-3BA5-....                     | 134000.-             | ▲ 1MB5534-3BA5-....                    | 133000.-             |
| 560                              | IE4         | 400                 | ▲ 1MB5514-4AA3-....                     | 166000.-             | ▲ 1MB5524-4AA3-....                     | 166000.-             | ▲ 1MB5534-4AA3-....                    | 166000.-             |
| 630                              | IE4         | 400                 | ▲ 1MB5514-4AA5-....                     | 187000.-             | ▲ 1MB5524-4AA5-....                     | 187000.-             | ▲ 1MB5534-4AA5-....                    | 186000.-             |
| 710                              | IE4         | 400                 | ▲ 1MB5514-4AA7-....                     | 212000.-             | ▲ 1MB5524-4AA7-....                     | 212000.-             | ▲ 1MB5534-4AA7-....                    | 212000.-             |
| 800                              | IE4         | 450                 | ▲ 1MB5514-4BA3-....                     | 245000.-             | ▲ 1MB5524-4BA3-....                     | 245000.-             | ▲ 1MB5534-4BA3-....                    | 246000.-             |
| 900                              | IE4         | 450                 | ▲ 1MB5514-4BA5-....                     | 270000.-             | ▲ 1MB5524-4BA5-....                     | 270000.-             | ▲ 1MB5534-4BA5-....                    | 270000.-             |
| 1000                             | IE4         | 450                 | ▲ 1MB5514-4BA7-....                     | 308000.-             | ▲ 1MB5524-4BA7-....                     | 308000.-             | ▲ 1MB5534-4BA7-....                    | 307000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 250                              | IE4         | 315                 | ▲ 1MB5514-3AB6-....                     | 62100.-              | ▲ 1MB5524-3AB6-....                     | 60500.-              | ▲ 1MB5534-3AB6-....                    | 60000.-              |
| 315                              | IE4         | 315                 | ▲ 1MB5514-3AB7-....                     | 78300.-              | ▲ 1MB5524-3AB7-....                     | 76300.-              | ▲ 1MB5534-3AB7-....                    | 75500.-              |
| 355                              | IE4         | 355                 | ▲ 1MB5514-3BB3-....                     | 91300.-              | ▲ 1MB5524-3BB3-....                     | 84600.-              | ▲ 1MB5534-3BB3-....                    | 83800.-              |
| 400                              | IE4         | 355                 | ▲ 1MB5514-3BB4-....                     | 104000.-             | ▲ 1MB5524-3BB4-....                     | 95200.-              | ▲ 1MB5534-3BB4-....                    | 95000.-              |
| 560                              | IE4         | 400                 | ▲ 1MB5514-4AB3-....                     | 154000.-             | ▲ 1MB5524-4AB3-....                     | 154000.-             | ▲ 1MB5534-4AB3-....                    | 154000.-             |
| 630                              | IE4         | 400                 | ▲ 1MB5514-4AB5-....                     | 176000.-             | ▲ 1MB5524-4AB5-....                     | 176000.-             | ▲ 1MB5534-4AB5-....                    | 176000.-             |
| 710                              | IE4         | 400                 | ▲ 1MB5514-4AB7-....                     | 198000.-             | ▲ 1MB5524-4AB7-....                     | 198000.-             | ▲ 1MB5534-4AB7-....                    | 198000.-             |
| 800                              | IE4         | 450                 | ▲ 1MB5514-4BB3-....                     | 224000.-             | ▲ 1MB5524-4BB3-....                     | 224000.-             | ▲ 1MB5534-4BB3-....                    | 225000.-             |
| 900                              | IE4         | 450                 | ▲ 1MB5514-4BB5-....                     | 253000.-             | ▲ 1MB5524-4BB5-....                     | 253000.-             | ▲ 1MB5534-4BB5-....                    | 253000.-             |
| 1000                             | IE4         | 450                 | ▲ 1MB5514-4BB7-....                     | 284000.-             | ▲ 1MB5524-4BB7-....                     | 283000.-             | ▲ 1MB5534-4BB7-....                    | 284000.-             |

Standard delivery times in working days:

20

25

30

40

80

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE4 Super Premium Efficiency</b>                                                |
| Series version                         | <b>Cast-iron series 1MB5514/1MB5524/1MB5534</b>                                    |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 315 ... 450                                                                        |
| Rated power at 50 Hz                   | 160 ... 1000 kW                                                                    |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                                   |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
 (for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 200                              | IE4         | 315                 | ▲ 1MB5514-3AC7-....                     | 71900.-              | ▲ 1MB5524-3AC7-....                     | 70700.-              | ▲ 1MB5534-3AC7-....                    | 70700.-              |
| 250                              | IE4         | 315                 | ▲ 1MB5514-3AC8-....                     | 90600.-              | ▲ 1MB5524-3AC8-....                     | 89100.-              | ▲ 1MB5534-3AC8-....                    | 89000.-              |
| 315                              | IE4         | 355                 | ▲ 1MB5514-3BC2-....                     | 120000.-             | ▲ 1MB5524-3BC2-....                     | 112000.-             | ▲ 1MB5534-3BC2-....                    | 112000.-             |
| 355                              | IE4         | 355                 | ▲ 1MB5514-3BC3-....                     | 128000.-             | ▲ 1MB5524-3BC3-....                     | 119000.-             | ▲ 1MB5534-3BC3-....                    | 119000.-             |
| 400                              | IE4         | 355                 | ▲ 1MB5514-3BC4-....                     | 140000.-             | ▲ 1MB5524-3BC4-....                     | 132000.-             | ▲ 1MB5534-3BC4-....                    | 132000.-             |
| 450                              | IE4         | 400                 | ▲ 1MB5514-4AC3-....                     | 171000.-             | ▲ 1MB5524-4AC3-....                     | 173000.-             | ▲ 1MB5534-4AC3-....                    | 173000.-             |
| 500                              | IE4         | 400                 | ▲ 1MB5514-4AC5-....                     | 187000.-             | ▲ 1MB5524-4AC5-....                     | 187000.-             | ▲ 1MB5534-4AC5-....                    | 187000.-             |
| 560                              | IE4         | 400                 | ▲ 1MB5514-4AC7-....                     | 213000.-             | ▲ 1MB5524-4AC7-....                     | 213000.-             | ▲ 1MB5534-4AC7-....                    | 213000.-             |
| 630                              | IE4         | 450                 | ▲ 1MB5514-4BC3-....                     | 240000.-             | ▲ 1MB5524-4BC3-....                     | 239000.-             | ▲ 1MB5534-4BC3-....                    | 239000.-             |
| 710                              | IE4         | 450                 | ▲ 1MB5514-4BC5-....                     | 266000.-             | ▲ 1MB5524-4BC5-....                     | 266000.-             | ▲ 1MB5534-4BC5-....                    | 266000.-             |
| 800                              | IE4         | 450                 | ▲ 1MB5514-4BC7-....                     | 298000.-             | ▲ 1MB5524-4BC7-....                     | 298000.-             | ▲ 1MB5534-4BC7-....                    | 298000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 160                              | IE4         | 315                 | ▲ 1MB5514-3AD7-....                     | 72000.-              | ▲ 1MB5524-3AD7-....                     | 70600.-              | ▲ 1MB5534-3AD7-....                    | 70600.-              |
| 200                              | IE4         | 315                 | ▲ 1MB5514-3AD8-....                     | 88600.-              | ▲ 1MB5524-3AD8-....                     | 87000.-              | ▲ 1MB5534-3AD8-....                    | 87000.-              |
| 250                              | IE4         | 355                 | ▲ 1MB5514-3BD1-....                     | 118000.-             | ▲ 1MB5524-3BD1-....                     | 111000.-             | ▲ 1MB5534-3BD1-....                    | 111000.-             |
| 315                              | IE4         | 355                 | ▲ 1MB5514-3BD2-....                     | 145000.-             | ▲ 1MB5524-3BD2-....                     | 136000.-             | ▲ 1MB5534-3BD2-....                    | 136000.-             |
| 355                              | IE4         | 400                 | ▲ 1MB5514-4AD3-....                     | 171000.-             | ▲ 1MB5524-4AD3-....                     | 173000.-             | ▲ 1MB5534-4AD3-....                    | 174000.-             |
| 400                              | IE4         | 400                 | ▲ 1MB5514-4AD5-....                     | 187000.-             | ▲ 1MB5524-4AD5-....                     | 186000.-             | ▲ 1MB5534-4AD5-....                    | 188000.-             |
| 450                              | IE4         | 400                 | ▲ 1MB5514-4AD7-....                     | 224000.-             | ▲ 1MB5524-4AD7-....                     | 225000.-             | ▲ 1MB5534-4AD7-....                    | 225000.-             |
| 500                              | IE4         | 450                 | ▲ 1MB5514-4BD3-....                     | 252000.-             | ▲ 1MB5524-4BD3-....                     | 251000.-             | ▲ 1MB5534-4BD3-....                    | 251000.-             |
| 560                              | IE4         | 450                 | ▲ 1MB5514-4BD5-....                     | 276000.-             | ▲ 1MB5524-4BD5-....                     | 275000.-             | ▲ 1MB5534-4BD5-....                    | 276000.-             |
| 630                              | IE4         | 450                 | ▲ 1MB5514-4BD7-....                     | 319000.-             | ▲ 1MB5524-4BD7-....                     | 318000.-             | ▲ 1MB5534-4BD7-....                    | 320000.-             |

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# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Aluminum series 1MB1013/1MB1023/1MB1033</b>                                     |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6                                                                            |
| Frame sizes (FS)                       | 80 M ... 160 L                                                                     |
| Rated power at 50 Hz                   | 0.37 ... 18.5 kW                                                                   |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                  |
| Rated torque at 50 Hz                  | 2.5 ... 109 Nm                                                                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21) | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22) | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2) | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------------------|----------------------|--------------------------------|----------------------|-------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 0.75                             | IE3         | 80 M                | 1MB1013-0DA2-....              | 803.-                | 1MB1023-0DA2-....              | 699.-                | 1MB1033-0DA2-....             | 750.-                |
| 1.1                              | IE3         | 80 M                | 1MB1013-0DA3-....              | 891.-                | 1MB1023-0DA3-....              | 788.-                | 1MB1033-0DA3-....             | 837.-                |
| 1.5                              | IE3         | 90 S                | 1MB1013-0EA0-....              | 1020.-               | 1MB1023-0EA0-....              | 915.-                | 1MB1033-0EA0-....             | 961.-                |
| 2.2                              | IE3         | 90 L                | 1MB1013-0EA4-....              | 1260.-               | 1MB1023-0EA4-....              | 1150.-               | 1MB1033-0EA4-....             | 1190.-               |
| 3                                | IE3         | 100 L               | 1MB1013-1AA4-....              | 1400.-               | 1MB1023-1AA4-....              | 1310.-               | 1MB1033-1AA4-....             | 1360.-               |
| 4                                | IE3         | 112 M               | 1MB1013-1BA2-....              | 1660.-               | 1MB1023-1BA2-....              | 1530.-               | 1MB1033-1BA2-....             | 1610.-               |
| 5.5                              | IE3         | 132 S               | 1MB1013-1CA0-....              | 2090.-               | 1MB1023-1CA0-....              | 1950.-               | 1MB1033-1CA0-....             | 2030.-               |
| 7.5                              | IE3         | 132 S               | 1MB1013-1CA1-....              | 2550.-               | 1MB1023-1CA1-....              | 2440.-               | 1MB1033-1CA1-....             | 2490.-               |
| 11                               | IE3         | 160 M               | 1MB1013-1DA2-....              | 3530.-               | 1MB1023-1DA2-....              | 3400.-               | 1MB1033-1DA2-....             | 3460.-               |
| 15                               | IE3         | 160 M               | 1MB1013-1DA3-....              | 4500.-               | 1MB1023-1DA3-....              | 4340.-               | 1MB1033-1DA3-....             | 4400.-               |
| 18.5                             | IE3         | 160 L               | 1MB1013-1DA4-....              | 5280.-               | 1MB1023-1DA4-....              | 5130.-               | 1MB1033-1DA4-....             | 5180.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 0.55                             | IE3         | 80 M                | 1MB1013-0DB2-....              | 798.-                | 1MB1023-0DB2-....              | 694.-                | 1MB1033-0DB2-....             | 744.-                |
| 0.75                             | IE3         | 80 M                | 1MB1013-0DB3-....              | 855.-                | 1MB1023-0DB3-....              | 751.-                | 1MB1033-0DB3-....             | 800.-                |
| 1.1                              | IE3         | 90 S                | 1MB1013-0EB0-....              | 999.-                | 1MB1023-0EB0-....              | 889.-                | 1MB1033-0EB0-....             | 937.-                |
| 1.5                              | IE3         | 90 L                | 1MB1013-0EB4-....              | 1150.-               | 1MB1023-0EB4-....              | 1040.-               | 1MB1033-0EB4-....             | 1080.-               |
| 2.2                              | IE3         | 100 L               | 1MB1013-1AB4-....              | 1320.-               | 1MB1023-1AB4-....              | 1190.-               | 1MB1033-1AB4-....             | 1270.-               |
| 3                                | IE3         | 100 L               | 1MB1013-1AB5-....              | 1480.-               | 1MB1023-1AB5-....              | 1360.-               | 1MB1033-1AB5-....             | 1410.-               |
| 4                                | IE3         | 112 M               | 1MB1013-1BB2-....              | 1790.-               | 1MB1023-1BB2-....              | 1660.-               | 1MB1033-1BB2-....             | 1730.-               |
| 5.5                              | IE3         | 132 S               | 1MB1013-1CB0-....              | 2210.-               | 1MB1023-1CB0-....              | 2100.-               | 1MB1033-1CB0-....             | 2160.-               |
| 7.5                              | IE3         | 132 M               | 1MB1013-1CB2-....              | 2740.-               | 1MB1023-1CB2-....              | 2610.-               | 1MB1033-1CB2-....             | 2670.-               |
| 11                               | IE3         | 160 M               | 1MB1013-1DB2-....              | 3610.-               | 1MB1023-1DB2-....              | 3470.-               | 1MB1033-1DB2-....             | 3530.-               |
| 15                               | IE3         | 160 L               | 1MB1013-1DB4-....              | 4550.-               | 1MB1023-1DB4-....              | 4400.-               | 1MB1033-1DB4-....             | 4470.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 0.37                             | IE3         | 80 M                | 1MB1013-0DC2-....              | 780.-                | 1MB1023-0DC2-....              | 676.-                | 1MB1033-0DC2-....             | 725.-                |
| 0.55                             | IE3         | 80 M                | 1MB1013-0DC3-....              | 872.-                | 1MB1023-0DC3-....              | 767.-                | 1MB1033-0DC3-....             | 818.-                |
| 0.75                             | IE3         | 90 S                | 1MB1013-0EC0-....              | 985.-                | 1MB1023-0EC0-....              | 874.-                | 1MB1033-0EC0-....             | 921.-                |
| 1.1                              | IE3         | 90 L                | 1MB1013-0EC4-....              | 1170.-               | 1MB1023-0EC4-....              | 1060.-               | 1MB1033-0EC4-....             | 1100.-               |
| 1.5                              | IE3         | 100 L               | 1MB1013-1AC4-....              | 1310.-               | 1MB1023-1AC4-....              | 1180.-               | 1MB1033-1AC4-....             | 1260.-               |
| 2.2                              | IE3         | 112 M               | 1MB1013-1BC2-....              | 1610.-               | 1MB1023-1BC2-....              | 1480.-               | 1MB1033-1BC2-....             | 1570.-               |
| 3                                | IE3         | 132 S               | 1MB1013-1CC0-....              | 2020.-               | 1MB1023-1CC0-....              | 1910.-               | 1MB1033-1CC0-....             | 1960.-               |
| 4                                | IE3         | 132 M               | 1MB1013-1CC2-....              | 2420.-               | 1MB1023-1CC2-....              | 2290.-               | 1MB1033-1CC2-....             | 2360.-               |
| 5.5                              | IE3         | 132 M               | 1MB1013-1CC3-....              | 2960.-               | 1MB1023-1CC3-....              | 2840.-               | 1MB1033-1CC3-....             | 2900.-               |
| 7.5                              | IE3         | 160 M               | 1MB1013-1DC2-....              | 3780.-               | 1MB1023-1DC2-....              | 3630.-               | 1MB1033-1DC2-....             | 3700.-               |
| 11                               | IE3         | 160 L               | 1MB1013-1DC4-....              | 5050.-               | 1MB1023-1DC4-....              | 4880.-               | 1MB1033-1DC4-....             | 4960.-               |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron series 1MB5513/1MB5523/1MB5533</b> (continued on next page)           |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 315 ... 450                                                                        |
| Rated power at 50 Hz                   | 160 ... 1000 kW                                                                    |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                                   |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 250                              | IE3         | 315                 | ▲ 1MB5513-3AA6-....                     | 58500.-              | ▲ 1MB5523-3AA6-....                     | 57400.-              | ▲ 1MB5533-3AA6-....                    | 57000.-              |
| 315                              | IE3         | 315                 | ▲ 1MB5513-3AA7-....                     | 73700.-              | ▲ 1MB5523-3AA7-....                     | 72400.-              | ▲ 1MB5533-3AA7-....                    | 71700.-              |
| 355                              | IE3         | 355                 | ▲ 1MB5513-3BA3-....                     | 85900.-              | ▲ 1MB5523-3BA3-....                     | 64500.-              | ▲ 1MB5533-3BA3-....                    | 79500.-              |
| 400                              | IE3         | 355                 | ▲ 1MB5513-3BA4-....                     | 98200.-              | ▲ 1MB5523-3BA4-....                     | 81200.-              | ▲ 1MB5533-3BA4-....                    | 91100.-              |
| 500                              | IE3         | 355                 | ▲ 1MB5513-3BA5-....                     | 128000.-             | ▲ 1MB5523-3BA5-....                     | 60500.-              | ▲ 1MB5533-3BA5-....                    | 118000.-             |
| 560                              | IE3         | 400                 | ▲ 1MB5513-4AA3-....                     | 147000.-             | ▲ 1MB5523-4AA3-....                     | 145000.-             | ▲ 1MB5533-4AA3-....                    | 144000.-             |
| 630                              | IE3         | 400                 | ▲ 1MB5513-4AA5-....                     | 165000.-             | ▲ 1MB5523-4AA5-....                     | 162000.-             | ▲ 1MB5533-4AA5-....                    | 161000.-             |
| 710                              | IE3         | 400                 | ▲ 1MB5513-4AA7-....                     | 188000.-             | ▲ 1MB5523-4AA7-....                     | 185000.-             | ▲ 1MB5533-4AA7-....                    | 181000.-             |
| 800                              | IE3         | 450                 | ▲ 1MB5513-4BA3-....                     | 216000.-             | ▲ 1MB5523-4BA3-....                     | 213000.-             | ▲ 1MB5533-4BA3-....                    | 211000.-             |
| 900                              | IE3         | 450                 | ▲ 1MB5513-4BA5-....                     | 239000.-             | ▲ 1MB5523-4BA5-....                     | 234000.-             | ▲ 1MB5533-4BA5-....                    | 233000.-             |
| 1000                             | IE3         | 450                 | ▲ 1MB5513-4BA7-....                     | 272000.-             | ▲ 1MB5523-4BA7-....                     | 268000.-             | ▲ 1MB5533-4BA7-....                    | 264000.-             |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 250                              | IE3         | 315                 | ▲ 1MB5513-3AB6-....                     | 55300.-              | ▲ 1MB5523-3AB6-....                     | 53800.-              | ▲ 1MB5533-3AB6-....                    | 53400.-              |
| 315                              | IE3         | 315                 | ▲ 1MB5513-3AB7-....                     | 69900.-              | ▲ 1MB5523-3AB7-....                     | 68000.-              | ▲ 1MB5533-3AB7-....                    | 67500.-              |
| 355                              | IE3         | 355                 | ▲ 1MB5513-3BB3-....                     | 81400.-              | ▲ 1MB5523-3BB3-....                     | 76300.-              | ▲ 1MB5533-3BB3-....                    | 74700.-              |
| 400                              | IE3         | 355                 | ▲ 1MB5513-3BB4-....                     | 92100.-              | ▲ 1MB5523-3BB4-....                     | 70700.-              | ▲ 1MB5533-3BB4-....                    | 84700.-              |
| 560                              | IE3         | 400                 | ▲ 1MB5513-4AB3-....                     | 138000.-             | ▲ 1MB5523-4AB3-....                     | 134000.-             | ▲ 1MB5533-4AB3-....                    | 133000.-             |
| 630                              | IE3         | 400                 | ▲ 1MB5513-4AB5-....                     | 157000.-             | ▲ 1MB5523-4AB5-....                     | 153000.-             | ▲ 1MB5533-4AB5-....                    | 151000.-             |
| 710                              | IE3         | 400                 | ▲ 1MB5513-4AB7-....                     | 176000.-             | ▲ 1MB5523-4AB7-....                     | 171000.-             | ▲ 1MB5533-4AB7-....                    | 170000.-             |
| 800                              | IE3         | 450                 | ▲ 1MB5513-4BB3-....                     | 200000.-             | ▲ 1MB5523-4BB3-....                     | 193000.-             | ▲ 1MB5533-4BB3-....                    | 192000.-             |
| 900                              | IE3         | 450                 | ▲ 1MB5513-4BB5-....                     | 226000.-             | ▲ 1MB5523-4BB5-....                     | 220000.-             | ▲ 1MB5533-4BB5-....                    | 218000.-             |
| 1000                             | IE3         | 450                 | ▲ 1MB5513-4BB7-....                     | 253000.-             | ▲ 1MB5523-4BB7-....                     | 246000.-             | ▲ 1MB5533-4BB7-....                    | 244000.-             |

4

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                                      |
| Series version                         | <b>Cast-iron series 1MB5513/1MB5523/1MB5533</b>                                    |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 315 ... 450                                                                        |
| Rated power at 50 Hz                   | 160 ... 1000 kW                                                                    |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                                   |
| Rated torque at 50 Hz                  | 1790 ... 8100 Nm                                                                   |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 200                              | IE3         | 315                 | ▲ 1MB5513-3AC7-....                     | 64100.-              | ▲ 1MB5523-3AC7-....                     | 62900.-              | ▲ 1MB5533-3AC7-....                    | 62900.-              |
| 250                              | IE3         | 315                 | ▲ 1MB5513-3AC8-....                     | 80700.-              | ▲ 1MB5523-3AC8-....                     | 79300.-              | ▲ 1MB5533-3AC8-....                    | 79300.-              |
| 315                              | IE3         | 355                 | ▲ 1MB5513-3BC2-....                     | 107000.-             | ▲ 1MB5523-3BC2-....                     | 70600.-              | ▲ 1MB5533-3BC2-....                    | 100000.-             |
| 355                              | IE3         | 355                 | ▲ 1MB5513-3BC3-....                     | 114000.-             | ▲ 1MB5523-3BC3-....                     | 90800.-              | ▲ 1MB5533-3BC3-....                    | 107000.-             |
| 400                              | IE3         | 355                 | ▲ 1MB5513-3BC4-....                     | 124000.-             | ▲ 1MB5523-3BC4-....                     | 80400.-              | ▲ 1MB5533-3BC4-....                    | 116000.-             |
| 450                              | IE3         | 400                 | ▲ 1MB5513-4AC3-....                     | 151000.-             | ▲ 1MB5523-4AC3-....                     | 150000.-             | ▲ 1MB5533-4AC3-....                    | 147000.-             |
| 500                              | IE3         | 400                 | ▲ 1MB5513-4AC5-....                     | 164000.-             | ▲ 1MB5523-4AC5-....                     | 163000.-             | ▲ 1MB5533-4AC5-....                    | 161000.-             |
| 560                              | IE3         | 400                 | ▲ 1MB5513-4AC7-....                     | 187000.-             | ▲ 1MB5523-4AC7-....                     | 187000.-             | ▲ 1MB5533-4AC7-....                    | 183000.-             |
| 630                              | IE3         | 450                 | ▲ 1MB5513-4BC3-....                     | 211000.-             | ▲ 1MB5523-4BC3-....                     | 211000.-             | ▲ 1MB5533-4BC3-....                    | 206000.-             |
| 710                              | IE3         | 450                 | ▲ 1MB5513-4BC5-....                     | 234000.-             | ▲ 1MB5523-4BC5-....                     | 234000.-             | ▲ 1MB5533-4BC5-....                    | 229000.-             |
| 800                              | IE3         | 450                 | ▲ 1MB5513-4BC7-....                     | 261000.-             | ▲ 1MB5523-4BC7-....                     | 261000.-             | ▲ 1MB5533-4BC7-....                    | 257000.-             |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 160                              | IE3         | 315                 | ▲ 1MB5513-3AD7-....                     | 64100.-              | ▲ 1MB5523-3AD7-....                     | 63000.-              | ▲ 1MB5533-3AD7-....                    | 63000.-              |
| 200                              | IE3         | 315                 | ▲ 1MB5513-3AD8-....                     | 79000.-              | ▲ 1MB5523-3AD8-....                     | 77600.-              | ▲ 1MB5533-3AD8-....                    | 31500.-              |
| 250                              | IE3         | 355                 | ▲ 1MB5513-3BD1-....                     | 105000.-             | ▲ 1MB5523-3BD1-....                     | 92000.-              | ▲ 1MB5533-3BD1-....                    | 98000.-              |
| 315                              | IE3         | 355                 | ▲ 1MB5513-3BD2-....                     | 130000.-             | ▲ 1MB5523-3BD2-....                     | 119000.-             | ▲ 1MB5533-3BD2-....                    | 122000.-             |
| 355                              | IE3         | 400                 | ▲ 1MB5513-4AD3-....                     | 151000.-             | ▲ 1MB5523-4AD3-....                     | 147000.-             | ▲ 1MB5533-4AD3-....                    | 149000.-             |
| 400                              | IE3         | 400                 | ▲ 1MB5513-4AD5-....                     | 164000.-             | ▲ 1MB5523-4AD5-....                     | 161000.-             | ▲ 1MB5533-4AD5-....                    | 161000.-             |
| 450                              | IE3         | 400                 | ▲ 1MB5513-4AD7-....                     | 197000.-             | ▲ 1MB5523-4AD7-....                     | 192000.-             | ▲ 1MB5533-4AD7-....                    | 192000.-             |
| 500                              | IE3         | 450                 | ▲ 1MB5513-4BD3-....                     | 221000.-             | ▲ 1MB5523-4BD3-....                     | 216000.-             | ▲ 1MB5533-4BD3-....                    | 216000.-             |
| 560                              | IE3         | 450                 | ▲ 1MB5513-4BD5-....                     | 244000.-             | ▲ 1MB5523-4BD5-....                     | 238000.-             | ▲ 1MB5533-4BD5-....                    | 238000.-             |
| 630                              | IE3         | 450                 | ▲ 1MB5513-4BD7-....                     | 278000.-             | ▲ 1MB5523-4BD7-....                     | 273000.-             | ▲ 1MB5533-4BD7-....                    | 273000.-             |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------|
| Category                               | Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec |
| Efficiency                             | IE3 Premium Efficiency                                                      |
| Series version                         | Cast-iron series 1MB5813/1MB5823/1MB5833                                    |
| Cooling                                | Self-ventilated (IC 411)                                                    |
| Degree of protection                   | IP55, optionally IP56 or IP65                                               |
| Insulation                             | Thermal class 155 (F)                                                       |
| Utilization                            | Thermal class 130 (B)                                                       |
| Number of poles                        | 2, 4, 6, 8                                                                  |
| Frame sizes (FS)                       | 400 ... 450                                                                 |
| Rated power at 50 Hz                   | 335 ... 980 kW                                                              |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                            |
| Rated torque at 50 Hz                  | 1740 ... 7700 Nm                                                            |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                               |
| Price group (PG)                       | 3X1                                                                         |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| 2-pole: 3000 rpm at 50 Hz    |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 545                          | IE3         | 400                 | ▲ 1MB5813-4AA3-....                     | 156000.-             | ▲ 1MB5823-4AA3-....                     | 154000.-             | ▲ 1MB5833-4AA3-....                    | 153000.-             |
| 610                          | IE3         | 400                 | ▲ 1MB5813-4AA5-....                     | 176000.-             | ▲ 1MB5823-4AA5-....                     | 173000.-             | ▲ 1MB5833-4AA5-....                    | 171000.-             |
| 680                          | IE3         | 400                 | ▲ 1MB5813-4AA7-....                     | 200000.-             | ▲ 1MB5823-4AA7-....                     | 197000.-             | ▲ 1MB5833-4AA7-....                    | 193000.-             |
| 775                          | IE3         | 450                 | ▲ 1MB5813-4BA3-....                     | 230000.-             | ▲ 1MB5823-4BA3-....                     | 227000.-             | ▲ 1MB5833-4BA3-....                    | 224000.-             |
| 875                          | IE3         | 450                 | ▲ 1MB5813-4BA5-....                     | 254000.-             | ▲ 1MB5823-4BA5-....                     | 250000.-             | ▲ 1MB5833-4BA5-....                    | 248000.-             |
| 970                          | IE3         | 450                 | ▲ 1MB5813-4BA7-....                     | 290000.-             | ▲ 1MB5823-4BA7-....                     | 285000.-             | ▲ 1MB5833-4BA7-....                    | 281000.-             |
| 4-pole: 1500 rpm at 50 Hz    |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 545                          | IE3         | 400                 | ▲ 1MB5813-4AB3-....                     | 147000.-             | ▲ 1MB5823-4AB3-....                     | 143000.-             | ▲ 1MB5833-4AB3-....                    | 141000.-             |
| 615                          | IE3         | 400                 | ▲ 1MB5813-4AB5-....                     | 167000.-             | ▲ 1MB5823-4AB5-....                     | 163000.-             | ▲ 1MB5833-4AB5-....                    | 161000.-             |
| 690                          | IE3         | 400                 | ▲ 1MB5813-4AB7-....                     | 187000.-             | ▲ 1MB5823-4AB7-....                     | 182000.-             | ▲ 1MB5833-4AB7-....                    | 181000.-             |
| 785                          | IE3         | 450                 | ▲ 1MB5813-4BB3-....                     | 213000.-             | ▲ 1MB5823-4BB3-....                     | 206000.-             | ▲ 1MB5833-4BB3-....                    | 205000.-             |
| 875                          | IE3         | 450                 | ▲ 1MB5813-4BB5-....                     | 240000.-             | ▲ 1MB5823-4BB5-....                     | 235000.-             | ▲ 1MB5833-4BB5-....                    | 232000.-             |
| 980                          | IE3         | 450                 | ▲ 1MB5813-4BB7-....                     | 269000.-             | ▲ 1MB5823-4BB7-....                     | 262000.-             | ▲ 1MB5833-4BB7-....                    | 260000.-             |
| 6-pole: 1000 rpm at 50 Hz    |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 435                          | IE3         | 400                 | ▲ 1MB5813-4AC3-....                     | 161000.-             | ▲ 1MB5823-4AC3-....                     | 160000.-             | ▲ 1MB5833-4AC3-....                    | 156000.-             |
| 485                          | IE3         | 400                 | ▲ 1MB5813-4AC5-....                     | 175000.-             | ▲ 1MB5823-4AC5-....                     | 174000.-             | ▲ 1MB5833-4AC5-....                    | 171000.-             |
| 545                          | IE3         | 400                 | ▲ 1MB5813-4AC7-....                     | 199000.-             | ▲ 1MB5823-4AC7-....                     | 199000.-             | ▲ 1MB5833-4AC7-....                    | 194000.-             |
| 615                          | IE3         | 450                 | ▲ 1MB5813-4BC3-....                     | 224000.-             | ▲ 1MB5823-4BC3-....                     | 224000.-             | ▲ 1MB5833-4BC3-....                    | 220000.-             |
| 690                          | IE3         | 450                 | ▲ 1MB5813-4BC5-....                     | 250000.-             | ▲ 1MB5823-4BC5-....                     | 250000.-             | ▲ 1MB5833-4BC5-....                    | 244000.-             |
| 780                          | IE3         | 450                 | ▲ 1MB5813-4BC7-....                     | 278000.-             | ▲ 1MB5823-4BC7-....                     | 278000.-             | ▲ 1MB5833-4BC7-....                    | 274000.-             |
| 8-pole: 750 rpm at 50 Hz     |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 335                          | IE3         | 400                 | ▲ 1MB5813-4AD3-....                     | 161000.-             | ▲ 1MB5823-4AD3-....                     | 156000.-             | ▲ 1MB5833-4AD3-....                    | 159000.-             |
| 375                          | IE3         | 400                 | ▲ 1MB5813-4AD5-....                     | 175000.-             | ▲ 1MB5823-4AD5-....                     | 171000.-             | ▲ 1MB5833-4AD5-....                    | 171000.-             |
| 425                          | IE3         | 400                 | ▲ 1MB5813-4AD7-....                     | 209000.-             | ▲ 1MB5823-4AD7-....                     | 205000.-             | ▲ 1MB5833-4AD7-....                    | 205000.-             |
| 485                          | IE3         | 450                 | ▲ 1MB5813-4BD3-....                     | 236000.-             | ▲ 1MB5823-4BD3-....                     | 230000.-             | ▲ 1MB5833-4BD3-....                    | 230000.-             |
| 545                          | IE3         | 450                 | ▲ 1MB5813-4BD5-....                     | 260000.-             | ▲ 1MB5823-4BD5-....                     | 253000.-             | ▲ 1MB5833-4BD5-....                    | 253000.-             |
| 600                          | IE3         | 450                 | ▲ 1MB5813-4BD7-....                     | 296000.-             | ▲ 1MB5823-4BD7-....                     | 291000.-             | ▲ 1MB5833-4BD7-....                    | 291000.-             |

4

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

## Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE2 High Efficiency</b>                                                         |
| Series version                         | <b>Aluminum series 1MB1011/1MB1021/1MB1031</b> (continued on next page)            |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 80 L ... 160 L                                                                     |
| Rated power at 50 Hz                   | 0.37 ... 18.5 kW                                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                   |
| Rated torque at 50 Hz                  | 2.6 ... 109 Nm                                                                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 0.18                             | IE2         | 63 M                | ▲ 1MB1011-0BA2-....                     | 549.-                | ▲ 1MB1021-0BA2-....                     | 465.-                | ▲ 1MB1031-0BA2-....                    | 498.-                |
| 0.25                             | IE2         | 63 M                | ▲ 1MB1011-0BA3-....                     | 572.-                | ▲ 1MB1021-0BA3-....                     | 488.-                | ▲ 1MB1031-0BA3-....                    | 521.-                |
| 0.37                             | IE2         | 71 M                | ▲ 1MB1011-0CA2-....                     | 602.-                | ▲ 1MB1021-0CA2-....                     | 506.-                | ▲ 1MB1031-0CA2-....                    | 547.-                |
| 0.55                             | IE2         | 71 M                | ▲ 1MB1011-0CA3-....                     | 657.-                | ▲ 1MB1021-0CA3-....                     | 561.-                | ▲ 1MB1031-0CA3-....                    | 602.-                |
| 0.75                             | IE2         | 80 M                | 1MB1011-0DA2-....                       | 707.-                | 1MB1021-0DA2-....                       | 599.-                | 1MB1031-0DA2-....                      | 651.-                |
| 1.1                              | IE2         | 80 M                | 1MB1011-0DA3-....                       | 782.-                | 1MB1021-0DA3-....                       | 673.-                | 1MB1031-0DA3-....                      | 725.-                |
| 1.5                              | IE2         | 90 S                | 1MB1011-0EA0-....                       | 895.-                | 1MB1021-0EA0-....                       | 782.-                | 1MB1031-0EA0-....                      | 830.-                |
| 2.2                              | IE2         | 90 L                | 1MB1011-0EA4-....                       | 1090.-               | 1MB1021-0EA4-....                       | 979.-                | 1MB1031-0EA4-....                      | 1030.-               |
| 3                                | IE2         | 100 L               | 1MB1011-1AA4-....                       | 1290.-               | 1MB1021-1AA4-....                       | 1160.-               | 1MB1031-1AA4-....                      | 1240.-               |
| 4                                | IE2         | 112 M               | 1MB1011-1BA2-....                       | 1510.-               | 1MB1021-1BA2-....                       | 1370.-               | 1MB1031-1BA2-....                      | 1450.-               |
| 5.5                              | IE2         | 132 S               | 1MB1011-1CA0-....                       | 1900.-               | 1MB1021-1CA0-....                       | 1770.-               | 1MB1031-1CA0-....                      | 1840.-               |
| 7.5                              | IE2         | 132 S               | 1MB1011-1CA1-....                       | 2320.-               | 1MB1021-1CA1-....                       | 2180.-               | 1MB1031-1CA1-....                      | 2260.-               |
| 11                               | IE2         | 160 M               | 1MB1011-1DA2-....                       | 3200.-               | 1MB1021-1DA2-....                       | 3050.-               | 1MB1031-1DA2-....                      | 3120.-               |
| 15                               | IE2         | 160 M               | 1MB1011-1DA3-....                       | 4050.-               | 1MB1021-1DA3-....                       | 3890.-               | 1MB1031-1DA3-....                      | 3960.-               |
| 18.5                             | IE2         | 160 L               | 1MB1011-1DA4-....                       | 4750.-               | 1MB1021-1DA4-....                       | 4580.-               | 1MB1031-1DA4-....                      | 4660.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 0.12                             | IE2         | 63 M                | ▲ 1MB1011-0BB2-....                     | 557.-                | ▲ 1MB1021-0BB2-....                     | 473.-                | ▲ 1MB1031-0BB2-....                    | 506.-                |
| 0.18                             | IE2         | 63 M                | ▲ 1MB1011-0BB3-....                     | 589.-                | ▲ 1MB1021-0BB3-....                     | 505.-                | ▲ 1MB1031-0BB3-....                    | 538.-                |
| 0.25                             | IE2         | 71 M                | ▲ 1MB1011-0CB2-....                     | 611.-                | ▲ 1MB1021-0CB2-....                     | 515.-                | ▲ 1MB1031-0CB2-....                    | 555.-                |
| 0.37                             | IE2         | 71 M                | ▲ 1MB1011-0CB3-....                     | 664.-                | ▲ 1MB1021-0CB3-....                     | 568.-                | ▲ 1MB1031-0CB3-....                    | 609.-                |
| 0.55                             | IE2         | 80 M                | 1MB1011-0DB2-....                       | 703.-                | 1MB1021-0DB2-....                       | 596.-                | 1MB1031-0DB2-....                      | 647.-                |
| 0.75                             | IE2         | 80 M                | 1MB1011-0DB3-....                       | 751.-                | 1MB1021-0DB3-....                       | 643.-                | 1MB1031-0DB3-....                      | 694.-                |
| 1.1                              | IE2         | 90 S                | 1MB1011-0EB0-....                       | 877.-                | 1MB1021-0EB0-....                       | 761.-                | 1MB1031-0EB0-....                      | 811.-                |
| 1.5                              | IE2         | 90 L                | 1MB1011-0EB4-....                       | 999.-                | 1MB1021-0EB4-....                       | 885.-                | 1MB1031-0EB4-....                      | 933.-                |
| 2.2                              | IE2         | 100 L               | 1MB1011-1AB4-....                       | 1190.-               | 1MB1021-1AB4-....                       | 1070.-               | 1MB1031-1AB4-....                      | 1140.-               |
| 3                                | IE2         | 100 L               | 1MB1011-1AB5-....                       | 1340.-               | 1MB1021-1AB5-....                       | 1230.-               | 1MB1031-1AB5-....                      | 1290.-               |
| 4                                | IE2         | 112 M               | 1MB1011-1BB2-....                       | 1620.-               | 1MB1021-1BB2-....                       | 1490.-               | 1MB1031-1BB2-....                      | 1570.-               |
| 5.5                              | IE2         | 132 S               | 1MB1011-1CB0-....                       | 2020.-               | 1MB1021-1CB0-....                       | 1880.-               | 1MB1031-1CB0-....                      | 1960.-               |
| 7.5                              | IE2         | 132 M               | 1MB1011-1CB2-....                       | 2470.-               | 1MB1021-1CB2-....                       | 2340.-               | 1MB1031-1CB2-....                      | 2420.-               |
| 11                               | IE2         | 160 M               | 1MB1011-1DB2-....                       | 3270.-               | 1MB1021-1DB2-....                       | 3120.-               | 1MB1031-1DB2-....                      | 3180.-               |
| 15                               | IE2         | 160 L               | 1MB1011-1DB4-....                       | 4100.-               | 1MB1021-1DB4-....                       | 3940.-               | 1MB1031-1DB4-....                      | 4020.-               |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE2 High Efficiency</b>                                                         |
| Series version                         | <b>Aluminum series 1MB1011/1MB1021/1MB1031</b>                                     |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 80 L ... 160 L                                                                     |
| Rated power at 50 Hz                   | 0.37 ... 18.5 kW                                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                   |
| Rated torque at 50 Hz                  | 2.6 ... 109 Nm                                                                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$<br>50 Hz<br>kW       | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22)<br>▲ New | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2)<br>▲ New | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|-----------------------------------------|----------------------|-----------------------------------------|----------------------|----------------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 0.09                             | IE2         | 63 M                | ▲ 1MB1011-0BC2-....                     | 590.-                | ▲ 1MB1021-0BC2-....                     | 506.-                | ▲ 1MB1031-0BC2-....                    | 539.-                |
| 0.18                             | IE2         | 71 M                | ▲ 1MB1011-0CC2-....                     | 629.-                | ▲ 1MB1021-0CC2-....                     | 532.-                | ▲ 1MB1031-0CC2-....                    | 573.-                |
| 0.25                             | IE2         | 71 M                | ▲ 1MB1011-0CC3-....                     | 685.-                | ▲ 1MB1021-0CC3-....                     | 589.-                | ▲ 1MB1031-0CC3-....                    | 630.-                |
| 0.37                             | IE2         | 80 M                | 1MB1011-0DC2-....                       | 688.-                | 1MB1021-0DC2-....                       | 579.-                | 1MB1031-0DC2-....                      | 631.-                |
| 0.55                             | IE2         | 80 M                | 1MB1011-0DC3-....                       | 765.-                | 1MB1021-0DC3-....                       | 658.-                | 1MB1031-0DC3-....                      | 708.-                |
| 0.75                             | IE2         | 90 S                | 1MB1011-0EC0-....                       | 863.-                | 1MB1021-0EC0-....                       | 749.-                | 1MB1031-0EC0-....                      | 798.-                |
| 1.1                              | IE2         | 90 L                | 1MB1011-0EC4-....                       | 1020.-               | 1MB1021-0EC4-....                       | 904.-                | 1MB1031-0EC4-....                      | 953.-                |
| 1.5                              | IE2         | 100 L               | 1MB1011-1AC4-....                       | 1180.-               | 1MB1021-1AC4-....                       | 1060.-               | 1MB1031-1AC4-....                      | 1130.-               |
| 2.2                              | IE2         | 112 M               | 1MB1011-1BC2-....                       | 1460.-               | 1MB1021-1BC2-....                       | 1330.-               | 1MB1031-1BC2-....                      | 1400.-               |
| 3                                | IE2         | 132 S               | 1MB1011-1CC0-....                       | 1840.-               | 1MB1021-1CC0-....                       | 1700.-               | 1MB1031-1CC0-....                      | 1790.-               |
| 4                                | IE2         | 132 M               | 1MB1011-1CC2-....                       | 2180.-               | 1MB1021-1CC2-....                       | 2050.-               | 1MB1031-1CC2-....                      | 2130.-               |
| 5.5                              | IE2         | 132 M               | 1MB1011-1CC3-....                       | 2670.-               | 1MB1021-1CC3-....                       | 2530.-               | 1MB1031-1CC3-....                      | 2620.-               |
| 7.5                              | IE2         | 160 M               | 1MB1011-1DC2-....                       | 3420.-               | 1MB1021-1DC2-....                       | 3250.-               | 1MB1031-1DC2-....                      | 3330.-               |
| 11                               | IE2         | 160 L               | 1MB1011-1DC4-....                       | 4530.-               | 1MB1021-1DC4-....                       | 4380.-               | 1MB1031-1DC4-....                      | 4450.-               |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                         |                      |                                         |                      |                                        |                      |
| 0.09                             | IE2         | 71 M                | ▲ 1MB1011-0CD2-....                     | 646.-                | ▲ 1MB1021-0CD2-....                     | 550.-                | ▲ 1MB1031-0CD2-....                    | 591.-                |
| 0.12                             | IE2         | 71 M                | ▲ 1MB1011-0CD3-....                     | 707.-                | ▲ 1MB1021-0CD3-....                     | 611.-                | ▲ 1MB1031-0CD3-....                    | 652.-                |
| 0.75                             | IE2         | 100 L               | 1MB1011-1AD4-....                       | 1300.-               | 1MB1021-1AD4-....                       | 1170.-               | 1MB1031-1AD4-....                      | 1250.-               |
| 1.1                              | IE2         | 100 L               | 1MB1011-1AD5-....                       | 1580.-               | 1MB1021-1AD5-....                       | 1450.-               | 1MB1031-1AD5-....                      | 1520.-               |
| 1.5                              | IE2         | 112 M               | 1MB1011-1BD2-....                       | 1860.-               | 1MB1021-1BD2-....                       | 1720.-               | 1MB1031-1BD2-....                      | 1810.-               |
| 2.2                              | IE2         | 132 S               | 1MB1011-1CD0-....                       | 2400.-               | 1MB1021-1CD0-....                       | 2260.-               | 1MB1031-1CD0-....                      | 2340.-               |
| 3                                | IE2         | 132 M               | 1MB1011-1CD2-....                       | 2850.-               | 1MB1021-1CD2-....                       | 2720.-               | 1MB1031-1CD2-....                      | 2790.-               |
| 4                                | IE2         | 160 M               | 1MB1011-1DD2-....                       | 3530.-               | 1MB1021-1DD2-....                       | 3390.-               | 1MB1031-1DD2-....                      | 3450.-               |
| 5.5                              | IE2         | 160 M               | 1MB1011-1DD3-....                       | 4230.-               | 1MB1021-1DD3-....                       | 4080.-               | 1MB1031-1DD3-....                      | 4140.-               |
| 7.5                              | IE2         | 160 L               | 1MB1011-1DD4-....                       | 5020.-               | 1MB1021-1DD4-....                       | 4850.-               | 1MB1031-1DD4-....                      | 4920.-               |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zones 21, 22 and 2 in types of protection Ex tb, Ex tc and Ex ec</b> |
| Efficiency                             | <b>IE1 Standard Efficiency</b>                                                     |
| Series version                         | <b>Aluminum series 1MB1012/1MB1022/1MB1032</b>                                     |
| Cooling                                | Self-ventilated (IC 411)                                                           |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                      |
| Insulation                             | Thermal class 155 (F)                                                              |
| Utilization                            | Thermal class 130 (B)                                                              |
| Number of poles                        | 2, 4, 6, 8                                                                         |
| Frame sizes (FS)                       | 100 L ... 160 L                                                                    |
| Rated power at 50 Hz                   | 0.75 ... 18.5 kW                                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                   |
| Rated torque at 50 Hz                  | 10 ... 109 Nm                                                                      |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                      |
| Price group (PG)                       | 3X1                                                                                |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br>Ex tb (zone 21) | Base<br>price<br>EUR | Article No.<br>Ex tc (zone 22) | Base<br>price<br>EUR | Article No.<br>Ex ec (zone 2) | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------------------|----------------------|--------------------------------|----------------------|-------------------------------|----------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 3                                | IE1         | 100 L               | 1MB1012-1AA4-....              | 1020.-               | 1MB1022-1AA4-....              | 894.-                | 1MB1032-1AA4-....             | 960.-                |
| 4                                | IE1         | 112 M               | 1MB1012-1BA2-....              | 1240.-               | 1MB1022-1BA2-....              | 1090.-               | 1MB1032-1BA2-....             | 1170.-               |
| 5.5                              | IE1         | 132 S               | 1MB1012-1CA0-....              | 1570.-               | 1MB1022-1CA0-....              | 1430.-               | 1MB1032-1CA0-....             | 1510.-               |
| 7.5                              | IE1         | 132 S               | 1MB1012-1CA1-....              | 1920.-               | 1MB1022-1CA1-....              | 1790.-               | 1MB1032-1CA1-....             | 1860.-               |
| 11                               | IE1         | 160 M               | 1MB1012-1DA2-....              | 2660.-               | 1MB1022-1DA2-....              | 2500.-               | 1MB1032-1DA2-....             | 2580.-               |
| 15                               | IE1         | 160 M               | 1MB1012-1DA3-....              | 3330.-               | 1MB1022-1DA3-....              | 3170.-               | 1MB1032-1DA3-....             | 3230.-               |
| 18.5                             | IE1         | 160 L               | 1MB1012-1DA4-....              | 3890.-               | 1MB1022-1DA4-....              | 3740.-               | 1MB1032-1DA4-....             | 3800.-               |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 2.2                              | IE1         | 100 L               | 1MB1012-1AB4-....              | 921.-                | 1MB1022-1AB4-....              | 800.-                | 1MB1032-1AB4-....             | 865.-                |
| 3                                | IE1         | 100 L               | 1MB1012-1AB5-....              | 1020.-               | 1MB1022-1AB5-....              | 904.-                | 1MB1032-1AB5-....             | 969.-                |
| 4                                | IE1         | 112 M               | 1MB1012-1BB2-....              | 1280.-               | 1MB1022-1BB2-....              | 1140.-               | 1MB1032-1BB2-....             | 1230.-               |
| 5.5                              | IE1         | 132 S               | 1MB1012-1CB0-....              | 1620.-               | 1MB1022-1CB0-....              | 1490.-               | 1MB1032-1CB0-....             | 1570.-               |
| 7.5                              | IE1         | 132 M               | 1MB1012-1CB2-....              | 1980.-               | 1MB1022-1CB2-....              | 1850.-               | 1MB1032-1CB2-....             | 1930.-               |
| 11                               | IE1         | 160 M               | 1MB1012-1DB2-....              | 2710.-               | 1MB1022-1DB2-....              | 2550.-               | 1MB1032-1DB2-....             | 2620.-               |
| 15                               | IE1         | 160 L               | 1MB1012-1DB4-....              | 3390.-               | 1MB1022-1DB4-....              | 3220.-               | 1MB1032-1DB4-....             | 3290.-               |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                |                      |                                |                      |                               |                      |
| 1.5                              | IE1         | 100 L               | 1MB1012-1AC4-....              | 965.-                | 1MB1022-1AC4-....              | 846.-                | 1MB1032-1AC4-....             | 911.-                |
| 2.2                              | IE1         | 112 M               | 1MB1012-1BC2-....              | 1180.-               | 1MB1022-1BC2-....              | 1050.-               | 1MB1032-1BC2-....             | 1130.-               |
| 3                                | IE1         | 132 S               | 1MB1012-1CC0-....              | 1490.-               | 1MB1022-1CC0-....              | 1350.-               | 1MB1032-1CC0-....             | 1430.-               |
| 4                                | IE1         | 132 M               | 1MB1012-1CC2-....              | 1780.-               | 1MB1022-1CC2-....              | 1640.-               | 1MB1032-1CC2-....             | 1710.-               |
| 5.5                              | IE1         | 132 M               | 1MB1012-1CC3-....              | 2150.-               | 1MB1022-1CC3-....              | 2020.-               | 1MB1032-1CC3-....             | 2100.-               |
| 7.5                              | IE1         | 160 M               | 1MB1012-1DC2-....              | 2820.-               | 1MB1022-1DC2-....              | 2660.-               | 1MB1032-1DC2-....             | 2730.-               |
| 11                               | IE1         | 160 L               | 1MB1012-1DC4-....              | 3730.-               | 1MB1022-1DC4-....              | 3560.-               | 1MB1032-1DC4-....             | 3640.-               |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                |                      |                                |                      |                               |                      |
| 0.75                             | IE1         | 100 L               | 1MB1012-1AD4-....              | 994.-                | 1MB1022-1AD4-....              | 874.-                | 1MB1032-1AD4-....             | 939.-                |
| 1.1                              | IE1         | 100 L               | 1MB1012-1AD5-....              | 1190.-               | 1MB1022-1AD5-....              | 1070.-               | 1MB1032-1AD5-....             | 1140.-               |
| 1.5                              | IE1         | 112 M               | 1MB1012-1BD2-....              | 1400.-               | 1MB1022-1BD2-....              | 1280.-               | 1MB1032-1BD2-....             | 1350.-               |
| 2.2                              | IE1         | 132 S               | 1MB1012-1CD0-....              | 1810.-               | 1MB1022-1CD0-....              | 1670.-               | 1MB1032-1CD0-....             | 1760.-               |
| 3                                | IE1         | 132 M               | 1MB1012-1CD2-....              | 2130.-               | 1MB1022-1CD2-....              | 1990.-               | 1MB1032-1CD2-....             | 2080.-               |
| 4                                | IE1         | 160 M               | 1MB1012-1DD2-....              | 2660.-               | 1MB1022-1DD2-....              | 2500.-               | 1MB1032-1DD2-....             | 2580.-               |
| 5.5                              | IE1         | 160 M               | 1MB1012-1DD3-....              | 3190.-               | 1MB1022-1DD3-....              | 3040.-               | 1MB1032-1DD3-....             | 3110.-               |
| 7.5                              | IE1         | 160 L               | 1MB1012-1DD4-....              | 3830.-               | 1MB1022-1DD4-....              | 3690.-               | 1MB1032-1DD4-....             | 3750.-               |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                                                                                                                                                                                                                                       |                                                                                   |                     |                           |                   |                                 |                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------|---------------------------|-------------------|---------------------------------|-------------------|--|
| Category                                                                                                                                                                                                                                              | Motors for zone 21 in type of protection Ex tb                                    |                     |                           |                   |                                 |                   |  |
| Efficiency                                                                                                                                                                                                                                            | IE3 Premium Efficiency                                                            |                     |                           |                   |                                 |                   |  |
| Series version                                                                                                                                                                                                                                        | Cast-iron series 1MB1513, 1MB1613 Basic/Performance Line (continued on next page) |                     |                           |                   |                                 |                   |  |
| Cooling                                                                                                                                                                                                                                               | Self-ventilated (IC 411)                                                          |                     |                           |                   |                                 |                   |  |
| Degree of protection                                                                                                                                                                                                                                  | IP55, optionally IP56 or IP65                                                     |                     |                           |                   |                                 |                   |  |
| Insulation                                                                                                                                                                                                                                            | Thermal class 155 (F)                                                             |                     |                           |                   |                                 |                   |  |
| Utilization                                                                                                                                                                                                                                           | Thermal class 130 (B)                                                             |                     |                           |                   |                                 |                   |  |
| Number of poles                                                                                                                                                                                                                                       | 2, 4, 6                                                                           |                     |                           |                   |                                 |                   |  |
| Frame sizes (FS)                                                                                                                                                                                                                                      | 71 M ... 315 L                                                                    |                     |                           |                   |                                 |                   |  |
| Rated power at 50 Hz                                                                                                                                                                                                                                  | 0.18 ... 200 kW                                                                   |                     |                           |                   |                                 |                   |  |
| Synchronous speed at 50 Hz                                                                                                                                                                                                                            | 1000 ... 3000 rpm                                                                 |                     |                           |                   |                                 |                   |  |
| Rated torque at 50 Hz                                                                                                                                                                                                                                 | 10 ... 1542 Nm                                                                    |                     |                           |                   |                                 |                   |  |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                                | N - W - - - -                                                                     |                     |                           |                   |                                 |                   |  |
| Price group (PG)                                                                                                                                                                                                                                      | 3X1                                                                               |                     |                           |                   |                                 |                   |  |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price) |                                                                                   |                     |                           |                   |                                 |                   |  |
| $P_{rated}$ ,<br>50 Hz<br>kW                                                                                                                                                                                                                          | IE<br>class                                                                       | Frame<br>size<br>FS | Article No.<br>Basic Line | Base price<br>EUR | Article No.<br>Performance Line | Base price<br>EUR |  |
| 2-pole: 3000 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                   |                     |                           |                   |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1513-0CA2-....         | 819.-             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1513-0CA3-....         | 930.-             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1513-0DA2-....         | 973.-             |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE3                                                                               | 80 M                | 1MB1513-0DA3-....         | 1080.-            |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE3                                                                               | 90 S                | 1MB1513-0EA0-....         | 1250.-            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE3                                                                               | 90 L                | 1MB1513-0EA4-....         | 1480.-            |                                 |                   |  |
| 3                                                                                                                                                                                                                                                     | IE3                                                                               | 100 L               | 1MB1513-1AA4-....         | 1520.-            | 1MB1613-1AA4-....               | 1680.-            |  |
| 4                                                                                                                                                                                                                                                     | IE3                                                                               | 112 M               | 1MB1513-1BA2-....         | 1800.-            | 1MB1613-1BA2-....               | 1980.-            |  |
| 5.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1513-1CA0-....         | 2220.-            | 1MB1613-1CA0-....               | 2480.-            |  |
| 7.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1513-1CA1-....         | 2760.-            | 1MB1613-1CA1-....               | 3070.-            |  |
| 11                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1513-1DA2-....         | 3800.-            | 1MB1613-1DA2-....               | 4240.-            |  |
| 15                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1513-1DA3-....         | 4830.-            | 1MB1613-1DA3-....               | 5400.-            |  |
| 18.5                                                                                                                                                                                                                                                  | IE3                                                                               | 160 L               | 1MB1513-1DA4-....         | 5690.-            | 1MB1613-1DA4-....               | 6370.-            |  |
| 22                                                                                                                                                                                                                                                    | IE3                                                                               | 180 M               | 1MB1513-1EA2-....         | 6480.-            | 1MB1613-1EA2-....               | 6990.-            |  |
| 30                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1513-2AA4-....         | 8600.-            | 1MB1613-2AA4-....               | 9270.-            |  |
| 37                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1513-2AA5-....         | 10500.-           | 1MB1613-2AA5-....               | 11400.-           |  |
| 45                                                                                                                                                                                                                                                    | IE3                                                                               | 225 M               | 1MB1513-2BA2-....         | 12200.-           | 1MB1613-2BA2-....               | 13100.-           |  |
| 55                                                                                                                                                                                                                                                    | IE3                                                                               | 250 M               | 1MB1513-2CA2-....         | 14500.-           | 1MB1613-2CA2-....               | 15700.-           |  |
| 75                                                                                                                                                                                                                                                    | IE3                                                                               | 280 S               | 1MB1513-2DA0-....         | 19700.-           | 1MB1613-2DA0-....               | 20200.-           |  |
| 90                                                                                                                                                                                                                                                    | IE3                                                                               | 280 M               | 1MB1513-2DA2-....         | 22900.-           | 1MB1613-2DA2-....               | 23700.-           |  |
| 110                                                                                                                                                                                                                                                   | IE3                                                                               | 315 S               | 1MB1513-3AA0-....         | 27300.-           | 1MB1613-3AA0-....               | 28500.-           |  |
| 132                                                                                                                                                                                                                                                   | IE3                                                                               | 315 M               | 1MB1513-3AA2-....         | 32200.-           | 1MB1613-3AA2-....               | 33700.-           |  |
| 160                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1513-3AA4-....         | 39400.-           | 1MB1613-3AA4-....               | 41100.-           |  |
| 200                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1513-3AA5-....         | 48600.-           | 1MB1613-3AA5-....               | 50800.-           |  |
| 4-pole: 1500 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                   |                     |                           |                   |                                 |                   |  |
| 0.25                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1513-0CB2-....         | 813.-             |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1513-0CB3-....         | 889.-             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1513-0DB2-....         | 967.-             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1513-0DB3-....         | 1040.-            |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE3                                                                               | 90 S                | 1MB1513-0EB0-....         | 1230.-            |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE3                                                                               | 90 L                | 1MB1513-0EB4-....         | 1350.-            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE3                                                                               | 100 L               | 1MB1513-1AB4-....         | 1390.-            | 1MB1613-1AB4-....               | 1560.-            |  |
| 3                                                                                                                                                                                                                                                     | IE3                                                                               | 100 L               | 1MB1513-1AB5-....         | 1590.-            | 1MB1613-1AB5-....               | 1770.-            |  |
| 4                                                                                                                                                                                                                                                     | IE3                                                                               | 112 M               | 1MB1513-1BB2-....         | 1910.-            | 1MB1613-1BB2-....               | 2130.-            |  |
| 5.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1513-1CB0-....         | 2390.-            | 1MB1613-1CB0-....               | 2660.-            |  |
| 7.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 M               | 1MB1513-1CB2-....         | 2950.-            | 1MB1613-1CB2-....               | 3290.-            |  |
| 11                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1513-1DB2-....         | 3890.-            | 1MB1613-1DB2-....               | 4340.-            |  |
| 15                                                                                                                                                                                                                                                    | IE3                                                                               | 160 L               | 1MB1513-1DB4-....         | 4890.-            | 1MB1613-1DB4-....               | 5480.-            |  |
| 18.5                                                                                                                                                                                                                                                  | IE3                                                                               | 180 M               | 1MB1513-1EB2-....         | 5600.-            | 1MB1613-1EB2-....               | 6040.-            |  |
| 22                                                                                                                                                                                                                                                    | IE3                                                                               | 180 L               | 1MB1513-1EB4-....         | 6400.-            | 1MB1613-1EB4-....               | 6910.-            |  |
| 30                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1513-2AB5-....         | 8500.-            | 1MB1613-2AB5-....               | 9150.-            |  |
| 37                                                                                                                                                                                                                                                    | IE3                                                                               | 225 S               | 1MB1513-2BB0-....         | 9960.-            | 1MB1613-2BB0-....               | 10700.-           |  |
| 45                                                                                                                                                                                                                                                    | IE3                                                                               | 225 M               | 1MB1513-2BB2-....         | 11400.-           | 1MB1613-2BB2-....               | 12500.-           |  |
| 55                                                                                                                                                                                                                                                    | IE3                                                                               | 250 M               | 1MB1513-2CB2-....         | 14000.-           | 1MB1613-2CB2-....               | 15200.-           |  |
| 75                                                                                                                                                                                                                                                    | IE3                                                                               | 280 S               | 1MB1513-2DB0-....         | 18600.-           | 1MB1613-2DB0-....               | 19200.-           |  |
| 90                                                                                                                                                                                                                                                    | IE3                                                                               | 280 M               | 1MB1513-2DB2-....         | 21500.-           | 1MB1613-2DB2-....               | 22000.-           |  |
| 110                                                                                                                                                                                                                                                   | IE3                                                                               | 315 S               | 1MB1513-3AB0-....         | 26800.-           | 1MB1613-3AB0-....               | 27300.-           |  |
| 132                                                                                                                                                                                                                                                   | IE3                                                                               | 315 M               | 1MB1513-3AB2-....         | 31200.-           | 1MB1613-3AB2-....               | 32100.-           |  |
| 160                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1513-3AB4-....         | 37300.-           | 1MB1613-3AB4-....               | 38100.-           |  |
| 200                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1513-3AB5-....         | 45600.-           | 1MB1613-3AB5-....               | 46800.-           |  |

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 21 in type of protection Ex tb</b>           |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1513, 1MB1613 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6                                                         |
| Frame sizes (FS)                       | 71 M ... 315 L                                                  |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                               |
| Rated torque at 50 Hz                  | 10 ... 1542 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | 1MB1513-0CC2-.....               | 794.-             |                                        |                   |
| 0.25                             | IE3         | 71 M                | 1MB1513-0CC3-.....               | 908.-             |                                        |                   |
| 0.37                             | IE3         | 80 M                | 1MB1513-0DC2-.....               | 943.-             |                                        |                   |
| 0.55                             | IE3         | 80 M                | 1MB1513-0DC3-.....               | 1060.-            |                                        |                   |
| 0.75                             | IE3         | 90 S                | 1MB1513-0EC0-.....               | 1190.-            |                                        |                   |
| 1.1                              | IE3         | 90 L                | 1MB1513-0EC4-.....               | 1340.-            |                                        |                   |
| 1.5                              | IE3         | 100 L               | 1MB1513-1AC4-.....               | 1370.-            | 1MB1613-1AC4-.....                     | 1550.-            |
| 2.2                              | IE3         | 112 M               | 1MB1513-1BC2-.....               | 1720.-            | 1MB1613-1BC2-.....                     | 1920.-            |
| 3                                | IE3         | 132 S               | 1MB1513-1CC0-.....               | 2170.-            | 1MB1613-1CC0-.....                     | 2420.-            |
| 4                                | IE3         | 132 M               | 1MB1513-1CC2-.....               | 2600.-            | 1MB1613-1CC2-.....                     | 2880.-            |
| 5.5                              | IE3         | 132 M               | 1MB1513-1CC3-.....               | 3180.-            | 1MB1613-1CC3-.....                     | 3540.-            |
| 7.5                              | IE3         | 160 M               | 1MB1513-1DC2-.....               | 4070.-            | 1MB1613-1DC2-.....                     | 4530.-            |
| 11                               | IE3         | 160 L               | 1MB1513-1DC4-.....               | 5440.-            | 1MB1613-1DC4-.....                     | 6110.-            |
| 15                               | IE3         | 180 L               | 1MB1513-1EC4-.....               | 6790.-            | 1MB1613-1EC4-.....                     | 7320.-            |
| 18.5                             | IE3         | 200 L               | 1MB1513-2AC4-.....               | 8550.-            | 1MB1613-2AC4-.....                     | 9200.-            |
| 22                               | IE3         | 200 L               | 1MB1513-2AC5-.....               | 9730.-            | 1MB1613-2AC5-.....                     | 10500.-           |
| 30                               | IE3         | 225 M               | 1MB1513-2BC2-.....               | 12500.-           | 1MB1613-2BC2-.....                     | 13400.-           |
| 37                               | IE3         | 250 M               | 1MB1513-2CC2-.....               | 15200.-           | 1MB1613-2CC2-.....                     | 16400.-           |
| 45                               | IE3         | 280 S               | 1MB1513-2DC0-.....               | 18500.-           | 1MB1613-2DC0-.....                     | 19100.-           |
| 55                               | IE3         | 280 M               | 1MB1513-2DC2-.....               | 21500.-           | 1MB1613-2DC2-.....                     | 22000.-           |
| 75                               | IE3         | 315 S               | 1MB1513-3AC0-.....               | 28900.-           | 1MB1613-3AC0-.....                     | 29600.-           |
| 90                               | IE3         | 315 M               | 1MB1513-3AC2-.....               | 32200.-           | 1MB1613-3AC2-.....                     | 33100.-           |
| 110                              | IE3         | 315 L               | 1MB1513-3AC4-.....               | 38300.-           | 1MB1613-3AC4-.....                     | 39300.-           |
| 132                              | IE3         | 315 L               | 1MB1513-3AC5-.....               | 45100.-           | 1MB1613-3AC5-.....                     | 46200.-           |
| 160                              | IE3         | 315 L               | 1MB1513-3AC6-.....               | 54200.-           | 1MB1613-3AC6-.....                     | 55600.-           |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

| Category                                                                                                                                                                                                                                              | Motors for zone 21 in type of protection Ex tb                                         |                     |                           |                   |                                 |                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------|---------------------------|-------------------|---------------------------------|-------------------|--|
| Efficiency                                                                                                                                                                                                                                            | IE2 High Efficiency                                                                    |                     |                           |                   |                                 |                   |  |
| Series version                                                                                                                                                                                                                                        | Cast-iron series 1MB1511, 1MB1611 Basic Line/Performance Line (continued on next page) |                     |                           |                   |                                 |                   |  |
| Cooling                                                                                                                                                                                                                                               | Self-ventilated (IC 411)                                                               |                     |                           |                   |                                 |                   |  |
| Degree of protection                                                                                                                                                                                                                                  | IP55, optionally IP56 or IP65                                                          |                     |                           |                   |                                 |                   |  |
| Insulation                                                                                                                                                                                                                                            | Thermal class 155 (F)                                                                  |                     |                           |                   |                                 |                   |  |
| Utilization                                                                                                                                                                                                                                           | Thermal class 130 (B)                                                                  |                     |                           |                   |                                 |                   |  |
| Number of poles                                                                                                                                                                                                                                       | 2, 4, 6, 8                                                                             |                     |                           |                   |                                 |                   |  |
| Frame sizes (FS)                                                                                                                                                                                                                                      | 71 M ... 315 L                                                                         |                     |                           |                   |                                 |                   |  |
| Rated power at 50 Hz                                                                                                                                                                                                                                  | 0.09 ... 200 kW                                                                        |                     |                           |                   |                                 |                   |  |
| Synchronous speed at 50 Hz                                                                                                                                                                                                                            | 750 ... 3000 rpm                                                                       |                     |                           |                   |                                 |                   |  |
| Rated torque at 50 Hz                                                                                                                                                                                                                                 | 9.9 ... 1703 Nm                                                                        |                     |                           |                   |                                 |                   |  |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                                | N - W - - - -                                                                          |                     |                           |                   |                                 |                   |  |
| Price group (PG)                                                                                                                                                                                                                                      | 3X1                                                                                    |                     |                           |                   |                                 |                   |  |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price) |                                                                                        |                     |                           |                   |                                 |                   |  |
| $P_{rated}$ ,<br>50 Hz<br>kW                                                                                                                                                                                                                          | IE<br>class                                                                            | Frame<br>size<br>FS | Article No.<br>Basic Line | Base price<br>EUR | Article No.<br>Performance Line | Base price<br>EUR |  |
| 2-pole: 3000 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                        |                     |                           |                   |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE2                                                                                    | 71 M                | 1MB1511-0CA2-....         | 687.–             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE2                                                                                    | 71 M                | 1MB1511-0CA3-....         | 777.–             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE2                                                                                    | 80 M                | 1MB1511-0DA2-....         | 816.–             |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE2                                                                                    | 80 M                | 1MB1511-0DA3-....         | 905.–             |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 90 S                | 1MB1511-0EA0-....         | 1040.–            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE2                                                                                    | 90 L                | 1MB1511-0EA4-....         | 1230.–            |                                 |                   |  |
| 3                                                                                                                                                                                                                                                     | IE2                                                                                    | 100 L               | 1MB1511-1AA4-....         | 1370.–            | 1MB1611-1AA4-....               | 1490.–            |  |
| 4                                                                                                                                                                                                                                                     | IE2                                                                                    | 112 M               | 1MB1511-1BA2-....         | 1620.–            | 1MB1611-1BA2-....               | 1760.–            |  |
| 5.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 132 S               | 1MB1511-1CA0-....         | 2030.–            | 1MB1611-1CA0-....               | 2200.–            |  |
| 7.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 132 S               | 1MB1511-1CA1-....         | 2490.–            | 1MB1611-1CA1-....               | 2710.–            |  |
| 11                                                                                                                                                                                                                                                    | IE2                                                                                    | 160 M               | 1MB1511-1DA2-....         | 3440.–            | 1MB1611-1DA2-....               | 3890.–            |  |
| 15                                                                                                                                                                                                                                                    | IE2                                                                                    | 160 M               | 1MB1511-1DA3-....         | 4350.–            | 1MB1611-1DA3-....               | 4930.–            |  |
| 18.5                                                                                                                                                                                                                                                  | IE2                                                                                    | 160 L               | 1MB1511-1DA4-....         | 5100.–            | 1MB1611-1DA4-....               | 5800.–            |  |
| 22                                                                                                                                                                                                                                                    | IE2                                                                                    | 180 M               | 1MB1511-1EA2-....         | 5840.–            | 1MB1611-1EA2-....               | 6370.–            |  |
| 30                                                                                                                                                                                                                                                    | IE2                                                                                    | 200 L               | 1MB1511-2AA4-....         | 7780.–            | 1MB1611-2AA4-....               | 8450.–            |  |
| 37                                                                                                                                                                                                                                                    | IE2                                                                                    | 200 L               | 1MB1511-2AA5-....         | 9490.–            | 1MB1611-2AA5-....               | 10300.–           |  |
| 45                                                                                                                                                                                                                                                    | IE2                                                                                    | 225 M               | 1MB1511-2BA2-....         | 11100.–           | 1MB1611-2BA2-....               | 12200.–           |  |
| 55                                                                                                                                                                                                                                                    | IE2                                                                                    | 250 M               | 1MB1511-2CA2-....         | 13300.–           | 1MB1611-2CA2-....               | 14400.–           |  |
| 75                                                                                                                                                                                                                                                    | IE2                                                                                    | 280 S               | 1MB1511-2DA0-....         | 18000.–           | 1MB1611-2DA0-....               | 18400.–           |  |
| 90                                                                                                                                                                                                                                                    | IE2                                                                                    | 280 M               | 1MB1511-2DA2-....         | 20900.–           | 1MB1611-2DA2-....               | 21800.–           |  |
| 110                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 S               | 1MB1511-3AA0-....         | 25000.–           | 1MB1611-3AA0-....               | 26300.–           |  |
| 132                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 M               | 1MB1511-3AA2-....         | 29600.–           | 1MB1611-3AA2-....               | 30900.–           |  |
| 160                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 L               | 1MB1511-3AA4-....         | 36100.–           | 1MB1611-3AA4-....               | 37800.–           |  |
| 200                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 L               | 1MB1511-3AA5-....         | 44500.–           | 1MB1611-3AA5-....               | 46500.–           |  |
| 4-pole: 1500 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                        |                     |                           |                   |                                 |                   |  |
| 0.25                                                                                                                                                                                                                                                  | IE2                                                                                    | 71 M                | 1MB1511-0CB2-....         | 684.–             |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE2                                                                                    | 71 M                | 1MB1511-0CB3-....         | 746.–             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE2                                                                                    | 80 M                | 1MB1511-0DB2-....         | 812.–             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE2                                                                                    | 80 M                | 1MB1511-0DB3-....         | 867.–             |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE2                                                                                    | 90 S                | 1MB1511-0EB0-....         | 1010.–            |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 90 L                | 1MB1511-0EB4-....         | 1120.–            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE2                                                                                    | 100 L               | 1MB1511-1AB4-....         | 1280.–            | 1MB1611-1AB4-....               | 1370.–            |  |
| 3                                                                                                                                                                                                                                                     | IE2                                                                                    | 100 L               | 1MB1511-1AB5-....         | 1430.–            | 1MB1611-1AB5-....               | 1560.–            |  |
| 4                                                                                                                                                                                                                                                     | IE2                                                                                    | 112 M               | 1MB1511-1BB2-....         | 1720.–            | 1MB1611-1BB2-....               | 1880.–            |  |
| 5.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 132 S               | 1MB1511-1CB0-....         | 2160.–            | 1MB1611-1CB0-....               | 2350.–            |  |
| 7.5                                                                                                                                                                                                                                                   | IE2                                                                                    | 132 M               | 1MB1511-1CB2-....         | 2660.–            | 1MB1611-1CB2-....               | 2890.–            |  |
| 11                                                                                                                                                                                                                                                    | IE2                                                                                    | 160 M               | 1MB1511-1DB2-....         | 3510.–            | 1MB1611-1DB2-....               | 3960.–            |  |
| 15                                                                                                                                                                                                                                                    | IE2                                                                                    | 160 L               | 1MB1511-1DB4-....         | 4410.–            | 1MB1611-1DB4-....               | 5020.–            |  |
| 18.5                                                                                                                                                                                                                                                  | IE2                                                                                    | 180 M               | 1MB1511-1EB2-....         | 5050.–            | 1MB1611-1EB2-....               | 5480.–            |  |
| 22                                                                                                                                                                                                                                                    | IE2                                                                                    | 180 L               | 1MB1511-1EB4-....         | 5770.–            | 1MB1611-1EB4-....               | 6270.–            |  |
| 30                                                                                                                                                                                                                                                    | IE2                                                                                    | 200 L               | 1MB1511-2AB5-....         | 7670.–            | 1MB1611-2AB5-....               | 8330.–            |  |
| 37                                                                                                                                                                                                                                                    | IE2                                                                                    | 225 S               | 1MB1511-2BB0-....         | 9180.–            | 1MB1611-2BB0-....               | 9960.–            |  |
| 45                                                                                                                                                                                                                                                    | IE2                                                                                    | 225 M               | 1MB1511-2BB2-....         | 10600.–           | 1MB1611-2BB2-....               | 11400.–           |  |
| 55                                                                                                                                                                                                                                                    | IE2                                                                                    | 250 M               | 1MB1511-2CB2-....         | 12900.–           | 1MB1611-2CB2-....               | 13900.–           |  |
| 75                                                                                                                                                                                                                                                    | IE2                                                                                    | 280 S               | 1MB1511-2DB0-....         | 17100.–           | 1MB1611-2DB0-....               | 17600.–           |  |
| 90                                                                                                                                                                                                                                                    | IE2                                                                                    | 280 M               | 1MB1511-2DB2-....         | 19700.–           | 1MB1611-2DB2-....               | 20300.–           |  |
| 110                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 S               | 1MB1511-3AB0-....         | 24500.–           | 1MB1611-3AB0-....               | 25100.–           |  |
| 132                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 M               | 1MB1511-3AB2-....         | 28600.–           | 1MB1611-3AB2-....               | 29400.–           |  |
| 160                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 L               | 1MB1511-3AB4-....         | 34000.–           | 1MB1611-3AB4-....               | 34900.–           |  |
| 200                                                                                                                                                                                                                                                   | IE2                                                                                    | 315 L               | 1MB1511-3AB5-....         | 41800.–           | 1MB1611-3AB5-....               | 43000.–           |  |

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|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                      |
|----------------------------------------|----------------------------------------------------------------------|
| Category                               | <b>Motors for zone 21 in type of protection Ex tb</b>                |
| Efficiency                             | <b>IE2 High Efficiency</b>                                           |
| Series version                         | <b>Cast-iron series 1MB1511, 1MB1611 Basic Line/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                             |
| Degree of protection                   | IP55, optionally IP56 or IP65                                        |
| Insulation                             | Thermal class 155 (F)                                                |
| Utilization                            | Thermal class 130 (B)                                                |
| Number of poles                        | 2, 4, 6, 8                                                           |
| Frame sizes (FS)                       | 71 M ... 315 L                                                       |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                      |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                     |
| Rated torque at 50 Hz                  | 9.9 ... 1703 Nm                                                      |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                        |
| Price group (PG)                       | 3X1                                                                  |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE2         | 71 M                | 1MB1511-0CC2-....                | 666.-             |                                        |                   |
| 0.25                             | IE2         | 71 M                | 1MB1511-0CC3-....                | 760.-             |                                        |                   |
| 0.37                             | IE2         | 80 M                | 1MB1511-0DC2-....                | 791.-             |                                        |                   |
| 0.55                             | IE2         | 80 M                | 1MB1511-0DC3-....                | 886.-             |                                        |                   |
| 0.75                             | IE2         | 90 S                | 1MB1511-0EC0-....                | 999.-             |                                        |                   |
| 1.1                              | IE2         | 90 L                | 1MB1511-0EC4-....                | 1130.-            |                                        |                   |
| 1.5                              | IE2         | 100 L               | 1MB1511-1AC4-....                | 1270.-            | 1MB1611-1AC4-....                      | 1360.-            |
| 2.2                              | IE2         | 112 M               | 1MB1511-1BC2-....                | 1570.-            | 1MB1611-1BC2-....                      | 1690.-            |
| 3                                | IE2         | 132 S               | 1MB1511-1CC0-....                | 1970.-            | 1MB1611-1CC0-....                      | 2130.-            |
| 4                                | IE2         | 132 M               | 1MB1511-1CC2-....                | 2350.-            | 1MB1611-1CC2-....                      | 2550.-            |
| 5.5                              | IE2         | 132 M               | 1MB1511-1CC3-....                | 2870.-            | 1MB1611-1CC3-....                      | 3120.-            |
| 7.5                              | IE2         | 160 M               | 1MB1511-1DC2-....                | 3670.-            | 1MB1611-1DC2-....                      | 4140.-            |
| 11                               | IE2         | 160 L               | 1MB1511-1DC4-....                | 4880.-            | 1MB1611-1DC4-....                      | 5560.-            |
| 15                               | IE2         | 180 L               | 1MB1511-1EC4-....                | 6110.-            | 1MB1611-1EC4-....                      | 6650.-            |
| 18.5                             | IE2         | 200 L               | 1MB1511-2AC4-....                | 7710.-            | 1MB1611-2AC4-....                      | 8380.-            |
| 22                               | IE2         | 200 L               | 1MB1511-2AC5-....                | 8790.-            | 1MB1611-2AC5-....                      | 9550.-            |
| 30                               | IE2         | 225 M               | 1MB1511-2BC2-....                | 11400.-           | 1MB1611-2BC2-....                      | 12500.-           |
| 37                               | IE2         | 250 M               | 1MB1511-2CC2-....                | 13900.-           | 1MB1611-2CC2-....                      | 15100.-           |
| 45                               | IE2         | 280 S               | 1MB1511-2DC0-....                | 17000.-           | 1MB1611-2DC0-....                      | 17500.-           |
| 55                               | IE2         | 280 M               | 1MB1511-2DC2-....                | 19700.-           | 1MB1611-2DC2-....                      | 20300.-           |
| 75                               | IE2         | 315 S               | 1MB1511-3AC0-....                | 26500.-           | 1MB1611-3AC0-....                      | 27200.-           |
| 90                               | IE2         | 315 M               | 1MB1511-3AC2-....                | 29600.-           | 1MB1611-3AC2-....                      | 30300.-           |
| 110                              | IE2         | 315 L               | 1MB1511-3AC4-....                | 35000.-           | 1MB1611-3AC4-....                      | 35900.-           |
| 132                              | IE2         | 315 L               | 1MB1511-3AC5-....                | 41200.-           | 1MB1611-3AC5-....                      | 42400.-           |
| 160                              | IE2         | 315 L               | 1MB1511-3AC6-....                | 49400.-           | 1MB1611-3AC6-....                      | 50900.-           |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                   |                                        |                   |
| 0.09                             | -           | 71 M                | 1MB1511-0CD2-....                | 748.-             |                                        |                   |
| 0.12                             | IE2         | 71 M                | 1MB1511-0CD3-....                | 814.-             |                                        |                   |
| 0.18                             | IE2         | 80 M                | 1MB1511-0DD2-....                | 868.-             |                                        |                   |
| 0.25                             | IE2         | 80 M                | 1MB1511-0DD3-....                | 1020.-            |                                        |                   |
| 0.37                             | IE2         | 90 S                | 1MB1511-0ED0-....                | 1190.-            |                                        |                   |
| 0.55                             | IE2         | 90 L                | 1MB1511-0ED4-....                | 1340.-            |                                        |                   |
| 0.75                             | IE2         | 100 L               | 1MB1511-1AD4-....                | 1380.-            | 1MB1611-1AD4-....                      | 1510.-            |
| 1.1                              | IE2         | 100 L               | 1MB1511-1AD5-....                | 1680.-            | 1MB1611-1AD5-....                      | 1830.-            |
| 1.5                              | IE2         | 112 M               | 1MB1511-1BD2-....                | 1980.-            | 1MB1611-1BD2-....                      | 2170.-            |
| 2.2                              | IE2         | 132 S               | 1MB1511-1CD0-....                | 2560.-            | 1MB1611-1CD0-....                      | 2790.-            |
| 3                                | IE2         | 132 M               | 1MB1511-1CD2-....                | 3060.-            | 1MB1611-1CD2-....                      | 3340.-            |
| 4                                | IE2         | 160 M               | 1MB1511-1DD2-....                | 3790.-            | 1MB1611-1DD2-....                      | 4300.-            |
| 5.5                              | IE2         | 160 M               | 1MB1511-1DD3-....                | 4560.-            | 1MB1611-1DD3-....                      | 5170.-            |
| 7.5                              | IE2         | 160 L               | 1MB1511-1DD4-....                | 5410.-            | 1MB1611-1DD4-....                      | 6150.-            |
| 11                               | -           | 180 L               | 1MB1511-1ED4-....                | 6480.-            | 1MB1611-1ED4-....                      | 7070.-            |
| 15                               | -           | 200 L               | 1MB1511-2AD5-....                | 8740.-            | 1MB1611-2AD5-....                      | 9520.-            |
| 18.5                             | -           | 225 S               | 1MB1511-2BD0-....                | 10400.-           | 1MB1611-2BD0-....                      | 11300.-           |
| 22                               | -           | 225 M               | 1MB1511-2BD2-....                | 11600.-           | 1MB1611-2BD2-....                      | 12800.-           |
| 30                               | -           | 250 M               | 1MB1511-2CD2-....                | 15100.-           | 1MB1611-2CD2-....                      | 16500.-           |
| 37                               | -           | 280 S               | 1MB1511-2DD0-....                | 18100.-           | 1MB1611-2DD0-....                      | 18600.-           |
| 45                               | -           | 280 M               | 1MB1511-2DD2-....                | 21600.-           | 1MB1611-2DD2-....                      | 22200.-           |
| 55                               | -           | 315 S               | 1MB1511-3AD0-....                | 25600.-           | 1MB1611-3AD0-....                      | 26500.-           |
| 75                               | -           | 315 M               | 1MB1511-3AD2-....                | 33600.-           | 1MB1611-3AD2-....                      | 34500.-           |
| 90                               | -           | 315 L               | 1MB1511-3AD4-....                | 37100.-           | 1MB1611-3AD4-....                      | 38100.-           |
| 110                              | -           | 315 L               | 1MB1511-3AD5-....                | 44100.-           | 1MB1611-3AD5-....                      | 45400.-           |
| 132                              | -           | 315 L               | 1MB1511-3AD6-....                | 52100.-           | 1MB1611-3AD6-....                      | 53800.-           |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                                                                                                                                                                                                                                       |                                                                                   |                     |                           |                   |                                 |                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------|---------------------------|-------------------|---------------------------------|-------------------|--|
| Category                                                                                                                                                                                                                                              | Motors for zone 22 in type of protection Ex tc                                    |                     |                           |                   |                                 |                   |  |
| Efficiency                                                                                                                                                                                                                                            | IE3 Premium Efficiency                                                            |                     |                           |                   |                                 |                   |  |
| Series version                                                                                                                                                                                                                                        | Cast-iron series 1MB1523, 1MB1623 Basic/Performance Line (continued on next page) |                     |                           |                   |                                 |                   |  |
| Cooling                                                                                                                                                                                                                                               | Self-ventilated (IC 411)                                                          |                     |                           |                   |                                 |                   |  |
| Degree of protection                                                                                                                                                                                                                                  | IP55, optionally IP56 or IP65                                                     |                     |                           |                   |                                 |                   |  |
| Insulation                                                                                                                                                                                                                                            | Thermal class 155 (F)                                                             |                     |                           |                   |                                 |                   |  |
| Utilization                                                                                                                                                                                                                                           | Thermal class 130 (B)                                                             |                     |                           |                   |                                 |                   |  |
| Number of poles                                                                                                                                                                                                                                       | 2, 4, 6                                                                           |                     |                           |                   |                                 |                   |  |
| Frame sizes (FS)                                                                                                                                                                                                                                      | 71 M ... 315 L                                                                    |                     |                           |                   |                                 |                   |  |
| Rated power at 50 Hz                                                                                                                                                                                                                                  | 0.18 ... 200 kW                                                                   |                     |                           |                   |                                 |                   |  |
| Synchronous speed at 50 Hz                                                                                                                                                                                                                            | 1000 ... 3000 rpm                                                                 |                     |                           |                   |                                 |                   |  |
| Rated torque at 50 Hz                                                                                                                                                                                                                                 | 10 ... 1542 Nm                                                                    |                     |                           |                   |                                 |                   |  |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                                | N - W - - - -                                                                     |                     |                           |                   |                                 |                   |  |
| Price group (PG)                                                                                                                                                                                                                                      | 3X1                                                                               |                     |                           |                   |                                 |                   |  |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price) |                                                                                   |                     |                           |                   |                                 |                   |  |
| $P_{rated}$ ,<br>50 Hz<br>kW                                                                                                                                                                                                                          | IE<br>class                                                                       | Frame<br>size<br>FS | Article No.<br>Basic Line | Base price<br>EUR | Article No.<br>Performance Line | Base price<br>EUR |  |
| 2-pole: 3000 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                   |                     |                           |                   |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1523-0CA2-....         | 722.–             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1523-0CA3-....         | 833.–             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1523-0DA2-....         | 865.–             |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE3                                                                               | 80 M                | 1MB1523-0DA3-....         | 976.–             |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE3                                                                               | 90 S                | 1MB1523-0EA0-....         | 1130.–            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE3                                                                               | 90 L                | 1MB1523-0EA4-....         | 1350.–            |                                 |                   |  |
| 3                                                                                                                                                                                                                                                     | IE3                                                                               | 100 L               | 1MB1523-1AA4-....         | 1390.–            | 1MB1623-1AA4-....               | 1570.–            |  |
| 4                                                                                                                                                                                                                                                     | IE3                                                                               | 112 M               | 1MB1523-1BA2-....         | 1660.–            | 1MB1623-1BA2-....               | 1860.–            |  |
| 5.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1523-1CA0-....         | 2110.–            | 1MB1623-1CA0-....               | 2360.–            |  |
| 7.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1523-1CA1-....         | 2640.–            | 1MB1623-1CA1-....               | 2950.–            |  |
| 11                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1523-1DA2-....         | 3660.–            | 1MB1623-1DA2-....               | 4090.–            |  |
| 15                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1523-1DA3-....         | 4680.–            | 1MB1623-1DA3-....               | 5250.–            |  |
| 18.5                                                                                                                                                                                                                                                  | IE3                                                                               | 160 L               | 1MB1523-1DA4-....         | 5520.–            | 1MB1623-1DA4-....               | 6210.–            |  |
| 22                                                                                                                                                                                                                                                    | IE3                                                                               | 180 M               | 1MB1523-1EA2-....         | 6360.–            | 1MB1623-1EA2-....               | 6870.–            |  |
| 30                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1523-2AA4-....         | 8320.–            | 1MB1623-2AA4-....               | 8990.–            |  |
| 37                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1523-2AA5-....         | 10300.–           | 1MB1623-2AA5-....               | 11100.–           |  |
| 45                                                                                                                                                                                                                                                    | IE3                                                                               | 225 M               | 1MB1523-2BA2-....         | 11600.–           | 1MB1623-2BA2-....               | 12700.–           |  |
| 55                                                                                                                                                                                                                                                    | IE3                                                                               | 250 M               | 1MB1523-2CA2-....         | 13900.–           | 1MB1623-2CA2-....               | 15000.–           |  |
| 75                                                                                                                                                                                                                                                    | IE3                                                                               | 280 S               | 1MB1523-2DA0-....         | 18700.–           | 1MB1623-2DA0-....               | 19200.–           |  |
| 90                                                                                                                                                                                                                                                    | IE3                                                                               | 280 M               | 1MB1523-2DA2-....         | 21900.–           | 1MB1623-2DA2-....               | 22900.–           |  |
| 110                                                                                                                                                                                                                                                   | IE3                                                                               | 315 S               | 1MB1523-3AA0-....         | 26200.–           | 1MB1623-3AA0-....               | 27300.–           |  |
| 132                                                                                                                                                                                                                                                   | IE3                                                                               | 315 M               | 1MB1523-3AA2-....         | 31100.–           | 1MB1623-3AA2-....               | 32400.–           |  |
| 160                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1523-3AA4-....         | 38200.–           | 1MB1623-3AA4-....               | 40100.–           |  |
| 200                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1523-3AA5-....         | 47500.–           | 1MB1623-3AA5-....               | 49600.–           |  |
| 4-pole: 1500 rpm at 50 Hz                                                                                                                                                                                                                             |                                                                                   |                     |                           |                   |                                 |                   |  |
| 0.25                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1523-0CB2-....         | 717.–             |                                 |                   |  |
| 0.37                                                                                                                                                                                                                                                  | IE3                                                                               | 71 M                | 1MB1523-0CB3-....         | 793.–             |                                 |                   |  |
| 0.55                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1523-0DB2-....         | 859.–             |                                 |                   |  |
| 0.75                                                                                                                                                                                                                                                  | IE3                                                                               | 80 M                | 1MB1523-0DB3-....         | 929.–             |                                 |                   |  |
| 1.1                                                                                                                                                                                                                                                   | IE3                                                                               | 90 S                | 1MB1523-0EB0-....         | 1100.–            |                                 |                   |  |
| 1.5                                                                                                                                                                                                                                                   | IE3                                                                               | 90 L                | 1MB1523-0EB4-....         | 1240.–            |                                 |                   |  |
| 2.2                                                                                                                                                                                                                                                   | IE3                                                                               | 100 L               | 1MB1523-1AB4-....         | 1300.–            | 1MB1623-1AB4-....               | 1430.–            |  |
| 3                                                                                                                                                                                                                                                     | IE3                                                                               | 100 L               | 1MB1523-1AB5-....         | 1460.–            | 1MB1623-1AB5-....               | 1640.–            |  |
| 4                                                                                                                                                                                                                                                     | IE3                                                                               | 112 M               | 1MB1523-1BB2-....         | 1790.–            | 1MB1623-1BB2-....               | 1990.–            |  |
| 5.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 S               | 1MB1523-1CB0-....         | 2260.–            | 1MB1623-1CB0-....               | 2530.–            |  |
| 7.5                                                                                                                                                                                                                                                   | IE3                                                                               | 132 M               | 1MB1523-1CB2-....         | 2830.–            | 1MB1623-1CB2-....               | 3170.–            |  |
| 11                                                                                                                                                                                                                                                    | IE3                                                                               | 160 M               | 1MB1523-1DB2-....         | 3740.–            | 1MB1623-1DB2-....               | 4180.–            |  |
| 15                                                                                                                                                                                                                                                    | IE3                                                                               | 160 L               | 1MB1523-1DB4-....         | 4750.–            | 1MB1623-1DB4-....               | 5340.–            |  |
| 18.5                                                                                                                                                                                                                                                  | IE3                                                                               | 180 M               | 1MB1523-1EB2-....         | 5460.–            | 1MB1623-1EB2-....               | 5900.–            |  |
| 22                                                                                                                                                                                                                                                    | IE3                                                                               | 180 L               | 1MB1523-1EB4-....         | 6260.–            | 1MB1623-1EB4-....               | 6770.–            |  |
| 30                                                                                                                                                                                                                                                    | IE3                                                                               | 200 L               | 1MB1523-2AB5-....         | 8220.–            | 1MB1623-2AB5-....               | 8870.–            |  |
| 37                                                                                                                                                                                                                                                    | IE3                                                                               | 225 S               | 1MB1523-2BB0-....         | 9490.–            | 1MB1623-2BB0-....               | 10300.–           |  |
| 45                                                                                                                                                                                                                                                    | IE3                                                                               | 225 M               | 1MB1523-2BB2-....         | 11000.–           | 1MB1623-2BB2-....               | 11900.–           |  |
| 55                                                                                                                                                                                                                                                    | IE3                                                                               | 250 M               | 1MB1523-2CB2-....         | 13400.–           | 1MB1623-2CB2-....               | 14500.–           |  |
| 75                                                                                                                                                                                                                                                    | IE3                                                                               | 280 S               | 1MB1523-2DB0-....         | 17800.–           | 1MB1623-2DB0-....               | 18200.–           |  |
| 90                                                                                                                                                                                                                                                    | IE3                                                                               | 280 M               | 1MB1523-2DB2-....         | 20700.–           | 1MB1623-2DB2-....               | 21200.–           |  |
| 110                                                                                                                                                                                                                                                   | IE3                                                                               | 315 S               | 1MB1523-3AB0-....         | 25600.–           | 1MB1623-3AB0-....               | 26200.–           |  |
| 132                                                                                                                                                                                                                                                   | IE3                                                                               | 315 M               | 1MB1523-3AB2-....         | 30100.–           | 1MB1623-3AB2-....               | 31000.–           |  |
| 160                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1523-3AB4-....         | 36100.–           | 1MB1623-3AB4-....               | 37000.–           |  |
| 200                                                                                                                                                                                                                                                   | IE3                                                                               | 315 L               | 1MB1523-3AB5-....         | 44500.–           | 1MB1623-3AB5-....               | 45700.–           |  |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 22 in type of protection Ex tc</b>           |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1523, 1MB1623 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6                                                         |
| Frame sizes (FS)                       | 71 M ... 315 L                                                  |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                               |
| Rated torque at 50 Hz                  | 10 ... 1542 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | 1MB1523-0CC2-.....               | 697.-             |                                        |                   |
| 0.25                             | IE3         | 71 M                | 1MB1523-0CC3-.....               | 812.-             |                                        |                   |
| 0.37                             | IE3         | 80 M                | 1MB1523-0DC2-.....               | 835.-             |                                        |                   |
| 0.55                             | IE3         | 80 M                | 1MB1523-0DC3-.....               | 952.-             |                                        |                   |
| 0.75                             | IE3         | 90 S                | 1MB1523-0EC0-.....               | 1080.-            |                                        |                   |
| 1.1                              | IE3         | 90 L                | 1MB1523-0EC4-.....               | 1230.-            |                                        |                   |
| 1.5                              | IE3         | 100 L               | 1MB1523-1AC4-.....               | 1280.-            | 1MB1623-1AC4-.....                     | 1410.-            |
| 2.2                              | IE3         | 112 M               | 1MB1523-1BC2-.....               | 1600.-            | 1MB1623-1BC2-.....                     | 1800.-            |
| 3                                | IE3         | 132 S               | 1MB1523-1CC0-.....               | 2050.-            | 1MB1623-1CC0-.....                     | 2300.-            |
| 4                                | IE3         | 132 M               | 1MB1523-1CC2-.....               | 2460.-            | 1MB1623-1CC2-.....                     | 2760.-            |
| 5.5                              | IE3         | 132 M               | 1MB1523-1CC3-.....               | 3060.-            | 1MB1623-1CC3-.....                     | 3430.-            |
| 7.5                              | IE3         | 160 M               | 1MB1523-1DC2-.....               | 3900.-            | 1MB1623-1DC2-.....                     | 4370.-            |
| 11                               | IE3         | 160 L               | 1MB1523-1DC4-.....               | 5290.-            | 1MB1623-1DC4-.....                     | 5940.-            |
| 15                               | IE3         | 180 L               | 1MB1523-1EC4-.....               | 6660.-            | 1MB1623-1EC4-.....                     | 7200.-            |
| 18.5                             | IE3         | 200 L               | 1MB1523-2AC4-.....               | 8270.-            | 1MB1623-2AC4-.....                     | 8920.-            |
| 22                               | IE3         | 200 L               | 1MB1523-2AC5-.....               | 9460.-            | 1MB1623-2AC5-.....                     | 10200.-           |
| 30                               | IE3         | 225 M               | 1MB1523-2BC2-.....               | 11900.-           | 1MB1623-2BC2-.....                     | 13000.-           |
| 37                               | IE3         | 250 M               | 1MB1523-2CC2-.....               | 14500.-           | 1MB1623-2CC2-.....                     | 15800.-           |
| 45                               | IE3         | 280 S               | 1MB1523-2DC0-.....               | 17700.-           | 1MB1623-2DC0-.....                     | 18100.-           |
| 55                               | IE3         | 280 M               | 1MB1523-2DC2-.....               | 20700.-           | 1MB1623-2DC2-.....                     | 21200.-           |
| 75                               | IE3         | 315 S               | 1MB1523-3AC0-.....               | 27700.-           | 1MB1623-3AC0-.....                     | 28400.-           |
| 90                               | IE3         | 315 M               | 1MB1523-3AC2-.....               | 31100.-           | 1MB1623-3AC2-.....                     | 31900.-           |
| 110                              | IE3         | 315 L               | 1MB1523-3AC4-.....               | 37200.-           | 1MB1623-3AC4-.....                     | 38100.-           |
| 132                              | IE3         | 315 L               | 1MB1523-3AC5-.....               | 43900.-           | 1MB1623-3AC5-.....                     | 45100.-           |
| 160                              | IE3         | 315 L               | 1MB1523-3AC6-.....               | 53000.-           | 1MB1623-3AC6-.....                     | 54400.-           |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 22 in type of protection Ex tc</b>                                    |
| Efficiency                             | <b>IE2 High Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1MB1521, 1MB1621 Basic/Performance Line</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                                                 |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                            |
| Insulation                             | Thermal class 155 (F)                                                                    |
| Utilization                            | Thermal class 130 (B)                                                                    |
| Number of poles                        | 2, 4, 6, 8                                                                               |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                           |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                                          |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                         |
| Rated torque at 50 Hz                  | 9.9 ... 1703 Nm                                                                          |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                            |
| Price group (PG)                       | 3X1                                                                                      |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.37                             | IE2         | 71 M                | 1MB1521-0CA2-....                | 590.-             |                                        |                   |
| 0.55                             | IE2         | 71 M                | 1MB1521-0CA3-....                | 679.-             |                                        |                   |
| 0.75                             | IE2         | 80 M                | 1MB1521-0DA2-....                | 708.-             |                                        |                   |
| 1.1                              | IE2         | 80 M                | 1MB1521-0DA3-....                | 797.-             |                                        |                   |
| 1.5                              | IE2         | 90 S                | 1MB1521-0EA0-....                | 925.-             |                                        |                   |
| 2.2                              | IE2         | 90 L                | 1MB1521-0EA4-....                | 1110.-            |                                        |                   |
| 3                                | IE2         | 100 L               | 1MB1521-1AA4-....                | 1260.-            | 1MB1621-1AA4-....                      | 1360.-            |
| 4                                | IE2         | 112 M               | 1MB1521-1BA2-....                | 1490.-            | 1MB1621-1BA2-....                      | 1620.-            |
| 5.5                              | IE2         | 132 S               | 1MB1521-1CA0-....                | 1900.-            | 1MB1621-1CA0-....                      | 2080.-            |
| 7.5                              | IE2         | 132 S               | 1MB1521-1CA1-....                | 2360.-            | 1MB1621-1CA1-....                      | 2580.-            |
| 11                               | IE2         | 160 M               | 1MB1521-1DA2-....                | 3280.-            | 1MB1621-1DA2-....                      | 3740.-            |
| 15                               | IE2         | 160 M               | 1MB1521-1DA3-....                | 4190.-            | 1MB1621-1DA3-....                      | 4780.-            |
| 18.5                             | IE2         | 160 L               | 1MB1521-1DA4-....                | 4940.-            | 1MB1621-1DA4-....                      | 5640.-            |
| 22                               | IE2         | 180 M               | 1MB1521-1EA2-....                | 5710.-            | 1MB1621-1EA2-....                      | 6230.-            |
| 30                               | IE2         | 200 L               | 1MB1521-2AA4-....                | 7490.-            | 1MB1621-2AA4-....                      | 8150.-            |
| 37                               | IE2         | 200 L               | 1MB1521-2AA5-....                | 9200.-            | 1MB1621-2AA5-....                      | 10100.-           |
| 45                               | IE2         | 225 M               | 1MB1521-2BA2-....                | 10700.-           | 1MB1621-2BA2-....                      | 11600.-           |
| 55                               | IE2         | 250 M               | 1MB1521-2CA2-....                | 12700.-           | 1MB1621-2CA2-....                      | 13800.-           |
| 75                               | IE2         | 280 S               | 1MB1521-2DA0-....                | 17100.-           | 1MB1621-2DA0-....                      | 17600.-           |
| 90                               | IE2         | 280 M               | 1MB1521-2DA2-....                | 20000.-           | 1MB1621-2DA2-....                      | 21000.-           |
| 110                              | IE2         | 315 S               | 1MB1521-3AA0-....                | 23900.-           | 1MB1621-3AA0-....                      | 25000.-           |
| 132                              | IE2         | 315 M               | 1MB1521-3AA2-....                | 28400.-           | 1MB1621-3AA2-....                      | 29700.-           |
| 160                              | IE2         | 315 L               | 1MB1521-3AA4-....                | 34900.-           | 1MB1621-3AA4-....                      | 36700.-           |
| 200                              | IE2         | 315 L               | 1MB1521-3AA5-....                | 43300.-           | 1MB1621-3AA5-....                      | 45300.-           |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.25                             | IE2         | 71 M                | 1MB1521-0CB2-....                | 587.-             |                                        |                   |
| 0.37                             | IE2         | 71 M                | 1MB1521-0CB3-....                | 648.-             |                                        |                   |
| 0.55                             | IE2         | 80 M                | 1MB1521-0DB2-....                | 703.-             |                                        |                   |
| 0.75                             | IE2         | 80 M                | 1MB1521-0DB3-....                | 760.-             |                                        |                   |
| 1.1                              | IE2         | 90 S                | 1MB1521-0EB0-....                | 900.-             |                                        |                   |
| 1.5                              | IE2         | 90 L                | 1MB1521-0EB4-....                | 1000.-            |                                        |                   |
| 2.2                              | IE2         | 100 L               | 1MB1521-1AB4-....                | 1150.-            | 1MB1621-1AB4-....                      | 1260.-            |
| 3                                | IE2         | 100 L               | 1MB1521-1AB5-....                | 1310.-            | 1MB1621-1AB5-....                      | 1430.-            |
| 4                                | IE2         | 112 M               | 1MB1521-1BB2-....                | 1600.-            | 1MB1621-1BB2-....                      | 1760.-            |
| 5.5                              | IE2         | 132 S               | 1MB1521-1CB0-....                | 2030.-            | 1MB1621-1CB0-....                      | 2210.-            |
| 7.5                              | IE2         | 132 M               | 1MB1521-1CB2-....                | 2520.-            | 1MB1621-1CB2-....                      | 2760.-            |
| 11                               | IE2         | 160 M               | 1MB1521-1DB2-....                | 3370.-            | 1MB1621-1DB2-....                      | 3800.-            |
| 15                               | IE2         | 160 L               | 1MB1521-1DB4-....                | 4250.-            | 1MB1621-1DB4-....                      | 4850.-            |
| 18.5                             | IE2         | 180 M               | 1MB1521-1EB2-....                | 4910.-            | 1MB1621-1EB2-....                      | 5360.-            |
| 22                               | IE2         | 180 L               | 1MB1521-1EB4-....                | 5630.-            | 1MB1621-1EB4-....                      | 6140.-            |
| 30                               | IE2         | 200 L               | 1MB1521-2AB5-....                | 7390.-            | 1MB1621-2AB5-....                      | 8040.-            |
| 37                               | IE2         | 225 S               | 1MB1521-2BB0-....                | 8710.-            | 1MB1621-2BB0-....                      | 9490.-            |
| 45                               | IE2         | 225 M               | 1MB1521-2BB2-....                | 10100.-           | 1MB1621-2BB2-....                      | 11000.-           |
| 55                               | IE2         | 250 M               | 1MB1521-2CB2-....                | 12300.-           | 1MB1621-2CB2-....                      | 13300.-           |
| 75                               | IE2         | 280 S               | 1MB1521-2DB0-....                | 16300.-           | 1MB1621-2DB0-....                      | 16700.-           |
| 90                               | IE2         | 280 M               | 1MB1521-2DB2-....                | 18800.-           | 1MB1621-2DB2-....                      | 19400.-           |
| 110                              | IE2         | 315 S               | 1MB1521-3AB0-....                | 23400.-           | 1MB1621-3AB0-....                      | 24000.-           |
| 132                              | IE2         | 315 M               | 1MB1521-3AB2-....                | 27400.-           | 1MB1621-3AB2-....                      | 28200.-           |
| 160                              | IE2         | 315 L               | 1MB1521-3AB4-....                | 32800.-           | 1MB1621-3AB4-....                      | 33800.-           |
| 200                              | IE2         | 315 L               | 1MB1521-3AB5-....                | 40600.-           | 1MB1621-3AB5-....                      | 41800.-           |

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 22 in type of protection Ex tc</b>           |
| Efficiency                             | <b>IE2 High Efficiency</b>                                      |
| Series version                         | <b>Cast-iron series 1MB1521, 1MB1621 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6, 8                                                      |
| Frame sizes (FS)                       | 71 M ... 315 L                                                  |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                |
| Rated torque at 50 Hz                  | 9.9 ... 1703 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base price</b><br>EUR | Article No.<br><b>Performance Line</b> | <b>Base price</b><br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|--------------------------|----------------------------------------|--------------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                          |                                        |                          |
| 0.18                             | IE2         | 71 M                | 1MB1521-0CC2-....                | 570.-                    |                                        |                          |
| 0.25                             | IE2         | 71 M                | 1MB1521-0CC3-....                | 664.-                    |                                        |                          |
| 0.37                             | IE2         | 80 M                | 1MB1521-0DC2-....                | 684.-                    |                                        |                          |
| 0.55                             | IE2         | 80 M                | 1MB1521-0DC3-....                | 779.-                    |                                        |                          |
| 0.75                             | IE2         | 90 S                | 1MB1521-0EC0-....                | 885.-                    |                                        |                          |
| 1.1                              | IE2         | 90 L                | 1MB1521-0EC4-....                | 1010.-                   |                                        |                          |
| 1.5                              | IE2         | 100 L               | 1MB1521-1AC4-....                | 1140.-                   | 1MB1621-1AC4-....                      | 1250.-                   |
| 2.2                              | IE2         | 112 M               | 1MB1521-1BC2-....                | 1430.-                   | 1MB1621-1BC2-....                      | 1570.-                   |
| 3                                | IE2         | 132 S               | 1MB1521-1CC0-....                | 1840.-                   | 1MB1621-1CC0-....                      | 1990.-                   |
| 4                                | IE2         | 132 M               | 1MB1521-1CC2-....                | 2210.-                   | 1MB1621-1CC2-....                      | 2420.-                   |
| 5.5                              | IE2         | 132 M               | 1MB1521-1CC3-....                | 2740.-                   | 1MB1621-1CC3-....                      | 2980.-                   |
| 7.5                              | IE2         | 160 M               | 1MB1521-1DC2-....                | 3500.-                   | 1MB1621-1DC2-....                      | 4000.-                   |
| 11                               | IE2         | 160 L               | 1MB1521-1DC4-....                | 4740.-                   | 1MB1621-1DC4-....                      | 5400.-                   |
| 15                               | IE2         | 180 L               | 1MB1521-1EC4-....                | 5970.-                   | 1MB1621-1EC4-....                      | 6520.-                   |
| 18.5                             | IE2         | 200 L               | 1MB1521-2AC4-....                | 7430.-                   | 1MB1621-2AC4-....                      | 8110.-                   |
| 22                               | IE2         | 200 L               | 1MB1521-2AC5-....                | 8500.-                   | 1MB1621-2AC5-....                      | 9260.-                   |
| 30                               | IE2         | 225 M               | 1MB1521-2BC2-....                | 10900.-                  | 1MB1621-2BC2-....                      | 11900.-                  |
| 37                               | IE2         | 250 M               | 1MB1521-2CC2-....                | 13300.-                  | 1MB1621-2CC2-....                      | 14400.-                  |
| 45                               | IE2         | 280 S               | 1MB1521-2DC0-....                | 16200.-                  | 1MB1621-2DC0-....                      | 16600.-                  |
| 55                               | IE2         | 280 M               | 1MB1521-2DC2-....                | 18800.-                  | 1MB1621-2DC2-....                      | 19400.-                  |
| 75                               | IE2         | 315 S               | 1MB1521-3AC0-....                | 25200.-                  | 1MB1621-3AC0-....                      | 26100.-                  |
| 90                               | IE2         | 315 M               | 1MB1521-3AC2-....                | 28400.-                  | 1MB1621-3AC2-....                      | 29100.-                  |
| 110                              | IE2         | 315 L               | 1MB1521-3AC4-....                | 33900.-                  | 1MB1621-3AC4-....                      | 34800.-                  |
| 132                              | IE2         | 315 L               | 1MB1521-3AC5-....                | 40100.-                  | 1MB1621-3AC5-....                      | 41200.-                  |
| 160                              | IE2         | 315 L               | 1MB1521-3AC6-....                | 48300.-                  | 1MB1621-3AC6-....                      | 49700.-                  |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                          |                                        |                          |
| 0.09                             | -           | 71 M                | 1MB1521-0CD2-....                | 651.-                    |                                        |                          |
| 0.12                             | IE2         | 71 M                | 1MB1521-0CD3-....                | 718.-                    |                                        |                          |
| 0.18                             | IE2         | 80 M                | 1MB1521-0DD2-....                | 761.-                    |                                        |                          |
| 0.25                             | IE2         | 80 M                | 1MB1521-0DD3-....                | 917.-                    |                                        |                          |
| 0.37                             | IE2         | 90 S                | 1MB1521-0ED0-....                | 1080.-                   |                                        |                          |
| 0.55                             | IE2         | 90 L                | 1MB1521-0ED4-....                | 1230.-                   |                                        |                          |
| 0.75                             | IE2         | 100 L               | 1MB1521-1AD4-....                | 1270.-                   | 1MB1621-1AD4-....                      | 1380.-                   |
| 1.1                              | IE2         | 100 L               | 1MB1521-1AD5-....                | 1570.-                   | 1MB1621-1AD5-....                      | 1700.-                   |
| 1.5                              | IE2         | 112 M               | 1MB1521-1BD2-....                | 1850.-                   | 1MB1621-1BD2-....                      | 2040.-                   |
| 2.2                              | IE2         | 132 S               | 1MB1521-1CD0-....                | 2430.-                   | 1MB1621-1CD0-....                      | 2670.-                   |
| 3                                | IE2         | 132 M               | 1MB1521-1CD2-....                | 2930.-                   | 1MB1621-1CD2-....                      | 3210.-                   |
| 4                                | IE2         | 160 M               | 1MB1521-1DD2-....                | 3640.-                   | 1MB1621-1DD2-....                      | 4130.-                   |
| 5.5                              | IE2         | 160 M               | 1MB1521-1DD3-....                | 4400.-                   | 1MB1621-1DD3-....                      | 5020.-                   |
| 7.5                              | IE2         | 160 L               | 1MB1521-1DD4-....                | 5260.-                   | 1MB1621-1DD4-....                      | 5990.-                   |
| 11                               | -           | 180 L               | 1MB1521-1ED4-....                | 6340.-                   | 1MB1621-1ED4-....                      | 6930.-                   |
| 15                               | -           | 200 L               | 1MB1521-2AD5-....                | 8460.-                   | 1MB1621-2AD5-....                      | 9230.-                   |
| 18.5                             | -           | 225 S               | 1MB1521-2BD0-....                | 9950.-                   | 1MB1621-2BD0-....                      | 10800.-                  |
| 22                               | -           | 225 M               | 1MB1521-2BD2-....                | 11200.-                  | 1MB1621-2BD2-....                      | 12400.-                  |
| 30                               | -           | 250 M               | 1MB1521-2CD2-....                | 14400.-                  | 1MB1621-2CD2-....                      | 15900.-                  |
| 37                               | -           | 280 S               | 1MB1521-2DD0-....                | 17200.-                  | 1MB1621-2DD0-....                      | 17800.-                  |
| 45                               | -           | 280 M               | 1MB1521-2DD2-....                | 20800.-                  | 1MB1621-2DD2-....                      | 21400.-                  |
| 55                               | -           | 315 S               | 1MB1521-3AD0-....                | 24500.-                  | 1MB1621-3AD0-....                      | 25200.-                  |
| 75                               | -           | 315 M               | 1MB1521-3AD2-....                | 32300.-                  | 1MB1621-3AD2-....                      | 33300.-                  |
| 90                               | -           | 315 L               | 1MB1521-3AD4-....                | 35800.-                  | 1MB1621-3AD4-....                      | 37000.-                  |
| 110                              | -           | 315 L               | 1MB1521-3AD5-....                | 43000.-                  | 1MB1621-3AD5-....                      | 44300.-                  |
| 132                              | -           | 315 L               | 1MB1521-3AD6-....                | 51100.-                  | 1MB1621-3AD6-....                      | 52600.-                  |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 2 in type of protection Ex ec</b>                                     |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                                            |
| Series version                         | <b>Cast-iron series 1MB1533, 1MB1633 Basic/Performance Line</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                                                 |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                            |
| Insulation                             | Thermal class 155 (F)                                                                    |
| Utilization                            | Thermal class 130 (B)                                                                    |
| Number of poles                        | 2, 4, 6                                                                                  |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                           |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                                          |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                        |
| Rated torque at 50 Hz                  | 10 ... 1542 Nm                                                                           |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                            |
| Price group (PG)                       | 3X1                                                                                      |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.37                             | IE3         | 71 M                | 1MB1533-0CA2-....                | 762.-             |                                        |                   |
| 0.55                             | IE3         | 71 M                | 1MB1533-0CA3-....                | 876.-             |                                        |                   |
| 0.75                             | IE3         | 80 M                | 1MB1533-0DA2-....                | 917.-             |                                        |                   |
| 1.1                              | IE3         | 80 M                | 1MB1533-0DA3-....                | 1030.-            |                                        |                   |
| 1.5                              | IE3         | 90 S                | 1MB1533-0EA0-....                | 1170.-            |                                        |                   |
| 2.2                              | IE3         | 90 L                | 1MB1533-0EA4-....                | 1400.-            |                                        |                   |
| 3                                | IE3         | 100 L               | 1MB1533-1AA4-....                | 1460.-            | 1MB1633-1AA4-....                      | 1630.-            |
| 4                                | IE3         | 112 M               | 1MB1533-1BA2-....                | 1730.-            | 1MB1633-1BA2-....                      | 1940.-            |
| 5.5                              | IE3         | 132 S               | 1MB1533-1CA0-....                | 2170.-            | 1MB1633-1CA0-....                      | 2430.-            |
| 7.5                              | IE3         | 132 S               | 1MB1533-1CA1-....                | 2710.-            | 1MB1633-1CA1-....                      | 3020.-            |
| 11                               | IE3         | 160 M               | 1MB1533-1DA2-....                | 3720.-            | 1MB1633-1DA2-....                      | 4160.-            |
| 15                               | IE3         | 160 M               | 1MB1533-1DA3-....                | 4750.-            | 1MB1633-1DA3-....                      | 5310.-            |
| 18.5                             | IE3         | 160 L               | 1MB1533-1DA4-....                | 5590.-            | 1MB1633-1DA4-....                      | 6260.-            |
| 22                               | IE3         | 180 M               | 1MB1533-1EA2-....                | 6330.-            | 1MB1633-1EA2-....                      | 6850.-            |
| 30                               | IE3         | 200 L               | 1MB1533-2AA4-....                | 8230.-            | 1MB1633-2AA4-....                      | 8890.-            |
| 37                               | IE3         | 200 L               | 1MB1533-2AA5-....                | 10200.-           | 1MB1633-2AA5-....                      | 10900.-           |
| 45                               | IE3         | 225 M               | 1MB1533-2BA2-....                | 11400.-           | 1MB1633-2BA2-....                      | 12500.-           |
| 55                               | IE3         | 250 M               | 1MB1533-2CA2-....                | 13700.-           | 1MB1633-2CA2-....                      | 14800.-           |
| 75                               | IE3         | 280 S               | 1MB1533-2DA0-....                | 18500.-           | 1MB1633-2DA0-....                      | 19000.-           |
| 90                               | IE3         | 280 M               | 1MB1533-2DA2-....                | 21700.-           | 1MB1633-2DA2-....                      | 22600.-           |
| 110                              | IE3         | 315 S               | 1MB1533-3AA0-....                | 26100.-           | 1MB1633-3AA0-....                      | 27200.-           |
| 132                              | IE3         | 315 M               | 1MB1533-3AA2-....                | 30900.-           | 1MB1633-3AA2-....                      | 32300.-           |
| 160                              | IE3         | 315 L               | 1MB1533-3AA4-....                | 38100.-           | 1MB1633-3AA4-....                      | 39900.-           |
| 200                              | IE3         | 315 L               | 1MB1533-3AA5-....                | 47300.-           | 1MB1633-3AA5-....                      | 49400.-           |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.25                             | IE3         | 71 M                | 1MB1533-0CB2-....                | 757.-             |                                        |                   |
| 0.37                             | IE3         | 71 M                | 1MB1533-0CB3-....                | 833.-             |                                        |                   |
| 0.55                             | IE3         | 80 M                | 1MB1533-0DB2-....                | 911.-             |                                        |                   |
| 0.75                             | IE3         | 80 M                | 1MB1533-0DB3-....                | 981.-             |                                        |                   |
| 1.1                              | IE3         | 90 S                | 1MB1533-0EB0-....                | 1150.-            |                                        |                   |
| 1.5                              | IE3         | 90 L                | 1MB1533-0EB4-....                | 1290.-            |                                        |                   |
| 2.2                              | IE3         | 100 L               | 1MB1533-1AB4-....                | 1350.-            | 1MB1633-1AB4-....                      | 1500.-            |
| 3                                | IE3         | 100 L               | 1MB1533-1AB5-....                | 1530.-            | 1MB1633-1AB5-....                      | 1700.-            |
| 4                                | IE3         | 112 M               | 1MB1533-1BB2-....                | 1860.-            | 1MB1633-1BB2-....                      | 2080.-            |
| 5.5                              | IE3         | 132 S               | 1MB1533-1CB0-....                | 2330.-            | 1MB1633-1CB0-....                      | 2610.-            |
| 7.5                              | IE3         | 132 M               | 1MB1533-1CB2-....                | 2890.-            | 1MB1633-1CB2-....                      | 3230.-            |
| 11                               | IE3         | 160 M               | 1MB1533-1DB2-....                | 3800.-            | 1MB1633-1DB2-....                      | 4240.-            |
| 15                               | IE3         | 160 L               | 1MB1533-1DB4-....                | 4810.-            | 1MB1633-1DB4-....                      | 5400.-            |
| 18.5                             | IE3         | 180 M               | 1MB1533-1EB2-....                | 5450.-            | 1MB1633-1EB2-....                      | 5890.-            |
| 22                               | IE3         | 180 L               | 1MB1533-1EB4-....                | 6250.-            | 1MB1633-1EB4-....                      | 6760.-            |
| 30                               | IE3         | 200 L               | 1MB1533-2AB5-....                | 8120.-            | 1MB1633-2AB5-....                      | 8780.-            |
| 37                               | IE3         | 225 S               | 1MB1533-2BB0-....                | 9330.-            | 1MB1633-2BB0-....                      | 10100.-           |
| 45                               | IE3         | 225 M               | 1MB1533-2BB2-....                | 10800.-           | 1MB1633-2BB2-....                      | 11700.-           |
| 55                               | IE3         | 250 M               | 1MB1533-2CB2-....                | 13200.-           | 1MB1633-2CB2-....                      | 14300.-           |
| 75                               | IE3         | 280 S               | 1MB1533-2DB0-....                | 17600.-           | 1MB1633-2DB0-....                      | 18000.-           |
| 90                               | IE3         | 280 M               | 1MB1533-2DB2-....                | 20500.-           | 1MB1633-2DB2-....                      | 21000.-           |
| 110                              | IE3         | 315 S               | 1MB1533-3AB0-....                | 25300.-           | 1MB1633-3AB0-....                      | 26100.-           |
| 132                              | IE3         | 315 M               | 1MB1533-3AB2-....                | 29900.-           | 1MB1633-3AB2-....                      | 30700.-           |
| 160                              | IE3         | 315 L               | 1MB1533-3AB4-....                | 35800.-           | 1MB1633-3AB4-....                      | 36900.-           |
| 200                              | IE3         | 315 L               | 1MB1533-3AB5-....                | 44400.-           | 1MB1633-3AB5-....                      | 45500.-           |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

20

25

30

40

80

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 2 in type of protection Ex ec</b>            |
| Efficiency                             | <b>IE3 Premium Efficiency</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1533, 1MB1633 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6                                                         |
| Frame sizes (FS)                       | 71 M ... 315 L                                                  |
| Rated power at 50 Hz                   | 0.18 ... 200 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                               |
| Rated torque at 50 Hz                  | 10 ... 1542 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | 1MB1533-0CC2-.....               | 739.-             |                                        |                   |
| 0.25                             | IE3         | 71 M                | 1MB1533-0CC3-.....               | 853.-             |                                        |                   |
| 0.37                             | IE3         | 80 M                | 1MB1533-0DC2-.....               | 887.-             |                                        |                   |
| 0.55                             | IE3         | 80 M                | 1MB1533-0DC3-.....               | 1000.-            |                                        |                   |
| 0.75                             | IE3         | 90 S                | 1MB1533-0EC0-.....               | 1130.-            |                                        |                   |
| 1.1                              | IE3         | 90 L                | 1MB1533-0EC4-.....               | 1280.-            |                                        |                   |
| 1.5                              | IE3         | 100 L               | 1MB1533-1AC4-.....               | 1330.-            | 1MB1633-1AC4-.....                     | 1490.-            |
| 2.2                              | IE3         | 112 M               | 1MB1533-1BC2-.....               | 1670.-            | 1MB1633-1BC2-.....                     | 1870.-            |
| 3                                | IE3         | 132 S               | 1MB1533-1CC0-.....               | 2120.-            | 1MB1633-1CC0-.....                     | 2360.-            |
| 4                                | IE3         | 132 M               | 1MB1533-1CC2-.....               | 2530.-            | 1MB1633-1CC2-.....                     | 2830.-            |
| 5.5                              | IE3         | 132 M               | 1MB1533-1CC3-.....               | 3130.-            | 1MB1633-1CC3-.....                     | 3490.-            |
| 7.5                              | IE3         | 160 M               | 1MB1533-1DC2-.....               | 3980.-            | 1MB1633-1DC2-.....                     | 4440.-            |
| 11                               | IE3         | 160 L               | 1MB1533-1DC4-.....               | 5360.-            | 1MB1633-1DC4-.....                     | 6000.-            |
| 15                               | IE3         | 180 L               | 1MB1533-1EC4-.....               | 6650.-            | 1MB1633-1EC4-.....                     | 7190.-            |
| 18.5                             | IE3         | 200 L               | 1MB1533-2AC4-.....               | 8180.-            | 1MB1633-2AC4-.....                     | 8830.-            |
| 22                               | IE3         | 200 L               | 1MB1533-2AC5-.....               | 9360.-            | 1MB1633-2AC5-.....                     | 10100.-           |
| 30                               | IE3         | 225 M               | 1MB1533-2BC2-.....               | 11700.-           | 1MB1633-2BC2-.....                     | 12800.-           |
| 37                               | IE3         | 250 M               | 1MB1533-2CC2-.....               | 14300.-           | 1MB1633-2CC2-.....                     | 15600.-           |
| 45                               | IE3         | 280 S               | 1MB1533-2DC0-.....               | 17500.-           | 1MB1633-2DC0-.....                     | 17900.-           |
| 55                               | IE3         | 280 M               | 1MB1533-2DC2-.....               | 20500.-           | 1MB1633-2DC2-.....                     | 21000.-           |
| 75                               | IE3         | 315 S               | 1MB1533-3AC0-.....               | 27600.-           | 1MB1633-3AC0-.....                     | 28300.-           |
| 90                               | IE3         | 315 M               | 1MB1533-3AC2-.....               | 30900.-           | 1MB1633-3AC2-.....                     | 31800.-           |
| 110                              | IE3         | 315 L               | 1MB1533-3AC4-.....               | 37100.-           | 1MB1633-3AC4-.....                     | 38000.-           |
| 132                              | IE3         | 315 L               | 1MB1533-3AC5-.....               | 43800.-           | 1MB1633-3AC5-.....                     | 45000.-           |
| 160                              | IE3         | 315 L               | 1MB1533-3AC6-.....               | 52900.-           | 1MB1633-3AC6-.....                     | 54300.-           |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

## Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                          |
|----------------------------------------|------------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 2 in type of protection Ex ec</b>                                     |
| Efficiency                             | <b>IE2 High Efficiency</b>                                                               |
| Series version                         | <b>Cast-iron series 1MB1531, 1MB1631 Basic/Performance Line</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                                                 |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                            |
| Insulation                             | Thermal class 155 (F)                                                                    |
| Utilization                            | Thermal class 130 (B)                                                                    |
| Number of poles                        | 2, 4, 6, 8                                                                               |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                           |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                                          |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                                         |
| Rated torque at 50 Hz                  | 9.9 ... 1703 Nm                                                                          |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                            |
| Price group (PG)                       | 3X1                                                                                      |

Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.37                             | IE2         | 71 M                | 1MB1531-0CA2-....                | 631.-             |                                        |                   |
| 0.55                             | IE2         | 71 M                | 1MB1531-0CA3-....                | 721.-             |                                        |                   |
| 0.75                             | IE2         | 80 M                | 1MB1531-0DA2-....                | 759.-             |                                        |                   |
| 1.1                              | IE2         | 80 M                | 1MB1531-0DA3-....                | 849.-             |                                        |                   |
| 1.5                              | IE2         | 90 S                | 1MB1531-0EA0-....                | 973.-             |                                        |                   |
| 2.2                              | IE2         | 90 L                | 1MB1531-0EA4-....                | 1150.-            |                                        |                   |
| 3                                | IE2         | 100 L               | 1MB1531-1AA4-....                | 1320.-            | 1MB1631-1AA4-....                      | 1430.-            |
| 4                                | IE2         | 112 M               | 1MB1531-1BA2-....                | 1570.-            | 1MB1631-1BA2-....                      | 1690.-            |
| 5.5                              | IE2         | 132 S               | 1MB1531-1CA0-....                | 1970.-            | 1MB1631-1CA0-....                      | 2150.-            |
| 7.5                              | IE2         | 132 S               | 1MB1531-1CA1-....                | 2440.-            | 1MB1631-1CA1-....                      | 2650.-            |
| 11                               | IE2         | 160 M               | 1MB1531-1DA2-....                | 3360.-            | 1MB1631-1DA2-....                      | 3800.-            |
| 15                               | IE2         | 160 M               | 1MB1531-1DA3-....                | 4250.-            | 1MB1631-1DA3-....                      | 4840.-            |
| 18.5                             | IE2         | 160 L               | 1MB1531-1DA4-....                | 5020.-            | 1MB1631-1DA4-....                      | 5710.-            |
| 22                               | IE2         | 180 M               | 1MB1531-1EA2-....                | 5700.-            | 1MB1631-1EA2-....                      | 6220.-            |
| 30                               | IE2         | 200 L               | 1MB1531-2AA4-....                | 7390.-            | 1MB1631-2AA4-....                      | 8040.-            |
| 37                               | IE2         | 200 L               | 1MB1531-2AA5-....                | 9110.-            | 1MB1631-2AA5-....                      | 9950.-            |
| 45                               | IE2         | 225 M               | 1MB1531-2BA2-....                | 10500.-           | 1MB1631-2BA2-....                      | 11400.-           |
| 55                               | IE2         | 250 M               | 1MB1531-2CA2-....                | 12500.-           | 1MB1631-2CA2-....                      | 13600.-           |
| 75                               | IE2         | 280 S               | 1MB1531-2DA0-....                | 16900.-           | 1MB1631-2DA0-....                      | 17300.-           |
| 90                               | IE2         | 280 M               | 1MB1531-2DA2-....                | 19800.-           | 1MB1631-2DA2-....                      | 20800.-           |
| 110                              | IE2         | 315 S               | 1MB1531-3AA0-....                | 23800.-           | 1MB1631-3AA0-....                      | 24900.-           |
| 132                              | IE2         | 315 M               | 1MB1531-3AA2-....                | 28300.-           | 1MB1631-3AA2-....                      | 29600.-           |
| 160                              | IE2         | 315 L               | 1MB1531-3AA4-....                | 34800.-           | 1MB1631-3AA4-....                      | 36600.-           |
| 200                              | IE2         | 315 L               | 1MB1531-3AA5-....                | 43200.-           | 1MB1631-3AA5-....                      | 45200.-           |
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.25                             | IE2         | 71 M                | 1MB1531-0CB2-....                | 627.-             |                                        |                   |
| 0.37                             | IE2         | 71 M                | 1MB1531-0CB3-....                | 690.-             |                                        |                   |
| 0.55                             | IE2         | 80 M                | 1MB1531-0DB2-....                | 755.-             |                                        |                   |
| 0.75                             | IE2         | 80 M                | 1MB1531-0DB3-....                | 812.-             |                                        |                   |
| 1.1                              | IE2         | 90 S                | 1MB1531-0EB0-....                | 949.-             |                                        |                   |
| 1.5                              | IE2         | 90 L                | 1MB1531-0EB4-....                | 1050.-            |                                        |                   |
| 2.2                              | IE2         | 100 L               | 1MB1531-1AB4-....                | 1230.-            | 1MB1631-1AB4-....                      | 1320.-            |
| 3                                | IE2         | 100 L               | 1MB1531-1AB5-....                | 1370.-            | 1MB1631-1AB5-....                      | 1500.-            |
| 4                                | IE2         | 112 M               | 1MB1531-1BB2-....                | 1670.-            | 1MB1631-1BB2-....                      | 1830.-            |
| 5.5                              | IE2         | 132 S               | 1MB1531-1CB0-....                | 2110.-            | 1MB1631-1CB0-....                      | 2300.-            |
| 7.5                              | IE2         | 132 M               | 1MB1531-1CB2-....                | 2610.-            | 1MB1631-1CB2-....                      | 2840.-            |
| 11                               | IE2         | 160 M               | 1MB1531-1DB2-....                | 3430.-            | 1MB1631-1DB2-....                      | 3860.-            |
| 15                               | IE2         | 160 L               | 1MB1531-1DB4-....                | 4330.-            | 1MB1631-1DB4-....                      | 4920.-            |
| 18.5                             | IE2         | 180 M               | 1MB1531-1EB2-....                | 4890.-            | 1MB1631-1EB2-....                      | 5350.-            |
| 22                               | IE2         | 180 L               | 1MB1531-1EB4-....                | 5620.-            | 1MB1631-1EB4-....                      | 6130.-            |
| 30                               | IE2         | 200 L               | 1MB1531-2AB5-....                | 7280.-            | 1MB1631-2AB5-....                      | 7950.-            |
| 37                               | IE2         | 225 S               | 1MB1531-2BB0-....                | 8550.-            | 1MB1631-2BB0-....                      | 9330.-            |
| 45                               | IE2         | 225 M               | 1MB1531-2BB2-....                | 9930.-            | 1MB1631-2BB2-....                      | 10800.-           |
| 55                               | IE2         | 250 M               | 1MB1531-2CB2-....                | 11900.-           | 1MB1631-2CB2-....                      | 13100.-           |
| 75                               | IE2         | 280 S               | 1MB1531-2DB0-....                | 16100.-           | 1MB1631-2DB0-....                      | 16500.-           |
| 90                               | IE2         | 280 M               | 1MB1531-2DB2-....                | 18600.-           | 1MB1631-2DB2-....                      | 19200.-           |
| 110                              | IE2         | 315 S               | 1MB1531-3AB0-....                | 23300.-           | 1MB1631-3AB0-....                      | 23900.-           |
| 132                              | IE2         | 315 M               | 1MB1531-3AB2-....                | 27300.-           | 1MB1631-3AB2-....                      | 28000.-           |
| 160                              | IE2         | 315 L               | 1MB1531-3AB4-....                | 32700.-           | 1MB1631-3AB4-....                      | 33700.-           |
| 200                              | IE2         | 315 L               | 1MB1531-3AB5-....                | 40500.-           | 1MB1631-3AB5-....                      | 41700.-           |

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 2 in type of protection Ex ec</b>            |
| Efficiency                             | <b>IE2 High Efficiency</b>                                      |
| Series version                         | <b>Cast-iron series 1MB1531, 1MB1631 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6, 8                                                      |
| Frame sizes (FS)                       | 71 M ... 315 L                                                  |
| Rated power at 50 Hz                   | 0.09 ... 200 kW                                                 |
| Synchronous speed at 50 Hz             | 750 ... 3000 rpm                                                |
| Rated torque at 50 Hz                  | 9.9 ... 1703 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE2         | 71 M                | 1MB1531-0CC2-....                | 611.-             |                                        |                   |
| 0.25                             | IE2         | 71 M                | 1MB1531-0CC3-....                | 705.-             |                                        |                   |
| 0.37                             | IE2         | 80 M                | 1MB1531-0DC2-....                | 733.-             |                                        |                   |
| 0.55                             | IE2         | 80 M                | 1MB1531-0DC3-....                | 829.-             |                                        |                   |
| 0.75                             | IE2         | 90 S                | 1MB1531-0EC0-....                | 933.-             |                                        |                   |
| 1.1                              | IE2         | 90 L                | 1MB1531-0EC4-....                | 1060.-            |                                        |                   |
| 1.5                              | IE2         | 100 L               | 1MB1531-1AC4-....                | 1220.-            | 1MB1631-1AC4-....                      | 1310.-            |
| 2.2                              | IE2         | 112 M               | 1MB1531-1BC2-....                | 1510.-            | 1MB1631-1BC2-....                      | 1640.-            |
| 3                                | IE2         | 132 S               | 1MB1531-1CC0-....                | 1920.-            | 1MB1631-1CC0-....                      | 2080.-            |
| 4                                | IE2         | 132 M               | 1MB1531-1CC2-....                | 2300.-            | 1MB1631-1CC2-....                      | 2490.-            |
| 5.5                              | IE2         | 132 M               | 1MB1531-1CC3-....                | 2820.-            | 1MB1631-1CC3-....                      | 3060.-            |
| 7.5                              | IE2         | 160 M               | 1MB1531-1DC2-....                | 3560.-            | 1MB1631-1DC2-....                      | 4060.-            |
| 11                               | IE2         | 160 L               | 1MB1531-1DC4-....                | 4800.-            | 1MB1631-1DC4-....                      | 5460.-            |
| 15                               | IE2         | 180 L               | 1MB1531-1EC4-....                | 5960.-            | 1MB1631-1EC4-....                      | 6510.-            |
| 18.5                             | IE2         | 200 L               | 1MB1531-2AC4-....                | 7320.-            | 1MB1631-2AC4-....                      | 8000.-            |
| 22                               | IE2         | 200 L               | 1MB1531-2AC5-....                | 8380.-            | 1MB1631-2AC5-....                      | 9160.-            |
| 30                               | IE2         | 225 M               | 1MB1531-2BC2-....                | 10800.-           | 1MB1631-2BC2-....                      | 11700.-           |
| 37                               | IE2         | 250 M               | 1MB1531-2CC2-....                | 13100.-           | 1MB1631-2CC2-....                      | 14200.-           |
| 45                               | IE2         | 280 S               | 1MB1531-2DC0-....                | 16000.-           | 1MB1631-2DC0-....                      | 16400.-           |
| 55                               | IE2         | 280 M               | 1MB1531-2DC2-....                | 18600.-           | 1MB1631-2DC2-....                      | 19200.-           |
| 75                               | IE2         | 315 S               | 1MB1531-3AC0-....                | 25100.-           | 1MB1631-3AC0-....                      | 26000.-           |
| 90                               | IE2         | 315 M               | 1MB1531-3AC2-....                | 28300.-           | 1MB1631-3AC2-....                      | 29000.-           |
| 110                              | IE2         | 315 L               | 1MB1531-3AC4-....                | 33800.-           | 1MB1631-3AC4-....                      | 34700.-           |
| 132                              | IE2         | 315 L               | 1MB1531-3AC5-....                | 40000.-           | 1MB1631-3AC5-....                      | 41100.-           |
| 160                              | IE2         | 315 L               | 1MB1531-3AC6-....                | 48200.-           | 1MB1631-3AC6-....                      | 49600.-           |
| <b>8-pole: 750 rpm at 50 Hz</b>  |             |                     |                                  |                   |                                        |                   |
| 0.09                             | -           | 71 M                | 1MB1531-0CD2-....                | 692.-             |                                        |                   |
| 0.12                             | IE2         | 71 M                | 1MB1531-0CD3-....                | 758.-             |                                        |                   |
| 0.18                             | IE2         | 80 M                | 1MB1531-0DD2-....                | 813.-             |                                        |                   |
| 0.25                             | IE2         | 80 M                | 1MB1531-0DD3-....                | 968.-             |                                        |                   |
| 0.37                             | IE2         | 90 S                | 1MB1531-0ED0-....                | 1130.-            |                                        |                   |
| 0.55                             | IE2         | 90 L                | 1MB1531-0ED4-....                | 1280.-            |                                        |                   |
| 0.75                             | IE2         | 100 L               | 1MB1531-1AD4-....                | 1330.-            | 1MB1631-1AD4-....                      | 1450.-            |
| 1.1                              | IE2         | 100 L               | 1MB1531-1AD5-....                | 1630.-            | 1MB1631-1AD5-....                      | 1780.-            |
| 1.5                              | IE2         | 112 M               | 1MB1531-1BD2-....                | 1940.-            | 1MB1631-1BD2-....                      | 2120.-            |
| 2.2                              | IE2         | 132 S               | 1MB1531-1CD0-....                | 2500.-            | 1MB1631-1CD0-....                      | 2740.-            |
| 3                                | IE2         | 132 M               | 1MB1531-1CD2-....                | 2990.-            | 1MB1631-1CD2-....                      | 3280.-            |
| 4                                | IE2         | 160 M               | 1MB1531-1DD2-....                | 3710.-            | 1MB1631-1DD2-....                      | 4200.-            |
| 5.5                              | IE2         | 160 M               | 1MB1531-1DD3-....                | 4470.-            | 1MB1631-1DD3-....                      | 5080.-            |
| 7.5                              | IE2         | 160 L               | 1MB1531-1DD4-....                | 5330.-            | 1MB1631-1DD4-....                      | 6070.-            |
| 11                               | -           | 180 L               | 1MB1531-1ED4-....                | 6330.-            | 1MB1631-1ED4-....                      | 6920.-            |
| 15                               | -           | 200 L               | 1MB1531-2AD5-....                | 8340.-            | 1MB1631-2AD5-....                      | 9130.-            |
| 18.5                             | -           | 225 S               | 1MB1531-2BD0-....                | 9800.-            | 1MB1631-2BD0-....                      | 10700.-           |
| 22                               | -           | 225 M               | 1MB1531-2BD2-....                | 11000.-           | 1MB1631-2BD2-....                      | 12200.-           |
| 30                               | -           | 250 M               | 1MB1531-2CD2-....                | 14200.-           | 1MB1631-2CD2-....                      | 15700.-           |
| 37                               | -           | 280 S               | 1MB1531-2DD0-....                | 17000.-           | 1MB1631-2DD0-....                      | 17600.-           |
| 45                               | -           | 280 M               | 1MB1531-2DD2-....                | 20600.-           | 1MB1631-2DD2-....                      | 21200.-           |
| 55                               | -           | 315 S               | 1MB1531-3AD0-....                | 24300.-           | 1MB1631-3AD0-....                      | 25000.-           |
| 75                               | -           | 315 M               | 1MB1531-3AD2-....                | 32200.-           | 1MB1631-3AD2-....                      | 33200.-           |
| 90                               | -           | 315 L               | 1MB1531-3AD4-....                | 35600.-           | 1MB1631-3AD4-....                      | 36900.-           |
| 110                              | -           | 315 L               | 1MB1531-3AD5-....                | 42800.-           | 1MB1631-3AD5-....                      | 44100.-           |
| 132                              | -           | 315 L               | 1MB1531-3AD6-....                | 50900.-           | 1MB1631-3AD6-....                      | 52400.-           |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                                                                                     |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in type of protection Ex eb</b>                                                                                |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                                                                                       |
| Series version                         | <b>Aluminum series 1MB1042, Cast-iron series 1MB1543/1MB5543/1MB1643/1MB5643 Basic/Performance Line</b><br>(continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                                                                                            |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                                       |
| Insulation                             | Thermal class 155 (F)                                                                                                               |
| Utilization                            | Thermal class 130 (B)                                                                                                               |
| Number of poles                        | 2, 4, 6                                                                                                                             |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                                      |
| Rated power at 50 Hz                   | 0.37 ... 165 kW                                                                                                                     |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                                                   |
| Rated torque at 50 Hz                  | 1.3 ... 1300 Nm                                                                                                                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                                       |
| Price group (PG)                       | 3X1                                                                                                                                 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW                            | Tempera-<br>ture class | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base<br/>price</b><br>EUR | Article No.<br><b>Performance Line</b> | <b>Base<br/>price</b><br>EUR |
|---------------------------------------------------------|------------------------|-------------|---------------------|----------------------------------|------------------------------|----------------------------------------|------------------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>                        |                        |             |                     |                                  |                              |                                        |                              |
| <b>Aluminum series 1MB1042</b>                          |                        |             |                     |                                  |                              |                                        |                              |
| 0,18                                                    | T1, T2, T3             | IE1         | 63 M                | 1MB1042-0BA2-....                | 393.-                        |                                        |                              |
| 0,25                                                    | T1, T2, T3             | IE1         | 63 M                | 1MB1042-0BA3-....                | 407.-                        |                                        |                              |
| <b>Cast-iron series 1MB1543/1MB5543/1MB1643/1MB5643</b> |                        |             |                     |                                  |                              |                                        |                              |
| 0.37                                                    | T1, T2, T3             | IE3         | 71 M                | 1MB1543-0CA2-....                | 849.-                        |                                        |                              |
| 0.55                                                    | T1, T2, T3             | IE3         | 71 M                | 1MB1543-0CA3-....                | 974.-                        |                                        |                              |
| 0.75                                                    | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DA2-....                | 1020.-                       |                                        |                              |
| 1.1                                                     | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DA3-....                | 1140.-                       |                                        |                              |
| 1.3                                                     | T1, T2, T3             | IE3         | 90 S                | 1MB1543-0EA0-....                | 1310.-                       |                                        |                              |
| 1.85                                                    | T1, T2, T3             | IE3         | 90 L                | 1MB1543-0EA4-....                | 1570.-                       |                                        |                              |
| 2.5                                                     | T1, T2, T3             | IE3         | 100 L               | 1MB1543-1AA4-....                | 1670.-                       | 1MB1643-1AA4-....                      | 1840.-                       |
| 3.3                                                     | T1, T2, T3             | IE3         | 112 M               | 1MB1543-1BA2-....                | 1970.-                       | 1MB1643-1BA2-....                      | 2190.-                       |
| 4.6                                                     | T1, T2, T3             | IE3         | 132 S               | 1MB1543-1CA0-....                | 2470.-                       | 1MB1643-1CA0-....                      | 2750.-                       |
| 5.5                                                     | T3                     | IE3         | 132 S               | 1MB1543-1CA1-....                | 3060.-                       | 1MB1643-1CA1-....                      | 3390.-                       |
| 6.5                                                     | T1, T2                 | IE3         | 132 S               | 1MB1543-1CA1-....                | 3060.-                       | 1MB1643-1CA1-....                      | 3390.-                       |
| 7.5                                                     | T3                     | IE3         | 160 M               | 1MB1543-1DA2-....                | 4230.-                       | 1MB1643-1DA2-....                      | 4700.-                       |
| 9.5                                                     | T1, T2                 | IE3         | 160 M               | 1MB1543-1DA2-....                | 4230.-                       | 1MB1643-1DA2-....                      | 4700.-                       |
| 10                                                      | T3                     | IE3         | 160 M               | 1MB1543-1DA3-....                | 5400.-                       | 1MB1643-1DA3-....                      | 5990.-                       |
| 13                                                      | T1, T2                 | IE3         | 160 M               | 1MB1543-1DA3-....                | 5400.-                       | 1MB1643-1DA3-....                      | 5990.-                       |
| 12.5                                                    | T3                     | IE3         | 160 L               | 1MB1543-1DA4-....                | 6340.-                       | 1MB1643-1DA4-....                      | 7050.-                       |
| 16                                                      | T1, T2                 | IE3         | 160 L               | 1MB1543-1DA4-....                | 6340.-                       | 1MB1643-1DA4-....                      | 7050.-                       |
| 15                                                      | T3                     | IE3         | 180 M               | 1MB1543-1EA2-....                | 7200.-                       | 1MB1643-1EA2-....                      | 7740.-                       |
| 19                                                      | T1, T2                 | IE3         | 180 M               | 1MB1543-1EA2-....                | 7200.-                       | 1MB1643-1EA2-....                      | 7740.-                       |
| 20                                                      | T3                     | IE3         | 200 L               | 1MB1543-2AA4-....                | 9350.-                       | 1MB1643-2AA4-....                      | 10000.-                      |
| 25                                                      | T1, T2                 | IE3         | 200 L               | 1MB1543-2AA4-....                | 9350.-                       | 1MB1643-2AA4-....                      | 10000.-                      |
| 24                                                      | T3                     | IE3         | 200 L               | 1MB1543-2AA5-....                | 11600.-                      | 1MB1643-2AA5-....                      | 12300.-                      |
| 31                                                      | T1, T2                 | IE3         | 200 L               | 1MB1543-2AA5-....                | 11600.-                      | 1MB1643-2AA5-....                      | 12300.-                      |
| 28                                                      | T3                     | IE3         | 225 M               | 1MB1543-2BA2-....                | 13000.-                      | 1MB1643-2BA2-....                      | 14100.-                      |
| 36                                                      | T3                     | IE3         | 250 M               | 1MB1543-2CA2-....                | 15600.-                      | 1MB1643-2CA2-....                      | 16900.-                      |
| 47                                                      | T3                     | IE3         | 280 S               | 1MB1543-2DA0-....                | 21100.-                      | 1MB1643-2DA0-....                      | 21500.-                      |
| 58                                                      | T3                     | IE3         | 280 M               | 1MB1543-2DA2-....                | 24700.-                      | 1MB1643-2DA2-....                      | 25700.-                      |
| 68                                                      | T3                     | IE3         | 315 S               | 1MB5543-3AA0-....                | 27800.-                      | 1MB5643-3AA0-....                      | 29000.-                      |
| 80                                                      | T3                     | IE3         | 315 M               | 1MB5543-3AA2-....                | 33000.-                      | 1MB5643-3AA2-....                      | 34500.-                      |
| 100                                                     | T3                     | IE3         | 315 L               | 1MB5543-3AA4-....                | 40900.-                      | 1MB5643-3AA4-....                      | 42700.-                      |
| 125                                                     | T3                     | IE3         | 315 L               | 1MB5543-3AA5-....                | 50600.-                      | 1MB5643-3AA5-....                      | 52800.-                      |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                                                                                     |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in type of protection Ex eb</b>                                                                                |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                                                                                       |
| Series version                         | <b>Aluminum series 1MB1042, Cast-iron series 1MB1543/1MB5543/1MB1643/1MB5643 Basic/Performance Line</b><br>(continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                                                                                            |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                                                                       |
| Insulation                             | Thermal class 155 (F)                                                                                                               |
| Utilization                            | Thermal class 130 (B)                                                                                                               |
| Number of poles                        | 2, 4, 6                                                                                                                             |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                                                                      |
| Rated power at 50 Hz                   | 0.37 ... 165 kW                                                                                                                     |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                                                                                   |
| Rated torque at 50 Hz                  | 1.3 ... 1300 Nm                                                                                                                     |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                                                                       |
| Price group (PG)                       | 3X1                                                                                                                                 |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW                            | Tempera-<br>ture class | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | <b>Base<br/>price</b><br>EUR | Article No.<br><b>Performance Line</b> | <b>Base<br/>price</b><br>EUR |
|---------------------------------------------------------|------------------------|-------------|---------------------|----------------------------------|------------------------------|----------------------------------------|------------------------------|
| <b>4-pole: 1500 rpm at 50 Hz</b>                        |                        |             |                     |                                  |                              |                                        |                              |
| <b>Aluminum series 1MB1042</b>                          |                        |             |                     |                                  |                              |                                        |                              |
| 0,12                                                    | T1, T2, T3             | IE1         | 63 M                | 1MB1042-0BB2-....                | 381.-                        |                                        |                              |
| 0,18                                                    | T1, T2, T3             | IE1         | 63 M                | 1MB1042-0BB3-....                | 404.-                        |                                        |                              |
| <b>Cast-iron series 1MB1543/1MB5543/1MB1643/1MB5643</b> |                        |             |                     |                                  |                              |                                        |                              |
| 0.25                                                    | T1, T2, T3             | IE3         | 71 M                | 1MB1543-0CB2-....                | 843.-                        |                                        |                              |
| 0.37                                                    | T1, T2, T3             | IE3         | 71 M                | 1MB1543-0CB3-....                | 929.-                        |                                        |                              |
| 0.55                                                    | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DB2-....                | 1010.-                       |                                        |                              |
| 0.75                                                    | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DB3-....                | 1090.-                       |                                        |                              |
| 1                                                       | T1, T2, T3             | IE3         | 90 S                | 1MB1543-0EB0-....                | 1290.-                       |                                        |                              |
| 1.35                                                    | T1, T2, T3             | IE3         | 90 L                | 1MB1543-0EB4-....                | 1430.-                       |                                        |                              |
| 2                                                       | T1, T2, T3             | IE3         | 100 L               | 1MB1543-1AB4-....                | 1530.-                       | 1MB1643-1AB4-....                      | 1700.-                       |
| 2.5                                                     | T1, T2, T3             | IE3         | 100 L               | 1MB1543-1AB5-....                | 1740.-                       | 1MB1643-1AB5-....                      | 1910.-                       |
| 3.6                                                     | T1, T2, T3             | IE3         | 112 M               | 1MB1543-1BB2-....                | 2110.-                       | 1MB1643-1BB2-....                      | 2330.-                       |
| 5                                                       | T1, T2, T3             | IE3         | 132 S               | 1MB1543-1CB0-....                | 2640.-                       | 1MB1643-1CB0-....                      | 2940.-                       |
| 6.8                                                     | T1, T2, T3             | IE3         | 132 M               | 1MB1543-1CB2-....                | 3290.-                       | 1MB1643-1CB2-....                      | 3650.-                       |
| 10                                                      | T1, T2, T3             | IE3         | 160 M               | 1MB1543-1DB2-....                | 4320.-                       | 1MB1643-1DB2-....                      | 4790.-                       |
| 13.5                                                    | T1, T2, T3             | IE3         | 160 L               | 1MB1543-1DB4-....                | 5470.-                       | 1MB1643-1DB4-....                      | 6100.-                       |
| 15                                                      | T3                     | IE3         | 180 M               | 1MB1543-1EB2-....                | 6190.-                       | 1MB1643-1EB2-....                      | 6660.-                       |
| 17                                                      | T1, T2                 | IE3         | 180 M               | 1MB1543-1EB2-....                | 6190.-                       | 1MB1643-1EB2-....                      | 6660.-                       |
| 17.5                                                    | T3                     | IE3         | 180 L               | 1MB1543-1EB4-....                | 7100.-                       | 1MB1643-1EB4-....                      | 7630.-                       |
| 20                                                      | T1, T2                 | IE3         | 180 L               | 1MB1543-1EB4-....                | 7100.-                       | 1MB1643-1EB4-....                      | 7630.-                       |
| 24                                                      | T3                     | IE3         | 200 L               | 1MB1543-2AB5-....                | 9210.-                       | 1MB1643-2AB5-....                      | 9910.-                       |
| 27                                                      | T1, T2                 | IE3         | 200 L               | 1MB1543-2AB5-....                | 9210.-                       | 1MB1643-2AB5-....                      | 9910.-                       |
| 30                                                      | T3                     | IE3         | 225 S               | 1MB1543-2BB0-....                | 10600.-                      | 1MB1643-2BB0-....                      | 11400.-                      |
| 33                                                      | T1, T2                 | IE3         | 225 S               | 1MB1543-2BB0-....                | 10600.-                      | 1MB1643-2BB0-....                      | 11400.-                      |
| 36                                                      | T3                     | IE3         | 225 M               | 1MB1543-2BB2-....                | 12300.-                      | 1MB1643-2BB2-....                      | 13300.-                      |
| 40                                                      | T1, T2                 | IE3         | 225 M               | 1MB1543-2BB2-....                | 12300.-                      | 1MB1643-2BB2-....                      | 13300.-                      |
| 44                                                      | T3                     | IE3         | 250 M               | 1MB1543-2CB2-....                | 14900.-                      | 1MB1643-2CB2-....                      | 16100.-                      |
| 50                                                      | T1, T2                 | IE3         | 250 M               | 1MB1543-2CB2-....                | 14900.-                      | 1MB1643-2CB2-....                      | 16100.-                      |
| 58                                                      | T3                     | IE3         | 280 S               | 1MB1543-2DB0-....                | 19900.-                      | 1MB1643-2DB0-....                      | 20400.-                      |
| 68                                                      | T1, T2                 | IE3         | 280 S               | 1MB1543-2DB0-....                | 19900.-                      | 1MB1643-2DB0-....                      | 20400.-                      |
| 70                                                      | T3                     | IE3         | 280 M               | 1MB1543-2DB2-....                | 23300.-                      | 1MB1643-2DB2-....                      | 23900.-                      |
| 80                                                      | T1, T2                 | IE3         | 280 M               | 1MB1543-2DB2-....                | 23300.-                      | 1MB1643-2DB2-....                      | 23900.-                      |
| 84                                                      | T3                     | IE3         | 315 S               | 1MB5543-3AB0-....                | 27200.-                      | 1MB5643-3AB0-....                      | 27900.-                      |
| 100                                                     | T1, T2                 | IE3         | 315 S               | 1MB5543-3AB0-....                | 27200.-                      | 1MB5643-3AB0-....                      | 27900.-                      |
| 100                                                     | T3                     | IE3         | 315 M               | 1MB5543-3AB2-....                | 33200.-                      | 1MB5643-3AB2-....                      | 34000.-                      |
| 120                                                     | T1, T2                 | IE3         | 315 M               | 1MB5543-3AB2-....                | 33200.-                      | 1MB5643-3AB2-....                      | 34000.-                      |
| 115                                                     | T3                     | IE3         | 315 L               | 1MB5543-3AB4-....                | 38300.-                      | 1MB5643-3AB4-....                      | 29400.-                      |
| 135                                                     | T1, T2                 | IE3         | 315 L               | 1MB5543-3AB4-....                | 38300.-                      | 1MB5643-3AB4-....                      | 29400.-                      |
| 135                                                     | T3                     | IE3         | 315 L               | 1MB5543-3AB5-....                | 47400.-                      | 1MB5643-3AB5-....                      | 48500.-                      |
| 165                                                     | T1, T2                 | IE3         | 315 L               | 1MB5543-3AB5-....                | 47400.-                      | 1MB5643-3AB5-....                      | 48500.-                      |

Standard delivery times in working days:

20

25

30

40

80

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in type of protection Ex eb</b>                           |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                                  |
| Series version                         | <b>Cast-iron series 1MB1543/1MB5543/1MB1643/1MB5643 Basic/Performance Line</b> |
| Cooling                                | Self-ventilated (IC 411)                                                       |
| Degree of protection                   | IP55, optionally IP56 or IP65                                                  |
| Insulation                             | Thermal class 155 (F)                                                          |
| Utilization                            | Thermal class 130 (B)                                                          |
| Number of poles                        | 2, 4, 6                                                                        |
| Frame sizes (FS)                       | 71 M ... 315 L                                                                 |
| Rated power at 50 Hz                   | 0.37 ... 165 kW                                                                |
| Synchronous speed at 50 Hz             | 1000 ... 3000 rpm                                                              |
| Rated torque at 50 Hz                  | 1.3 ... 1300 Nm                                                                |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                                  |
| Price group (PG)                       | 3X1                                                                            |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | Tempera-<br>ture class | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base<br>price<br>EUR | Article No.<br><b>Performance Line</b> | Base<br>price<br>EUR |
|----------------------------------|------------------------|-------------|---------------------|----------------------------------|----------------------|----------------------------------------|----------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |                        |             |                     |                                  |                      |                                        |                      |
| 0.25                             | T1, T2, T3             | IE3         | 71 M                | 1MB1543-0CC3-....                | 949.-                |                                        |                      |
| 0.37                             | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DC2-....                | 987.-                |                                        |                      |
| 0.55                             | T1, T2, T3             | IE3         | 80 M                | 1MB1543-0DC3-....                | 1110.-               |                                        |                      |
| 0.65                             | T1, T2, T3             | IE3         | 90 S                | 1MB1543-0EC0-....                | 1250.-               |                                        |                      |
| 0.95                             | T1, T2, T3             | IE3         | 90 L                | 1MB1543-0EC4-....                | 1420.-               |                                        |                      |
| 1.3                              | T1, T2, T3             | IE3         | 100 L               | 1MB1543-1AC4-....                | 1510.-               | 1MB1643-1AC4-....                      | 1690.-               |
| 1.9                              | T1, T2, T3             | IE3         | 112 M               | 1MB1543-1BC2-....                | 1900.-               | 1MB1643-1BC2-....                      | 2120.-               |
| 2.6                              | T1, T2, T3             | IE3         | 132 S               | 1MB1543-1CC0-....                | 2410.-               | 1MB1643-1CC0-....                      | 2650.-               |
| 3.5                              | T1, T2, T3             | IE3         | 132 M               | 1MB1543-1CC2-....                | 2880.-               | 1MB1643-1CC2-....                      | 3200.-               |
| 4.8                              | T1, T2, T3             | IE3         | 132 M               | 1MB1543-1CC3-....                | 3560.-               | 1MB1643-1CC3-....                      | 3940.-               |
| 6.6                              | T1, T2, T3             | IE3         | 160 M               | 1MB1543-1DC2-....                | 4510.-               | 1MB1643-1DC2-....                      | 5000.-               |
| 9.7                              | T1, T2, T3             | IE3         | 160 L               | 1MB1543-1DC4-....                | 6080.-               | 1MB1643-1DC4-....                      | 6770.-               |
| 13.2                             | T1, T2, T3             | IE3         | 180 L               | 1MB1543-1EC4-....                | 7560.-               | 1MB1643-1EC4-....                      | 8120.-               |
| 16.5                             | T1, T2, T3             | IE3         | 200 L               | 1MB1543-2AC4-....                | 9290.-               | 1MB1643-2AC4-....                      | 9960.-               |
| 20                               | T1, T2, T3             | IE3         | 200 L               | 1MB1543-2AC5-....                | 10600.-              | 1MB1643-2AC5-....                      | 11400.-              |
| 27                               | T1, T2, T3             | IE3         | 225 M               | 1MB1543-2BC2-....                | 13400.-              | 1MB1643-2BC2-....                      | 14500.-              |
| 33                               | T1, T2, T3             | IE3         | 250 M               | 1MB1543-2CC2-....                | 16200.-              | 1MB1643-2CC2-....                      | 17600.-              |
| 40                               | T1, T2, T3             | IE3         | 280 S               | 1MB1543-2DC0-....                | 19800.-              | 1MB1643-2DC0-....                      | 20200.-              |
| 46                               | T3                     | IE3         | 280 M               | 1MB1543-2DC2-....                | 23300.-              | 1MB1643-2DC2-....                      | 23900.-              |
| 50                               | T1, T2                 | IE3         | 280 M               | 1MB1543-2DC2-....                | 23300.-              | 1MB1643-2DC2-....                      | 23900.-              |
| 64                               | T3                     | IE3         | 315 S               | 1MB5543-3AC0-....                | 29600.-              | 1MB5643-3AC0-....                      | 30400.-              |
| 68                               | T1, T2                 | IE3         | 315 S               | 1MB5543-3AC0-....                | 29600.-              | 1MB5643-3AC0-....                      | 30400.-              |
| 76                               | T3                     | IE3         | 315 M               | 1MB5543-3AC2-....                | 33000.-              | 1MB5643-3AC2-....                      | 33900.-              |
| 82                               | T1, T2                 | IE3         | 315 M               | 1MB5543-3AC2-....                | 33000.-              | 1MB5643-3AC2-....                      | 33900.-              |
| 92                               | T3                     | IE3         | 315 L               | 1MB5543-3AC4-....                | 39700.-              | 1MB5643-3AC4-....                      | 40700.-              |
| 98                               | T1, T2                 | IE3         | 315 L               | 1MB5543-3AC4-....                | 39700.-              | 1MB5643-3AC4-....                      | 40700.-              |
| 110                              | T3                     | IE3         | 315 L               | 1MB5543-3AC5-....                | 47500.-              | 1MB5643-3AC5-....                      | 48700.-              |
| 120                              | T1, T2                 | IE3         | 315 L               | 1MB5543-3AC5-....                | 47500.-              | 1MB5643-3AC5-....                      | 48700.-              |
| 125                              | T3                     | IE3         | 315 L               | 1MB5543-3AC6-....                | 55200.-              | 1MB5643-3AC6-....                      | 56500.-              |
| 135                              | T1, T2                 | IE3         | 315 L               | 1MB5543-3AC6-....                | 55200.-              | 1MB5643-3AC6-....                      | 56500.-              |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1553/1MB5553</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.09 ... 460 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 1.2 ... 4043 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|-------------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b>    |             |                     |                                  |                   |                                        |                   |
| 0.37                                | IE3         | 71 M                | 1MB1553-0CA2-....                | 2690.-            |                                        |                   |
| 0.55                                | IE3         | 71 M                | 1MB1553-0CA3-....                | 2820.-            |                                        |                   |
| 0.75                                | IE3         | 80 M                | 1MB1553-0DA2-....                | 2970.-            |                                        |                   |
| 1.1                                 | IE3         | 80 M                | 1MB1553-0DA3-....                | 3120.-            |                                        |                   |
| 1.5                                 | IE3         | 90 S                | 1MB1553-0EA0-....                | 3370.-            |                                        |                   |
| 2.2                                 | IE3         | 90 L                | 1MB1553-0EA4-....                | 3690.-            |                                        |                   |
| 3                                   | IE3         | 100 L               | 1MB1553-1AA4-....                | 4440.-            |                                        |                   |
| 4                                   | IE3         | 112 M               | 1MB1553-1BA2-....                | 5280.-            |                                        |                   |
| 5.5                                 | IE3         | 132 S               | 1MB1553-1CA0-....                | 6240.-            | ▲ 1MB1563-1CA0-....                    | 4558.20           |
| 7.5                                 | IE3         | 132 S               | 1MB1553-1CA1-....                | 7470.-            | ▲ 1MB1563-1CA1-....                    | 5378.40           |
| 11                                  | IE3         | 160 M               | 1MB1553-1DA2-....                | 9770.-            | ▲ 1MB1563-1DA2-....                    | 7132.10           |
| 15                                  | IE3         | 160 M               | 1MB1553-1DA3-....                | 11200.-           | ▲ 1MB1563-1DA3-....                    | 8288.-            |
| 18.5                                | IE3         | 160 L               | 1MB1553-1DA4-....                | 12400.-           | ▲ 1MB1563-1DA4-....                    | 9300.-            |
| 22                                  | IE3         | 180 M               | 1MB1553-1EA2-....                | 15100.-           | ▲ 1MB1563-1EA2-....                    | 11476.-           |
| 30                                  | IE3         | 200 L               | 1MB1553-2AA4-....                | 18500.-           | ▲ 1MB1563-2AA4-....                    | 14162.78          |
| 37                                  | IE3         | 200 L               | 1MB1553-2AA5-....                | 22000.-           | ▲ 1MB1563-2AA5-....                    | 16964.44          |
| 45                                  | IE3         | 225 M               | 1MB1553-2BA2-....                | 24700.-           | ▲ 1MB1563-2BA2-....                    | 19183.67          |
| 55                                  | IE3         | 250 M               | 1MB1553-2CA2-....                | 29800.-           | ▲ 1MB1563-2CA2-....                    | 23310.22          |
| 75                                  | IE3         | 280 S               | 1MB1553-2DA0-....                | 38300.-           | ▲ 1MB1563-2DA0-....                    | 30171.89          |
| 90                                  | IE3         | 280 M               | 1MB1553-2DA2-....                | 44400.-           | ▲ 1MB1563-2DA2-....                    | 35224.-           |
| 110                                 | IE3         | 315 S               | 1MB5553-3AA0-....                | 54400.-           |                                        |                   |
| 132                                 | IE3         | 315 M               | 1MB5553-3AA2-....                | 63200.-           |                                        |                   |
| 160                                 | IE3         | 315 L               | 1MB5553-3AA4-....                | 77500.-           |                                        |                   |
| 200                                 | IE3         | 315 L               | 1MB5553-3AA5-....                | 92600.-           |                                        |                   |
| 250                                 | IE3         | 315 L               | 1MB5553-3AA6-....                | 102000.-          |                                        |                   |
| 315                                 | IE3         | 355 M               | 1MB5553-3BA2-....                | 129000.-          |                                        |                   |
| 355                                 | IE3         | 355 M               | 1MB5553-3BA3-....                | 133000.-          |                                        |                   |
| 400                                 | IE3         | 355 L               | 1MB5553-3BA4-....                | 151000.-          |                                        |                   |
| 460                                 | IE3         | 355 L               | 1MB5553-3BA5-....                | 181000.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1553/1MB5553</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.09 ... 460 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 1.2 ... 4043 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| 4-pole: 1500 rpm at 50 Hz    |             |                     |                                  |                   |                                        |                   |
| 0.25                         | IE3         | 71 M                | 1MB1553-0CB2-....                | 2640.-            |                                        |                   |
| 0.37                         | IE3         | 71 M                | 1MB1553-0CB3-....                | 2760.-            |                                        |                   |
| 0.55                         | IE3         | 80 M                | 1MB1553-0DB2-....                | 2900.-            |                                        |                   |
| 0.75                         | IE3         | 80 M                | 1MB1553-0DB3-....                | 3030.-            |                                        |                   |
| 1.1                          | IE3         | 90 S                | 1MB1553-0EB0-....                | 3280.-            |                                        |                   |
| 1.5                          | IE3         | 90 L                | 1MB1553-0EB4-....                | 3570.-            |                                        |                   |
| 2.2                          | IE3         | 100 L               | 1MB1553-1AB4-....                | 4050.-            |                                        |                   |
| 3                            | IE3         | 100 M               | 1MB1553-1AB5-....                | 4330.-            |                                        |                   |
| 4                            | IE3         | 112 S               | 1MB1553-1BB2-....                | 5130.-            |                                        |                   |
| 5.5                          | IE3         | 132 S               | 1MB1553-1CB0-....                | 6230.-            | ▲ 1MB1563-1CB0-....                    | 4445.55           |
| 7.5                          | IE3         | 132 M               | 1MB1553-1CB2-....                | 7530.-            | ▲ 1MB1563-1CB2-....                    | 5443.11           |
| 11                           | IE3         | 160 M               | 1MB1553-1DB2-....                | 9420.-            | ▲ 1MB1563-1DB2-....                    | 6896.79           |
| 15                           | IE3         | 160 L               | 1MB1553-1DB4-....                | 11800.-           | ▲ 1MB1563-1DB4-....                    | 8748.86           |
| 18.5                         | IE3         | 180 M               | 1MB1553-1EB2-....                | 13100.-           | ▲ 1MB1563-1EB2-....                    | 9834.36           |
| 22                           | IE3         | 180 L               | 1MB1553-1EB4-....                | 14500.-           | ▲ 1MB1563-1EB4-....                    | 11020.-           |
| 30                           | IE3         | 200 L               | 1MB1553-2AB5-....                | 18300.-           | ▲ 1MB1563-2AB5-....                    | 14009.67          |
| 37                           | IE3         | 225 S               | 1MB1553-2BB0-....                | 20500.-           | ▲ 1MB1563-2BB0-....                    | 15807.78          |
| 45                           | IE3         | 225 M               | 1MB1553-2BB2-....                | 23700.-           | ▲ 1MB1563-2BB2-....                    | 18407.-           |
| 55                           | IE3         | 250 M               | 1MB1553-2CB2-....                | 28600.-           | ▲ 1MB1563-2CB2-....                    | 22371.56          |
| 75                           | IE3         | 280 S               | 1MB1553-2DB0-....                | 36800.-           | ▲ 1MB1563-2DB0-....                    | 28990.22          |
| 90                           | IE3         | 280 M               | 1MB1553-2DB2-....                | 42300.-           | ▲ 1MB1563-2DB2-....                    | 33558.-           |
| 110                          | IE3         | 315 S               | 1MB5553-3AB0-....                | 51800.-           |                                        |                   |
| 132                          | IE3         | 315 M               | 1MB5553-3AB2-....                | 60600.-           |                                        |                   |
| 160                          | IE3         | 315 L               | 1MB5553-3AB4-....                | 73500.-           |                                        |                   |
| 200                          | IE3         | 315 L               | 1MB5553-3AB5-....                | 87800.-           |                                        |                   |
| 250                          | IE3         | 315 L               | 1MB5553-3AB6-....                | 97200.-           |                                        |                   |
| 315                          | IE3         | 355 M               | 1MB5553-3BB2-....                | 122000.-          |                                        |                   |
| 355                          | IE3         | 355 M               | 1MB5553-3BB3-....                | 127000.-          |                                        |                   |
| 400                          | IE3         | 355 L               | 1MB5553-3BB4-....                | 144000.-          |                                        |                   |
| 460                          | IE3         | 355 L               | 1MB5553-3BB5-....                | 172000.-          |                                        |                   |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1553/1MB5553</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.09 ... 460 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 1.2 ... 4043 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | 1MB1553-0CC2-....                | 2850.-            |                                        |                   |
| 0.25                             | IE3         | 71 M                | 1MB1553-0CC3-....                | 2990.-            |                                        |                   |
| 0.37                             | IE3         | 80 M                | 1MB1553-0DC2-....                | 3110.-            |                                        |                   |
| 0.55                             | IE3         | 80 M                | 1MB1553-0DC3-....                | 3270.-            |                                        |                   |
| 0.75                             | IE3         | 90 S                | 1MB1553-0EC0-....                | 3560.-            |                                        |                   |
| 1.1                              | IE3         | 100 L               | 1MB1553-1AC3-....                | 3890.-            |                                        |                   |
| 1.5                              | IE3         | 112 L               | 1MB1553-1BC1-....                | 4360.-            |                                        |                   |
| 2.2                              | IE3         | 132 S               | 1MB1553-1CC1-....                | 5490.-            | ▲ 1MB1563-1CC1-....                    | 4799.60           |
| 3                                | IE3         | 132 S               | 1MB1553-1CC0-....                | 6760.-            | ▲ 1MB1563-1CC0-....                    | 3843.-            |
| 4                                | IE3         | 132 M               | 1MB1553-1CC2-....                | 7530.-            | ▲ 1MB1563-1CC2-....                    | 5421.60           |
| 5.5                              | IE3         | 132 M               | 1MB1553-1CC3-....                | 8160.-            | ▲ 1MB1563-1CC3-....                    | 5956.80           |
| 7.5                              | IE3         | 160 M               | 1MB1553-1DC2-....                | 10100.-           | ▲ 1MB1563-1DC2-....                    | 7474.-            |
| 11                               | IE3         | 160 L               | 1MB1553-1DC4-....                | 12900.-           | ▲ 1MB1563-1DC4-....                    | 9675.-            |
| 15                               | IE3         | 180 L               | 1MB1553-1EC4-....                | 15600.-           | ▲ 1MB1563-1EC4-....                    | 11856.-           |
| 18.5                             | IE3         | 200 L               | 1MB1553-2AC4-....                | 18500.-           | ▲ 1MB1563-2AC4-....                    | 14152.50          |
| 22                               | IE3         | 200 L               | 1MB1553-2AC5-....                | 20100.-           | ▲ 1MB1563-2AC5-....                    | 15477.-           |
| 30                               | IE3         | 225 M               | 1MB1553-2BC2-....                | 25600.-           | ▲ 1MB1563-2BC2-....                    | 19840.-           |
| 37                               | IE3         | 250 M               | 1MB1553-2CC2-....                | 30600.-           | ▲ 1MB1563-2CC2-....                    | 23868.-           |
| 45                               | IE3         | 280 S               | 1MB1553-2DC0-....                | 40000.-           | ▲ 1MB1563-2DC0-....                    | 31400.-           |
| 55                               | IE3         | 280 M               | 1MB1553-2DC2-....                | 45900.-           | ▲ 1MB1563-2DC2-....                    | 36261.-           |
| 75                               | IE3         | 315 S               | 1MB5553-3AC0-....                | 56800.-           |                                        |                   |
| 90                               | IE3         | 315 M               | 1MB5553-3AC2-....                | 66300.-           |                                        |                   |
| 110                              | IE3         | 315 L               | 1MB5553-3AC4-....                | 74800.-           |                                        |                   |
| 132                              | IE3         | 315 L               | 1MB5553-3AC5-....                | 80900.-           |                                        |                   |
| 160                              | IE3         | 315 L               | 1MB5553-3AC6-....                | 94700.-           |                                        |                   |
| 200                              | IE3         | 315 L               | 1MB5553-3AC7-....                | 105000.-          |                                        |                   |
| 250                              | IE3         | 355 S               | 1MB5553-3BC1-....                | 132000.-          |                                        |                   |
| 315                              | IE3         | 355 M               | 1MB5553-3BC2-....                | 137000.-          |                                        |                   |
| 355                              | IE3         | 355 M               | 1MB5553-3BC3-....                | 152000.-          |                                        |                   |
| 380                              | IE3         | 355 L               | 1MB5553-3BC4-....                | 188000.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b> |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1553/1MB5553</b>                         |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6, 8                                                      |
| Frame sizes (FS)                       | 71 M ... 355 L                                                  |
| Rated power at 50 Hz                   | 0.09 ... 460 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                               |
| Rated torque at 50 Hz                  | 1.2 ... 4043 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{\text{rated}}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|-------------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>8-pole: 750 rpm at 50 Hz</b>     |             |                     |                                  |                   |                                        |                   |
| 0.09                                | IE3         | 71 M                | 1MB1553-0CD2-....                | 2990.-            |                                        |                   |
| 0.12                                | IE3         | 71 M                | 1MB1553-0CD3-....                | 3140.-            |                                        |                   |
| 0.18                                | IE3         | 80 M                | 1MB1553-0DD2-....                | 3270.-            |                                        |                   |
| 0.25                                | IE3         | 80 M                | 1MB1553-0DD3-....                | 3420.-            |                                        |                   |
| 0.37                                | IE3         | 90 S                | 1MB1553-0ED0-....                | 3780.-            |                                        |                   |
| 0.55                                | IE3         | 90 L                | 1MB1553-0ED4-....                | 4140.-            |                                        |                   |
| 0.75                                | IE3         | 100 L               | 1MB1553-1AD4-....                | 4700.-            |                                        |                   |
| 1.1                                 | IE3         | 100 L               | 1MB1553-1AD5-....                | 4970.-            |                                        |                   |
| 1.5                                 | IE3         | 112 M               | 1MB1553-1BD2-....                | 5830.-            |                                        |                   |
| 2.2                                 | IE3         | 132 S               | 1MB1553-1CD0-....                | 7140.-            | ▲ 1MB1563-1CD0-....                    | 5094.90           |
| 3                                   | IE3         | 132 M               | 1MB1553-1CD2-....                | 8570.-            | ▲ 1MB1563-1CD2-....                    | 6194.89           |
| 4                                   | IE3         | 160 M               | 1MB1553-1DD2-....                | 10800.-           | ▲ 1MB1563-1DD2-....                    | 7907.14           |
| 5.5                                 | IE3         | 160 M               | 1MB1553-1DD3-....                | 12300.-           | ▲ 1MB1563-1DD3-....                    | 9119.57           |
| 7.5                                 | IE3         | 160 L               | 1MB1553-1DD4-....                | 13800.-           | ▲ 1MB1563-1DD4-....                    | 10359.86          |
| 11                                  | IE3         | 180 L               | 1MB1553-1ED4-....                | 16400.-           | ▲ 1MB1563-1ED4-....                    | 12464.-           |
| 15                                  | IE3         | 200 L               | 1MB1553-2AD5-....                | 21000.-           | ▲ 1MB1563-2AD5-....                    | 16076.67          |
| 18.5                                | IE3         | 225 S               | 1MB1553-2BD0-....                | 23400.-           | ▲ 1MB1563-2BD0-....                    | 18044.-           |
| 22                                  | IE3         | 225 M               | 1MB1553-2BD2-....                | 26800.-           | ▲ 1MB1563-2BD2-....                    | 20815.-           |
| 30                                  | IE3         | 250 M               | 1MB1553-2CD2-....                | 33000.-           | ▲ 1MB1563-2CD2-....                    | 25813.33          |
| 37                                  | IE3         | 280 S               | 1MB1553-2DD0-....                | 42300.-           | ▲ 1MB1563-2DD0-....                    | 33323.-           |
| 45                                  | IE3         | 280 M               | 1MB1553-2DD2-....                | 49400.-           | ▲ 1MB1563-2DD2-....                    | 39190.67          |
| 55                                  | IE3         | 315 S               | 1MB5553-3AD0-....                | 60400.-           |                                        |                   |
| 75                                  | IE3         | 315 M               | 1MB5553-3AD2-....                | 68400.-           |                                        |                   |
| 90                                  | IE3         | 315 L               | 1MB5553-3AD4-....                | 79300.-           |                                        |                   |
| 110                                 | IE3         | 315 L               | 1MB5553-3AD5-....                | 85600.-           |                                        |                   |
| 132                                 | IE3         | 315 L               | 1MB5553-3AD6-....                | 100000.-          |                                        |                   |
| 160                                 | IE3         | 315 L               | 1MB5553-3AD7-....                | 111000.-          |                                        |                   |
| 200                                 | IE3         | 355 M               | 1MB5553-3BD0-....                | 139000.-          |                                        |                   |
| 250                                 | IE3         | 355 M               | 1MB5553-3BD1-....                | 145000.-          |                                        |                   |
| 315                                 | IE3         | 355 L               | 1MB5553-3BD2-....                | 161000.-          |                                        |                   |

4

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1556/1MB5556</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6                                                          |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.12 ... 315 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 0.84 ... 2682 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.25                             | IE3         | 71 M                | ▲ 1MB1556-0CA2-.....             | 3730.-            |                                        |                   |
| 0.37                             | IE3         | 71 M                | ▲ 1MB1556-0CA3-.....             | 3860.-            |                                        |                   |
| 0.55                             | IE3         | 80 M                | ▲ 1MB1556-0DA2-.....             | 4010.-            |                                        |                   |
| 0.75                             | IE3         | 80 M                | ▲ 1MB1556-0DA3-.....             | 4170.-            |                                        |                   |
| 1.1                              | IE3         | 90 S                | ▲ 1MB1556-0EA0-.....             | 4420.-            |                                        |                   |
| 1.5                              | IE3         | 90 L                | ▲ 1MB1556-0EA4-.....             | 4750.-            |                                        |                   |
| 2.2                              | IE3         | 100 L               | ▲ 1MB1556-1AA4-.....             | 5510.-            |                                        |                   |
| 3                                | IE3         | 112 M               | ▲ 1MB1556-1BA2-.....             | 6360.-            |                                        |                   |
| 4                                | IE3         | 132 S               | ▲ 1MB1556-1CA0-.....             | 7520.-            | ▲ 1MB1566-1CA0-.....                   | 5658.20           |
| 5.5                              | IE3         | 132 S               | ▲ 1MB1556-1CA1-.....             | 8580.-            | ▲ 1MB1566-1CA1-.....                   | 6488.40           |
| 7.5                              | IE3         | 160 M               | ▲ 1MB1556-1DA2-.....             | 10900.-           | ▲ 1MB1566-1DA2-.....                   | 8262.10           |
| 11                               | IE3         | 160 M               | ▲ 1MB1556-1DA3-.....             | 12400.-           | ▲ 1MB1566-1DA3-.....                   | 9488.-            |
| 15                               | IE3         | 160 L               | ▲ 1MB1556-1DA4-.....             | 13600.-           | ▲ 1MB1566-1DA4-.....                   | 10500.-           |
| 18.5                             | IE3         | 180 M               | ▲ 1MB1556-1EA2-.....             | 16300.-           | ▲ 1MB1566-1EA2-.....                   | 12676.-           |
| 22                               | IE3         | 200 L               | ▲ 1MB1556-2AA4-.....             | 19800.-           | ▲ 1MB1566-2AA4-.....                   | 15462.78          |
| 30                               | IE3         | 200 L               | ▲ 1MB1556-2AA5-.....             | 23300.-           | ▲ 1MB1566-2AA5-.....                   | 18264.44          |
| 37                               | IE3         | 225 M               | ▲ 1MB1556-2BA2-.....             | 26100.-           | ▲ 1MB1566-2BA2-.....                   | 20583.67          |
| 45                               | IE3         | 250 M               | ▲ 1MB1556-2CA2-.....             | 31200.-           | ▲ 1MB1566-2CA2-.....                   | 24710.22          |
| 55                               | IE3         | 280 M               | ▲ 1MB1556-2DA2-.....             | 46100.-           | ▲ 1MB1566-2DA2-.....                   | 36924.-           |
| 75                               | IE3         | 315 S               | ▲ 1MB5556-3AA0-.....             | 56200.-           |                                        |                   |
| 90                               | IE3         | 315 M               | ▲ 1MB5556-3AA2-.....             | 65100.-           |                                        |                   |
| 110                              | IE3         | 315 L               | ▲ 1MB5556-3AA4-.....             | 79700.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5556-3AA5-.....             | 95000.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5556-3AA6-.....             | 104500.-          |                                        |                   |
| 200                              | IE3         | 355 L               | ▲ 1MB5556-3BA2-.....             | 131900.-          |                                        |                   |
| 250                              | IE3         | 355 L               | ▲ 1MB5556-3BA3-.....             | 136000.-          |                                        |                   |
| 300                              | IE3         | 355 L               | ▲ 1MB5556-3BA5-.....             | 184700.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1556/1MB5556</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6                                                          |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.12 ... 315 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 0.84 ... 2682 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>BG | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | ▲ 1MB1556-0CB2-....              | 3680.-            |                                        |                   |
| 0.25                             | IE3         | 71 M                | ▲ 1MB1556-0CB3-....              | 3800.-            |                                        |                   |
| 0.37                             | IE3         | 80 M                | ▲ 1MB1556-0DB2-....              | 3940.-            |                                        |                   |
| 0.55                             | IE3         | 80 M                | ▲ 1MB1556-0DB3-....              | 4080.-            |                                        |                   |
| 0.75                             | IE3         | 90 S                | ▲ 1MB1556-0EB0-....              | 4330.-            |                                        |                   |
| 1.1                              | IE3         | 90 L                | ▲ 1MB1556-0EB4-....              | 4620.-            |                                        |                   |
| 1.5                              | IE3         | 100 M               | ▲ 1MB1556-1AB4-....              | 5110.-            |                                        |                   |
| 2.2                              | IE3         | 100 L               | ▲ 1MB1556-1AB5-....              | 5390.-            |                                        |                   |
| 3                                | IE3         | 112 M               | ▲ 1MB1556-1BB2-....              | 6210.-            |                                        |                   |
| 4                                | IE3         | 132 S               | ▲ 1MB1556-1CB0-....              | 7320.-            | ▲ 1MB1566-1CB0-....                    | 5535.55           |
| 5.5                              | IE3         | 132 M               | ▲ 1MB1556-1CB2-....              | 8640.-            | ▲ 1MB1566-1CB2-....                    | 6553.11           |
| 7.5                              | IE3         | 160 M               | ▲ 1MB1556-1DB2-....              | 10600.-           | ▲ 1MB1566-1DB2-....                    | 8076.79           |
| 11                               | IE3         | 160 L               | ▲ 1MB1556-1DB4-....              | 13000.-           | ▲ 1MB1566-1DB4-....                    | 9948.86           |
| 15                               | IE3         | 180 M               | ▲ 1MB1556-1EB2-....              | 14300.-           | ▲ 1MB1566-1EB2-....                    | 11034.36          |
| 18.5                             | IE3         | 180 L               | ▲ 1MB1556-1EB4-....              | 15700.-           | ▲ 1MB1566-1EB4-....                    | 12220.-           |
| 22                               | IE3         | 200 L               | ▲ 1MB1556-2AB5-....              | 19600.-           | ▲ 1MB1566-2AB5-....                    | 15309.67          |
| 30                               | IE3         | 225 S               | ▲ 1MB1556-2BB0-....              | 21800.-           | ▲ 1MB1566-2BB0-....                    | 17107.78          |
| 37                               | IE3         | 225 M               | ▲ 1MB1556-2BB2-....              | 25100.-           | ▲ 1MB1566-2BB2-....                    | 19807.-           |
| 45                               | IE3         | 250 M               | ▲ 1MB1556-2CB2-....              | 30000.-           | ▲ 1MB1566-2CB2-....                    | 23771.56          |
| 55                               | IE3         | 280 S               | ▲ 1MB1556-2DB0-....              | 38400.-           | ▲ 1MB1566-2DB0-....                    | 30590.22          |
| 75                               | IE3         | 280 M               | ▲ 1MB1556-2DB2-....              | 43900.-           | ▲ 1MB1566-2DB2-....                    | 35158.-           |
| 90                               | IE3         | 315 S               | ▲ 1MB5556-3AB0-....              | 53600.-           |                                        |                   |
| 110                              | IE3         | 315 M               | ▲ 1MB5556-3AB2-....              | 62500.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5556-3AB5-....              | 90100.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5556-3AB6-....              | 99700.-           |                                        |                   |
| 200                              | IE3         | 355 M               | ▲ 1MB5556-3BB2-....              | 124800.-          |                                        |                   |
| 250                              | IE3         | 355 L               | ▲ 1MB5556-3BB4-....              | 147200.-          |                                        |                   |
| 315                              | IE3         | 355 L               | ▲ 1MB5556-3BB5-....              | 175600.-          |                                        |                   |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b> |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1556/1MB5556</b>                         |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6                                                         |
| Frame sizes (FS)                       | 71 M ... 355 L                                                  |
| Rated power at 50 Hz                   | 0.12 ... 315 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                               |
| Rated torque at 50 Hz                  | 0.84 ... 2682 Nm                                                |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>BG | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.12                             | IE3         | 71 M                | ▲ 1MB1556-0CC2-.....             | 3890.-            |                                        |                   |
| 0.18                             | IE3         | 71 M                | ▲ 1MB1556-0CC3-.....             | 4030.-            |                                        |                   |
| 0.25                             | IE3         | 80 M                | ▲ 1MB1556-0DC2-.....             | 4160.-            |                                        |                   |
| 0.37                             | IE3         | 80 M                | ▲ 1MB1556-0DC3-.....             | 4320.-            |                                        |                   |
| 0.55                             | IE3         | 90 S                | ▲ 1MB1556-0EC0-.....             | 4610.-            |                                        |                   |
| 0.75                             | IE3         | 100 L               | ▲ 1MB1556-1AC3-.....             | 4950.-            |                                        |                   |
| 1.1                              | IE3         | 112 L               | ▲ 1MB1556-1BC1-.....             | 5430.-            |                                        |                   |
| 1.5                              | IE3         | 132 S               | ▲ 1MB1556-1CC1-.....             | 6570.-            | ▲ 1MB1566-1CC1-.....                   | 5899.60           |
| 2.2                              | IE3         | 132 S               | ▲ 1MB1556-1CC0-.....             | 7860.-            | ▲ 1MB1566-1CC0-.....                   | 4923.-            |
| 3                                | IE3         | 132 M               | ▲ 1MB1556-1CC2-.....             | 8640.-            | ▲ 1MB1566-1CC2-.....                   | 6531.60           |
| 4                                | IE3         | 132 M               | ▲ 1MB1556-1CC3-.....             | 9280.-            | ▲ 1MB1566-1CC3-.....                   | 7076.80           |
| 5.5                              | IE3         | 160 M               | ▲ 1MB1556-1DC2-.....             | 11300.-           | ▲ 1MB1566-1DC2-.....                   | 8674.-            |
| 7.5                              | IE3         | 160 L               | ▲ 1MB1556-1DC4-.....             | 14100.-           | ▲ 1MB1566-1DC4-.....                   | 10875.-           |
| 11                               | IE3         | 180 L               | ▲ 1MB1556-1EC4-.....             | 16800.-           | ▲ 1MB1566-1EC4-.....                   | 13056.-           |
| 15                               | IE3         | 200 L               | ▲ 1MB1556-2AC4-.....             | 19800.-           | ▲ 1MB1566-2AC4-.....                   | 15452.50          |
| 18.5                             | IE3         | 200 L               | ▲ 1MB1556-2AC5-.....             | 21400.-           | ▲ 1MB1566-2AC5-.....                   | 16777.-           |
| 22                               | IE3         | 225 M               | ▲ 1MB1556-2BC2-.....             | 27000.-           | ▲ 1MB1566-2BC2-.....                   | 21240.-           |
| 30                               | IE3         | 250 M               | ▲ 1MB1556-2CC2-.....             | 32100.-           | ▲ 1MB1566-2CC2-.....                   | 25368.-           |
| 37                               | IE3         | 280 S               | ▲ 1MB1556-2DC0-.....             | 41600.-           | ▲ 1MB1566-2DC0-.....                   | 33000.-           |
| 45                               | IE3         | 280 M               | ▲ 1MB1556-2DC2-.....             | 47600.-           | ▲ 1MB1566-2DC2-.....                   | 37961.-           |
| 55                               | IE3         | 315 S               | ▲ 1MB5556-3AC0-.....             | 58700.-           |                                        |                   |
| 75                               | IE3         | 315 M               | ▲ 1MB5556-3AC2-.....             | 68300.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5556-3AC7-.....             | 107600.-          |                                        |                   |
| 200                              | IE3         | 355 L               | ▲ 1MB5556-3BC2-.....             | 140100.-          |                                        |                   |
| 280                              | IE3         | 355 L               | ▲ 1MB5556-3BC4-.....             | 191800.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Orientation

Overview of selection and ordering data with base prices and standard delivery times

## Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1557/1MB5557</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6                                                          |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.12 ... 355 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 0.82 ... 3032 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

## Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.25                             | IE3         | 71 M                | ▲ 1MB1557-0CA2-.....             | 3730.-            |                                        |                   |
| 0.37                             | IE3         | 71 M                | ▲ 1MB1557-0CA3-.....             | 3860.-            |                                        |                   |
| 0.55                             | IE3         | 80 M                | ▲ 1MB1557-0DA2-.....             | 4010.-            |                                        |                   |
| 0.75                             | IE3         | 80 M                | ▲ 1MB1557-0DA3-.....             | 4170.-            |                                        |                   |
| 1.1                              | IE3         | 90 S                | ▲ 1MB1557-0EA0-.....             | 4420.-            |                                        |                   |
| 1.5                              | IE3         | 90 L                | ▲ 1MB1557-0EA4-.....             | 4750.-            |                                        |                   |
| 2.2                              | IE3         | 100 L               | ▲ 1MB1557-1AA4-.....             | 5510.-            |                                        |                   |
| 3                                | IE3         | 112 M               | ▲ 1MB1557-1BA2-.....             | 6360.-            |                                        |                   |
| 4                                | IE3         | 132 S               | ▲ 1MB1557-1CA0-.....             | 7520.-            | ▲ 1MB1567-1CA0-.....                   | 5658.20           |
| 5.5                              | IE3         | 132 S               | ▲ 1MB1557-1CA1-.....             | 8580.-            | ▲ 1MB1567-1CA1-.....                   | 6488.40           |
| 7.5                              | IE3         | 160 M               | ▲ 1MB1557-1DA2-.....             | 10900.-           | ▲ 1MB1567-1DA2-.....                   | 8262.10           |
| 11                               | IE3         | 160 M               | ▲ 1MB1557-1DA3-.....             | 12400.-           | ▲ 1MB1567-1DA3-.....                   | 9488.-            |
| 15                               | IE3         | 160 L               | ▲ 1MB1557-1DA4-.....             | 13600.-           | ▲ 1MB1567-1DA4-.....                   | 10500.-           |
| 18.5                             | IE3         | 180 M               | ▲ 1MB1557-1EA2-.....             | 16300.-           | ▲ 1MB1567-1EA2-.....                   | 12676.-           |
| 22                               | IE3         | 200 L               | ▲ 1MB1557-2AA4-.....             | 19800.-           | ▲ 1MB1567-2AA4-.....                   | 15462.78          |
| 30                               | IE3         | 200 L               | ▲ 1MB1557-2AA5-.....             | 23300.-           | ▲ 1MB1567-2AA5-.....                   | 18264.44          |
| 37                               | IE3         | 225 M               | ▲ 1MB1557-2BA2-.....             | 26100.-           | ▲ 1MB1567-2BA2-.....                   | 20583.67          |
| 45                               | IE3         | 250 M               | ▲ 1MB1557-2CA2-.....             | 31200.-           | ▲ 1MB1567-2CA2-.....                   | 24710.22          |
| 55                               | IE3         | 280 S               | ▲ 1MB1557-2DA0-.....             | 39900.-           | ▲ 1MB1567-2DA0-.....                   | 31771.89          |
| 75                               | IE3         | 280 M               | ▲ 1MB1557-2DA2-.....             | 46100.-           | ▲ 1MB1567-2DA2-.....                   | 36924.-           |
| 90                               | IE3         | 315 S               | ▲ 1MB5557-3AA0-.....             | 56200.-           |                                        |                   |
| 110                              | IE3         | 315 M               | ▲ 1MB5557-3AA2-.....             | 65100.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5557-3AA4-.....             | 79700.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5557-3AA5-.....             | 95000.-           |                                        |                   |
| 200                              | IE3         | 315 L               | ▲ 1MB5557-3AA6-.....             | 105000.-          |                                        |                   |

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# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1557/1MB5557</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6                                                          |
| Frame sizes (FS)                       | 71 M ... 355 L                                                   |
| Rated power at 50 Hz                   | 0.12 ... 355 kW                                                  |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 0.82 ... 3032 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>BG | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.18                             | IE3         | 71 M                | ▲ 1MB1557-0CB2-.....             | 3680.-            |                                        |                   |
| 0.25                             | IE3         | 71 M                | ▲ 1MB1557-0CB3-.....             | 3800.-            |                                        |                   |
| 0.37                             | IE3         | 80 M                | ▲ 1MB1557-0DB2-.....             | 3940.-            |                                        |                   |
| 0.55                             | IE3         | 80 M                | ▲ 1MB1557-0DB3-.....             | 4080.-            |                                        |                   |
| 0.75                             | IE3         | 90 S                | ▲ 1MB1557-0EB0-.....             | 4330.-            |                                        |                   |
| 1.1                              | IE3         | 90 L                | ▲ 1MB1557-0EB4-.....             | 4620.-            |                                        |                   |
| 1.5                              | IE3         | 100 M               | ▲ 1MB1557-1AB4-.....             | 5110.-            |                                        |                   |
| 2.2                              | IE3         | 100 L               | ▲ 1MB1557-1AB5-.....             | 5390.-            |                                        |                   |
| 3                                | IE3         | 112 M               | ▲ 1MB1557-1BB2-.....             | 6210.-            |                                        |                   |
| 4                                | IE3         | 132 S               | ▲ 1MB1557-1CB0-.....             | 7320.-            | ▲ 1MB1567-1CB0-.....                   | 5535.55           |
| 5.5                              | IE3         | 132 M               | ▲ 1MB1557-1CB2-.....             | 8640.-            | ▲ 1MB1567-1CB2-.....                   | 6553.11           |
| 7.5                              | IE3         | 160 M               | ▲ 1MB1557-1DB2-.....             | 10600.-           | ▲ 1MB1567-1DB2-.....                   | 8076.79           |
| 11                               | IE3         | 160 L               | ▲ 1MB1557-1DB4-.....             | 13000.-           | ▲ 1MB1567-1DB4-.....                   | 9948.86           |
| 15                               | IE3         | 180 M               | ▲ 1MB1557-1EB2-.....             | 14300.-           | ▲ 1MB1567-1EB2-.....                   | 11034.36          |
| 18.5                             | IE3         | 180 L               | ▲ 1MB1557-1EB4-.....             | 15700.-           | ▲ 1MB1567-1EB4-.....                   | 12220.-           |
| 22                               | IE3         | 200 L               | ▲ 1MB1557-2AB5-.....             | 19600.-           | ▲ 1MB1567-2AB5-.....                   | 15309.67          |
| 30                               | IE3         | 225 S               | ▲ 1MB1557-2BB0-.....             | 21800.-           | ▲ 1MB1567-2BB0-.....                   | 17107.78          |
| 37                               | IE3         | 225 M               | ▲ 1MB1557-2BB2-.....             | 25100.-           | ▲ 1MB1567-2BB2-.....                   | 19807.-           |
| 45                               | IE3         | 250 M               | ▲ 1MB1557-2CB2-.....             | 30000.-           | ▲ 1MB1567-2CB2-.....                   | 23771.56          |
| 55                               | IE3         | 280 S               | ▲ 1MB1557-2DB0-.....             | 38400.-           | ▲ 1MB1567-2DB0-.....                   | 30590.22          |
| 75                               | IE3         | 280 M               | ▲ 1MB1557-2DB2-.....             | 43900.-           | ▲ 1MB1567-2DB2-.....                   | 35158.-           |
| 90                               | IE3         | 315 S               | ▲ 1MB5557-3AB0-.....             | 53600.-           |                                        |                   |
| 110                              | IE3         | 315 M               | ▲ 1MB5557-3AB2-.....             | 62500.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5557-3AB5-.....             | 90100.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5557-3AB6-.....             | 99700.-           |                                        |                   |
| 200                              | IE3         | 315 L               | ▲ 1MB5557-3BB2-.....             | 125000.-          |                                        |                   |
| 250                              | IE3         | 355 L               | ▲ 1MB5557-3BB4-.....             | 147000.-          |                                        |                   |
| 315                              | IE3         | 355 L               | ▲ 1MB5557-3BB5-.....             | 176000.-          |                                        |                   |
| 355                              | IE3         | 355 L               | ▲ 1MB5557-3BB5-.....             | 176000.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b> |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1557/1MB5557</b>                         |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6                                                         |
| Frame sizes (FS)                       | 71 M ... 355 L                                                  |
| Rated power at 50 Hz                   | 0.12 ... 355 kW                                                 |
| Synchronous speed at 50 Hz             | 1000 ... 3600 rpm                                               |
| Rated torque at 50 Hz                  | 0.82 ... 3032 Nm                                                |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>BG | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 0.12                             | IE3         | 71 M                | ▲ 1MB1557-0CC2-.....             | 3890.-            |                                        |                   |
| 0.18                             | IE3         | 71 M                | ▲ 1MB1557-0CC3-.....             | 4030.-            |                                        |                   |
| 0.25                             | IE3         | 80 M                | ▲ 1MB1557-0DC2-.....             | 4160.-            |                                        |                   |
| 0.37                             | IE3         | 80 M                | ▲ 1MB1557-0DC3-.....             | 4320.-            |                                        |                   |
| 0.55                             | IE3         | 90 S                | ▲ 1MB1557-0EC0-.....             | 4610.-            |                                        |                   |
| 0.75                             | IE3         | 100 L               | ▲ 1MB1557-1AC3-.....             | 4950.-            |                                        |                   |
| 1.1                              | IE3         | 112 L               | ▲ 1MB1557-1BC1-.....             | 5430.-            |                                        |                   |
| 1.5                              | IE3         | 132 S               | ▲ 1MB1557-1CC1-.....             | 6570.-            | ▲ 1MB1567-1CC1-.....                   | 5899.60           |
| 2.2                              | IE3         | 132 S               | ▲ 1MB1557-1CC0-.....             | 7860.-            | ▲ 1MB1567-1CC0-.....                   | 4923.-            |
| 3                                | IE3         | 132 M               | ▲ 1MB1557-1CC2-.....             | 8640.-            | ▲ 1MB1567-1CC2-.....                   | 6531.60           |
| 4                                | IE3         | 132 M               | ▲ 1MB1557-1CC3-.....             | 9280.-            | ▲ 1MB1567-1CC3-.....                   | 7076.80           |
| 5.5                              | IE3         | 160 M               | ▲ 1MB1557-1DC2-.....             | 11300.-           | ▲ 1MB1567-1DC2-.....                   | 8674.-            |
| 7.5                              | IE3         | 160 L               | ▲ 1MB1557-1DC4-.....             | 14100.-           | ▲ 1MB1567-1DC4-.....                   | 10875.-           |
| 11                               | IE3         | 180 L               | ▲ 1MB1557-1EC4-.....             | 16800.-           | ▲ 1MB1567-1EC4-.....                   | 13056.-           |
| 15                               | IE3         | 200 L               | ▲ 1MB1557-2AC4-.....             | 19800.-           | ▲ 1MB1567-2AC4-.....                   | 15452.50          |
| 18.5                             | IE3         | 200 L               | ▲ 1MB1557-2AC5-.....             | 21400.-           | ▲ 1MB1567-2AC5-.....                   | 16777.-           |
| 22                               | IE3         | 225 M               | ▲ 1MB1557-2BC2-.....             | 27000.-           | ▲ 1MB1567-2BC2-.....                   | 21240.-           |
| 30                               | IE3         | 250 M               | ▲ 1MB1557-2CC2-.....             | 32100.-           | ▲ 1MB1567-2CC2-.....                   | 25368.-           |
| 37                               | IE3         | 280 S               | ▲ 1MB1557-2DC0-.....             | 41600.-           | ▲ 1MB1567-2DC0-.....                   | 33000.-           |
| 45                               | IE3         | 280 M               | ▲ 1MB1557-2DC2-.....             | 47600.-           | ▲ 1MB1567-2DC2-.....                   | 37961.-           |
| 55                               | IE3         | 315 S               | ▲ 1MB5557-3AC0-.....             | 58700.-           |                                        |                   |
| 75                               | IE3         | 315 M               | ▲ 1MB5557-3AC2-.....             | 68300.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5557-3AC7-.....             | 107600.-          |                                        |                   |
| 250                              | IE3         | 355 L               | ▲ 1MB5557-3BC2-.....             | 140100.-          |                                        |                   |
| 315                              | IE3         | 355 L               | ▲ 1MB5557-3BC4-.....             | 191800.-          |                                        |                   |

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1853/1MB5853</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 100 L ... 355 L                                                  |
| Rated power at 50 Hz                   | 2.2 ... 450 kW                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                 |
| Rated torque at 50 Hz                  | 9.8 ... 3589 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>2-pole: 3000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 3                                | IE3         | 100 L               | ▲ 1MB1853-1AA4-....              | 4930.-            |                                        |                   |
| 4                                | IE3         | 112 M               | ▲ 1MB1853-1BA2-....              | 5910.-            |                                        |                   |
| 5.5                              | IE3         | 132 S               | ▲ 1MB1853-1CA0-....              | 7380.-            | ▲ 1MB1863-1CA0-....                    | 5518.20           |
| 7.5                              | IE3         | 132 S               | ▲ 1MB1853-1CA1-....              | 8370.-            | ▲ 1MB1863-1CA1-....                    | 6278.40           |
| 11                               | IE3         | 160 M               | ▲ 1MB1853-1DA2-....              | 10730.-           | ▲ 1MB1863-1DA2-....                    | 8092.10           |
| 15                               | IE3         | 160 M               | ▲ 1MB1853-1DA3-....              | 12160.-           | ▲ 1MB1863-1DA3-....                    | 9248.-            |
| 18.5                             | IE3         | 160 L               | ▲ 1MB1853-1DA4-....              | 13400.-           | ▲ 1MB1863-1DA4-....                    | 10300.-           |
| 22                               | IE3         | 180 M               | ▲ 1MB1853-1EA2-....              | 16470.-           | ▲ 1MB1863-1EA2-....                    | 12846.-           |
| 30                               | IE3         | 200 L               | ▲ 1MB1853-2AA4-....              | 20220.-           | ▲ 1MB1863-2AA4-....                    | 15882.78          |
| 37                               | IE3         | 200 L               | ▲ 1MB1853-2AA5-....              | 23560.-           | ▲ 1MB1863-2AA5-....                    | 18524.44          |
| 45                               | IE3         | 225 M               | ▲ 1MB1853-2BA2-....              | 26900.-           | ▲ 1MB1863-2BA2-....                    | 21383.67          |
| 55                               | IE3         | 250 M               | ▲ 1MB1853-2CA2-....              | 32100.-           | ▲ 1MB1863-2CA2-....                    | 25610.22          |
| 75                               | IE3         | 280 S               | ▲ 1MB1853-2DA0-....              | 40880.-           | ▲ 1MB1863-2DA0-....                    | 32751.89          |
| 85                               | IE3         | 280 M               | ▲ 1MB1853-2DA2-....              | 46900.-           | ▲ 1MB1863-2DA2-....                    | 37724.-           |
| 110                              | IE3         | 315 S               | ▲ 1MB5853-3AA0-....              | 57600.-           |                                        |                   |
| 132                              | IE3         | 315 M               | ▲ 1MB5853-3AA2-....              | 66500.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5853-3AA4-....              | 80100.-           |                                        |                   |
| 200                              | IE3         | 315 L               | ▲ 1MB5853-3AA5-....              | 95800.-           |                                        |                   |
| 250                              | IE3         | 315 L               | ▲ 1MB5853-3AA6-....              | 105355.-          |                                        |                   |
| 315                              | IE3         | 355 M               | ▲ 1MB5853-3BA2-....              | 132850.-          |                                        |                   |
| 355                              | IE3         | 355 M               | ▲ 1MB5853-3BA3-....              | 137300.-          |                                        |                   |
| 400                              | IE3         | 355 L               | ▲ 1MB5853-3BA4-....              | 155750.-          |                                        |                   |
| 450                              | IE3         | 355 L               | ▲ 1MB5853-3BA5-....              | 186200.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1853/1MB5853</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 100 L ... 355 L                                                  |
| Rated power at 50 Hz                   | 2.2 ... 450 kW                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                 |
| Rated torque at 50 Hz                  | 9.8 ... 3589 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| 4-pole: 1500 rpm at 50 Hz    |             |                     |                                  |                   |                                        |                   |
| 2.2                          | IE3         | 100 L               | ▲ 1MB1853-1AB4-....              | 4690.-            |                                        |                   |
| 3                            | IE3         | 100 M               | ▲ 1MB1853-1AB5-....              | 5200.-            |                                        |                   |
| 4                            | IE3         | 112 S               | ▲ 1MB1853-1BB2-....              | 5910.-            |                                        |                   |
| 5.5                          | IE3         | 132 S               | ▲ 1MB1853-1CB0-....              | 7090.-            | ▲ 1MB1863-1CB0-....                    | 5305.55           |
| 7.5                          | IE3         | 132 M               | ▲ 1MB1853-1CB2-....              | 8400.-            | ▲ 1MB1863-1CB2-....                    | 6313.11           |
| 11                           | IE3         | 160 M               | ▲ 1MB1853-1DB2-....              | 10540.-           | ▲ 1MB1863-1DB2-....                    | 7976.79           |
| 15                           | IE3         | 160 L               | ▲ 1MB1853-1DB4-....              | 13090.-           | ▲ 1MB1863-1DB4-....                    | 10048.86          |
| 18.5                         | IE3         | 180 M               | ▲ 1MB1853-1EB2-....              | 14940.-           | ▲ 1MB1863-1EB2-....                    | 11634.36          |
| 22                           | IE3         | 180 L               | ▲ 1MB1853-1EB4-....              | 16520.-           | ▲ 1MB1863-1EB4-....                    | 13020.-           |
| 30                           | IE3         | 200 L               | ▲ 1MB1853-2AB5-....              | 20900.-           | ▲ 1MB1863-2AB5-....                    | 16609.67          |
| 45                           | IE3         | 225 M               | ▲ 1MB1853-2BB2-....              | 25304.-           | ▲ 1MB1863-2BB2-....                    | 20007.-           |
| 55                           | IE3         | 250 M               | ▲ 1MB1853-2CB2-....              | 30320.-           | ▲ 1MB1863-2CB2-....                    | 24071.56          |
| 75                           | IE3         | 280 S               | ▲ 1MB1853-2DB0-....              | 38440.-           | ▲ 1MB1863-2DB0-....                    | 30590.22          |
| 90                           | IE3         | 280 M               | ▲ 1MB1853-2DB2-....              | 43940.-           | ▲ 1MB1863-2DB2-....                    | 35158.-           |
| 110                          | IE3         | 315 S               | ▲ 1MB5853-3AB0-....              | 53160.-           |                                        |                   |
| 132                          | IE3         | 315 M               | ▲ 1MB5853-3AB2-....              | 62000.-           |                                        |                   |
| 160                          | IE3         | 315 L               | ▲ 1MB5853-3AB4-....              | 74860.-           |                                        |                   |
| 200                          | IE3         | 315 L               | ▲ 1MB5853-3AB5-....              | 89000.-           |                                        |                   |
| 250                          | IE3         | 315 L               | ▲ 1MB5853-3AB6-....              | 99520.-           |                                        |                   |
| 315                          | IE3         | 355 M               | ▲ 1MB5853-3BB2-....              | 124130.-          |                                        |                   |
| 355                          | IE3         | 355 M               | ▲ 1MB5853-3BB3-....              | 129430.-          |                                        |                   |
| 400                          | IE3         | 355 L               | ▲ 1MB5853-3BB4-....              | 146790.-          |                                        |                   |
| 460                          | IE3         | 355 L               | ▲ 1MB5853-3BB5-....              | 175000.-          |                                        |                   |

4

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

## Orientation

Standard delivery times in working days:

|    |    |    |    |    |
|----|----|----|----|----|
| 20 | 25 | 30 | 40 | 80 |
|----|----|----|----|----|

### Overview of selection and ordering data with base prices and standard delivery times

#### Overview

|                                        |                                                                  |
|----------------------------------------|------------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b>  |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                    |
| Series version                         | <b>Cast-iron series 1MB1853/1MB5853</b> (continued on next page) |
| Cooling                                | Self-ventilated (IC 411)                                         |
| Degree of protection                   | IP55, optionally IP56 or IP65                                    |
| Insulation                             | Thermal class 155 (F)                                            |
| Utilization                            | Thermal class 130 (B)                                            |
| Number of poles                        | 2, 4, 6, 8                                                       |
| Frame sizes (FS)                       | 100 L ... 355 L                                                  |
| Rated power at 50 Hz                   | 2.2 ... 450 kW                                                   |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                 |
| Rated torque at 50 Hz                  | 9.8 ... 3589 Nm                                                  |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                    |
| Price group (PG)                       | 3X1                                                              |

#### Range of motors in standard version with Article No., delivery time and base price plus MS

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|----------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 15                               | IE3         | 180 L               | ▲ 1MB1853-1EC4-.....             | 17090.-           | ▲ 1MB1863-1EC4-.....                   | 13346.-           |
| 18.5                             | IE3         | 200 L               | ▲ 1MB1853-2AC4-.....             | 20220.-           | ▲ 1MB1863-2AC4-.....                   | 15872.50          |
| 22                               | IE3         | 200 L               | ▲ 1MB1853-2AC5-.....             | 22060.-           | ▲ 1MB1863-2AC5-.....                   | 17437.-           |
| 30                               | IE3         | 225 M               | ▲ 1MB1853-2BC2-.....             | 27100.-           | ▲ 1MB1863-2BC2-.....                   | 21340.-           |
| 37                               | IE3         | 250 M               | ▲ 1MB1853-2CC2-.....             | 32050.-           | ▲ 1MB1863-2CC2-.....                   | 25318.-           |
| 45                               | IE3         | 280 S               | ▲ 1MB1853-2DC0-.....             | 41450.-           | ▲ 1MB1863-2DC0-.....                   | 32850.-           |
| 55                               | IE3         | 280 M               | ▲ 1MB1853-2DC2-.....             | 47700.-           | ▲ 1MB1863-2DC2-.....                   | 38061.-           |
| 75                               | IE3         | 315 S               | ▲ 1MB5853-3AC0-.....             | 58300.-           |                                        |                   |
| 90                               | IE3         | 315 M               | ▲ 1MB5853-3AC2-.....             | 67950.-           |                                        |                   |
| 110                              | IE3         | 315 L               | ▲ 1MB5853-3AC4-.....             | 76200.-           |                                        |                   |
| 132                              | IE3         | 315 L               | ▲ 1MB5853-3AC5-.....             | 82600.-           |                                        |                   |
| 160                              | IE3         | 315 L               | ▲ 1MB5853-3AC6-.....             | 96600.-           |                                        |                   |
| 250                              | IE3         | 355 S               | ▲ 1MB5853-3BC1-.....             | 134310.-          |                                        |                   |
| 315                              | IE3         | 355 M               | ▲ 1MB5853-3BC2-.....             | 140300.-          |                                        |                   |
| 355                              | IE3         | 355 M               | ▲ 1MB5853-3BC3-.....             | 155000.-          |                                        |                   |
| 380                              | IE3         | 355 L               | ▲ 1MB5853-3BC4-.....             | 192200.-          |                                        |                   |

Standard delivery times in working days:

20

25

30

40

80

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Orientation

Overview of selection and ordering data with base prices and standard delivery times

**Overview**

|                                        |                                                                 |
|----------------------------------------|-----------------------------------------------------------------|
| Category                               | <b>Motors for zone 1 in types of protection Ex db, Ex db eb</b> |
| Efficiency                             | <b>Premium Efficiency IE3</b>                                   |
| Series version                         | <b>Cast-iron series 1MB1853/1MB5853</b>                         |
| Cooling                                | Self-ventilated (IC 411)                                        |
| Degree of protection                   | IP55, optionally IP56 or IP65                                   |
| Insulation                             | Thermal class 155 (F)                                           |
| Utilization                            | Thermal class 130 (B)                                           |
| Number of poles                        | 2, 4, 6, 8                                                      |
| Frame sizes (FS)                       | 100 L ... 355 L                                                 |
| Rated power at 50 Hz                   | 2.2 ... 450 kW                                                  |
| Synchronous speed at 50 Hz             | 750 ... 3600 rpm                                                |
| Rated torque at 50 Hz                  | 9.8 ... 3589 Nm                                                 |
| Metal factor for metal surcharges (MS) | N - W - - - -                                                   |
| Price group (PG)                       | 3X1                                                             |

**Range of motors in standard version with Article No., delivery time and base price plus MS**

(for article number supplements and special versions see from Page 4/40, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW    | IE<br>class | Frame<br>size<br>FS | Article No.<br><b>Basic Line</b> | Base price<br>EUR | Article No.<br><b>Performance Line</b> | Base price<br>EUR |
|---------------------------------|-------------|---------------------|----------------------------------|-------------------|----------------------------------------|-------------------|
|                                 |             |                     | ▲                                |                   | ▲ New                                  |                   |
| <b>8-pole: 750 rpm at 50 Hz</b> |             |                     |                                  |                   |                                        |                   |
| 11                              | IE3         | 180 L               | ▲ 1MB1853-1ED4-....              | 18050.-           | ▲ 1MB1863-1ED4-....                    | 14114.-           |
| 15                              | IE3         | 200 L               | ▲ 1MB1853-2AD5-....              | 22320.-           | ▲ 1MB1863-2AD5-....                    | 17397.-           |
| 18.5                            | IE3         | 225 S               | ▲ 1MB1853-2BD0-....              | 25200.-           | ▲ 1MB1863-2BD0-....                    | 19844.-           |
| 22                              | IE3         | 225 M               | ▲ 1MB1853-2BD2-....              | 28600.-           | ▲ 1MB1863-2BD2-....                    | 22615.-           |
| 30                              | IE3         | 250 M               | ▲ 1MB1853-2CD2-....              | 34900.-           | ▲ 1MB1863-2CD2-....                    | 27713.-           |
| 37                              | IE3         | 280 S               | ▲ 1MB1853-2DD0-....              | 45100.-           | ▲ 1MB1863-2DD0-....                    | 36123.-           |
| 45                              | IE3         | 280 M               | ▲ 1MB1853-2DD2-....              | 51500.-           | ▲ 1MB1863-2DD2-....                    | 41291.-           |
| 55                              | IE3         | 315 S               | ▲ 1MB5853-3AD0-....              | 62100.-           |                                        |                   |
| 75                              | IE3         | 315 M               | ▲ 1MB5853-3AD2-....              | 69400.-           |                                        |                   |
| 90                              | IE3         | 315 L               | ▲ 1MB5853-3AD4-....              | 81000.-           |                                        |                   |
| 110                             | IE3         | 315 L               | ▲ 1MB5853-3AD5-....              | 86900.-           |                                        |                   |
| 132                             | IE3         | 315 L               | ▲ 1MB5853-3AD6-....              | 101000.-          |                                        |                   |
| 160                             | IE3         | 315 L               | ▲ 1MB5853-3AD7-....              | 113500.-          |                                        |                   |
| 200                             | IE3         | 355 M               | ▲ 1MB5853-3BD0-....              | 141500.-          |                                        |                   |
| 250                             | IE3         | 355 M               | ▲ 1MB5853-3BD1-....              | 147500.-          |                                        |                   |
| 315                             | IE3         | 355 L               | ▲ 1MB5853-3BD2-....              | 163500.-          |                                        |                   |

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

20

## Voltages · Aluminum series 1MB10

## Selection and ordering data

| Voltages                                 | Article No. supplement                                    |                                                                           | Frame size                        |       |       |       |       |       |       |       | Motor version |                                                        |                   |
|------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|---------------|--------------------------------------------------------|-------------------|
|                                          | Voltage code<br>12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 63                                | 71    | 80    | 90    | 100   | 112   | 132   | 160   | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1 |
|                                          |                                                           |                                                                           | 1MB10.3                           |       |       |       |       |       |       |       |               |                                                        |                   |
|                                          |                                                           |                                                                           | 1MB10.1                           |       |       |       |       |       |       |       |               |                                                        |                   |
|                                          |                                                           |                                                                           | 1MB10.2                           |       |       |       |       |       |       |       |               |                                                        |                   |
| 1MB10...-...-...-...-...-...             |                                                           | Order code                                                                |                                   |       |       |       |       |       |       |       |               |                                                        |                   |
| Voltage at 50 Hz or 60 Hz (50 Hz power)  |                                                           |                                                                           |                                   |       |       |       |       |       |       |       |               |                                                        |                   |
| 50 Hz 230 VΔ/400 VY, 60 Hz 460 VY        | 2                                                         | 2                                                                         | —                                 | □     | □     | □     | □     | □     | □     | □     | □             |                                                        |                   |
| 50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ        | 3                                                         | 4                                                                         | —                                 | □     | □     | □     | □     | □     | □     | □     | □             |                                                        |                   |
| 50 Hz 500 VY                             | 2                                                         | 7                                                                         | —                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 50 Hz 500 VΔ                             | 4                                                         | 0                                                                         | —                                 | ○     | 32.10 | —     | —     | ○     | ○     | ○     | ○             |                                                        |                   |
| 50 Hz 220 VΔ/380 VY, 60 Hz 440 VY        | 2                                                         | 1                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ        | 3                                                         | 3                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 50 Hz 240 VΔ/415 VY, 60 Hz 480 VY        | 2                                                         | 3                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 50 Hz 415 VΔ, 60 Hz 480 VΔ               | 3                                                         | 5                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 50 Hz 400 VY, 60 Hz 460 VY <sup>1)</sup> | 0                                                         | 2                                                                         | —                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 50 Hz 400 VΔ, 60 Hz 460 VΔ <sup>2)</sup> | 0                                                         | 4                                                                         | —                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 60 Hz 220 VΔ/380 VY                      | 1                                                         | 7                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         | Not for:                                               | 1MB10.2           |
| 60 Hz 230 VΔ/400 VY                      | 1                                                         | 8                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         | Not for:                                               | 1MB10.2           |
| 60 Hz 380 VΔ/660 VY                      | 3                                                         | 0                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         | Not for:                                               | 1MB10.2           |
| 60 Hz 400 VΔ/690 VY                      | 3                                                         | 1                                                                         | —                                 | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         | Not for:                                               | 1MB10.2           |
| 50 Hz 400 VY                             | 9                                                         | 0                                                                         | M4A                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 50 Hz 400 VΔ                             | 9                                                         | 0                                                                         | M4B                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| Voltage at 60 Hz (50 Hz power)           |                                                           |                                                                           |                                   |       |       |       |       |       |       |       |               |                                                        |                   |
| 220 VΔ/380 VY; 50 Hz power <sup>3)</sup> | 9                                                         | 0                                                                         | M2A                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 220 VΔ/380 VY; 60 Hz power               | 9                                                         | 0                                                                         | M1A                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 380 VΔ/660 VY; 50 Hz power <sup>3)</sup> | 9                                                         | 0                                                                         | M2B                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 380 VΔ/660 VY; 60 Hz power               | 9                                                         | 0                                                                         | M1B                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 440 VY; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2C                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 440 VY; 60 Hz power                      | 9                                                         | 0                                                                         | M1C                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 440 VΔ; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2D                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 440 VΔ; 60 Hz power                      | 9                                                         | 0                                                                         | M1D                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 460 VY; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2E                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 460 VY; 60 Hz power                      | 9                                                         | 0                                                                         | M1E                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 460 VΔ; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2F                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 460 VΔ; 60 Hz power                      | 9                                                         | 0                                                                         | M1F                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| 575 VY; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2G                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 575 VY; 60 Hz power                      | 9                                                         | 0                                                                         | M1G                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 575 VΔ; 50 Hz power <sup>3)</sup>        | 9                                                         | 0                                                                         | M2H                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 575 VΔ; 60 Hz power                      | 9                                                         | 0                                                                         | M1H                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 400 VΔ/690 VY; 50 Hz power               | 9                                                         | 0                                                                         | M2J                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 400 VΔ/690 VY; 60 Hz power               | 9                                                         | 0                                                                         | M1J                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 480 VY; 50 Hz power                      | 9                                                         | 0                                                                         | M2K                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 480 VY; 60 Hz power                      | 9                                                         | 0                                                                         | M1K                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 480 VΔ; 50 Hz power                      | 9                                                         | 0                                                                         | M2L                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 480 VΔ; 60 Hz power                      | 9                                                         | 0                                                                         | M1L                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 230 VΔ/400 VY; 50 Hz power               | 9                                                         | 0                                                                         | M2M                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| 230 VΔ/400 VY; 60 Hz power               | 9                                                         | 0                                                                         | M1M                               | 28.60 | 32.10 | 36.40 | 42.60 | 52.90 | 64.—  | 82.10 | 101.—         |                                                        |                   |
| Voltage at 87 Hz (87 Hz power)           |                                                           |                                                                           |                                   |       |       |       |       |       |       |       |               |                                                        |                   |
| 400 VΔ <sup>5)</sup>                     | 9                                                         | 0                                                                         | M3A                               | 28.60 | 32.10 | ○     | ○     | ○     | ○     | ○     | ○             |                                                        |                   |
| Non-standard voltage and/or frequencies  |                                                           |                                                                           |                                   |       |       |       |       |       |       |       |               |                                                        |                   |
| Non-standard winding <sup>4)</sup>       | 9                                                         | 0                                                                         | M1Y • and customer specifications | 57.70 | 64.90 | 72.90 | 85.80 | 106.— | 129.— | 164.— | 204.—         |                                                        |                   |

- Standard version
- Without additional charge

- Not possible
- This order code only determines the price of the version – additional plain text is required.

1) Delta connection is not possible.

2) Star connection is not possible.

3) A power of 3.7 kW is stamped on the rating plate for versions 1MB1... - 1BA2, 1MB1... - 1BB2, 1MB1... - 1CC2 and 1MB1... - 1DD2 at 60 Hz with 50 Hz power in accordance with the international efficiency classification to IEC 60034-30.

4) Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

5) Only possible for 4-pole, 6-pole and 8-pole motors with order codes **B40** and **B41**. The operating data for converter operation is provided in a table on the rating plate. Motor has 50 Hz 230 VΔ winding.

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## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Voltages · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

## Selection and ordering data

| Voltages | Article No.               | supplement                                                | Frame size                                                                |    |    |    |     |     |     |     |     |     |     |     |     |     | Motor version |                                                                 |     |
|----------|---------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----------------------------------------------------------------|-----|
|          |                           | Voltage code<br>12th and 13th position of the Article No. | Additional Identification code with order code and plain text if required | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 |               |                                                                 |     |
|          |                           |                                                           | 1MB15.3 Basic Line                                                        |    |    |    |     |     |     |     |     |     |     |     |     |     | IEC           | Ex tb<br>(zone 21),<br>Ex tc<br>(zone 22),<br>Ex ec<br>(zone 2) | IE3 |
|          |                           |                                                           | 1MB16.3 Performance Line                                                  |    |    |    |     |     |     |     |     |     |     |     |     |     |               |                                                                 |     |
|          |                           |                                                           | 1MB15.1 Basic Line                                                        |    |    |    |     |     |     |     |     |     |     |     |     |     |               |                                                                 |     |
|          |                           |                                                           | 1MB16.1 Performance Line                                                  |    |    |    |     |     |     |     |     |     |     |     |     |     |               |                                                                 |     |
|          | 1MB15 .-. . . . . ■ - ■ . |                                                           |                                                                           |    |    |    |     |     |     |     |     |     |     |     |     |     |               |                                                                 |     |
|          | 1MB16 .-. . . . . ■ - ■ . | Order code                                                |                                                                           |    |    |    |     |     |     |     |     |     |     |     |     |     |               |                                                                 |     |

| Voltage at 50 Hz or 60 Hz                |   |   |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
|------------------------------------------|---|---|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 50 Hz 230 VΔ/400 VY, 60 Hz 460 VY        | 2 | 2 | –                                 | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     |  |
| 50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ        | 3 | 4 | –                                 | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     |  |
| 50 Hz 400 VY, 60 Hz 460 VY <sup>1)</sup> | 0 | 2 | –                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 50 Hz 400 VΔ, 60 Hz 460 VΔ <sup>2)</sup> | 0 | 4 | –                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 50 Hz 500 VY                             | 2 | 7 | –                                 | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 50 Hz 500 VΔ                             | 4 | 0 | –                                 | –     | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 50 Hz 220 VΔ/380 VY, 60 Hz 440 VY        | 2 | 1 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ        | 3 | 3 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 50 Hz 240 VΔ/415 VY, 60 Hz 480 VY        | 2 | 3 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 50 Hz 415 VΔ, 60 Hz 480 VΔ               | 3 | 5 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 60 Hz 220 VΔ/380 VY                      | 1 | 7 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 60 Hz 230 VΔ/400 VY                      | 1 | 8 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 60 Hz 380 VΔ/660 VY                      | 3 | 0 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 136.– | 136.– | 136.– | 136.– | 136.– |  |
| 60 Hz 400 VΔ/690 VY                      | 3 | 1 | –                                 | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 136.– | 136.– | 136.– | 136.– | 136.– |  |
| 50 Hz 400 VY                             | 9 | 0 | M4A                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 50 Hz 400 VΔ                             | 9 | 0 | M4B                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| Voltage at 60 Hz and required power      |   |   |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 220 VΔ/380 VY; 50 Hz power <sup>3)</sup> | 9 | 0 | M2A                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 220 VΔ/380 VY; 60 Hz power               | 9 | 0 | M1A                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 380 VΔ/660 VY; 50 Hz power <sup>3)</sup> | 9 | 0 | M2B                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 380 VΔ/660 VY; 60 Hz power               | 9 | 0 | M1B                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 440 VY; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2C                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 440 VY; 60 Hz power                      | 9 | 0 | M1C                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 440 VΔ; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2D                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 440 VΔ; 60 Hz power                      | 9 | 0 | M1D                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 460 VY; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2E                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 460 VY; 60 Hz power                      | 9 | 0 | M1E                               | –     | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 460 VΔ; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2F                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 460 VΔ; 60 Hz power                      | 9 | 0 | M1F                               | –     | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |  |
| 575 VY; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2G                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 575 VY; 60 Hz power                      | 9 | 0 | M1G                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 575 VΔ; 50 Hz power <sup>3)</sup>        | 9 | 0 | M2H                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 575 VΔ; 60 Hz power                      | 9 | 0 | M1H                               | –     | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 400 VΔ/690 VY; 50 Hz power               | 9 | 0 | M2J                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 400 VΔ/690 VY; 60 Hz power               | 9 | 0 | M1J                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 480 VY; 50 Hz power                      | 9 | 0 | M2K                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 480 VY; 60 Hz power                      | 9 | 0 | M1K                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 480 VΔ; 50 Hz power                      | 9 | 0 | M2L                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 480 VΔ; 60 Hz power                      | 9 | 0 | M1L                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 230 VΔ/400 VY; 50 Hz power               | 9 | 0 | M2M                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| 230 VΔ/400 VY; 60 Hz power               | 9 | 0 | M1M                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |  |
| Voltage at 87 Hz (87 Hz power)           |   |   |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| 400 VΔ <sup>5)</sup>                     | 9 | 0 | M3A                               | 32.10 | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | –     | –     | –     | –     |  |
| Non-standard voltage and/or frequencies  |   |   |                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |  |
| Non-standard winding <sup>4)</sup>       | 9 | 0 | M1Y • and customer specifications | 64.30 | 72.90 | 85.80 | 106.– | 129.– | 164.– | 204.– | 263.– | 320.– | 474.– | 597.– | 764.– | 993.– |  |

- Standard version
- Without additional charge

- Not possible
- This order code only determines the price of the version – additional plain text is required.

1) Delta connection is not possible.

2) Star connection is not possible.

3) A power of 3.7 kW is stamped on the rating plate for versions 1MB1... - 1BA2, 1MB1... - 1BB2, 1MB1... - 1CC2 and 1MB1... - 1DD2 at 60 Hz with 50 Hz power in accordance with the international efficiency classification to IEC 60034-30.

4) Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

5) Only possible for 4-pole, 6-pole and 8-pole motors with order codes **B40** and **B41**. The operating data for converter operation is provided in a table on the rating plate. Motor has 50 Hz 230 VA winding.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors****25****40**

Article No. supplements and special versions

Voltages · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

**Selection and ordering data**

| Voltages                                                     | Article No. supplement                                 |                                                                           | Frame size |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       | Motor version      |     |  |
|--------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|---------------------------|---------------------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-----|--|
|                                                              | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | 63         | 71                        | 80                              | 90                              | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   |                    |     |  |
|                                                              |                                                        |                                                                           |            | <b>1MB1042</b>            |                                 |                                 |       |       |       |       |       |       |       |       |       |       | IEC Ex eb (zone 1) | IE3 |  |
|                                                              |                                                        |                                                                           |            | <b>1MB1543 Basic Line</b> |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
|                                                              |                                                        |                                                                           |            |                           | <b>1MB1643 Performance Line</b> |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
|                                                              |                                                        |                                                                           |            |                           |                                 | <b>1MB5543 Basic Line</b>       |       |       |       |       |       |       |       |       |       |       |                    |     |  |
|                                                              |                                                        |                                                                           |            |                           |                                 | <b>1MB5643 Performance Line</b> |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| <b>1MB1042 - . . . .</b>                                     | <b>■ ■</b>                                             |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| <b>1MB . 5 . . . . .</b>                                     | <b>■ ■</b>                                             |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| <b>1MB . 6 . . . . .</b>                                     | <b>■ ■</b>                                             |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
|                                                              |                                                        | Order code                                                                |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| <b>Voltage at 50 Hz (50 Hz power) <sup>3)</sup></b>          |                                                        |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| 50 Hz 230 VΔ/400 VY                                          | <b>2 2</b>                                             | –                                                                         | □          | □                         | □                               | □                               | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     |                    |     |  |
| 50 Hz 400 VΔ/690 VY                                          | <b>3 4</b>                                             | –                                                                         | □          | □                         | □                               | □                               | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     |                    |     |  |
| 50 Hz 500 VY <sup>1)</sup>                                   | <b>2 7</b>                                             | –                                                                         | ○          | ○                         | ○                               | ○                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |                    |     |  |
| 50 Hz 500 VΔ <sup>1) 2)</sup>                                | <b>4 0</b>                                             | –                                                                         | –          | –                         | –                               | –                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |                    |     |  |
| 50 Hz 220 VΔ/380 VY                                          | <b>2 1</b>                                             | –                                                                         | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | –     | –     | –     | –     |                    |     |  |
| 50 Hz 230 VΔ                                                 | <b>0 1</b>                                             | –                                                                         | ○          | ○                         | ○                               | ○                               | ○     | ○     | ○     | ○     | ○     | ○     | –     | –     | –     | –     |                    |     |  |
| 50 Hz 380 VΔ/660 VYΔ                                         | <b>3 3</b>                                             | –                                                                         | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |                    |     |  |
| 50 Hz 415 VY <sup>1) 2)</sup>                                | <b>2 3</b>                                             | –                                                                         | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 50 Hz 415 VΔ                                                 | <b>3 5</b>                                             | –                                                                         | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |                    |     |  |
| 50 Hz 400 VY                                                 | <b>9 0</b>                                             | <b>M4A</b>                                                                | ○          | ○                         | ○                               | ○                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |                    |     |  |
| 50 Hz 400 VΔ                                                 | <b>9 0</b>                                             | <b>M4B</b>                                                                | ○          | ○                         | ○                               | ○                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     |                    |     |  |
| <b>Voltage at 60 Hz and 50 Hz power <sup>2) 5)</sup></b>     |                                                        |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| 220 VΔ/380 VY; 50 Hz power                                   | <b>9 0</b>                                             | <b>M2A</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 380 VΔ/660 VY; 50 Hz power <sup>3) 4)</sup>                  | <b>9 0</b>                                             | <b>M2B</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 440 VY; 50 Hz power                                          | <b>9 0</b>                                             | <b>M2C</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 440 VΔ; 50 Hz power                                          | <b>9 0</b>                                             | <b>M2D</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |                    |     |  |
| 460 VY; 50 Hz power <sup>4)</sup>                            | <b>9 0</b>                                             | <b>M2E</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 460 VΔ; 50 Hz power                                          | <b>9 0</b>                                             | <b>M2F</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |                    |     |  |
| 575 VY; 50 Hz power <sup>3) 4)</sup>                         | <b>9 0</b>                                             | <b>M2G</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     |                    |     |  |
| 575 VΔ; 50 Hz power                                          | <b>9 0</b>                                             | <b>M2H</b>                                                                | 27.50      | 32.10                     | 36.40                           | 42.60                           | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– |                    |     |  |
| <b>Non-standard voltage and/or frequencies <sup>5)</sup></b> |                                                        |                                                                           |            |                           |                                 |                                 |       |       |       |       |       |       |       |       |       |       |                    |     |  |
| Non-standard winding <sup>3)</sup>                           | <b>9 0</b>                                             | <b>M1Y •</b> and customer specifications                                  | 54.70      | 64.30                     | 72.90                           | 85.80                           | 106.– | 129.– | 164.– | 204.– | 263.– | 320.– | 474.– | 597.– | 764.– | 993.– |                    |     |  |

- Standard version  
○ Without additional charge

- Not possible  
• This order code only determines the price of the version – additional plain text is required.

<sup>1)</sup> Not possible for 1MB1042-0BB2 (frame size 63, 4-pole)

<sup>2)</sup> Special certification is required for 60 Hz.

<sup>3)</sup> Plain text must be specified in the order:  
Voltage between 200 V and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

<sup>4)</sup> Not possible for 1MB1042-0BA2, 1MB1042-0BB2 and 1MB1042-0BB3 (frame size 63, 4-pole)

<sup>5)</sup> Motors in these frame sizes have a second rating plate (T1/T2 and T3) as standard.  
The T3 power is stamped on the rating plate as standard if the following motors are selected with PTC thermistor (protection by PTC thermistor only) or voltage code **90**:  
– 2-pole motors: Frame sizes 132 to 160  
– 4-pole motors: Frame size 180  
Alternatively, with order code **B33**, the "T1/T2 power is stamped on the rating plate".  
– 2-pole motors: Frame sizes 132 to 200  
– 4-pole motors: Frame sizes 180 to 200

Standard delivery times in working days:

30

40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Voltages · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853

**Selection and ordering data**

| Voltages                                    | Article No. supplement                                 |                                                                           |                                   | Frame size                         |       |       |       |       |       |       |       |       |       |       |       |       | Motor version |     |                          |     |
|---------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-----|--------------------------|-----|
|                                             | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required | Order code                        | 71                                 | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   | 355           | IEC | Ex db, Ex db eb (zone 1) | IE3 |
|                                             |                                                        |                                                                           |                                   | 1MB15.3, 1MB15.6, 1MB15.7          |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
|                                             |                                                        |                                                                           |                                   | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
|                                             |                                                        |                                                                           |                                   | 1MB1853                            |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 1MB5853                                     |                                                        |                                                                           |                                   |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 1MB1 . . . . .                              | ■                                                      | ■                                                                         | ■                                 |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 1MB5 . 5 . . . . .                          | ■                                                      | ■                                                                         | ■                                 |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| Voltage at 50 Hz or 60 Hz                   |                                                        |                                                                           |                                   |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 50 Hz 230 VΔ/400 VY, 60 Hz 460 VY           | 2                                                      | 2                                                                         | –                                 | □                                  | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | –     | –             |     |                          |     |
| 50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ           | 3                                                      | 4                                                                         | –                                 | □                                  | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □             |     |                          |     |
| 50 Hz 500 VY                                | 2                                                      | 7                                                                         | –                                 | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | –     | –             |     |                          |     |
| 50 Hz 500 VΔ                                | 4                                                      | 0                                                                         | –                                 | –                                  | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |     |                          |     |
| 50 Hz 220 VΔ/380 VY, 60 Hz 440 VY           | 2                                                      | 1                                                                         | –                                 | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ           | 3                                                      | 3                                                                         | –                                 | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| 50 Hz 240 VΔ/415 VY, 60 Hz 480 VY           | 2                                                      | 3                                                                         | –                                 | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 50 Hz 415 VΔ, 60 Hz 480 VΔ                  | 3                                                      | 5                                                                         | –                                 | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| 50 Hz 400 VY                                | 9                                                      | 0                                                                         | M4A                               | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | –     | –             |     |                          |     |
| 50 Hz 400 VΔ                                | 9                                                      | 0                                                                         | M4B                               | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |     |                          |     |
| 50 Hz 690 VY                                | 9                                                      | 0                                                                         | M4E                               | –                                  | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |     |                          |     |
| 50 Hz 690 VΔ                                | 9                                                      | 0                                                                         | M4F                               | –                                  | –     | –     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○             |     |                          |     |
| 50 Hz 230 VY                                | 0                                                      | 1                                                                         | –                                 | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | –     | –             |     |                          |     |
| 50 Hz 400 VY <sup>1)</sup>                  | 0                                                      | 2                                                                         | –                                 | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | –     | –             |     |                          |     |
| 50 Hz 400 VΔ <sup>2)</sup>                  | 0                                                      | 4                                                                         | –                                 | ○                                  | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | –     | –     | –     | –     | –             |     |                          |     |
| Voltage at 60 Hz and required power         |                                                        |                                                                           |                                   |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 220 VΔ/380 VY; 50 Hz power <sup>3) 6)</sup> | 9                                                      | 0                                                                         | M2A                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 380 VΔ/660 VY; 50 Hz power <sup>3) 6)</sup> | 9                                                      | 0                                                                         | M2B                               | –                                  | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| 440 VY; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2C                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 440 VΔ; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2D                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| 460 VY; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2E                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 460 VΔ; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2F                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| 575 VY; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2G                               | –                                  | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | –     | –             |     |                          |     |
| 575 VΔ; 50 Hz power <sup>3) 6)</sup>        | 9                                                      | 0                                                                         | M2H                               | –                                  | –     | –     | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | 211.– | 241.– | 311.– | 404.– | 618.–         |     |                          |     |
| Voltage at 78 Hz (78 Hz power)              |                                                        |                                                                           |                                   |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| 400 VΔ; 78 Hz power <sup>5)</sup>           | 9                                                      | 0                                                                         | M3A                               | 32.10                              | 36.40 | 42.60 | 52.90 | 64.–  | 82.10 | 101.– | 136.– | 156.– | –     | –     | –     | –     | –             |     |                          |     |
| Non-standard voltage and/or frequencies     |                                                        |                                                                           |                                   |                                    |       |       |       |       |       |       |       |       |       |       |       |       |               |     |                          |     |
| Non-standard winding <sup>4)</sup>          | 9                                                      | 0                                                                         | M1Y • and customer specifications | 64.30                              | 72.90 | 85.80 | 106.– | 129.– | 164.– | 204.– | 263.– | 320.– | 474.– | 597.– | 764.– | 993.– | 1130.–        |     |                          |     |

- Standard version  
○ Without additional charge

- Not possible  
• This order code only determines the price of the version – additional plain text is required.

<sup>1)</sup> Delta connection is not possible.

<sup>2)</sup> Star connection is not possible.

<sup>3)</sup> Power at 60 Hz as specified in the selection and ordering data of the basic motor.

<sup>4)</sup> Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

<sup>5)</sup> Only possible for 4-, 6- and 8-pole motors and in connection with the order codes B43 and B44. The operating data for converter operation are given in a table on the additional rating plate. Engine has Winding version 50 Hz 230 VΔ.

<sup>6)</sup> A power of 3.7 kW is stamped on the rating plate for versions 1MB1... - 1BA2, 1MB1... - 1BB2, 1MB1... - 1CC2 and 1MB1... - 1DD2 at 60 Hz with 50 Hz power in accordance with the international efficiency classification to IEC 60034-30.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**25**

Voltages · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

**Selection and ordering data**

| Voltages | Article No. supplement                                 |  | Additional identification code with order code and plain text if required | Frame size                |                           |                           |                        | Motor version |                                                        |            |  |
|----------|--------------------------------------------------------|--|---------------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|------------------------|---------------|--------------------------------------------------------|------------|--|
|          | Voltage code 12th and 13th position of the Article No. |  |                                                                           | 315                       | 355                       | 400, 450                  |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           | $P_N \leq 630 \text{ kW}$ | $P_N > 630 \text{ kW}$ |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           | 1MB5514, 1MB5524, 1MB5534 |                           |                           |                        | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4<br>IE3 |  |
|          |                                                        |  |                                                                           | 1MB5513, 1MB5523, 1MB5533 |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           | 1MB5813, 1MB5823, 1MB5833 |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
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|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
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|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
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|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
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|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
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|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |
|          |                                                        |  |                                                                           |                           |                           |                           |                        |               |                                                        |            |  |

- Standard version  
 ○ Without additional charge  
 O. R. Possible on request  
 – Not possible

- This order code only determines the price of the version – additional plain text is required.

<sup>1)</sup> 2-pole version shaft height 450 for 60 Hz operation on request.

<sup>2)</sup> Plain text must be specified in the order: Voltage between 380 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

Standard delivery times in working days:

20

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Aluminum series 1MB10

**Selection and ordering data**

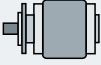
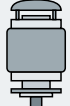
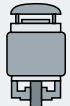
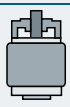
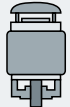
| Types of construction                        |    | Article No.<br>Type of construction letter<br>14th position of the<br>Article No. | supplement<br>For types of construction with order code(s) Article No. with additional identification code -Z<br>Order code | Frame size     |                |                |                |                |                |                |                | Motor version |                                                        |                   |
|----------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--------------------------------------------------------|-------------------|
|                                              |                                                                                     |                                                                                   |                                                                                                                             | 63             | 71             | 80             | 90             | 100            | 112            | 132            | 160            | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1 |
|                                              |                                                                                     |                                                                                   |                                                                                                                             | 1MB10.3        |                |                |                |                |                |                |                |               |                                                        |                   |
|                                              |                                                                                     |                                                                                   |                                                                                                                             | 1MB10.1        |                |                |                | 1MB10.2        |                |                |                |               |                                                        |                   |
| 1MB10 . . . . .                              |                                                                                     | ■ . . (-Z)                                                                        |                                                                                                                             |                |                |                |                |                |                |                |                |               |                                                        |                   |
| Without flange                               |                                                                                     |                                                                                   |                                                                                                                             |                |                |                |                |                |                |                |                |               |                                                        |                   |
| IM B3                                        |    | A                                                                                 | –                                                                                                                           | □              | □              | □              | □              | □              | □              | □              | □              |               |                                                        |                   |
| IM B6 <sup>1)</sup>                          |    | T                                                                                 | –                                                                                                                           | □              | □              | □              | □              | □              | □              | □              | □              |               |                                                        |                   |
| IM B7 <sup>1)</sup>                          |    | U                                                                                 | –                                                                                                                           | □              | □              | □              | □              | □              | □              | □              | □              |               |                                                        |                   |
| IM B8 <sup>1)</sup>                          |    | V                                                                                 | –                                                                                                                           | □              | □              | □              | □              | □              | □              | □              | □              |               |                                                        |                   |
| IM V6 <sup>1)</sup>                          |   | D                                                                                 | –                                                                                                                           | □              | □              | □              | □              | □              | □              | □              | □              |               |                                                        |                   |
| IM V5 with protective cover <sup>1) 2)</sup> |  | C                                                                                 | H00                                                                                                                         | 55.60          | 55.60          | 55.60          | 55.60          | 80.80          | 80.80          | 141.–          | 141.–          |               |                                                        |                   |
| With flange                                  |                                                                                     | EN 50347<br>DIN 42948                                                             |                                                                                                                             | FF115<br>A 140 | FF130<br>A 160 | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 |               |                                                        |                   |
| IM B5                                        |  | F                                                                                 | –                                                                                                                           | 42.60          | 47.30          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          |               |                                                        |                   |
| IM V1 with protective cover <sup>1) 2)</sup> |  | G                                                                                 | H00                                                                                                                         | 98.20          | 102.90         | 109.30         | 109.30         | 145.20         | 160.50         | 240.–          | 270.–          |               |                                                        |                   |
| IM V3 <sup>1)</sup>                          |  | H                                                                                 | –                                                                                                                           | 42.60          | 47.30          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          |               |                                                        |                   |
| IM B35                                       |  | J                                                                                 | –                                                                                                                           | 48.–           | 52.–           | 56.70          | 67.–           | 87.60          | 108.–          | 134.–          | 185.–          |               |                                                        |                   |
| With flange next larger                      |                                                                                     | EN 50347<br>DIN 42948                                                             |                                                                                                                             | –              | –              | –              | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | –              |               |                                                        |                   |
| IM B5                                        |  | F                                                                                 | P01                                                                                                                         | –              | –              | –              | 111.20         | 126.50         | 145.8          | 187.40         | –              |               |                                                        |                   |
| IM V1 with protective cover <sup>1) 2)</sup> |  | G                                                                                 | P01+H00                                                                                                                     | –              | –              | –              | 166.80         | 207.30         | 226.60         | 328.40         | –              |               |                                                        |                   |
| IM V3 <sup>1)</sup>                          |  | H                                                                                 | P01                                                                                                                         | –              | –              | –              | 111.20         | 126.50         | 145.8          | 187.40         | –              |               |                                                        |                   |
| IM B35                                       |  | J                                                                                 | P01                                                                                                                         | –              | –              | –              | 113.80         | 134.40         | 154.80         | 192.40         | –              |               |                                                        |                   |

For legends and footnotes, see Page 4/47.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1MB10**

| Types of construction                            | Article No.                                                                         | supplement | Frame size             |                        |                        |                        |                |                        |                        |                        | Motor version          |                                                        |                   |
|--------------------------------------------------|-------------------------------------------------------------------------------------|------------|------------------------|------------------------|------------------------|------------------------|----------------|------------------------|------------------------|------------------------|------------------------|--------------------------------------------------------|-------------------|
|                                                  |                                                                                     |            | 63                     | 71                     | 80                     | 90                     | 100            | 112                    | 132                    | 160                    | IEC                    | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1 |
|                                                  |                                                                                     |            |                        |                        | <b>1MB10.3</b>         |                        |                |                        |                        |                        |                        |                                                        |                   |
|                                                  |                                                                                     |            | <b>1MB10.1</b>         |                        |                        |                        |                |                        |                        |                        |                        |                                                        |                   |
|                                                  |                                                                                     |            |                        |                        |                        |                        | <b>1MB10.2</b> |                        |                        |                        |                        |                                                        |                   |
| <b>1MB10 . . . . .</b>                           | <b>.. (-Z)</b>                                                                      |            |                        |                        |                        |                        |                |                        |                        |                        |                        |                                                        |                   |
| <b>With flange<br/>next smaller</b>              | <b>EN 50347<br/>DIN 42948</b>                                                       |            | <b>FF100<br/>A 120</b> | <b>FF115<br/>A 140</b> | <b>FF130<br/>A 160</b> | –                      |                | <b>FF165<br/>A 200</b> | <b>FF165<br/>A 200</b> | <b>FF215<br/>A 250</b> | –                      |                                                        |                   |
| IM B5                                            |    | <b>F</b>   | <b>P02</b>             | 137.60 152.30          | 183.70                 | –                      |                | 264.40 319.70          | 409.–                  | –                      |                        |                                                        |                   |
| IM V1 with protective<br>cover <sup>1) 2)</sup>  |    | <b>G</b>   | <b>P02+H00</b>         | 193.20 207.90          | 239.30                 | –                      |                | 320.– 400.50           | 489.80                 | –                      |                        |                                                        |                   |
| IM V3 <sup>1)</sup>                              |    | <b>H</b>   | <b>P02</b>             | 137.60 152.30          | 183.70                 | –                      |                | 264.40 319.70          | 409.–                  | –                      |                        |                                                        |                   |
| IM B35                                           |    | <b>J</b>   | <b>P02</b>             | 143.– 157.–            | 186.70                 | –                      |                | 267.– 327.60           | 418.–                  | –                      |                        |                                                        |                   |
| <b>With flange</b>                               | <b>EN 50347<br/>DIN 42948</b>                                                       |            | <b>FT75<br/>C 90</b>   | <b>FT85<br/>C 105</b>  | <b>FT100<br/>C 120</b> | <b>FT115<br/>C 140</b> |                | <b>FT130<br/>C 160</b> | <b>FT130<br/>C 160</b> | <b>FT165<br/>C 200</b> | <b>FT215<br/>C 250</b> |                                                        |                   |
| IM B14 <sup>1)</sup>                             |    | <b>K</b>   | –                      | 42.60 47.30            | 53.70 64.40            |                        |                | 79.70 99.–             | 129.–                  | 167.–                  |                        |                                                        |                   |
| IM V19 <sup>1)</sup>                             |  | <b>L</b>   | –                      | 42.60 47.30            | 53.70 64.40            |                        |                | 79.70 99.–             | 129.–                  | 167.–                  |                        |                                                        |                   |
| IM V18 with protective<br>cover <sup>1) 2)</sup> |  | <b>M</b>   | <b>H00</b>             | 98.20 102.90           | 164.60 175.60          |                        |                | 240.80 260.80          | 411.–                  | 449.–                  |                        |                                                        |                   |
| IM B34                                           |  | <b>N</b>   | –                      | 42.60 47.30            | 56.70 67.–             |                        |                | 87.60 108.–            | 134.–                  | 185.–                  |                        |                                                        |                   |
| <b>With special flange<br/>next larger</b>       | <b>EN 50347<br/>DIN 42948</b>                                                       |            | <b>FT100<br/>C 120</b> | <b>FT115<br/>C 140</b> | <b>FT130<br/>C 160</b> | <b>FT130<br/>C 160</b> |                | <b>FT165<br/>C 200</b> | <b>FT165<br/>C 200</b> | <b>FT215<br/>C 250</b> | –                      |                                                        |                   |
| IM B14 <sup>1)</sup>                             |  | <b>K</b>   | <b>P01</b>             | 89.40 94.10            | 100.50 111.20          |                        |                | 126.50 145.80          | 187.40                 | –                      |                        |                                                        |                   |
| IM V19 <sup>1)</sup>                             |  | <b>L</b>   | <b>P01</b>             | 89.40 94.10            | 100.50 111.20          |                        |                | 126.50 145.80          | 187.40                 | –                      |                        |                                                        |                   |
| IM V18 with protective<br>cover <sup>1) 2)</sup> |  | <b>M</b>   | <b>P01+H00</b>         | 145.– 149.70           | 155.80 166.80          |                        |                | 206.80 226.80          | 328.40                 | –                      |                        |                                                        |                   |
| IM B34                                           |  | <b>N</b>   | <b>P01</b>             | 89.40 94.10            | 103.50 113.80          |                        |                | 134.40 154.80          | 192.40                 | –                      |                        |                                                        |                   |

For legends and footnotes, see Page 4/47.

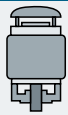
Standard delivery times in working days:

20

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Types of construction · Aluminum series 1MB10**

| Types of construction                         | Article No.                                                                       | supplement                                                                                      | Frame size     |               |    |    |                |     |     | Motor version |     |                                                        |
|-----------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------|---------------|----|----|----------------|-----|-----|---------------|-----|--------------------------------------------------------|
|                                               |                                                                                   |                                                                                                 | 63             | 71            | 80 | 90 | 100            | 112 | 132 | 160           | IEC | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) |
|                                               | Type of construction letter                                                       | For types of construction with order code(s) Article No. with additional identification code -Z | 1MB10.3        |               |    |    |                |     |     |               |     |                                                        |
|                                               | 14th position of the Article No.                                                  | Order code                                                                                      | 1MB10.1        |               |    |    |                |     |     |               |     | IE3                                                    |
|                                               | 1MB10 . . . . .                                                                   |                                                                                                 | 1MB10.2        |               |    |    |                |     |     |               |     | IE2                                                    |
|                                               |                                                                                   |                                                                                                 |                |               |    |    |                |     |     |               |     | IE1                                                    |
| With special flange next larger               | EN 50347<br>DIN 42948                                                             |                                                                                                 | FT65<br>C 80   | FT75<br>C 90  | –  | –  | FT115<br>C 140 | –   | –   | –             |     |                                                        |
| IM B14 <sup>1)</sup>                          |  | <b>K</b>                                                                                        | <b>P02</b>     | 137.60 152.30 | –  | –  | 279.70         | –   | –   | –             |     |                                                        |
| IM V19 <sup>1)</sup>                          |  | <b>L</b>                                                                                        | <b>P02</b>     | 137.60 152.30 | –  | –  | 279.70         | –   | –   | –             |     |                                                        |
| IM V18 with protective cover <sup>1) 2)</sup> |  | <b>M</b>                                                                                        | <b>P02+H00</b> | 193.20 207.90 | –  | –  | 440.80         | –   | –   | –             |     |                                                        |
| IM B34                                        |  | <b>N</b>                                                                                        | <b>P02</b>     | 137.60 152.30 | –  | –  | 287.60         | –   | –   | –             |     |                                                        |

- Standard version  
– Not possible

<sup>1)</sup> For explosion-proof motors: For types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

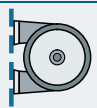
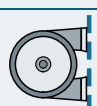
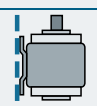
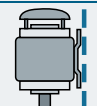
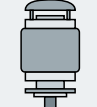
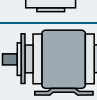
<sup>2)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

**Selection and ordering data**

| Types of construction                | Article No.<br>Type of construction letter<br>14th position of the Article No.      | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> | Frame size         |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   | Motor version                                              |     |     |
|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------|----------------|----------------|----------------|----------------|--------------------------|----------------|----------------|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|---|------------------------------------------------------------|-----|-----|
|                                      |                                                                                     |                                                                                                        | 71                 | 80             | 90             | 100            | 112            | 132                      | 160            | 180            | 200                      | 225            | 250            | 280            | 315 S/M        | 315 L          |                |   |                                                            |     |     |
|                                      |                                                                                     |                                                                                                        | 1MB15.3 Basic Line |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3 | IE2 |
|                                      |                                                                                     |                                                                                                        |                    |                |                |                |                |                          |                |                | 1MB16.3 Performance Line |                |                |                |                |                |                |   |                                                            |     |     |
|                                      |                                                                                     |                                                                                                        | 1MB15.1 Basic Line |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   |                                                            |     |     |
|                                      |                                                                                     |                                                                                                        |                    |                |                |                |                | 1MB16.1 Performance Line |                |                |                          |                |                |                |                |                |                |   |                                                            |     |     |
| 1MB15 .....                          | ■ .. (-Z)                                                                           | Order code                                                                                             |                    |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   |                                                            |     |     |
| 1MB16 .....                          | ■ .. (-Z)                                                                           |                                                                                                        |                    |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   |                                                            |     |     |
| Without flange                       |                                                                                     |                                                                                                        |                    |                |                |                |                |                          |                |                |                          |                |                |                |                |                |                |   |                                                            |     |     |
| IM B3                                |    | A                                                                                                      | –                  | □              | □              | □              | □              | □                        | □              | □              | □                        | □              | □              | □              | □              | □              | □              | □ |                                                            |     |     |
| IM B6<br>1)                          |    | T                                                                                                      | –                  | □              | □              | □              | □              | □                        | □              | □              | □                        | □              | □              | □              | □              | □              | □              | □ |                                                            |     |     |
| IM B7<br>1)                          |    | U                                                                                                      | –                  | □              | □              | □              | □              | □                        | □              | □              | □                        | □              | □              | □              | □              | □              | □              | □ |                                                            |     |     |
| IM B8<br>1)                          |    | V                                                                                                      | –                  | □              | □              | □              | □              | □                        | □              | □              | □                        | □              | □              | □              | □              | □              | □              | □ |                                                            |     |     |
| IM V6<br>1)                          |   | D                                                                                                      | –                  | □              | □              | □              | □              | □                        | □              | □              | □                        | □              | □              | □              | □              | □              | □              | □ |                                                            |     |     |
| IM V5 with protective cover<br>1) 2) |  | C                                                                                                      | H00                | 56.–           | 56.–           | 56.–           | 80.80          | 80.80                    | 141.–          | 141.–          | 188.–                    | 283.–          | 375.–          | 469.–          | 562.–          | 751.–          | 751.–          |   |                                                            |     |     |
| With flange                          |                                                                                     | EN 50347<br>DIN 42948                                                                                  |                    | FF130<br>A 160 | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF215<br>A 250           | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350           | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 | FF600<br>A 660 | FF600<br>A 660 |   |                                                            |     |     |
| IM B5                                |  | F                                                                                                      | –                  | 47.30          | 53.70          | 64.40          | 79.70          | 99.–                     | 129.–          | 167.–          | 264.–                    | 320.–          | 414.–          | 497.–          | 724.–          | 1030.–         | –              |   |                                                            |     |     |
| IM V1 with protective cover<br>1) 2) |  | G                                                                                                      | H00                | 103.30         | 109.70         | 120.40         | 160.50         | 179.80                   | 270.–          | 308.–          | 638.–                    | 885.–          | 1166.–         | 1444.–         | 1852.–         | 2541.–         | 2971.–         |   |                                                            |     |     |
| IM V3<br>1)                          |  | H                                                                                                      | –                  | 47.30          | 53.70          | 64.40          | 79.70          | 99.–                     | 129.–          | 167.–          | 264.–                    | 320.–          | 414.–          | 497.–          | 724.–          | 1030.–         | –              |   |                                                            |     |     |
| IM B35<br>1)                         |  | J                                                                                                      | –                  | 51.50          | 56.70          | 67.–           | 87.60          | 108.–                    | 134.–          | 185.–          | 309.–                    | 412.–          | 515.–          | 721.–          | 927.–          | 1180.–         | 1180.–         |   |                                                            |     |     |

For legends and footnotes, see Page 4/50.

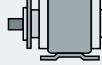
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## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Types of construction · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

| Types of construction              | Article No.                                                                         |                                                                                                           | supplement | Frame size               |                |                |                |                          |                |                |                |                |     |     |     |         |       | Motor version                                              |  |  |
|------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------|--------------------------|----------------|----------------|----------------|--------------------------|----------------|----------------|----------------|----------------|-----|-----|-----|---------|-------|------------------------------------------------------------|--|--|
|                                    | Type of construction letter<br>14th position of the Article No.                     | For types of construction with order code(s)<br>Article No. with additional identification code <b>-Z</b> |            | 71                       | 80             | 90             | 100            | 112                      | 132            | 160            | 180            | 200            | 225 | 250 | 280 | 315 S/M | 315 L |                                                            |  |  |
|                                    |                                                                                     |                                                                                                           |            | 1MB15.3 Basic Line       |                |                |                |                          |                |                |                |                |     |     |     |         |       |                                                            |  |  |
|                                    |                                                                                     |                                                                                                           |            |                          |                |                |                | 1MB16.3 Performance Line |                |                |                |                |     |     |     |         |       |                                                            |  |  |
|                                    |                                                                                     |                                                                                                           |            | 1MB15.1 Basic Line       |                |                |                |                          |                |                |                |                |     |     |     |         |       |                                                            |  |  |
|                                    |                                                                                     |                                                                                                           |            | 1MB16.1 Performance Line |                |                |                |                          |                |                |                |                |     |     |     |         |       |                                                            |  |  |
| 1MB15 . . . . .                    | ■ .. (-Z)                                                                           |                                                                                                           |            |                          |                |                |                |                          |                |                |                |                |     |     |     |         |       | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) |  |  |
| 1MB16 . . . . .                    | ■ .. (-Z)                                                                           |                                                                                                           | Order code |                          |                |                |                |                          |                |                |                |                |     |     |     |         |       |                                                            |  |  |
| With flange                        | EN 50347<br>DIN 42948                                                               |                                                                                                           |            | –                        | –              | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300           | FF300<br>A 350 | –              | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B5                              |    | F                                                                                                         | P01        | –                        | –              | 111.20         | 126.50         | 145.80                   | 187.40         | –              | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V1 with protective cover 1) 2)  |    | G                                                                                                         | P01        | –                        | –              | 167.20         | 207.30         | 226.60                   | 328.40         | –              | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V3 1)                           |    | H                                                                                                         | P01+H00    | –                        | –              | 111.20         | 126.50         | 145.80                   | 187.40         | –              | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B35 1)                          |    | J                                                                                                         | P01        | –                        | –              | 113.80         | 134.40         | 154.80                   | 192.40         | –              | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| With flange                        | EN 50347<br>DIN 42948                                                               |                                                                                                           |            | –                        | FF165<br>A 200 | –              | FF215<br>A 250 | FF215<br>A 250           | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B5                              |   | F                                                                                                         | P02        | –                        | 183.70         | –              | 279.70         | 339.–                    | 439.–          | 567.–          | 904.–          | 1100.–         | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V1 with protective cover 1) 2)  |  | G                                                                                                         | P02        | –                        | 139.70         | –              | 360.50         | 479.80                   | 580.–          | 708.–          | 1278.–         | 1665.–         | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V3 1)                           |  | H                                                                                                         | P02+H00    | –                        | 183.70         | –              | 279.70         | 339.–                    | 439.–          | 567.–          | 904.–          | 1100.–         | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B35 1)                          |  | J                                                                                                         | P02        | –                        | 186.70         | –              | 287.60         | 348.–                    | 444.–          | 585.–          | 949.–          | 1192.–         | –   | –   | –   | –       | –     |                                                            |  |  |
| With flange                        | EN 50347<br>DIN 42948                                                               |                                                                                                           |            | FT85<br>C 105            | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160           | FT165<br>C 200 | FT215<br>C 250 | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B14 1)                          |  | K                                                                                                         | –          | 47.30                    | 53.70          | 64.40          | 79.70          | 99.–                     | 129.–          | 167.–          | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V19 1)                          |  | L                                                                                                         | –          | 53.70                    | 53.70          | 64.40          | 79.70          | 99.–                     | 129.–          | 167.–          | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM V18 with protective cover 1) 2) |  | M                                                                                                         | H00        | 109.70                   | 109.70         | 120.40         | 240.80         | 260.80                   | 411.–          | 453.–          | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |
| IM B34                             |  | N                                                                                                         | –          | 51.50                    | 56.70          | 67.–           | 87.60          | 108.–                    | 134.–          | 185.–          | –              | –              | –   | –   | –   | –       | –     |                                                            |  |  |

For legends and footnotes, see Page 4/50.

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

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## Types of construction · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

[illegible]

- ▣ Standard version
- Not possible

1) For explosion-proof motors: For types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

<sup>2)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

Standard delivery times in working days:

25

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**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

**Selection and ordering data**

| Types of construction                | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size               |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     | Motor version  |     |  |
|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|-----|----------------|-----|--|
|                                      |                                                                                     |                                                              |                                                                                                 | 63                       | 71             | 80             | 90             | 100            | 112            | 132            | 160            | 180            | 200            | 225            | 250            | 280            | 315 S/M        | 315 L      | IEC | Ex eb (zone 1) | IE3 |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1042                  |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1543 Basic Line       |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1643 Performance Line |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
| 1MB5543 Basic Line                   |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
| 1MB5643 Performance Line             |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
| Without flange                       |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |     |                |     |  |
| IM B3 2)                             |    | A                                                            | –                                                                                               | □                        | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □          |     |                |     |  |
| IM B6 1) 2)                          |    | T                                                            | –                                                                                               | □                        | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □          |     |                |     |  |
| IM B7 1) 2)                          |    | U                                                            | –                                                                                               | □                        | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □          |     |                |     |  |
| IM B8 1) 2)                          |    | V                                                            | –                                                                                               | □                        | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □          |     |                |     |  |
| IM V6 1) 2)                          |   | D                                                            | –                                                                                               | □                        | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □          |     |                |     |  |
| IM V5 with protective cover 1) 2)    |  | C                                                            | H00                                                                                             | 55.60                    | 55.60          | 55.60          | 55.60          | 80.80          | 80.80          | 141.–          | 141.–          | 188.–          | 283.–          | 375.–          | 469.–          | 562.–          | 751.–          | 751.–      |     |                |     |  |
| With flange                          |                                                                                     | DIN EN 50347<br>DIN 42948                                    |                                                                                                 | FF115<br>A 140           | FF130<br>A 160 | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 | FF600<br>A 660 | –<br>A 660 |     |                |     |  |
| IM B5 2)                             |  | F                                                            | –                                                                                               | 47.30                    | 47.30          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          | 264.–          | 320.–          | 414.–          | 497.–          | 724.–          | 1030.–         | –          |     |                |     |  |
| IM V1 with protective cover 1) 2) 3) |  | G                                                            | H00                                                                                             | 102.90                   | 102.90         | 109.30         | 120.–          | 160.50         | 179.80         | 270.–          | 308.–          | 452.–          | 603.–          | 789.–          | 966.–          | 1286.–         | 1781.–         | 1781.–     |     |                |     |  |
| IM V3 1) 2)                          |  | H                                                            | –                                                                                               | 47.30                    | 47.30          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          | 264.–          | 320.–          | 414.–          | 497.–          | 724.–          | 1030.–         | –          |     |                |     |  |
| IM B35 1) 2)                         |  | J                                                            | –                                                                                               | 48.40                    | 51.50          | 56.70          | 67.–           | 87.60          | 108.–          | 134.–          | 185.–          | 309.–          | 412.–          | 515.–          | 721.–          | 927.–          | 1180.–         | 1180.–     |     |                |     |  |
| IM V15 with protective cover 1) 2)   |  | W                                                            | H00                                                                                             | –                        | 162.70         | 112.30         | 122.60         | 168.40         | 188.80         | 275.–          | 326.–          | 497.–          | 695.–          | 890.–          | 1489.–         | 1869.–         | 1869.–         | 1869.–     |     |                |     |  |

For legends and footnotes, see Page 4/54.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

| Types of construction                | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size               |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     | Motor version  |     |  |
|--------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|----------------|--------|----------------|----------------|----------------|----------------|----------------|----------------|-----|-----|-----|-----|---------|-------|-----|----------------|-----|--|
|                                      |                                                                                     |                                                              |                                                                                                 | 63                       | 71             | 80     | 90             | 100            | 112            | 132            | 160            | 180            | 200 | 225 | 250 | 280 | 315 S/M | 315 L | IEC | Ex eb (zone 1) | IE3 |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1042                  |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1543 Basic Line       |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
|                                      |                                                                                     |                                                              |                                                                                                 | 1MB1643 Performance Line |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
| 1MB1042 - . . . . .                  |                                                                                     | ■ . . (-Z)                                                   | 1MB5543 Basic Line                                                                              |                          |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
| 1MB . 5 . . . . .                    |                                                                                     | ■ . . (-Z)                                                   | 1MB5643 Performance Line                                                                        |                          |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
| 1MB . 6 . . . . .                    |                                                                                     | ■ . . (-Z)                                                   |                                                                                                 |                          |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
|                                      |                                                                                     | Order code                                                   |                                                                                                 |                          |                |        |                |                |                |                |                |                |     |     |     |     |         |       |     |                |     |  |
| With flange next larger              |                                                                                     | DIN EN 50347<br>DIN 42948                                    | -                                                                                               | -                        | -              | -      | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | FF350<br>A 400 | -              | -              | -   | -   | -   | -   | -       | -     |     |                |     |  |
| IM B5 2)                             |    | F                                                            | P01                                                                                             | -                        | -              |        | 126.50         | 145.80         | 175.80         | 213.80         | -              | -              | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V1 with protective cover 1) 2) 3) |    | G                                                            | P01+H00                                                                                         | -                        | -              |        | 207.30         | 226.60         | 316.80         | 354.80         | -              | -              | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V3 1) 2)                          |    | H                                                            | P01                                                                                             | -                        | -              |        | 126.50         | 145.80         | 175.80         | 213.80         | -              | -              | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM B35 1) 2)                         |    | J                                                            | P01                                                                                             | -                        | -              |        | 134.40         | 154.80         | 180.80         | 231.80         | -              | -              | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V15 with protective cover 1) 2)   |   | W                                                            | P01+H00                                                                                         | -                        | -              |        | 215.20         | 235.60         | 321.80         | 372.80         | -              | -              | -   | -   | -   | -   | -       |       |     |                |     |  |
| With flange next smaller             |                                                                                     | DIN EN 50347<br>DIN 42948                                    | -                                                                                               | -                        | FF130<br>A 160 | -      | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF265<br>A 300 | FF265<br>A 300 | FF300<br>A 350 | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM B5 2)                             |  | F                                                            | P02                                                                                             | -                        | -              | 183.70 | 279.70         | 339.-          | 439.-          | 567.-          | 904.-          | 1100.-         | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V1 with protective cover 1) 2) 3) |  | G                                                            | P02+H00                                                                                         | -                        | -              | 139.30 | 360.50         | 419.80         | 580.-          | 708.-          | 1092.-         | 1383.-         | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V3 1) 2)                          |  | H                                                            | P02                                                                                             | -                        | -              | 183.70 | 279.70         | 339.-          | 439.-          | 567.-          | 904.-          | 1100.-         | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM B35 1) 2)                         |  | J                                                            | P02                                                                                             | -                        | -              | 186.70 | 287.60         | 348.-          | 444.-          | 585.-          | 949.-          | 1192.-         | -   | -   | -   | -   | -       |       |     |                |     |  |
| IM V15 with protective cover 1) 2)   |  | W                                                            | P02+H00                                                                                         | -                        | -              | 242.30 | 368.40         | 428.80         | 585.-          | 726.-          | 1137.-         | 1475.-         | -   | -   | -   | -   | -       |       |     |                |     |  |

For legends and footnotes, see Page 4/54.

Standard delivery times in working days:

25

40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Types of construction · Aluminum serie 1MB1024; Cast-iron serie 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line**

| Types of construction                                  | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size               |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     | Motor version  |     |  |
|--------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|-----|-----|-----|-----|---------|-------|-----|----------------|-----|--|
|                                                        |                                                                                     |                                                              |                                                                                                 | 63                       | 71             | 80             | 90             | 100            | 112            | 132            | 160            | 180 | 200 | 225 | 250 | 280 | 315 S/M | 315 L | IEC | Ex eb (zone 1) | IE3 |  |
|                                                        |                                                                                     |                                                              |                                                                                                 | 1MB1042                  |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
|                                                        |                                                                                     |                                                              |                                                                                                 | 1MB1543 Basic Line       |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
|                                                        |                                                                                     |                                                              |                                                                                                 | 1MB1643 Performance Line |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
|                                                        |                                                                                     |                                                              |                                                                                                 |                          |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
| 1MB1042 - . . . . .                                    |                                                                                     | ■ . . (-Z)                                                   |                                                                                                 | 1MB5543 Basic Line       |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
| 1MB . 5 . . . . .                                      |                                                                                     | ■ . . (-Z)                                                   |                                                                                                 | 1MB5643 Performance Line |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
| 1MB . 6 . . . . .                                      |                                                                                     | ■ . . (-Z)                                                   | Order code                                                                                      |                          |                |                |                |                |                |                |                |     |     |     |     |     |         |       |     |                |     |  |
| With flange                                            |                                                                                     | DIN EN 50347<br>DIN 42948                                    |                                                                                                 | F75<br>C 90              | FT85<br>C 105  | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT215<br>C 250 | –   | –   | –   | –   | –   | –       | –     | –   |                |     |  |
| IM B14<br>1) 2)                                        |    | K                                                            | –                                                                                               | 42.60                    | 47.30          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM V19<br>1) 2)                                        |    | L                                                            | –                                                                                               | 42.60                    | 53.70          | 53.70          | 64.40          | 79.70          | 99.–           | 129.–          | 167.–          | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM V18<br>with protec-<br>tive cover<br>1) 2) 3)       |    | M                                                            | H00                                                                                             | 98.20                    | 102.90         | 109.30         | 120.–          | 160.50         | 179.80         | 270.–          | 308.–          | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM B34<br>1) 2)                                        |    | N                                                            | –                                                                                               | 42.60                    | 51.50          | 56.70          | 67.–           | 87.60          | 108.–          | 134.–          | 185.–          | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| With special flange<br>next larger                     |                                                                                     | DIN EN 50347<br>DIN 42948                                    |                                                                                                 | FT100<br>C 120           | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT165<br>C 200 | FT215<br>C 250 | –              | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM B14<br>1) 2) 4)                                     |   | K                                                            | P01                                                                                             | 89.40                    | 94.10          | 100.50         | 111.20         | 126.50         | 157.40         | 187.40         | –              | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM V19<br>1) 2) 4)                                     |  | L                                                            | P01                                                                                             | 89.40                    | 100.50         | 100.50         | 111.20         | 126.50         | 157.40         | 187.40         | –              | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM V18<br>with protec-<br>tive cover<br>1) 2) 3)<br>4) |  | M                                                            | P01+H00                                                                                         | 145.–                    | 149.70         | 156.10         | 166.80         | 207.30         | 238.20         | 328.40         | –              | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |
| IM B34<br>1) 2) 4)                                     |  | N                                                            | P01                                                                                             | 89.40                    | 98.30          | 103.50         | 113.80         | 134.40         | 166.40         | 192.40         | –              | –   | –   | –   | –   | –   | –       | –     |     |                |     |  |

For legends and footnotes, see Page 4/54.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

| Types of construction    | Article No. supplement | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size               |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    | Motor version |  |  |
|--------------------------|------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-------|--------------------|---------------|--|--|
|                          |                        |                                                              |                                                                                                 | 63                       | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 S/M | 315 L | IEC Ex eb (zone 1) | IE3           |  |  |
|                          |                        |                                                              |                                                                                                 | 1MB1042                  |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 | 1MB1543 Basic Line       |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 | 1MB1643 Performance Line |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
| 1MB5543 Basic Line       |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
| 1MB5643 Performance Line |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
| Order code               |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |
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|                          |                        |                                                              |                                                                                                 |                          |    |    |    |     |     |     |     |     |     |     |     |     |         |       |                    |               |  |  |

- Standard version  
 - Not possible

1) For explosion-proof motors: For types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

2) The type of construction is stamped on the rating plate. For orders with condensation drainage holes (order code H03), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.

3) The "Standard cylindrical shaft extension (second shaft extension)" option (order code L05) is not possible.

4) With reference to standard EN 50347, flanges that are 2 steps larger are used with option P01 in the frame sizes 71 and 80.

Standard delivery times in working days:

30

40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853

**Selection and ordering data**

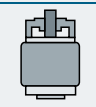
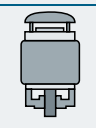
| Types of construction                         | Article No.                                                                         | supplement                | Frame size                         |                |                |                |                |                |                |                |                |                |                |                |                |                |            | Motor version                  |     |  |
|-----------------------------------------------|-------------------------------------------------------------------------------------|---------------------------|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------|--------------------------------|-----|--|
|                                               |                                                                                     |                           | 71                                 | 80             | 90             | 100            | 112            | 132            | 160            | 180            | 200            | 225            | 250            | 280            | 315            | 355            | IEC        | Ex db,<br>Ex db eb<br>(zone 1) | IE3 |  |
|                                               |                                                                                     |                           | 1MB15.3, 1MB15.6, 1MB15.7          |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
|                                               |                                                                                     |                           | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
|                                               |                                                                                     |                           | 1MB1853                            |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
|                                               |                                                                                     |                           |                                    |                |                |                |                |                |                |                |                | 1MB5853        |                |                |                |                |            |                                |     |  |
| 1MB1 . . . . .                                | .. (-Z)                                                                             | Order code                |                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
| 1MB5 . 5 . . . . .                            | .. (-Z)                                                                             |                           |                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
| Without flange                                |                                                                                     |                           |                                    |                |                |                |                |                |                |                |                |                |                |                |                |                |            |                                |     |  |
| IM B3                                         |    | A                         | –                                  | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              |            |                                |     |  |
| IM B6<br>1)                                   |    | T                         | –                                  | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | –              |            |                                |     |  |
| IM B7<br>1)                                   |    | U                         | –                                  | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | –              |            |                                |     |  |
| IM B8<br>1)                                   |    | V                         | –                                  | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | –              |            |                                |     |  |
| IM V6<br>1) 3)                                |   | D                         | –                                  | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | □              | –              |            |                                |     |  |
| IM V5<br>with protec-<br>tive cover<br>1) 3)  |  | C                         | H00                                | 55,60          | 55,60          | 55,60          | 80,80          | 80,80          | 141,–          | 141,–          | 188,–          | 283,–          | 375,–          | 469,–          | 562,–          | 751,–          | –          |                                |     |  |
| With flange                                   |                                                                                     | DIN EN 50347<br>DIN 42948 |                                    | FF130<br>A 160 | FF165<br>A 200 | FF165<br>A 200 | FF215<br>A 250 | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 | FF600<br>A 660 | –<br>A 660 |                                |     |  |
| IM B5<br>1)                                   |  | F                         | –                                  | 47,30          | 53,70          | 64,40          | 79,70          | 99,–           | 129,–          | 167,–          | 264,–          | 320,–          | 414,–          | 497,–          | 724,–          | 1030,–         | –          |                                |     |  |
| IM V1<br>with protec-<br>tive cover<br>2) 3)  |  | G                         | H00                                | 102,90         | 109,30         | 120,–          | 160,50         | 179,80         | 270,–          | 308,–          | 452,–          | 603,–          | 789,–          | 966,–          | 1286,–         | 1781,–         | 2172,–     |                                |     |  |
| IM V3<br>3)                                   |  | H                         | –                                  | 47,30          | 53,70          | 64,40          | 79,70          | 99,–           | 129,–          | 167,–          | 264,–          | 320,–          | 414,–          | 497,–          | 724,–          | 1030,–         | –          |                                |     |  |
| IM B35                                        |  | J                         | –                                  | 51,50          | 56,70          | 67,–           | 87,60          | 108,–          | 134,–          | 185,–          | 309,–          | 412,–          | 515,–          | 721,–          | 927,–          | 1180,–         | 4330,–     |                                |     |  |
| IM V15<br>with protec-<br>tive cover<br>2) 3) |  | W                         | H00                                | 107,10         | 72,–           | 82,30          | 99,–           | 130,–          | 163,–          | 235,–          | 356,–          | 469,–          | 692,–          | 942,–          | 1230,–         | 1180,–         | –          |                                |     |  |

For legends and footnotes, see Page 4/56.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Types of construction · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853**

| Types of construction                                                                                                              | Article No.                                                  | supplement                                                                                      | Frame size                         |                |                |                |                |                |                |     |     |     |     |     |     |     | Motor version |                          |     |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----|-----|-----|-----|-----|-----|-----|---------------|--------------------------|-----|
|                                                                                                                                    | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code -Z | 71                                 | 80             | 90             | 100            | 112            | 132            | 160            | 180 | 200 | 225 | 250 | 280 | 315 | 355 | IEC           | Ex db, Ex db eb (zone 1) | IE3 |
|                                                                                                                                    |                                                              |                                                                                                 | 1MB15.3, 1MB15.6, 1MB15.7          |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
|                                                                                                                                    |                                                              |                                                                                                 | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
|                                                                                                                                    |                                                              |                                                                                                 | 1MB1853                            |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
| 1MB5853                                                                                                                            |                                                              |                                                                                                 |                                    |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
| 1MB1 . . . . .                                                                                                                     | ■ .. (-Z)                                                    |                                                                                                 |                                    |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
| 1MB5 . 5 . . . . .                                                                                                                 | ■ .. (-Z)                                                    | Order code                                                                                      |                                    |                |                |                |                |                |                |     |     |     |     |     |     |     |               |                          |     |
| With flange                                                                                                                        | DIN EN 50347<br>DIN 42948                                    |                                                                                                 | FT85<br>C 105                      | FT100<br>C 120 | FT115<br>C 140 | FT130<br>C 160 | FT130<br>C 160 | FT165<br>C 200 | FT215<br>C 250 | –   | –   | –   | –   | –   | –   | –   |               |                          |     |
| IM B14<br>3)<br>                                  | K                                                            | –                                                                                               | 47,30                              | 53,70          | 64,40          | 79,70          | 99,–           | 129,–          | 167,–          | –   | –   | –   | –   | –   | –   | –   |               |                          |     |
| IM V19<br>3)<br>                                  | L                                                            | –                                                                                               | 53,70                              | 53,70          | 64,40          | 79,70          | 99,–           | 129,–          | 167,–          | –   | –   | –   | –   | –   | –   | –   |               |                          |     |
| IM V18<br>with protec-<br>tive cover<br>2) 3)<br> | M                                                            | H00                                                                                             | 109,30                             | 109,30         | 120,–          | 240,80         | 260,80         | 411,–          | 453,–          | –   | –   | –   | –   | –   | –   | –   |               |                          |     |
| IM B34<br>                                        | N                                                            | –                                                                                               | 51,50                              | 56,70          | 67,–           | 87,60          | 108,–          | 134,–          | 185,–          | –   | –   | –   | –   | –   | –   | –   |               |                          |     |

- Standard version  
– Not possible

<sup>1)</sup> Only possible for frame size 315 S/M (horizontal mounting).

<sup>2)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

<sup>3)</sup> For explosion-proof motors: For types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

Standard delivery times in working days:

**25****SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Types of construction · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

**Selection and ordering data**

| Types of construction                              | Article No. supplement                                                              | Type of construction letter 14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> Order code | Frame size                |                           |                     |                     | Motor version |                                                        |            |  |
|----------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|---------------------|---------------------|---------------|--------------------------------------------------------|------------|--|
|                                                    |                                                                                     |                                                              |                                                                                                                   | 315                       | 355                       | 400                 | 450                 | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4<br>IE3 |  |
|                                                    |                                                                                     |                                                              |                                                                                                                   | 1MB5514, 1MB5524, 1MB5534 |                           |                     |                     |               |                                                        |            |  |
|                                                    |                                                                                     |                                                              |                                                                                                                   | 1MB5513, 1MB5523, 1MB5533 |                           |                     |                     |               |                                                        |            |  |
|                                                    |                                                                                     |                                                              |                                                                                                                   |                           | 1MB5813, 1MB5823, 1MB5833 |                     |                     |               |                                                        |            |  |
| <b>1MB55.4 - . . . . . - . . . . . (-Z)</b>        |                                                                                     |                                                              |                                                                                                                   |                           |                           |                     |                     |               |                                                        |            |  |
| <b>1MB55.3 - . . . . . - . . . . . (-Z)</b>        |                                                                                     |                                                              |                                                                                                                   |                           |                           |                     |                     |               |                                                        |            |  |
| <b>1MB58.3 - . . . . . - . . . . . (-Z)</b>        |                                                                                     |                                                              |                                                                                                                   |                           |                           |                     |                     |               |                                                        |            |  |
| Without flange                                     |                                                                                     |                                                              |                                                                                                                   |                           |                           |                     |                     |               |                                                        |            |  |
| IM B3 <sup>1) 2)</sup>                             |    | <b>A</b>                                                     | —                                                                                                                 | □                         | □                         | □                   | □                   |               |                                                        |            |  |
| IM B6 <sup>1)</sup>                                |    | <b>T</b>                                                     | —                                                                                                                 | ○                         | ○                         | —                   | —                   |               |                                                        |            |  |
| IM B7 <sup>3)</sup>                                |    | <b>U</b>                                                     | —                                                                                                                 | ○                         | ○                         | —                   | —                   |               |                                                        |            |  |
| IM B8 <sup>3)</sup>                                |    | <b>V</b>                                                     | —                                                                                                                 | ○                         | ○                         | —                   | —                   |               |                                                        |            |  |
| IM V6 <sup>2)</sup>                                |   | <b>D</b>                                                     | —                                                                                                                 | ○                         | ○                         | O. R. <sup>6)</sup> | O. R. <sup>6)</sup> |               |                                                        |            |  |
| IM V5 without protective cover <sup>2) 3)</sup>    |  | <b>C</b>                                                     | —                                                                                                                 | ○                         | ○                         | O. R. <sup>6)</sup> | O. R. <sup>6)</sup> |               |                                                        |            |  |
| IM V5 with protective cover <sup>2) 3) 4) 5)</sup> |  | <b>C</b>                                                     | <b>H00</b>                                                                                                        | 751.—                     | 876.—                     | O. R. <sup>6)</sup> | O. R. <sup>6)</sup> |               |                                                        |            |  |

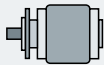
**4**

For legends and footnotes, see Page 4/58.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**25****Types of construction · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33**

| Types of construction                              | Article No. supplement                                                             | For types of construction with order code(s) Article No. with additional identification code -Z | Frame size                       |                        |                         |                          | Motor version |                                                        |            |
|----------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------|------------------------|-------------------------|--------------------------|---------------|--------------------------------------------------------|------------|
|                                                    |                                                                                    |                                                                                                 | 315                              | 355                    | 400                     | 450                      | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4<br>IE3 |
| <b>1MB55 . 4 - . . . . .</b>                       | <b>.. (-Z)</b>                                                                     |                                                                                                 | <b>1MB5514, 1MB5524, 1MB5534</b> |                        |                         |                          |               |                                                        |            |
| <b>1MB55 . 3 - . . . . .</b>                       | <b>.. (-Z)</b>                                                                     |                                                                                                 | <b>1MB5513, 1MB5523, 1MB5533</b> |                        |                         |                          |               |                                                        |            |
| <b>1MB58 . 3 - . . . . .</b>                       | <b>.. (-Z)</b>                                                                     |                                                                                                 | <b>1MB5813, 1MB5823, 1MB5833</b> |                        |                         |                          |               |                                                        |            |
| <b>With flange</b>                                 | <b>DIN EN 50347<br/>DIN 42948</b>                                                  |                                                                                                 | <b>FF600<br/>A 660</b>           | <b>FF740<br/>A 800</b> | <b>FF940<br/>A 1000</b> | <b>FF1080<br/>A 1150</b> |               |                                                        |            |
| IM B5 <sup>2) 7) 8)</sup>                          |   | <b>F</b>                                                                                        | 1030.–                           | 4120.–                 | 4300.–                  | 5780.–                   |               |                                                        |            |
| IM V1 without protective cover <sup>2) 3)</sup>    |   | <b>G</b>                                                                                        | 1040.–                           | 4120.–                 | 4300.–                  | 5780.–                   |               |                                                        |            |
| IM V1 with protective cover <sup>2) 3) 4) 5)</sup> |   | <b>G</b>                                                                                        | <b>H00</b>                       | 4996.–                 | 6450.–                  | 8350.–                   |               |                                                        |            |
| IM V3 <sup>3)</sup>                                |   | <b>H</b>                                                                                        | 1030.–                           | 4120.–                 | –                       | –                        |               |                                                        |            |
| IM B35 <sup>4)</sup>                               |  | <b>J</b>                                                                                        | 1180.–                           | 4330.–                 | 4520.–                  | 5620.–                   |               |                                                        |            |

- Standard version  
 ○ Without additional charge  
 O. R. Possible on request  
 – Not possible

- <sup>1)</sup> The types of construction IM B6/7/8, IM V6, and IM V5 with/without protective cover are also possible as long as there are no condensation drainage holes (order code H03) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.  
<sup>2)</sup> The type of construction is stamped on the rating plate. For orders with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.  
<sup>3)</sup> The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.  
<sup>4)</sup> In combination with an encoder, it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).

- <sup>5)</sup> The "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.  
<sup>6)</sup> Not possible for 2-pole motors.  
<sup>7)</sup> The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.  
<sup>8)</sup> For machines, type of construction IM B5, provide an additional support foot at the NDE. The support foot is not included in the scope of supply. Use an appropriately sized support foot with the appropriate rigidity. The support foot must be able to support the total weight of the machine.

Standard delivery times in working days:

20

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Motor protection · Aluminum series 1MB10

**Selection and ordering data**

| Motor protection                                                                | Article No. | supplement | Frame size |       |         |       |         |        | Motor version |        |                                                            |
|---------------------------------------------------------------------------------|-------------|------------|------------|-------|---------|-------|---------|--------|---------------|--------|------------------------------------------------------------|
|                                                                                 |             |            | 63         | 71    | 80      | 90    | 100     | 112    | 132           | 160    |                                                            |
|                                                                                 |             |            |            |       | 1MB10.3 |       |         |        |               |        | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) |
|                                                                                 |             | 1MB10.1    |            |       |         |       |         |        |               |        |                                                            |
|                                                                                 |             |            |            |       |         |       | 1MB10.2 |        |               |        |                                                            |
| 1MB10 . . . . .                                                                 |             | Order code |            |       |         |       |         |        |               |        | IE3                                                        |
|                                                                                 |             |            |            |       |         |       |         |        |               |        | IE2                                                        |
|                                                                                 |             |            |            |       |         |       |         |        |               |        | IE1                                                        |
| <b>Motor protection</b>                                                         |             |            |            |       |         |       |         |        |               |        |                                                            |
| Without (Standard)                                                              | A           | –          | □          | □     | □       | □     | □       | □      | □             | □      |                                                            |
| 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                    | B           | –          | 37.10      | 38.40 | 39.70   | 42.60 | 117.–   | 117.–  | 176.–         | 176.–  |                                                            |
| 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>          | C           | –          | 173.–      | 173.– | 173.–   | 173.– | 201.–   | 201.–  | 269.–         | 269.–  |                                                            |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>                      | F           | –          | 103.–      | 103.– | 103.–   | 103.– | 117.–   | 117.–  | 176.–         | 176.–  |                                                            |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>                     | G           | –          | 207.–      | 207.– | 207.–   | 207.– | 236.–   | 236.–  | 352.–         | 352.–  |                                                            |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>1) 2)</sup> | H           | –          | –          | –     | –       | –     | 1480.–  | 1480.– | 1480.–        | 1480.– |                                                            |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1)</sup>                     | K           | –          | 103.–      | 103.– | 103.–   | 103.– | 117.–   | 117.–  | 176.–         | 176.–  |                                                            |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>1)</sup>                    | L           | –          | 207.–      | 207.– | 207.–   | 207.– | 236.–   | 236.–  | 352.–         | 352.–  |                                                            |

- Standard version  
– Not possible

4

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>2)</sup> Order codes **Q02** and **Q03** are not possible for frame sizes 100 to 160 in combination with 15th position of the Article No. "**H**". It can only be supplied with a star or delta winding for direct switch-on (3 terminals).

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Motor protection · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

**Selection and ordering data**

| Motor protection                                                                | Article No. supplement                                 |                                                                           | Frame size               |        |        |        |        |        |        |        |        |        |        |        |        |                                       | Motor version                                          |                |  |
|---------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------------|--------------------------------------------------------|----------------|--|
|                                                                                 | Motor protection code 15th position of the Article No. | Additional identification code with order code and plain text if required | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC                                   | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br><br>IE2 |  |
|                                                                                 |                                                        |                                                                           | 1MB15.3 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
|                                                                                 |                                                        |                                                                           | 1MB16.3 Performance Line |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
|                                                                                 |                                                        |                                                                           | 1MB15.1 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
| 1MB16.1 Performance Line                                                        |                                                        |                                                                           |                          |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
| 1MB15 . . . . .                                                                 |                                                        |                                                                           |                          |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
| 1MB16 . . . . .                                                                 |                                                        | Order code                                                                |                          |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
| Motor protection                                                                |                                                        |                                                                           |                          |        |        |        |        |        |        |        |        |        |        |        |        |                                       |                                                        |                |  |
| Without (Standard)                                                              | A                                                      | –                                                                         | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB15..<br>Basic Line       |                                                        |                |  |
| 3 PTC thermistors – for tripping (2 terminals) <sup>1) 2)</sup>                 | B                                                      | –                                                                         | 38.40                    | 39.70  | 42.60  | 117.–  | 117.–  | 176.–  | 176.–  | 234.–  | 234.–  | 319.–  | 319.–  | 398.–  | 398.–  |                                       |                                                        |                |  |
| 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>2)</sup>          | C                                                      | –                                                                         | 173.–                    | 173.–  | 173.–  | 201.–  | 201.–  | 269.–  | 269.–  | 413.–  | 413.–  | 537.–  | 537.–  | 666.–  | 666.–  | Only for: 1MB15..<br>Basic Line       |                                                        |                |  |
|                                                                                 |                                                        |                                                                           | –                        | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB16..<br>Performance Line |                                                        |                |  |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>2) 3)</sup> | H                                                      | Q60                                                                       | 1020.–                   | 1020.– | 1020.– | 1220.– | 1220.– | 1220.– | 1220.– | 1480.– | 1480.– | 1480.– | 1640.– | 1640.– | 1640.– |                                       |                                                        |                |  |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>2)</sup>   | J                                                      | Q61                                                                       | –                        | –      | –      | –      | –      | –      | –      | 2420.– | 2420.– | 2420.– | 2420.– | 2420.– | 2420.– |                                       |                                                        |                |  |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>2)</sup>                     | K                                                      | –                                                                         | 103.–                    | 103.–  | 103.–  | 117.–  | 117.–  | 176.–  | 176.–  | 332.–  | 332.–  | 454.–  | 589.–  | 589.–  | 868.–  |                                       |                                                        |                |  |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>2)</sup>                    | L                                                      | –                                                                         | 206.–                    | 206.–  | 206.–  | 236.–  | 236.–  | 352.–  | 352.–  | 539.–  | 539.–  | 741.–  | 1000.– | 1000.– | 1470.– |                                       |                                                        |                |  |
| 3 Pt100 resistance thermometers – 3-wire input (9 terminals) <sup>2) 3)</sup>   | Q                                                      | Q63                                                                       | –                        | –      | –      | –      | –      | –      | –      | 2730.– | 2730.– | 3070.– | 3070.– | 3070.– | 3070.– |                                       |                                                        |                |  |
| 6 Pt100 resistance thermometers – 3-wire input (18 terminals) <sup>2) 3)</sup>  | R                                                      | Q64                                                                       | –                        | –      | –      | –      | –      | –      | –      | 4070.– | 4070.– | 4140.– | 4140.– | 4140.– | 4140.– |                                       |                                                        |                |  |

- Standard version  
– Not possible

<sup>1)</sup> For the Performance Line, motor protection by means of PTC thermistors with 3 embedded temperature sensors for tripping (motor protection code B) is already included in the base price. For the Performance Line, the option "Without motor protection" (motor protection code A) is not possible.

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>3)</sup> Order codes **Q02** and **Q03** are not possible for frame sizes 100 to 160 in combination with 15th position of the Article No. "**H**". It can only be supplied with a star or delta winding for direct switch-on (3 terminals).

Standard delivery times in working days:

**25 40****SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Motor protection · Aluminum serie 1MB1024; Cast-iron serie 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

**Selection and ordering data**

| Motor protection                                                                  | Article No.<br>Motor protection code<br>15th position of the Article No. | supplement<br>Additional identification code with order code and plain text if required | Frame size               |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       | Motor version                   |                                 |  |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|-----|-------|-------|-------|-------|--------|--------|--------|--------|--------|---------------------------------------|---------------------------------|---------------------------------|--|
|                                                                                   |                                                                          |                                                                                         | 63                       | 71    | 80    | 90    | 100 | 112   | 132   | 160   | 180   | 200    | 225    | 250    | 280    | 315    | IEC                                   | Ex eb<br>(Zone 1)               | IE3                             |  |
| 1MB1042 - . . . . .<br>1MB . 5 . . . . .<br>1MB . 6 . . . . .                     |                                                                          |                                                                                         | 1MB1042                  |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
|                                                                                   |                                                                          |                                                                                         | 1MB1543 Basic Line       |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
|                                                                                   |                                                                          |                                                                                         | 1MB1643 Performance Line |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
|                                                                                   |                                                                          |                                                                                         | 1MB5543 Basic Line       |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
|                                                                                   |                                                                          |                                                                                         | 1MB5643 Performance Line |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
|                                                                                   |                                                                          | Order code                                                                              |                          |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
| Motor protection                                                                  |                                                                          |                                                                                         |                          |       |       |       |     |       |       |       |       |        |        |        |        |        |                                       |                                 |                                 |  |
| Without (Standard) <sup>1)</sup>                                                  | A                                                                        | –                                                                                       | □                        | □     | □     | □     |     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □                                     | □                               | Only for: 1MB.5..<br>Basic Line |  |
| 3 PTC thermistors – for tripping (2 terminals)<br><sup>1) 2) 3)</sup>             | B                                                                        | –                                                                                       | 38.40                    | 38.40 | 39.70 | 42.60 |     | 117.– | 117.– | 176.– | 176.– | 234.–  | 234.–  | 319.–  | 319.–  | 398.–  | 398.–                                 | Only for: 1MB.5..<br>Basic Line |                                 |  |
|                                                                                   |                                                                          |                                                                                         | –                        | □     | □     | □     |     | □     | □     | □     | □     | □      | □      | □      | □      | □      | Only for: 1MB.6..<br>Performance Line |                                 |                                 |  |
| 6 PTC thermistors – for alarm and tripping (4 terminals)<br><sup>2) 3)</sup>      | C                                                                        | –                                                                                       | 173.–                    | 173.– | 173.– | 173.– |     | 201.– | 201.– | 269.– | 269.– | 413.–  | 413.–  | 537.–  | 537.–  | 666.–  | 666.–                                 |                                 |                                 |  |
| 3 Pt100 resistance thermometers – 3-wire input (9 terminals)<br><sup>2) 4)</sup>  | Q                                                                        | Q63                                                                                     | –                        | –     | –     | –     |     | –     | –     | –     |       | 2730.– | 2730.– | 3070.– | 3070.– | 3070.– | 3070.–                                |                                 |                                 |  |
| 6 Pt100 resistance thermometers – 3-wire input (18 terminals)<br><sup>2) 4)</sup> | R                                                                        | Q64                                                                                     | –                        | –     | –     | –     |     | –     | –     | –     | –     |        | 4070.– | 4070.– | 4140.– | 4140.– | 4140.–                                |                                 |                                 |  |

- Standard version  
– Not possible

**4**

<sup>1)</sup> For the Performance Line, motor protection by means of PTC thermistors with 3 embedded temperature sensors for tripping (motor protection code B) is already included in the base price. For the Performance Line, the option "Without motor protection" (motor protection code A) is not possible.

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>3)</sup> Motors in these frame sizes have a second rating plate (T1/T2 and T3) as standard.  
The T3 power is stamped on the rating plate as standard if the following motors are selected with PTC thermistor (protection by PTC thermistor only) or voltage code **"90"**:  
- 2-pole motors: Frame sizes 132 to 160  
- 4-pole motors: Frame size 180  
Alternatively, with order code **B33**, the "T1/T2 power is stamped on the rating plate".  
- 2-pole motors: Frame sizes 132 to 200  
- 4-pole motors: Frame sizes 180 to 200

<sup>4)</sup> In combination with the 15th position of the article number **"H"**, the order codes **Q02** and **Q03** are not possible for frame size 160. It can only be supplied with a star or delta winding for direct connection (3 terminals).

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**30****40****Motor protection · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853****Selection and ordering data**

| Motor protection                                                                 | Article No. supplement                                    |                                                                           | Frame size                         |       |       |        |        |        |        |        |        |        |        |        |        |        | Motor version |                          |     |
|----------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|--------------------------|-----|
|                                                                                  | Motor protection code<br>15th position of the Article No. | Additional identification code with order code and plain text if required | 71                                 | 80    | 90    | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | 355    | IEC           | Ex db, Ex db eb (zone 1) | IE3 |
|                                                                                  |                                                           |                                                                           | 1MB15.3, 1MB15.6, 1MB15.7          |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
|                                                                                  |                                                           |                                                                           | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
|                                                                                  |                                                           |                                                                           | 1MB1853                            |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
| 1MB5853                                                                          |                                                           |                                                                           |                                    |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
| 1MB1 . . . . .                                                                   | ■ .                                                       | Order code                                                                |                                    |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
| 1MB5 . 5 . . . . .                                                               | ■ .                                                       |                                                                           |                                    |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
| Motor protection                                                                 |                                                           |                                                                           |                                    |       |       |        |        |        |        |        |        |        |        |        |        |        |               |                          |     |
| Without (Standard)                                                               | A                                                         | –                                                                         | □                                  | □     | □     | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |               |                          |     |
| 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                     | B                                                         | –                                                                         | 38,40                              | 39,70 | 42,60 | 117,–  | 117,–  | 176,–  | 176,–  | 234,–  | 234,–  | 319,–  | 319,–  | 398,–  | 398,–  | 398,–  |               |                          |     |
| 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1) 2)</sup>        | C                                                         | –                                                                         | 173,–                              | 173,– | 173,– | 201,–  | 201,–  | 269,–  | 269,–  | 413,–  | 413,–  | 537,–  | 537,–  | 666,–  | 666,–  | 666,–  |               |                          |     |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) <sup>2)</sup>     | H                                                         | Q60                                                                       | –                                  | –     | –     | 1220,– | 1220,– | 1220,– | 1220,– | 1480,– | 1480,– | 1480,– | 1640,– | 1640,– | 1640,– | 1640,– |               |                          |     |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) <sup>2) 3)</sup> | J                                                         | Q61                                                                       | –                                  | –     | –     | –      | –      | –      | –      | 2420,– | 2420,– | 2420,– | 2420,– | 2420,– | 2420,– | 2420,– |               |                          |     |
| 1 Pt1000 resistance thermometer (2 terminals) <sup>1)</sup>                      | K                                                         | Q35                                                                       | 103,–                              | 103,– | 103,– | 117,–  | 117,–  | 176,–  | 176,–  | 332,–  | 332,–  | 454,–  | 589,–  | 589,–  | 868,–  | 868,–  |               |                          |     |
| 2 Pt1000 resistance thermometers (4 terminals) <sup>2)</sup>                     | L                                                         | Q36                                                                       | 206,–                              | 206,– | 206,– | 236,–  | 236,–  | 352,–  | 352,–  | 539,–  | 539,–  | 741,–  | 1000,– | 1000,– | 1470,– | 1470,– |               |                          |     |
| 3 Pt100 resistance thermometers – 3-wire input (9 terminals) <sup>2) 3)</sup>    | Q                                                         | Q63                                                                       | –                                  | –     | –     | –      | –      | –      | –      | 2730,– | 2730,– | 2730,– | 3070,– | 3070,– | 3070,– | 3070,– |               |                          |     |
| 6 Pt100 resistance thermometers – 3-wire input (18 terminals) <sup>2) 3)</sup>   | R                                                         | Q64                                                                       | –                                  | –     | –     | –      | –      | –      | –      | 4070,– | 4070,– | 4140,– | 4140,– | 4140,– | 4140,– | 4140,– |               |                          |     |

- Standard version  
– Not possible

<sup>1)</sup> For the Performance Line, motor protection by means of PTC thermistors with 3 embedded temperature sensors for tripping (motor protection code B) is already included in the base price. For the Performance Line, the option "Without motor protection" (motor protection code A) is not possible.

<sup>2)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

<sup>3)</sup> Order codes **Q02** and **Q03** are not possible for frame sizes 100 to 160 in combination with 15th position of the Article No. "H". It can only be supplied with a star or delta winding for direct switch-on (3 terminals).

Standard delivery times in working days:

25

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Motor protection · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

**Selection and ordering data**

| Motor protection                                                       | Article No. supplement                                 |                                                                           | Frame size                |        |        |        | Motor version |                                                        |            |
|------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|---------------------------|--------|--------|--------|---------------|--------------------------------------------------------|------------|
|                                                                        | Motor protection code 15th position of the Article No. | Additional identification code with order code and plain text if required | 315                       | 355    | 400    | 450    | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4<br>IE3 |
|                                                                        |                                                        |                                                                           | 1MB5514, 1MB5524, 1MB5534 |        |        |        |               |                                                        |            |
|                                                                        |                                                        |                                                                           | 1MB5513, 1MB5523, 1MB5533 |        |        |        |               |                                                        |            |
|                                                                        |                                                        |                                                                           | 1MB5813, 1MB5823, 1MB5833 |        |        |        |               |                                                        |            |
| 1MB55 . 4 - . . . . . ■ .                                              |                                                        |                                                                           |                           |        |        |        |               |                                                        |            |
| 1MB55 . 3 - . . . . . ■ .                                              |                                                        |                                                                           |                           |        |        |        |               |                                                        |            |
| 1MB58 . 3 - . . . . . ■ .                                              |                                                        | Order code                                                                |                           |        |        |        |               |                                                        |            |
| Motor protection                                                       |                                                        |                                                                           |                           |        |        |        |               |                                                        |            |
| Without (Standard)                                                     | A                                                      | –                                                                         | □                         | □      | □      | □      |               |                                                        |            |
| 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>           | B                                                      | –                                                                         | 398.–                     | 398.–  | 935.–  | 935.–  |               |                                                        |            |
| 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup> | C                                                      | –                                                                         | 666.–                     | 666.–  | 1040.– | 1040.– |               |                                                        |            |
| 1 temperature sensor KTY84-130 (2 terminals) <sup>1)</sup>             | F                                                      | –                                                                         | 868.–                     | 868.–  | 1250.– | 1250.– |               |                                                        |            |
| 2 temperature sensors KTY84-130 (4 terminals) <sup>1)</sup>            | G                                                      | –                                                                         | 1470.–                    | 1470.– | 1960.– | 1960.– |               |                                                        |            |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)         | H                                                      | –                                                                         | 1640.–                    | 1640.– | 1670.– | 1670.– |               |                                                        |            |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)        | J                                                      | –                                                                         | 2420.–                    | 2420.– | 2470.– | 2470.– |               |                                                        |            |
| 1 Pt1000 resistance thermometer (2 terminals)                          | K                                                      | –                                                                         | 868.–                     | 868.–  | 1250.– | 1250.– |               |                                                        |            |
| 2 Pt1000 resistance thermometers (4 terminals)                         | L                                                      | –                                                                         | 1470.–                    | 1470.– | 1960.– | 1960.– |               |                                                        |            |
| 6 Pt100 resistance thermometers – 2-wire input (2 terminals)           | P                                                      | –                                                                         | 1310.–                    | 1310.– | 1340.– | 1340.– |               |                                                        |            |
| 3 Pt100 resistance thermometers – 3-wire input (9 terminals)           | Q                                                      | –                                                                         | 1970.–                    | 1970.– | 2010.– | 2010.– |               |                                                        |            |
| 6 Pt100 resistance thermometers – 3-wire input (18 terminals)          | R                                                      | –                                                                         | 2900.–                    | 2900.– | 2960.– | 2960.– |               |                                                        |            |

- Standard version  
– Not possible

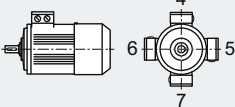
4

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Terminal box position · Aluminum series 1MB10****Selection and ordering data**

| Terminal box position                                                             | Article No.                                                 | supplement                                                                | Frame size |           |           |           |            |            |            |            | Motor version |                                                        |                   |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|------------|-----------|-----------|-----------|------------|------------|------------|------------|---------------|--------------------------------------------------------|-------------------|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | <b>63</b>  | <b>71</b> | <b>80</b> | <b>90</b> | <b>100</b> | <b>112</b> | <b>132</b> | <b>160</b> | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1 |
|                                                                                   |                                                             |                                                                           | 1MB10.3    |           |           |           |            |            |            |            |               |                                                        |                   |
|                                                                                   |                                                             |                                                                           | 1MB10.1    |           |           |           |            |            |            |            |               |                                                        |                   |
|                                                                                   |                                                             |                                                                           | 1MB10.2    |           |           |           |            |            |            |            |               |                                                        |                   |
| 1MB10 . . . . .                                                                   |                                                             | Order code                                                                |            |           |           |           |            |            |            |            |               |                                                        |                   |
| Terminal box position                                                             |                                                             |                                                                           |            |           |           |           |            |            |            |            |               |                                                        |                   |
| Terminal box top <sup>1)</sup>                                                    | 4                                                           | –                                                                         | □          | □         | □         | □         | □          | □          | □          | □          |               |                                                        |                   |
| Terminal box on RHS <sup>2)</sup>                                                 | 5                                                           | –                                                                         | –          | –         | 35.20     | 39.80     | 102.–      | 111.–      | 121.–      | 129.–      |               |                                                        |                   |
| Terminal box on LHS <sup>2)</sup>                                                 | 6                                                           | –                                                                         | –          | –         | 35.20     | 39.80     | 102.–      | 111.–      | 121.–      | 129.–      |               |                                                        |                   |
| Terminal box bottom <sup>2) 3)</sup>                                              | 7                                                           | –                                                                         | –          | –         | –         | –         | 102.–      | 111.–      | 121.–      | 129.–      |               |                                                        |                   |

- Standard version  
– Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>3)</sup> Not generally possible for motors with feet.

Standard delivery times in working days:

20

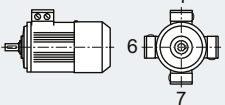
30

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Terminal box position · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

**Selection and ordering data**

| Terminal box position                                                             | Article No.                                                 | supplement                                                                | Frame size               |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                | Motor version |  |  |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--------------------------------------------------------|----------------|---------------|--|--|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | 71                       | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   | IEC | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br><br>IE2 |               |  |  |
|                                                                                   |                                                             |                                                                           | 1MB15.3 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
|                                                                                   |                                                             |                                                                           | 1MB16.3 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
|                                                                                   |                                                             |                                                                           | 1MB15.1 Basic Line       |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
|                                                                                   |                                                             |                                                                           | 1MB16.1 Performance Line |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
| 1MB15.....                                                                        |                                                             |                                                                           |                          |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
| 1MB16.....                                                                        |                                                             | Order code                                                                |                          |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
| Terminal box position                                                             |                                                             |                                                                           |                          |       |       |       |       |       |       |       |       |       |       |       |       |     |                                                        |                |               |  |  |
| Terminal box top <sup>1)</sup>                                                    | 4                                                           | –                                                                         | □                        | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     |     |                                                        |                |               |  |  |
| Terminal box on RHS <sup>2)</sup>                                                 | 5                                                           | –                                                                         | –                        | 51.50 | 72.10 | 102.– | 111.– | 121.– | 129.– | 364.– | 428.– | 507.– | 753.– | 846.– | 974.– |     |                                                        |                |               |  |  |
| Terminal box on LHS <sup>2)</sup>                                                 | 6                                                           | –                                                                         | –                        | 51.50 | 72.10 | 102.– | 111.– | 121.– | 129.– | 364.– | 428.– | 507.– | 753.– | 846.– | 974.– |     |                                                        |                |               |  |  |
| Terminal box bottom <sup>2) 3)</sup>                                              | 7                                                           | –                                                                         | –                        | –     | –     | 102.– | 111.– | 121.– | 129.– | –     | –     | –     | –     | –     | –     |     |                                                        |                |               |  |  |

- ☐ Standard version  
 – Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>3)</sup> Not generally possible for motors with feet.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors****25****40**

Article No. supplements and special versions

Terminal box position · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line

**Selection and ordering data**

| Terminal box position                                 | Article No. supplement                                      | Additional identification code with order code and plain text if required | Frame size               |    |       |       |       |       |       |       |       |       |       |       |       |       | Motor version |                |     |
|-------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|----------------|-----|
|                                                       |                                                             |                                                                           | 63                       | 71 | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315   |               |                |     |
|                                                       | Terminal box position code 16th position of the Article No. |                                                                           | 1MB1042                  |    |       |       |       |       |       |       |       |       |       |       |       |       | IEC           | Ex eb (zone 1) | IE3 |
|                                                       |                                                             |                                                                           | 1MB1543 Basic Line       |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
|                                                       |                                                             |                                                                           | 1MB1643 Performance Line |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
|                                                       |                                                             |                                                                           | 1MB5543 Basic Line       |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
|                                                       |                                                             |                                                                           | 1MB5643 Performance Line |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
| 1MB1042 - . . . . .                                   |                                                             | Order code                                                                |                          |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
| 1MB . 5 - . . . . .                                   |                                                             |                                                                           |                          |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
| 1MB . 6 - . . . . .                                   |                                                             |                                                                           |                          |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
| Terminal box positioni                                |                                                             |                                                                           |                          |    |       |       |       |       |       |       |       |       |       |       |       |       |               |                |     |
| Terminal box base left with terminal box at the top   | 0                                                           |                                                                           | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |
| Terminal box base right with terminal box at the top  | 1                                                           |                                                                           | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |
| Terminal box base left with oblique terminal box 45°  | 2                                                           |                                                                           | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | O     |               |                |     |
| Terminal box base right with oblique terminal box 45° | 3                                                           |                                                                           | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | □     |               |                |     |
| Terminal box top <sup>1)</sup>                        | 4                                                           | -                                                                         | □                        | □  | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | -     |               |                |     |
| Terminal box on RHS <sup>2)</sup>                     | 5                                                           | -                                                                         | -                        | -  | 51.50 | 72.10 | 102.- | 111.- | 121.- | 129.- | 364.- | 428.- | 507.- | 753.- | 846.- | 618.- |               |                |     |
| Terminal box on LHS <sup>2)</sup>                     | 6                                                           | -                                                                         | -                        | -  | 51.50 | 72.10 | 102.- | 111.- | 121.- | 129.- | 364.- | 428.- | 507.- | 753.- | 846.- | 618.- |               |                |     |
| Terminal box bottom <sup>2) 3)</sup>                  | 7                                                           | -                                                                         | -                        | -  | -     | -     | 102.- | 111.- | 121.- | 129.- | -     | -     | -     | -     | -     | -     |               |                |     |
| Terminal box on left-hand side (base below)           | 9                                                           | R5L                                                                       | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |
| Terminal box on right-hand side (base below)          | 9                                                           | R6R                                                                       | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |
| Terminal box bottom left                              | 9                                                           | R7L                                                                       | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |
| Terminal box bottom right                             | 9                                                           | R7R                                                                       | -                        | -  | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | -     | 618.- |               |                |     |

- Standard version  
 O Without additional charge  
 - Not possible

<sup>1)</sup> For types of construction with feet, cast feet are standard.  
Screwed-on feet are available with order code **H01**.

<sup>2)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>3)</sup> Not generally possible for motors with feet.

Standard delivery times in working days:

30

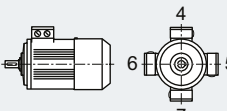
40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Terminal box position · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853

**Selection and ordering data**

| Terminal box position                                                             | Article No.                                                 | supplement                                                                | Frame size                         |       |       |       |       |       |       |       |       |       |       |       |        |     | Motor version |                          |     |  |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-----|---------------|--------------------------|-----|--|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | 71                                 | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | 315    | 355 | IEC           | Ex db, Ex db eb (zone 1) | IE3 |  |
|                                                                                   |                                                             |                                                                           | 1MB15.3, 1MB15.6, 1MB15.7          |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
|                                                                                   |                                                             |                                                                           | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
|                                                                                   |                                                             |                                                                           | 1MB1853                            |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
|                                                                                   |                                                             |                                                                           |                                    |       |       |       |       |       |       |       |       |       |       |       |        |     | 1MB5853       |                          |     |  |
| 1MB1 . . . . .                                                                    |                                                             |                                                                           |                                    |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
| 1MB5 . 5 . . . . .                                                                |                                                             | Order code                                                                |                                    |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
| Terminal box position                                                             |                                                             |                                                                           |                                    |       |       |       |       |       |       |       |       |       |       |       |        |     |               |                          |     |  |
| Terminal box top <sup>1)</sup>                                                    | 4                                                           | –                                                                         | □                                  | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □     | □      | □   |               |                          |     |  |
| Terminal box on RHS <sup>1)</sup>                                                 | 5                                                           | –                                                                         | –                                  | –     | –     | 111.– | 121.– | 129.– | 364.– | 428.– | 507.– | 753.– | 846.– | 946.– | 1040.– |     |               |                          |     |  |
| Terminal box on LHS <sup>1)</sup>                                                 | 6                                                           | –                                                                         | –                                  | 51.50 | 72.10 | 102.– | 111.– | 121.– | 129.– | 364.– | 428.– | 507.– | 753.– | 846.– | –      | –   |               |                          |     |  |
| Terminal box bottom <sup>2)</sup>                                                 | 7                                                           | –                                                                         | –                                  | –     | –     | 102.– | 111.– | 121.– | 129.– | –     | –     | –     | –     | –     | –      | –   |               |                          |     |  |

- Standard version  
– Not possible

Note:

Flange designs with horizontal alignment can also be mounted with a connection box on the right / left or below.

<sup>1)</sup> For types of construction with feet, screwed-on feet are standard.

<sup>2)</sup> Not generally possible for motors with feet.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**25**

Terminal box position · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

**Selection and ordering data**

| Terminal box position                                 | Article No. supplement                                      |                                                                           | Frame size                |        |       |       | Motor version |                                                        |            |
|-------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------|--------|-------|-------|---------------|--------------------------------------------------------|------------|
|                                                       | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | 315                       | 355    | 400   | 450   | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4<br>IE3 |
|                                                       |                                                             |                                                                           | 1MB5514, 1MB5524, 1MB5534 |        |       |       |               |                                                        |            |
|                                                       |                                                             |                                                                           | 1MB5513, 1MB5523, 1MB5533 |        |       |       |               |                                                        |            |
|                                                       |                                                             |                                                                           | 1MB5813, 1MB5823, 1MB5833 |        |       |       |               |                                                        |            |
| 1MB55 . 4 - . . . . . ■                               |                                                             |                                                                           |                           |        |       |       |               |                                                        |            |
| 1MB55 . 3 - . . . . . ■                               |                                                             | Order code                                                                |                           |        |       |       |               |                                                        |            |
| 1MB58 . 3 - . . . . . ■                               |                                                             |                                                                           |                           |        |       |       |               |                                                        |            |
| Terminal box positioni                                |                                                             |                                                                           |                           |        |       |       |               |                                                        |            |
| Terminal box base left with terminal box at the top   | 0                                                           |                                                                           | 618.–                     | 618.–  | 824.– | 840.– |               |                                                        |            |
| Terminal box base right with terminal box at the top  | 1                                                           |                                                                           | 618.–                     | 618.–  | 824.– | 840.– |               |                                                        |            |
| Terminal box base left with oblique terminal box 45°  | 2                                                           |                                                                           | O                         | O      | O     | O     |               |                                                        |            |
| Terminal box base right with oblique terminal box 45° | 3                                                           |                                                                           | □                         | □      | □     | □     |               |                                                        |            |
| Terminal box on RHS                                   | 5                                                           | –                                                                         | 946.–                     | 1040.– | 840.– | 840.– |               |                                                        |            |
| Terminal box on LHS                                   | 6                                                           | –                                                                         | 618.–                     | 618    | 840.– | 840.– |               |                                                        |            |
| Terminal box on left-hand side (base below) 1)        | 9                                                           | R5L                                                                       | 618.–                     | 618.–  | 630.– | 630.– |               |                                                        |            |
| Terminal box on right-hand side (base below) 1)       | 9                                                           | R6R                                                                       | 618.–                     | 618.–  | 630.– | 630.– |               |                                                        |            |
| Terminal box bottom left 1)                           | 9                                                           | R7L                                                                       | 618.–                     | 618.–  | 630.– | 630.– |               |                                                        |            |
| Terminal box bottom right 1)                          | 9                                                           | R7R                                                                       | 618.–                     | 618.–  | 630.– | 630.– |               |                                                        |            |

- ☐ Standard version  
☐ Without additional charge

<sup>1)</sup> possible in combination with types of construction IM V1.

Standard delivery times in working days:

**20**On  
request**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Options · Aluminum series 1MB10

**Selection and ordering data**

| Special versions                                                                                                                                                                                                                                                                                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |       |       |       |         |       |       |       | Motor version |                                                        |                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-------|-------|-------|---------|-------|-------|-------|---------------|--------------------------------------------------------|--------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     | 63         | 71    | 80    | 90    | 100     | 112   | 132   | 160   | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     | 1MB10.3    |       |       |       |         |       |       |       |               |                                                        |                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                     | 1MB10.1    |       |       |       | 1MB10.2 |       |       |       |               |                                                        |                                                              |
| 1MB10 ... - - - - - - - - - - <b>-Z</b>                                                                                                                                                                                                                                                                                                                                                        | Order code                                                                          |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| Explosion-proof version                                                                                                                                                                                                                                                                                                                                                                        |                                                                                     |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| Design additional for dust Ex tc – zone 22 <sup>1) 14) 22)</sup>                                                                                                                                                                                                                                                                                                                               | <b>B30</b>                                                                          |            | –     | –     | 78.80 | 94.30   | 107.– | 126.– | 188.– | 274.–         | Only for:                                              | 1MB103. – Ex ec (zone 2)                                     |
| Design IIC with marking IIB <sup>22)</sup>                                                                                                                                                                                                                                                                                                                                                     | <b>B31</b>                                                                          |            | ○     | ○     | ○     | ○       | ○     | ○     | ○     | ○             | Only for:                                              | 1MB103. – Ex ec (zone 2)                                     |
| VIK version                                                                                                                                                                                                                                                                                                                                                                                    | <b>C02</b>                                                                          |            | 78.30 | 80.30 | 82.40 | 84.50   | 86.50 | 88.60 | 105.– | 105.–         | Only for:                                              | 1MB1033 – Ex ec IE3 (zone 2)<br>1MB1031 – Ex ec IE2 (zone 2) |
| Design for converter operation                                                                                                                                                                                                                                                                                                                                                                 |                                                                                     |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| Design for converter operation in basic version with operating data SINAMICS G120 with PM240-2. <sup>15)</sup>                                                                                                                                                                                                                                                                                 | <b>B40</b>                                                                          |            | 82.40 | 92.70 | 103.– | 113.–   | 134.– | 155.– | 175.– | 206.–         |                                                        |                                                              |
| Design for converter operation in basic version with operating data SINAMICS S150. <sup>15)</sup>                                                                                                                                                                                                                                                                                              | <b>B41</b>                                                                          |            | 82.40 | 92.70 | 103.– | 113.–   | 134.– | 155.– | 175.– | 206.–         |                                                        |                                                              |
| Version for converter operation with power data on the PWM converter                                                                                                                                                                                                                                                                                                                           | <b>B43</b>                                                                          |            | 82.40 | 92.70 | 103.– | 113.–   | 134.– | 155.– | 175.– | 206.–         |                                                        |                                                              |
| Operating data as order code <b>B40</b> with alternative SINAMICS converter on the rating plate<br>• G120 with PM230<br>• G120 with PM240<br>• G120C<br>• G120P with PM230<br>• G120P with PM240-2<br>• G120P with PM330<br>• G130, G150, G180<br>• S120 (BLM/SLM)<br>• V20<br>Operating data as order code <b>B41</b> with alternative SINAMICS converter on the rating plate<br>• S120 (ALM) | <b>Y68 •</b><br>and converter type                                                  |            | ○     | ○     | ○     | ○       | ○     | ○     | ○     | ○             |                                                        |                                                              |
| Motor protection                                                                                                                                                                                                                                                                                                                                                                               |                                                                                     |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| 1 or 3 PTC thermistors – for tripping (2 terminals)                                                                                                                                                                                                                                                                                                                                            | <b>Q11</b>                                                                          |            | 37.10 | 38.40 | –     | –       | –     | –     | –     | –             |                                                        |                                                              |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals)                                                                                                                                                                                                                                                                                                                                  | <b>Q12</b>                                                                          |            | 173.– | 173.– | –     | –       | –     | –     | –     | –             |                                                        |                                                              |
| 1 KTY84-130 temperature sensor (2 terminals)                                                                                                                                                                                                                                                                                                                                                   | <b>Q23</b>                                                                          |            | 103.– | 103.– | –     | –       | –     | –     | –     | –             |                                                        |                                                              |
| 2 KTY84-130 temperature sensors (4 terminals)                                                                                                                                                                                                                                                                                                                                                  | <b>Q25</b>                                                                          |            | 207.– | 207.– | –     | –       | –     | –     | –     | –             |                                                        |                                                              |
| 1 Pt1000 resistance thermometer (2 terminals)                                                                                                                                                                                                                                                                                                                                                  | <b>Q35</b>                                                                          |            | 103.– | 103.– | 103.– | 103.–   | 210.– | 210.– | 289.– | 289.–         |                                                        |                                                              |
| 2 Pt1000 resistance thermometers (4 terminals)                                                                                                                                                                                                                                                                                                                                                 | <b>Q36</b>                                                                          |            | 207.– | 207.– | 207.– | 207.–   | 329.– | 329.– | 466.– | 466.–         |                                                        |                                                              |
| Motor connection and terminal box                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| External grounding                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |            | □     | □     | □     | □       | □     | □     | □     | □             |                                                        |                                                              |
| Rotation of the terminal box through 90°, entry from DE                                                                                                                                                                                                                                                                                                                                        | <b>R10</b>                                                                          |            | ○     | ○     | ○     | ○       | ○     | ○     | ○     | ○             |                                                        |                                                              |
| Rotation of the terminal box through 90°, entry from NDE                                                                                                                                                                                                                                                                                                                                       | <b>R11</b>                                                                          |            | ○     | ○     | ○     | ○       | ○     | ○     | ○     | ○             |                                                        |                                                              |
| Rotation of the terminal box through 180°                                                                                                                                                                                                                                                                                                                                                      | <b>R12</b>                                                                          |            | ○     | ○     | ○     | ○       | ○     | ○     | ○     | ○             |                                                        |                                                              |
| Metal cable gland, max. configuration                                                                                                                                                                                                                                                                                                                                                          | <b>R18</b>                                                                          |            | 123.– | 123.– | 123.– | 123.–   | 231.– | 231.– | 231.– | 284.–         |                                                        |                                                              |
| Larger terminal box <sup>24)</sup>                                                                                                                                                                                                                                                                                                                                                             | <b>R50</b>                                                                          |            | 48.50 | 101.– | □     | □       | –     | –     | –     | –             |                                                        |                                                              |
| Windings and insulation                                                                                                                                                                                                                                                                                                                                                                        |                                                                                     |            |       |       |       |         |       |       |       |               |                                                        |                                                              |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % <sup>2)</sup>                                                                                                                                                                                                                                                                             | <b>N05</b>                                                                          |            | 41.20 | 41.20 | 40.70 | 40.70   | 47.40 | 47.40 | 63.–  | 63.–          |                                                        |                                                              |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % <sup>2)</sup>                                                                                                                                                                                                                                                                             | <b>N06</b>                                                                          |            | 41.20 | 41.20 | 40.70 | 40.70   | 47.40 | 47.40 | 63.–  | 63.–          |                                                        |                                                              |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % <sup>2)</sup>                                                                                                                                                                                                                                                                            | <b>N07</b>                                                                          |            | 61.80 | 64.40 | 72.90 | 85.80   | 106.– | 129.– | 164.– | 204.–         |                                                        |                                                              |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %                                                                                                                                                                                                                                                                                          | <b>N08</b>                                                                          |            | 61.80 | 64.40 | 72.90 | 85.80   | 106.– | 129.– | 164.– | 204.–         |                                                        |                                                              |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                                                                                                                                                                                                                                                                                                         | <b>N30</b>                                                                          |            | 134.– | 134.– | 134.– | 134.–   | 134.– | 134.– | 134.– | 206.–         |                                                        |                                                              |

For legends and footnotes, see Page 4/72.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**20**On  
request**Options · Aluminum series 1MB10**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code -Z with order code and plain text if required | Frame size |       |       |       |         |        |        |        | Motor version |                                                        |                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|-------|-------|-------|---------|--------|--------|--------|---------------|--------------------------------------------------------|-------------------------------------------------------|
|                                                                                                                                                                                                                                                                                             |                                                                              | 63         | 71    | 80    | 90    | 100     | 112    | 132    | 160    | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1                                     |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1MB10.3    |       |       |       |         |        |        |        |               |                                                        |                                                       |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1MB10.1    |       |       |       | 1MB10.2 |        |        |        |               |                                                        |                                                       |
| 1MB10...-.....-Z                                                                                                                                                                                                                                                                            | Order code                                                                   |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Windings and insulation (continued)                                                                                                                                                                                                                                                         |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                                                                                                                                                                                                     | N31                                                                          |            | 196.– | 196.– | 216.– | 216.–   | 216.–  | 247.–  | 278.–  | 391.–         |                                                        |                                                       |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude                                                                                                                                                                           | Y50 • and requ. power, CT ... °C or IA .... m above sea level                |            | 92.70 | 101.– | 109.– | 129.–   | 159.–  | 192.–  | 247.–  | 304.–         |                                                        |                                                       |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                              |            | □     | □     | □     | □       | □      | □      | □      | □             |                                                        |                                                       |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                          |            | ○     | ○     | ○     | ○       | ○      | ○      | ○      | ○             |                                                        |                                                       |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                          |            | 27.30 | 27.30 | 20.50 | 27.30   | 27.30  | 27.30  | 43.50  | 43.50         |                                                        |                                                       |
| Special finish C3                                                                                                                                                                                                                                                                           | S02                                                                          |            | 36.10 | 36.10 | 36.10 | 36.10   | 61.80  | 61.80  | 82.40  | 82.40         |                                                        |                                                       |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | S03                                                                          |            | 494.– | 494.– | 494.– | 494.–   | 525.–  | 525.–  | 577.–  | 577.–         |                                                        |                                                       |
| Top coat polyurethane <sup>12) 23)</sup>                                                                                                                                                                                                                                                    | S06                                                                          |            | 50.50 | 50.50 | 30.90 | 50.50   | 72.10  | 98.90  | 147.–  | 206.–         | Only for:                                              | 1MB103. – Ex ec (zone 2)                              |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and finish RAL ....                                                    |            | 25.80 | 25.80 | 25.80 | 25.80   | 41.20  | 41.20  | 56.70  | 56.70         |                                                        |                                                       |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                      | Y56 • and finish RAL ....                                                    |            | 608.– | 608.– | 608.– | 608.–   | 649.–  | 649.–  | 680.–  | 680.–         |                                                        |                                                       |
| Modular technology – Basic version                                                                                                                                                                                                                                                          |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Mounting of separately driven fan <sup>17)</sup>                                                                                                                                                                                                                                            | F70                                                                          |            | –     | –     | –     | –       | –      | –      | –      | –             | Only for:                                              | 1MB101. – Ex tb (zone 21)                             |
|                                                                                                                                                                                                                                                                                             |                                                                              |            | –     | –     | –     | –       | 1030.– | 1240.– | 1440.– | 1750.–        | Only for:                                              | 1MB102. – Ex tc (zone 22)<br>1MB103. – Ex ec (zone 2) |
| Special technology                                                                                                                                                                                                                                                                          |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Mounting of explosion-proof rotary pulse encoder LL 841 (HTL); 1024 l <sup>16)</sup>                                                                                                                                                                                                        | G30                                                                          |            | –     | –     | –     | –       | 8030.– | 8030.– | 8030.– | 8030.–        |                                                        |                                                       |
| Mechanical design and degrees of protection                                                                                                                                                                                                                                                 |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                                                                                                                                                                                    | F77                                                                          |            | –     | –     | –     | –       | –      | –      | 613.–  | 870.–         |                                                        |                                                       |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                                                                                                                                                                            | F78                                                                          |            | –     | –     | –     | –       | –      | –      | 613.–  | 870.–         |                                                        |                                                       |
| Mechanical protection for encoders                                                                                                                                                                                                                                                          | G43                                                                          |            | –     | –     | □     | □       | □      | □      | □      | □             |                                                        |                                                       |
| Protective cover                                                                                                                                                                                                                                                                            | H00                                                                          |            | 55.60 | 55.60 | 55.60 | 55.60   | 80.80  | 80.80  | 141.–  | 141.–         |                                                        |                                                       |
| Screwed-on (instead of cast) feet                                                                                                                                                                                                                                                           | H01                                                                          |            | –     | –     | 89.–  | 89.–    | 104.–  | 113.–  | 123.–  | 132.–         |                                                        |                                                       |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                                                                                                                                                                                                  | H02                                                                          |            | 113.– | 127.– | 145.– | 165.–   | 185.–  | 205.–  | 222.–  | 258.–         |                                                        |                                                       |
| Condensation drainage holes <sup>6)</sup>                                                                                                                                                                                                                                                   | H03                                                                          |            | 61.80 | 63.90 | 66.30 | 74.–    | 81.10  | 88.50  | 95.90  | 103.–         |                                                        |                                                       |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                          | H07                                                                          |            | 55.60 | 55.60 | 66.30 | 66.30   | 81.10  | 81.10  | 95.90  | 95.90         |                                                        |                                                       |
| IP66 degree of protection                                                                                                                                                                                                                                                                   | H19                                                                          |            | 310.– | 310.– | 310.– | 310.–   | 310.–  | 310.–  | 310.–  | 462.–         |                                                        |                                                       |
| IP65 degree of protection <sup>4)</sup>                                                                                                                                                                                                                                                     | H20                                                                          |            | 147.– | 147.– | 147.– | 147.–   | 147.–  | 147.–  | 147.–  | 220.–         | Only for:                                              | 1MB103. – Ex ec (zone 2)                              |
| IP56 degree of protection <sup>5)</sup>                                                                                                                                                                                                                                                     | H22                                                                          |            | 163.– | 163.– | 163.– | 163.–   | 163.–  | 163.–  | 163.–  | 242.–         | Only for:                                              | 1MB103. – Ex ec (zone 2)                              |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar <sup>3)</sup>                                                                                                                                                                                                               | H23                                                                          |            | 41.20 | 44.90 | 47.40 | 50.70   | 56.40  | 61.70  | 75.30  | 110.–         |                                                        |                                                       |
| Coolant temperature and installation altitude                                                                                                                                                                                                                                               |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Coolant temperature –40 °C to +40 °C <sup>20)</sup>                                                                                                                                                                                                                                         | D03                                                                          |            | 259.– | 325.– | 390.– | 456.–   | 585.–  | 715.–  | 909.–  | 1300.–        |                                                        |                                                       |
| Designs in accordance with standards and specifications                                                                                                                                                                                                                                     |                                                                              |            |       |       |       |         |        |        |        |               |                                                        |                                                       |
| Ex certification for China                                                                                                                                                                                                                                                                  | D32                                                                          |            | –     | –     | 217.– | 217.–   | 217.–  | 217.–  | 217.–  | 228.–         |                                                        |                                                       |
| China Energy Efficiency Label                                                                                                                                                                                                                                                               | D34                                                                          |            | –     | –     | ○     | ○       | ○      | ○      | ○      | ○             |                                                        |                                                       |

For legends and footnotes, see Page 4/72.

## Standard delivery times in working days:

**20**On  
request**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

## Options · Aluminum series 1MB10

| Special versions                                                                                                                     | Additional identification code -Z with order code and plain text if required | Frame size |        |        |        |         |        |        |        | Motor version |                                                         |     |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|--------|--------|--------|---------|--------|--------|--------|---------------|---------------------------------------------------------|-----|
|                                                                                                                                      |                                                                              | 63         | 71     | 80     | 90     | 100     | 112    | 132    | 160    | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2)  | IE3 |
|                                                                                                                                      |                                                                              | 1MB10.3    |        |        |        |         |        |        |        |               |                                                         | IE2 |
|                                                                                                                                      |                                                                              | 1MB10.1    |        |        |        | 1MB10.2 |        |        |        |               |                                                         | IE1 |
| 1MB10...-Z                                                                                                                           | Order code                                                                   |            |        |        |        |         |        |        |        |               |                                                         |     |
| Designs in accordance with standards and specifications (continued)                                                                  |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Ex certificate EAC for the Eurasian customs union <sup>18)</sup>                                                                     | D35                                                                          | –          | –      | –      | –      | 217.–   | 217.–  | 217.–  | 228.–  |               |                                                         |     |
| IECEX certification                                                                                                                  | D37                                                                          | –          | –      | 162.–  | 162.–  | –       | –      | –      | –      | Only for:     | 1MB101. – Ex tb (zone 21)                               |     |
|                                                                                                                                      |                                                                              | –          | –      | 162.–  | 162.–  | 217.–   | 217.–  | 217.–  | 228.–  | Only for:     | 1MB102. – Ex tc (zone 22)<br>1MB103. – Ex ec (zone 2)   |     |
| MEPS Australia                                                                                                                       | D70                                                                          | –          | –      | 607.–  | 628.–  | 651.–   | 679.–  | 728.–  | 803.–  | Only for:     | 1MB1013, 1MB1023, 1MB1033                               |     |
| Bearings and lubrication                                                                                                             |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Located bearing DE                                                                                                                   | L20                                                                          | 39.–       | 39.–   | 39.–   | 41.40  | 71.40   | 84.60  | 104.–  | 142.–  |               |                                                         |     |
| Located bearing NDE                                                                                                                  | L21                                                                          | 39.–       | 39.–   | 39.–   | 41.40  | 43.30   | 45.60  | 48.30  | □      |               |                                                         |     |
| Bearing design for increased cantilever forces <sup>19)</sup>                                                                        | L22                                                                          | –          | –      | –      | –      | 98.80   | 115.–  | 130.–  | 172.–  |               |                                                         |     |
| Regreasing device                                                                                                                    | L23                                                                          | –          | –      | –      | –      | 311.–   | 319.–  | 329.–  | 356.–  |               |                                                         |     |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                                     | L25                                                                          | –          | –      | –      | –      | 199.–   | 232.–  | 260.–  | 346.–  |               |                                                         |     |
| Bearing insulation NDE                                                                                                               | L51                                                                          | –          | –      | –      | –      | 530.–   | 550.–  | 1230.– | 1270.– |               |                                                         |     |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                                              | Q01                                                                          | –          | –      | –      | –      | 252.–   | 282.–  | 311.–  | 343.–  |               |                                                         |     |
| Balance and vibration quantity                                                                                                       |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Vibration quantity level A                                                                                                           |                                                                              | □          | □      | □      | □      | □       | □      | □      | □      |               |                                                         |     |
| Vibration quantity level B <sup>19)</sup>                                                                                            | L00                                                                          | 227.–      | 237.–  | 250.–  | 265.–  | 278.–   | 321.–  | 411.–  | 509.–  |               |                                                         |     |
| Half-key balancing                                                                                                                   |                                                                              | □          | □      | □      | □      | □       | □      | □      | □      |               |                                                         |     |
| Balancing without key                                                                                                                | L01                                                                          | 21.40      | 21.40  | 21.40  | 21.40  | 27.80   | 27.80  | 32.90  | 32.90  |               |                                                         |     |
| Full-key balancing                                                                                                                   | L02                                                                          | 94.20      | 94.20  | 94.20  | 109.–  | 109.–   | 109.–  | 126.–  | 126.–  |               |                                                         |     |
| Shaft and rotor                                                                                                                      |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Shaft extension with standard dimensions, without feather keyway                                                                     | L04                                                                          | –          | –      | –      | –      | 515.–   | 542.–  | 569.–  | 598.–  |               |                                                         |     |
| Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347                                        | L05                                                                          | 83.20      | 83.20  | 95.90  | 95.90  | 140.–   | 140.–  | 185.–  | 213.–  |               |                                                         |     |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                 | L06                                                                          | 803.–      | 803.–  | 822.–  | 822.–  | 943.–   | 943.–  | 1090.– | 1360.– |               |                                                         |     |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                            | L07                                                                          | 239.–      | 239.–  | 239.–  | 239.–  | 263.–   | 263.–  | 400.–  | 400.–  |               |                                                         |     |
| Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                          | 118.–      | 148.–  | 176.–  | 207.–  | 236.–   | 265.–  | 296.–  | 367.–  |               |                                                         |     |
| Non-standard cylindrical shaft extension DE <sup>7)</sup>                                                                            | Y58 • and customer specifications                                            | 391.–      | 430.–  | 459.–  | 486.–  | 515.–   | 542.–  | 569.–  | 598.–  |               |                                                         |     |
| Non-standard cylindrical shaft extension NDE <sup>7)</sup>                                                                           | Y59 • and customer specifications                                            | 391.–      | 430.–  | 459.–  | 486.–  | 515.–   | 542.–  | 569.–  | 598.–  |               |                                                         |     |
| Heating and ventilation                                                                                                              |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Metal external fan <sup>8)</sup>                                                                                                     | F76                                                                          | 147.–      | 147.–  | □      | □      | –       | –      | –      | –      | Only for:     | 1MB103. – Ex ec (zone 2)                                |     |
|                                                                                                                                      |                                                                              | –          | –      | □      | □      | 185.–   | 220.–  | 256.–  | 296.–  | Only for:     | 1MB101. – Ex tb (zone 21),<br>1MB102. – Ex tc (zone 22) |     |
| Anti-condensation heating for 230 V <sup>9)</sup>                                                                                    | Q02                                                                          | 1020.–     | 1020.– | 1020.– | 1020.– | 1020.–  | 1030.– | 1080.– | 1130.– |               |                                                         |     |
| Anti-condensation heating for 115 V <sup>9)</sup>                                                                                    | Q03                                                                          | 1020.–     | 1020.– | 1020.– | 1020.– | 1020.–  | 1030.– | 1080.– | 1130.– |               |                                                         |     |
| Rating plate and extra rating plates                                                                                                 |                                                                              |            |        |        |        |         |        |        |        |               |                                                         |     |
| Second rating plate, loose                                                                                                           | M10                                                                          | 20.70      | 20.70  | 20.70  | 20.70  | 20.70   | 20.70  | 20.70  | 20.70  |               |                                                         |     |
| Rating plate, stainless steel                                                                                                        | M11                                                                          | 41.40      | 41.40  | 41.40  | 41.40  | 41.40   | 41.40  | 41.40  | 41.40  |               |                                                         |     |
| Extra rating plate with deviating rating plate data                                                                                  | Y80 • and customer specifications                                            | 72.10      | 72.10  | 72.10  | 72.10  | 103.–   | 103.–  | 103.–  | 103.–  |               |                                                         |     |
| Extra rating plate with identification codes                                                                                         | Y82 • and customer specifications                                            | 40.70      | 40.70  | 40.70  | 40.70  | 40.70   | 40.70  | 40.70  | 40.70  |               |                                                         |     |

For legends and footnotes, see Page 4/72.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**20****On  
request****Options · Aluminum series 1MB10**

| Special versions                                                                                                  | Additional identification code -Z with order code and plain text if required | Frame size     |        |                |        |                |        |        |        | Motor version |                                                        |                   |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------|--------|----------------|--------|----------------|--------|--------|--------|---------------|--------------------------------------------------------|-------------------|
|                                                                                                                   |                                                                              | 63             | 71     | 80             | 90     | 100            | 112    | 132    | 160    | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br>IE2<br>IE1 |
|                                                                                                                   |                                                                              |                |        | <b>1MB10.3</b> |        |                |        |        |        |               |                                                        |                   |
|                                                                                                                   |                                                                              | <b>1MB10.1</b> |        |                |        |                |        |        |        |               |                                                        |                   |
|                                                                                                                   |                                                                              |                |        |                |        | <b>1MB10.2</b> |        |        |        |               |                                                        |                   |
| <b>1MB10...-Z</b>                                                                                                 | Order code                                                                   |                |        |                |        |                |        |        |        |               |                                                        |                   |
| <b>Rating plate and extra rating plates (continued)</b>                                                           |                                                                              |                |        |                |        |                |        |        |        |               |                                                        |                   |
| Additional information on rating plate and on package label (max. 20 characters)                                  | <b>Y84</b> • and customer specifications                                     | 40.70          | 40.70  | 40.70          | 40.70  | 40.70          | 40.70  | 40.70  | 40.70  |               |                                                        |                   |
| <b>Packaging, safety notes, documentation and test certificates</b>                                               |                                                                              |                |        |                |        |                |        |        |        |               |                                                        |                   |
| Printed Operating Instructions (compact) for explosion-proof motors enclosed in English and German <sup>11)</sup> |                                                                              | □              | □      | □              | □      | □              | □      | □      | □      |               |                                                        |                   |
| Acceptance test certificate 3.1 according to EN 10204 <sup>10)</sup>                                              | <b>B02</b>                                                                   | 28.10          | 28.10  | 28.10          | 28.10  | 28.10          | 28.10  | 28.10  | 28.10  |               |                                                        |                   |
| Document – Electrical datasheet                                                                                   | <b>B60</b>                                                                   | 309.–          | 309.–  | 309.–          | 309.–  | 309.–          | 309.–  | 309.–  | 309.–  |               |                                                        |                   |
| Document – Order dimensional drawing                                                                              | <b>B61</b>                                                                   | 309.–          | 309.–  | 309.–          | 309.–  | 309.–          | 309.–  | 309.–  | 309.–  |               |                                                        |                   |
| Type test with heat run for horizontal motors, with acceptance                                                    | <b>B83</b>                                                                   | 4100.–         | 4100.– | 5620.–         | 6390.– | 7150.–         | 7910.– | 8670.– | 9430.– |               |                                                        |                   |
| Documentation package "Basic"                                                                                     | <b>B90</b>                                                                   | 597.–          | 597.–  | 597.–          | 597.–  | 597.–          | 597.–  | 597.–  | 597.–  |               |                                                        |                   |
| Documentation package "Advanced"                                                                                  | <b>B91</b>                                                                   | 906.–          | 906.–  | 906.–          | 906.–  | 906.–          | 906.–  | 906.–  | 906.–  |               |                                                        |                   |
| Documentation package "Projects"                                                                                  | <b>B92</b>                                                                   | 2470.–         | 2470.– | 2470.–         | 2470.– | 2470.–         | 2470.– | 2470.– | 2470.– |               |                                                        |                   |
| Wire-lattice pallet packaging                                                                                     | <b>B99</b>                                                                   | ○              | ○      | ○              | ○      | ○              | ○      | ○      | ○      |               |                                                        |                   |
| Connected in star for dispatch                                                                                    | <b>M01</b>                                                                   | 23.50          | 23.50  | 23.50          | 23.50  | 28.30          | 28.30  | 28.30  | 28.30  |               |                                                        |                   |
| Connected in delta for dispatch                                                                                   | <b>M02</b>                                                                   | 23.50          | 23.50  | 23.50          | 23.50  | 28.30          | 28.30  | 28.30  | 28.30  |               |                                                        |                   |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible

<sup>1)</sup> Please inquire regarding combination with order codes **D03** and **C02**. Not possible in combination with order codes **H20** and **H22**.

<sup>2)</sup> There is no derating in combination with the order codes **M2A, M2B, M2C, M2D, M2E, M2F, M2G, M2H**.

<sup>3)</sup> Not possible for type of construction IM V3.

<sup>4)</sup> For zone 21, IP65 degree of protection is standard. Not possible for zone 22, because only IP55 degree of protection is required.

<sup>5)</sup> Not admissible for zone 21 (IP65 degree of protection) and zone 22 (IP55 degree of protection).

<sup>6)</sup> Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.

<sup>7)</sup> When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case.

For order codes **Y58, Y59** and **L05**:

– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")

– Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension

For explanation of the order codes, see Catalog D 81.1 Section 1 "Introduction".

<sup>8)</sup> The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.

<sup>9)</sup> Order codes **Q02** and **Q03** are not possible for frame sizes 100 to 160 in combination with 15th position of the Article No. "H". It can only be supplied with a star or delta winding for direct switch-on (3 terminals).

<sup>10)</sup> The delivery time for the acceptance test certificate may differ from the delivery time for the motor.

<sup>11)</sup> The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>

<sup>12)</sup> Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.

<sup>13)</sup> A minimum cantilever force  $F_{\min}$  of  $0.5 \cdot F_{\max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.

<sup>14)</sup> The Ex motor is not permitted if a potentially explosive gas and dust atmosphere occurs (hybrid). No standard exists until now which describes the product requirements for a hybrid mixture.

<sup>15)</sup> In combination with order code **B40** and **B41**, "B" or "C" must be added to the 15th position of the Article No. For compliance with the admissible temperature class 130 (B), derating is necessary in the case of converter operation in zones 2, 21 and 22! The operating data for SIEMENS SINAMICS converters are on the rating plate - the torque moment is reduced, compared to the line operation. The operating data of the motor at converter operation are available in the selection and ordering tool Drive Technology Configurator.

For converter operation, voltage codes/order codes are only admissible with one voltage only. The frequency converter for motors of category 1 (zone 21) needs a certified tripping unit for use in hazardous areas. For motors of category 3 (zone 2 and 22) a certified tripping unit is recommended. Alternatively, an external tripping unit can be used (see Catalog IC 10).

<sup>16)</sup> It can be combined with **N30, N31, L51** and **F70** on request. Not possible in combination with order code **L05**. Combination with protective cover is standard for frame sizes 100 to 200. Protective cover not possible for frame sizes 225 to 315.

<sup>17)</sup> Please inquire regarding combinations with order codes **N05, N06, N07, N08, N30, N31, D03, G30, C02, H20** and **H22**. Not permissible with order code **L05**. The type of protection of the separately driven fan must be selected to comply with that of the motor.

<sup>18)</sup> Not possible in combination with converter operation.

<sup>19)</sup> Vibration quantity level B is not admitted in combination with converter operation (order code **B40/B41**).

<sup>20)</sup> Not possible in combination with order codes **Q02** or **Q03**.

<sup>21)</sup> Not possible in vertical version with shaft extension DE downwards.

<sup>22)</sup> Permissible paint film thickness up to 2 mm.

<sup>23)</sup> Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.

<sup>24)</sup> For Zone 22 the larger terminal box is standard only for motors with motor protection or anti-condensation heating. For Zone 2 the special large terminal box is standard.

Standard delivery times in working days:

20

30

On  
request**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Options · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

**Selection and ordering data**

| Special versions                                                                                                                                                                                                                                                                                                                                                                                                             | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |       |       |       |       |       |       |       |        |        |        |        |        |        | Motor version                                                     |            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------------------------------------------------------------------|------------|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     | 71                       | 80    | 90    | 100   | 112   | 132   | 160   | 180   | 200    | 225    | 250    | 280    | 315    | IEC    | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2)            | IE3<br>IE2 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     | 1MB15.3 Basic Line       |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     | 1MB16.3 Performance Line |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     | 1MB15.1 Basic Line       |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| 1MB16.1 Performance Line                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                     |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| 1MB15 .....-Z<br>1MB16 .....-Z                                                                                                                                                                                                                                                                                                                                                                                               | Order code                                                                          |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| Explosion-proof version                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| Design additional for dust Ex tc – zone 22 <sup>1) 16)</sup>                                                                                                                                                                                                                                                                                                                                                                 | <b>B30</b>                                                                          |                          | 69.10 | 78.80 | 94.30 | 107.– | 126.– | 188.– | 274.– | 487.–  | 597.–  | 671.–  | 706.–  | 747.–  | 788.–  | Only for: 1MB1.3. – Ex ec (zone 2)                                |            |  |
| Design IIC with marking IIB <sup>23)</sup>                                                                                                                                                                                                                                                                                                                                                                                   | <b>B31</b>                                                                          |                          | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | Only for: 1MB1.3. – Ex ec (zone 2)                                |            |  |
| VIK version                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>C02</b><br>(1MB153. and 1MB163. with Ex ec marking)                              |                          | 39.80 | 39.80 | 39.80 | 86.50 | 88.60 | 105.– | 105.– | 181.–  | 190.–  | 214.–  | 327.–  | 563.–  | 874.–  | Only for: 1MB1.3. – Ex ec (zone 2)                                |            |  |
| Design for converter data                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                     |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| Design for converter operation in basic version with operating data SINAMICS G120 with PM240-2. <sup>17) 20) 21) 22)</sup>                                                                                                                                                                                                                                                                                                   | <b>B40</b>                                                                          |                          | 92.70 | 103.– | 113.– | 134.– | 155.– | 175.– | 206.– | 237.–  | 268.–  | 309.–  | 361.–  | 2330.– | 2470.– |                                                                   |            |  |
| Design for converter operation in basic version with operating data SINAMICS S150. <sup>17) 20) 21)</sup>                                                                                                                                                                                                                                                                                                                    | <b>B41</b>                                                                          |                          | 92.70 | 103.– | 113.– | 134.– | 155.– | 175.– | 206.– | 237.–  | 268.–  | 309.–  | 361.–  | 2330.– | 2470.– |                                                                   |            |  |
| Version for converter operation with power data on the PWM converter                                                                                                                                                                                                                                                                                                                                                         | <b>B43</b>                                                                          |                          | 92.70 | 103.– | 113.– | 134.– | 155.– | 175.– | 206.– | 237.–  | 268.–  | 309.–  | 361.–  | 2330.– | 2470.– |                                                                   |            |  |
| Operating data as order code <b>B40</b> with alternative SINAMICS converter on the rating plate <sup>20)</sup><br>• G120 with PM230<br>• G120 with PM240<br>• G120C<br>• G120P with PM230<br>• G120P with PM240-2<br>• G120P with PM330<br>• G130, G150, G180<br>• S120 (BLM/SLM)<br>• V20<br>Operating data as order code <b>B41</b> with alternative SINAMICS converter on the rating plate <sup>20)</sup><br>• S120 (ALM) | <b>Y68 •</b><br>and converter type                                                  |                          | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      |                                                                   |            |  |
| Motor protection                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| 1 Pt1000 resistance thermometer (2 terminals)                                                                                                                                                                                                                                                                                                                                                                                | <b>Q35</b>                                                                          |                          | –     | –     | –     | 210.– | 210.– | 289.– | 289.– | 466.–  | 466.–  | 609.–  | 744.–  | 744.–  | 868.–  |                                                                   |            |  |
| 2 Pt1000 resistance thermometers (4 terminals)                                                                                                                                                                                                                                                                                                                                                                               | <b>Q36</b>                                                                          |                          | –     | –     | –     | 329.– | 329.– | 466.– | 466.– | 673.–  | 673.–  | 895.–  | 1150.– | 1150.– | 1470.– |                                                                   |            |  |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>2) 3)</sup>                                                                                                                                                                                                                                                                                                                                   | <b>Q72</b>                                                                          |                          | –     | –     | –     | –     | –     | –     | –     | 4220.– | 4220.– | 4220.– | 4220.– | 4220.– | 4220.– |                                                                   |            |  |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals) <sup>2) 3)</sup>                                                                                                                                                                                                                                                                                                                                  | <b>Q78</b>                                                                          |                          | –     | –     | –     | –     | –     | –     | –     | 4640.– | 4640.– | 4640.– | 4640.– | 4640.– | 4640.– |                                                                   |            |  |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) <sup>2) 3)</sup>                                                                                                                                                                                                                                                                                                                          | <b>Q79</b>                                                                          |                          | –     | –     | –     | –     | –     | –     | –     | –      | –      | –      | –      | 5560.– | 5560.– |                                                                   |            |  |
| Motor connection and terminal box                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |                          |       |       |       |       |       |       |       |        |        |        |        |        |        |                                                                   |            |  |
| External grounding                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                     |                          | □     | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      |                                                                   |            |  |
| Rotation of the terminal box through 90°, entry from DE                                                                                                                                                                                                                                                                                                                                                                      | <b>R10</b>                                                                          |                          | ○     | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                                                                   |            |  |
| Rotation of the terminal box through 90°, entry from NDE                                                                                                                                                                                                                                                                                                                                                                     | <b>R11</b>                                                                          |                          | ○     | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                                                                   |            |  |
| Rotation of the terminal box through 180°                                                                                                                                                                                                                                                                                                                                                                                    | <b>R12</b>                                                                          |                          | ○     | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                                                                   |            |  |
| Stud terminals for cable connection, accessories pack (3 items)                                                                                                                                                                                                                                                                                                                                                              | <b>R17</b>                                                                          |                          | –     | –     | –     | –     | –     | –     | –     | –      | –      | –      | 147.–  | 147.–  | 185.–  | Only for: 1MB1.1. – Ex tb (zone 21),<br>1MB1.2. – Ex tc (zone 22) |            |  |

For legends and footnotes, see Page 4/77.

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|----|----|------------|
| 20 | 30 | On request |
|----|----|------------|

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Options · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |        |        |        |        |        |        |        |        |        |        |        |        | Motor version                                                           |                |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------------------------------------------------------------|----------------|--|
|                                                                                                                                                                                                                                                                                             |                                                                                     | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC    | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2)                  | IE3<br><br>IE2 |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1MB15.3 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1MB16.3 Performance Line |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     | 1MB15.1 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| 1MB16.1 Performance Line                                                                                                                                                                                                                                                                    |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| 1MB15.....-Z                                                                                                                                                                                                                                                                                | Order code                                                                          |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| 1MB16.....-Z                                                                                                                                                                                                                                                                                |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| Motor connection and terminal box (continued)                                                                                                                                                                                                                                               |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| Metal cable gland, maximum configuration                                                                                                                                                                                                                                                    | R18                                                                                 |                          | 127.–  | 127.–  | 127.–  | 231.–  | 231.–  | 231.–  | 284.–  | 284.–  | 315.–  | 315.–  | 433.–  | 433.–  | 433.–  |                                                                         |                |  |
| Saddle terminals for connection without cable lug, accessories pack (6 items)                                                                                                                                                                                                               | R19                                                                                 |                          | –      | –      | –      | –      | –      | –      | –      | –      | –      | –      | 721.–  | 721.–  | 721.–  | Only for: 1MB1.1. –<br>Ex tb (zone 21),<br>1MB1.2. –<br>Ex tc (zone 22) |                |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |                          | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB1.3. –<br>Ex ec (zone 2)                                   |                |  |
| Larger terminal box <sup>15)</sup>                                                                                                                                                                                                                                                          | R50                                                                                 |                          | 48.50  | 101.–  | 101.–  | 210.–  | 210.–  | 269.–  | 307.–  | 466.–  | 513.–  | 1630.– | 1860.– | 1860.– | 2190.– |                                                                         |                |  |
| Cast-iron auxiliary terminal box (small)                                                                                                                                                                                                                                                    | R62                                                                                 |                          | –      | –      | –      | –      | –      | –      | –      | 278.–  | 278.–  | 278.–  | 278.–  | 278.–  | 278.–  |                                                                         |                |  |
| Windings and insulation                                                                                                                                                                                                                                                                     |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % <sup>4)</sup>                                                                                                                                                                          | N05                                                                                 |                          | 41.20  | 41.20  | 41.20  | 47.40  | 47.40  | 63.–   | 63.–   | 80.30  | 80.30  | 91.30  | 91.30  | 107.–  | 107.–  |                                                                         |                |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % <sup>4)</sup>                                                                                                                                                                          | N06                                                                                 |                          | 41.20  | 41.20  | 41.20  | 47.40  | 47.40  | 63.–   | 63.–   | 80.30  | 80.30  | 91.30  | 91.30  | 107.–  | 107.–  |                                                                         |                |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % <sup>4)</sup>                                                                                                                                                                         | N07                                                                                 |                          | 64.40  | 72.90  | 85.80  | 106.–  | 129.–  | 164.–  | 204.–  | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  |                                                                         |                |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %                                                                                                                                                                                       | N08                                                                                 |                          | 64.40  | 72.90  | 85.80  | 106.–  | 129.–  | 164.–  | 204.–  | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  |                                                                         |                |  |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                                                                                                                                                                                                      | N30                                                                                 |                          | 134.–  | 134.–  | 134.–  | 134.–  | 134.–  | 134.–  | 206.–  | 299.–  | 412.–  | 639.–  | 855.–  | 1080.– | 1320.– |                                                                         |                |  |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                                                                                                                                                                                                     | N31                                                                                 |                          | 196.–  | 216.–  | 216.–  | 216.–  | 247.–  | 278.–  | 391.–  | 505.–  | 649.–  | 917.–  | 1180.– | 1490.– | 1780.– |                                                                         |                |  |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude                                                                                                                                                                           | Y50 • and spec. power, CT... °C or IA .... m above sea level                        |                          | 159.–  | 159.–  | 159.–  | 159.–  | 192.–  | 247.–  | 304.–  | 393.–  | 483.–  | 711.–  | 894    | 1140.– | 1480.– |                                                                         |                |  |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                         |                |  |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                                     |                          | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB15..                                                       |                |  |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                                 |                          | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      |                                                                         |                |  |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                                 |                          | 20.50  | 20.50  | 27.30  | 27.30  | 27.30  | 43.50  | 43.50  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70  |                                                                         |                |  |
| Special finish C3                                                                                                                                                                                                                                                                           | S02                                                                                 |                          | 36.10  | 36.10  | 36.10  | 61.80  | 82.40  | 82.40  | 82.40  | 113.–  | 124.–  | 185.–  | 227.–  | 268.–  | 299.–  | Only for: 1MB15..                                                       |                |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |                          | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB16..                                                       |                |  |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | S03                                                                                 |                          | 494.–  | 494.–  | 494.–  | 525.–  | 525.–  | 577.–  | 577.–  | 618.–  | 659.–  | 700.–  | 742.–  | 783.–  | 814.–  |                                                                         |                |  |
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | S04                                                                                 |                          | 2010.– | 2010.– | 2010.– | 2110.– | 2220.– | 2340.– | 2460.– | 2590.– | 2720.– | 3140.– | 4090.– | 5120.– | 7910.– |                                                                         |                |  |
| Top coat polyurethane <sup>12)</sup>                                                                                                                                                                                                                                                        | S06                                                                                 |                          | 30.90  | 30.90  | 50.50  | 72.10  | 98.90  | 147.–  | 206.–  | 247.–  | 303.–  | 389.–  | 485.–  | 613.–  | 779.–  | Only for: 1MB1.3. –<br>Ex ec (zone 2)                                   |                |  |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and finish RAL .....                                                          |                          | 25.80  | 25.80  | 25.80  | 41.20  | 41.20  | 56.70  | 56.70  | 82.40  | 113.–  | 124.–  | 155.–  | 185.–  | 258.–  | Only for: 1MB15..                                                       |                |  |

For legends and footnotes, see Page 4/77.

## Standard delivery times in working days:

20

30

On  
request

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Options · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

| Special versions                                                                                                                   | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |       |       |       |        |        |        |        |        |        |        |        |        | Motor version     |                                                        |                |
|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------|--------------------------------------------------------|----------------|
|                                                                                                                                    |                                                                                     | 71                       | 80    | 90    | 100   | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC               | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE3<br><br>IE2 |
|                                                                                                                                    |                                                                                     | 1MB15.3 Basic Line       |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
|                                                                                                                                    |                                                                                     | 1MB16.3 Performance Line |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
|                                                                                                                                    |                                                                                     | 1MB15.1 Basic Line       |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| 1MB16.1 Performance Line                                                                                                           |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| 1MB15 .....-Z<br>1MB16 .....-Z                                                                                                     | Order code                                                                          |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Colors and paint finish (continued)                                                                                                |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction") | Y56 • and finish RAL .....                                                          |                          | 608.– | 608.– | 608.– | 649.–  | 649.–  | 680.–  | 680.–  | 690.–  | 700.–  | 711.–  | 721.–  | 731.–  | 742.–             |                                                        |                |
| Modular technology – Basic version                                                                                                 |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Mounting of separately driven fan <sup>19)</sup>                                                                                   | F70                                                                                 |                          | –     | –     | –     | –      | –      | –      | –      | –      | –      | 2780.– | 3300.– | 3910.– | 4640.–            | Only for: 1MB1.1. – Ex tb (zone 21)                    |                |
|                                                                                                                                    |                                                                                     |                          | –     | –     | –     | 1030.– | 1240.– | 1440.– | 1750.– | 2060.– | 2370.– | 2780.– | 3300.– | 3910.– | 4640.–            | Only for: 1MB1.2. – Ex tc (zone 22)                    |                |
|                                                                                                                                    |                                                                                     |                          | –     | –     | –     | 1030.– | 1240.– | 1440.– | 1750.– | 2060.– | 2370.– | 2780.– | 3300.– | 3910.– | 4640.–            | Only for: 1MB1.3. – Ex ec (zone 2)                     |                |
| Special technology                                                                                                                 |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Mounting of explosion-proof rotary pulse encoder LL 841 (HTL); 1024 l <sup>18)</sup>                                               | G30                                                                                 |                          | –     | –     | –     | 8030.– | 8030.– | 8030.– | 8030.– | 8030.– | 8030.– | 9170.– | 9170.– | 9170.– | 9170.–            |                                                        |                |
| Mechanical design and degrees of protection                                                                                        |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                           | F77                                                                                 |                          | –     | –     | –     | –      | –      | 613.–  | 870.–  | 1130.– | 1390.– | 1640.– | 1900.– | 2160.– | 2420.–            |                                                        |                |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                   | F78                                                                                 |                          | –     | –     | –     | –      | –      | 613.–  | 870.–  | 1130.– | 1390.– | 1640.– | 1900.– | 2160.– | 2420.–            |                                                        |                |
| Mechanical protection for encoders                                                                                                 | G43                                                                                 |                          | –     | –     | –     | □      | □      | □      | □      | □      | □      | 208.–  | 208.–  | 208.–  | 208.–             |                                                        |                |
| Protective cover                                                                                                                   | H00                                                                                 |                          | 55.60 | 55.60 | 55.60 | 80.80  | 80.80  | 141.–  | 141.–  | 188.–  | 283.–  | 375.–  | 469.–  | 562.–  | 751.–             |                                                        |                |
| Screwed-on (instead of cast) feet                                                                                                  | H01                                                                                 |                          | –     | –     | –     | 104.–  | 113.–  | 123.–  | 132.–  | 371.–  | 437.–  | 517.–  | 768.–  | 863.–  | 993.–             |                                                        |                |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 <sup>27)</sup>                          | H02                                                                                 |                          | 127.– | 145.– | 165.– | 185.–  | 205.–  | 222.–  | 258.–  | 309.–  | 371.–  | 433.–  | 515.–  | 597.–  | 680.–             |                                                        |                |
| Condensation drainage holes <sup>7)</sup>                                                                                          | H03                                                                                 |                          | 62.–  | 64.40 | 71.80 | □      | □      | □      | □      | □      | □      | □      | □      | □      | □                 |                                                        |                |
| Rust-resistant screws (externally)                                                                                                 | H07                                                                                 |                          | 65.90 | 67.–  | 67.–  | 81.10  | 81.10  | 95.90  | 95.90  | 110.–  | 125.–  | 167.–  | 199.–  | 207.–  | 275.–             |                                                        |                |
| IP66 degree of protection                                                                                                          | H19                                                                                 |                          | 310.– | 310.– | 310.– | 310.–  | 310.–  | 310.–  | 462.–  | 618.–  | 772.–  | 930.–  | 1090.– | 1240.– | 1390.–            |                                                        |                |
| IP65 degree of protection <sup>5)</sup>                                                                                            | H20                                                                                 |                          | 147.– | 147.– | 147.– | 147.–  | 147.–  | 147.–  | 220.–  | 296.–  | 367.–  | 443.–  | 517.–  | 589.–  | 663.–             |                                                        |                |
| IP56 degree of protection <sup>6)</sup>                                                                                            | H22                                                                                 |                          | 163.– | 163.– | 163.– | 163.–  | 163.–  | 163.–  | 242.–  | 322.–  | 405.–  | 487.–  | 568.–  | 650.–  | 728.–             |                                                        |                |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar<br>Not possible for type of construction IM V3.                    | H23                                                                                 |                          | 44.90 | 47.40 | 50.70 | 56.40  | 61.70  | 75.30  | 110.–  | 142.–  | 176.–  | 234.–  | 311.–  | 390.–  | 469.–             |                                                        |                |
| Coolant temperature and installation altitude                                                                                      |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Coolant temperature –40 °C to +40 °C <sup>26)</sup>                                                                                | D03                                                                                 |                          | 325.– | 390.– | 456.– | 585.–  | 715.–  | 909.–  | 1300.– | 1570.– | 1820.– | 2200.– | 2730.– | 3640.– | 4810.–            |                                                        |                |
| Designs in accordance with standards and specifications                                                                            |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Ex certification for China                                                                                                         | D32                                                                                 |                          | 217.– | 217.– | 217.– | 217.–  | 217.–  | 217.–  | 228.–  | 228.–  | 332.–  | 332.–  | 439.–  | 643.–  | 764.–             | Only for: 1MB15..                                      |                |
|                                                                                                                                    |                                                                                     | –                        | –     | –     | 217.– | 217.–  | 217.–  | 228.–  | 228.–  | 332.–  | 332.–  | 439.–  | 643.–  | 764.–  | Only for: 1MB16.. |                                                        |                |
| China Energy Efficiency Label                                                                                                      | D34                                                                                 |                          | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○                 | Only for: 1MB15..                                      |                |
|                                                                                                                                    |                                                                                     | –                        | –     | –     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | Only for: 1MB16.. |                                                        |                |
| Ex certificate EAC for the Eurasian customs union <sup>13)</sup>                                                                   | D35                                                                                 |                          | –     | –     | –     | 217.–  | 217.–  | 217.–  | 228.–  | 228.–  | 332.–  | 332.–  | 439.–  | 643.–  | 764.–             |                                                        |                |
| IECEx certification                                                                                                                | D37                                                                                 |                          | 217.– | 217.– | 217.– | 217.–  | 217.–  | 217.–  | 228.–  | 228.–  | 332.–  | 332.–  | 439.–  | 643.–  | 764.–             |                                                        |                |
| MEPS Australia                                                                                                                     | D70                                                                                 |                          | –     | 692.– | 692.– | 962.–  | 692.–  | 692.–  | 713.–  | 713.–  | 921.–  | 921.–  | 1130.– | 1550.– | 1380.–            | Only for: 1MB15.3, 1MB16.3                             |                |
| Bearings and lubrication                                                                                                           |                                                                                     |                          |       |       |       |        |        |        |        |        |        |        |        |        |                   |                                                        |                |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                              | L19                                                                                 |                          | –     | –     | –     | –      | –      | –      | –      | 375.–  | 422.–  | 469.–  | 562.–  | ○      | ○                 |                                                        |                |
| Located bearing DE                                                                                                                 | L20                                                                                 |                          | 39.–  | 39.–  | 41.40 | 71.40  | 84.60  | 104.–  | 142.–  | 300.–  | 416.–  | 585.–  | 753.–  | 974.–  | 1050.–            |                                                        |                |
| Located bearing NDE                                                                                                                | L21                                                                                 |                          | 39.–  | 39.–  | 41.40 | 43.30  | 45.60  | 48.30  | □      | □      | □      | □      | □      | □      | □                 |                                                        |                |
| Bearing design for increased cantilever forces <sup>14)</sup>                                                                      | L22                                                                                 |                          | 72.10 | 79.30 | 87.60 | 98.80  | 115.–  | 130.–  | 172.–  | 273.–  | 316.–  | 356.–  | 412.–  | 461.–  | 515.–             |                                                        |                |
| Regreasing device                                                                                                                  | L23                                                                                 |                          | –     | –     | –     | 311.–  | 319.–  | 329.–  | 356.–  | 375.–  | 422.–  | 469.–  | 562.–  | □      | □                 | Only for: 1MB15..                                      |                |
|                                                                                                                                    |                                                                                     | –                        | –     | –     | 311.– | 319.–  | 329.–  | □      | □      | □      | □      | □      | □      | □      | □                 | Only for: 1MB16..                                      |                |

For legends and footnotes, see Page 4/77.

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On  
request**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Options · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line**

| Special versions                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |        |        |        |        |        |        |        |        |        |        |        |        | Motor version                                                   |                |  |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------------------------------------------------|----------------|--|
|                                                                                                                                |                                                                                     | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC    | Ex tb<br>(zone 21),<br>Ex tc<br>(zone 22),<br>Ex ec<br>(zone 2) | IE3<br><br>IE2 |  |
|                                                                                                                                |                                                                                     | 1MB15.3 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
|                                                                                                                                |                                                                                     | 1MB16.3 Performance Line |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
|                                                                                                                                |                                                                                     | 1MB15.1 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| 1MB16.1 Performance Line                                                                                                       |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| 1MB15 .....-Z                                                                                                                  | Order code                                                                          |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| 1MB16 .....-Z                                                                                                                  |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Bearings and lubrication (continued)                                                                                           |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                               | L25                                                                                 |                          | 134.–  | 165.–  | 199.–  | 199.–  | 232.–  | 260.–  | 346.–  | 459.–  | 565.–  | 803.–  | 1110.– | □      | □      | Only for: 1MB15..                                               |                |  |
|                                                                                                                                |                                                                                     |                          | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB16..                                               |                |  |
| Bearing insulation NDE <sup>20)</sup>                                                                                          | L51                                                                                 |                          | –      | –      | –      | –      | –      | –      | –      | 1320.– | 1340.– | 1730.– | 1850.– | 1920.– | 2010.– |                                                                 |                |  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                                        | Q01                                                                                 |                          | –      | –      | –      | 252.–  | 282.–  | 311.–  | 343.–  | 370.–  | 400.–  | 430.–  | 459.–  | 488.–  | 518.–  |                                                                 |                |  |
| Balance and vibration quantity                                                                                                 |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Vibration quantity level A                                                                                                     |                                                                                     |                          | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                                                                 |                |  |
| Vibration quantity level B 21) 22) 23)                                                                                         | L00                                                                                 |                          | 237.–  | 250.–  | 265.–  | 278.–  | 321.–  | 411.–  | 509.–  | 798.–  | 803.–  | 882.–  | 1120.– | 1310.– | 1680.– |                                                                 |                |  |
| Half-key balancing                                                                                                             |                                                                                     |                          | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                                                                 |                |  |
| Balancing without key                                                                                                          | L01                                                                                 |                          | 21.40  | 21.40  | 21.40  | 28.–   | 28.–   | 33.–   | 33.–   | 43.–   | 43.–   | 58.10  | 58.10  | 70.70  | 82.–   |                                                                 |                |  |
| Full-key balancing                                                                                                             | L02                                                                                 |                          | 94.20  | 94.20  | 109.–  | 109.–  | 109.–  | 126.–  | 126.–  | 159.–  | 159.–  | 205.–  | 205.–  | 205.–  | 205.–  |                                                                 |                |  |
| Shaft and rotor                                                                                                                |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Shaft extension with standard dimensions, without feather keyway                                                               | L04                                                                                 |                          | –      | –      | –      | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– |                                                                 |                |  |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347 <sup>25)</sup>                         | L05                                                                                 |                          | 83.20  | 95.90  | 95.90  | 140.–  | 140.–  | 185.–  | 213.–  | 322.–  | 357.–  | 376.–  | 392.–  | 464.–  | 509.–  |                                                                 |                |  |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                           | L06                                                                                 |                          | 124.–  | 124.–  | 144.–  | 165.–  | 227.–  | 350.–  | 556.–  | 662.–  | 988.–  | 1360.– | 1620.– | 2700.– | 3290.– |                                                                 |                |  |
| Concentricity of shaft extension in acc. with DIN 42955 Tolerance R                                                            | L07                                                                                 |                          | 239.–  | 239.–  | 239.–  | 263.–  | 263.–  | 400.–  | 400.–  | 207.–  | 233.–  | 277.–  | 363.–  | 363.–  | 554.–  |                                                                 |                |  |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 |                          | 148.–  | 176.–  | 207.–  | 236.–  | 265.–  | 296.–  | 367.–  | 443.–  | 517.–  | 589.–  | 663.–  | 739.–  | 811.–  |                                                                 |                |  |
| Non-standard cylindrical shaft extension DE <sup>8)</sup>                                                                      | Y58 • and customer specifications                                                   |                          | 430.–  | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– |                                                                 |                |  |
| Non-standard cylindrical shaft extension NDE <sup>8)</sup>                                                                     | Y59 • and customer specifications                                                   |                          | 430.–  | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– |                                                                 |                |  |
| Heating and ventilation                                                                                                        |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Metal external fan <sup>9)</sup>                                                                                               | F76                                                                                 |                          | 147.–  | 147.–  | 147.–  | 185.–  | 220.–  | 256.–  | 296.–  | 332.–  | 367.–  | 405.–  | 443.–  | 479.–  | 517.–  | Only for: 1MB1.3. – Ex ec (zone 2)                              |                |  |
| Anti-condensation heating for 230 V <sup>3)</sup>                                                                              | Q02                                                                                 |                          | 1020.– | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.– |                                                                 |                |  |
| Anti-condensation heating for 115 V <sup>3)</sup>                                                                              | Q03                                                                                 |                          | 1020.– | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.– |                                                                 |                |  |
| Rating plate and extra rating plates                                                                                           |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Second rating plate, loose                                                                                                     | M10                                                                                 |                          | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  |                                                                 |                |  |
| Rating plate, stainless steel                                                                                                  | M11                                                                                 |                          | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 50.60  | 50.60  | □      | □      | □      | □      | Only for: 1MB15..                                               |                |  |
|                                                                                                                                |                                                                                     |                          | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | Only for: 1MB16..                                               |                |  |
| Extra rating plate with deviating rating plate data                                                                            | Y80 • and customer specifications                                                   |                          | 72.10  | 72.10  | 72.10  | 103.–  | 103.–  | 103.–  | 103.–  | 155.–  | 155.–  | 206.–  | 206.–  | 206.–  | 206.–  |                                                                 |                |  |
| Extra rating plate with identification codes                                                                                   | Y82 • and customer specifications                                                   |                          | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 84.90  | 84.90  | 107.–  |                                                                 |                |  |
| Additional information on rating plate and on package label (max. 20 characters)                                               | Y84 • and customer specifications                                                   |                          | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 84.90  | 84.90  | 107.–  |                                                                 |                |  |
| Packaging, safety notes, documentation and test certificates                                                                   |                                                                                     |                          |        |        |        |        |        |        |        |        |        |        |        |        |        |                                                                 |                |  |
| Printed Operating Instructions (compact) for explosion-proof motors enclosed in English and German <sup>11)</sup>              |                                                                                     |                          | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                                                                 |                |  |
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>10)</sup>                                                     | B02                                                                                 |                          | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  |                                                                 |                |  |

For legends and footnotes, see Page 4/77.

## Standard delivery times in working days:

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On  
request

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Options · Cast-iron series 1MB15 Basic Line, 1MB16 Performance Line

| Special versions                                                         | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |        |        |        |        |        |        |         |         |         |         |         |         | Motor version                                                   |                  |  |  |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|-----------------------------------------------------------------|------------------|--|--|
|                                                                          |                                                                                     | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     | IEC     | Ex tb<br>(zone 21),<br>Ex tc<br>(zone 22),<br>Ex ec<br>(zone 2) | IE3<br><hr/> IE2 |  |  |
|                                                                          |                                                                                     | 1MB15.3 Basic Line       |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
|                                                                          |                                                                                     | 1MB16.3 Performance Line |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
|                                                                          |                                                                                     | 1MB15.1 Basic Line       |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
| 1MB16.1 Performance Line                                                 |                                                                                     |                          |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
| 1MB15 .....-Z                                                            | 1MB16 .....-Z                                                                       | Order code               |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
| Packaging, safety notes, documentation and test certificates (continued) |                                                                                     |                          |        |        |        |        |        |        |        |         |         |         |         |         |         |                                                                 |                  |  |  |
| Document – Electrical data-sheet                                         | B60                                                                                 |                          | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |         |                                                                 |                  |  |  |
| Document – Order dimensional drawing                                     | B61                                                                                 |                          | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |         |                                                                 |                  |  |  |
| Type test with heat run for horizontal motors, with acceptance           | B83                                                                                 |                          | 4860.– | 5620.– | 6390.– | 7150.– | 7910.– | 8670.– | 9430.– | 10200.– | 11000.– | 11700.– | 12500.– | 13200.– | 14000.– |                                                                 |                  |  |  |
| Documentation package “Basic”                                            | B90                                                                                 |                          | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   |                                                                 |                  |  |  |
| Documentation package “Advanced”                                         | B91                                                                                 |                          | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   |                                                                 |                  |  |  |
| Documentation package “Projects”                                         | B92                                                                                 |                          | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  |                                                                 |                  |  |  |
| Wire-lattice pallet packaging                                            | B99                                                                                 |                          | 0      | 0      | 0      | 0      | 0      | 0      | 0      | –       | –       | –       | –       | –       | –       |                                                                 |                  |  |  |
| Connected in star for dispatch                                           | M01                                                                                 |                          | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | 37.20   | 46.–    | 46.–    | 46.–    |                                                                 |                  |  |  |
| Connected in delta for dispatch                                          | M02                                                                                 |                          | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | □       | □       | □       | □       |                                                                 |                  |  |  |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible

- 1) Please inquire regarding combination with order codes D03 and C02. Not possible in combination with order codes **H20** and **H22**.
- 2) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. A certified tripping unit is necessary for use in hazardous areas.
- 3) Order codes **Q02** and **Q03** are not possible for frame sizes 100 to 160 in combination with 15th position of the Article No. "H". It can only be supplied with a star or delta winding for direct switch-on (3 terminals).
- 4) There is no derating in combination with the order codes **M2A**, **M2B**, **M2C**, **M2D**, **M2E**, **M2F**, **M2G**, **M2H**.
- 5) Order code **H20** (IP65 degree of protection) can only be ordered for zone 2. For zone 21, IP65 degree of protection is standard. Not possible for zone 22, because only IP55 degree of protection is required.
- 6) Order code **H22** (IP56 degree of protection) can only be ordered for zone 2. IP56 degree of protection is not admissible for zone 21 (IP65 degree of protection) and zone 22 (IP55 degree of protection).
- 7) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 8) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case.  
For order codes **Y58**, **Y59** and **L05**:  
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")  
– Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension  
For explanation of the order codes, see Catalog D 81.1 Section 1 "Introduction".
- 9) The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.
- 10) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 11) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- 12) Order code **S06** cannot be combined with order code **S00**, **S01** and **S02**. It can be combined with **Y53** and **Y56** on request.
- 13) Not admissible in combination with anti-condensation heating (order code **Q02/Q03**). For this component, no TR CU certificate is available yet.
- 14) A minimum cantilever force  $F_{\min}$  of  $0.5 \cdot F_{\max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling power or for brief periods of no-load operation without cantilever force.
- 15) Standard version in combination with order code **Q02**, **Q03** and/or 15th position of the Article No. "H" for frame sizes 71 to 90.
- 16) The Ex motor is not permitted if a potentially explosive gas and dust atmosphere occurs (hybrid). No standard exists until now which describes the product requirements for a hybrid mixture.
- 17) In combination with order code **B40** and **B41**, "B" or "C" must be added to the 15th position of the Article No. For compliance with the admissible temperature class 130 (B), derating is necessary in the case of converter operation in zones 2, 21 and 22! The operating data for Siemens SINAMICS converters are on the rating plate - the torque moment is reduced, compared to the line operation. The operating data of the motor at converter operation are available in the selection and ordering tool Drive Technology Configurator. For converter operation, voltage codes/order codes are only admissible with one voltage only. The frequency converter for motors of category 1 (zone 21) needs a certified tripping unit for use in hazardous areas. For motors of category 3 (zone 2 and 22) a certified tripping unit is recommended. Alternatively, an external tripping unit can be used (see Catalog IC 10).
- 18) It can be combined with order code **N30**, **N31**, **L51** and **F70** on request. Not possible in combination with order code **L05**. Combination with protective cover is standard for FS 100 to 200. Protective cover not possible for FS 225 to 315.
- 19) Please inquire regarding combinations with order codes **N05**, **N06**, **N07**, **N08**, **N30**, **N31**, **D03**, **G30**, **C02**, **H20** and **H22**. Not permissible with order code **L05**. The type of protection of the separately driven fan must be selected to comply with that of the motor.
- 20) The frame sizes 280 and 315 in combination with order code **B40** or **B41** are equipped with "Bearing insulation NDE" as standard (order code **L51** is included in **B40/B41**).
- 21) Not admissible for frame size 315, 2-pole. An exception is elastic installation (please inquire).
- 22) Not admissible in combination with converter operation (order code **B40**, **B41**).
- 23) On request for 2-pole motors for line operation (concerns frame sizes 225 to 315).
- 24) Permissible paint film thickness up to 2 mm.
- 25) Not possible in vertical version with downward shaft extension DE.
- 26) Not possible in combination with order code **Q02** or **Q03**.
- 27) Not possible in combination with order code **R50**.

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

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## Selection and ordering data

| Special versions                                                                                         | Additional identification code -Z with order code and plain text if required |  | Frame size               |                    |       |       |       |       |       |       |        |        |        |        |        |        | Motor version     |                |     |  |  |
|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--------------------------|--------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------------------|----------------|-----|--|--|
|                                                                                                          |                                                                              |  | 63                       | 71                 | 80    | 90    | 100   | 112   | 132   | 160   | 180    | 200    | 225    | 250    | 280    | 315    | IEC               | Ex eb (zone 1) | IE3 |  |  |
|                                                                                                          |                                                                              |  |                          | 1MB1042            |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
|                                                                                                          |                                                                              |  |                          | 1MB1543 Basic Line |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| 1MB1042 -.....-Z                                                                                         | Order code                                                                   |  | 1MB1643 Performance Line |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| 1MB . 5.....-Z                                                                                           |                                                                              |  | 1MB5543 Basic Line       |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| 1MB . 6.....-Z                                                                                           |                                                                              |  | 1MB5643 Performance Line |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| Explosion-proof version                                                                                  |                                                                              |  |                          |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| Design IIC with marking IIB 1)                                                                           | B31                                                                          |  | ○                        | ○                  | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      |                   |                |     |  |  |
| Version additionally for dust Ex tb – Zone 21; IP65 2)                                                   | B32                                                                          |  | 278.–                    | 278.–              | 288.– | 303.– | 316.– | 335.– | 398.– | 556.– | 845.–  | 1030.– | 1170.– | 1290.– | 1400.– | 1510.– |                   |                |     |  |  |
| T1/T2 on rating plate 3)                                                                                 | B33                                                                          |  | –                        | –                  | –     | –     | –     | –     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      |                   |                |     |  |  |
| VIK version 19)                                                                                          | C02                                                                          |  | 86.50                    | 86.50              | 86.50 | 86.50 | 86.50 | 88.60 | 105.– | 105.– | 181.–  | 190.–  | 214.–  | 327.–  | 563.–  | 874.–  |                   |                |     |  |  |
| Motor protection                                                                                         |                                                                              |  |                          |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| 2 Pt100 screw-in thermometers in basic configuration for bearing (2 terminals) 4)                        | Q72                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | 4220.– | 4220.– | 4220.– | 4220.– | 4220.– | 4220.– |                   |                |     |  |  |
| 2 Pt100 screw-in thermometers in 3-wire input for bearing (6 terminals) 4)                               | Q78                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | 4640.– | 4640.– | 4640.– | 4640.– | 4640.– | 4640.– |                   |                |     |  |  |
| 2 Pt100 double screw-in thermometers in 3-wire input for bearing (12 terminals) 4)                       | Q79                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | –      | –      | –      | –      | 5560.– | 5560.– |                   |                |     |  |  |
| Motor connection and terminal box                                                                        |                                                                              |  |                          |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| External grounding                                                                                       |                                                                              |  | □                        | □                  | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      |                   |                |     |  |  |
| Second external grounding                                                                                | H70                                                                          |  | –                        | –                  | –     | –     | 15.50 | 15.50 | 15.50 | 15.50 | 15.50  | 15.50  | 15.50  | 15.50  | 15.50  | 15.50  |                   |                |     |  |  |
| Rotation of the terminal box through 90°, entry from DE                                                  | R10                                                                          |  | ○                        | ○                  | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                   |                |     |  |  |
| Rotation of the terminal box through 90°, entry from NDE                                                 | R11                                                                          |  | ○                        | ○                  | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                   |                |     |  |  |
| Rotation of the terminal box through 180°                                                                | R12                                                                          |  | ○                        | ○                  | ○     | ○     | ○     | ○     | ○     | ○     | 44.20  | 57.30  | 70.70  | 84.90  | 101.–  | 122.–  |                   |                |     |  |  |
| Metal cable gland, maximum configuration                                                                 | R18                                                                          |  | 127.–                    | 127.–              | 127.– | 127.– | 231.– | 231.– | 231.– | 284.– | 284.–  | 315.–  | 315.–  | 433.–  | 433.–  | 433.–  |                   |                |     |  |  |
| Saddle terminals for connection without cable lug, accessories pack (6 items)                            |                                                                              |  | –                        | –                  | –     | –     | –     | –     | –     | –     | –      | –      | □      | □      | □      | □      |                   |                |     |  |  |
| Larger terminal box 15)                                                                                  | R50                                                                          |  | 48.50                    | 48.50              | 101.– | 101.– | 210.– | 210.– | 269.– | 307.– | 466.–  | 513.–  | 1630.– | 1860.– | 1860.– | 2190.– |                   |                |     |  |  |
| Drilled removable entry plate                                                                            | R52                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | –      | –      | 431.–  | 716.–  | 716.–  | 500.–  |                   |                |     |  |  |
| Undrilled removable entry plate                                                                          | R53                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | –      | –      | 375.–  | 623.–  | 623.–  | 650.–  |                   |                |     |  |  |
| Cast-iron auxiliary terminal box (small)                                                                 | R62                                                                          |  | –                        | –                  | –     | –     | 278.– | 278.– | 278.– | 278.– | 278.–  | 278.–  | 278.–  | 278.–  | 278.–  | 278.–  |                   |                |     |  |  |
| Cast-iron auxiliary terminal box (large)                                                                 | R63                                                                          |  | –                        | –                  | –     | –     | –     | –     | –     | –     | –      | –      | 695.–  | 695.–  | 695.–  | 695.–  |                   |                |     |  |  |
| 2 small cast-iron auxiliary terminal boxes                                                               | R67                                                                          |  | –                        | –                  | –     | –     | 556.– | 556.– | 556.– | 556.– | 556.–  | 556.–  | 556.–  | 556.–  | 556.–  | 556.–  |                   |                |     |  |  |
| Windings and insulation                                                                                  |                                                                              |  |                          |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % 5)  | N05                                                                          |  | 41.20                    | 41.20              | 41.20 | 41.20 | 47.40 | 47.40 | 63.–  | 63.–  | 80.30  | 80.30  | 91.30  | 91.30  | 107.–  | 107.–  |                   |                |     |  |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % 5)  | N06                                                                          |  | 41.20                    | 41.20              | 41.20 | 41.20 | 47.40 | 47.40 | 63.–  | 63.–  | 80.30  | 80.30  | 91.30  | 91.30  | 107.–  | 107.–  |                   |                |     |  |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % 5) | N07                                                                          |  | 64.40                    | 64.40              | 72.90 | 85.80 | 106.– | 129.– | 164.– | 204.– | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  |                   |                |     |  |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 % 5) | N08                                                                          |  | 64.40                    | 64.40              | 72.90 | 85.80 | 106.– | 129.– | 164.– | 204.– | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  |                   |                |     |  |  |
| Increased air humidity/temperature with 30 to 60 g water per m³ of air                                   | N30                                                                          |  | 134.–                    | 134.–              | 134.– | 134.– | 134.– | 134.– | 134.– | 206.– | 299.–  | 412.–  | 639.–  | 855.–  | 1080.– | 1320.– |                   |                |     |  |  |
| Increased air humidity/temperature with 60 to 100 g water per m³ of air                                  | N31                                                                          |  | 196.–                    | 196.–              | 216.– | 216.– | 216.– | 247.– | 278.– | 391.– | 505.–  | 649.–  | 917.–  | 1180.– | 1490.– | 1780.– |                   |                |     |  |  |
| Colors and paint finish                                                                                  |                                                                              |  |                          |                    |       |       |       |       |       |       |        |        |        |        |        |        |                   |                |     |  |  |
| Standard finish C2 in RAL 7030 stone gray                                                                |                                                                              |  | □                        | □                  | □     | □     | □     | □     | □     | □     | □      | □      | □      | □      | □      | □      | Only for: 1MB.5.. |                |     |  |  |
| Unpainted (only cast-iron parts primed)                                                                  | S00                                                                          |  | ○                        | ○                  | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      |                   |                |     |  |  |

For legends and footnotes, see Page 4/81.

**Options · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        | Motor version |                   |     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|---------------------------------|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-------------------|-----|--|
|                                                                                                                                                                                                                                                                                             |                                                                                     | 63         | 71                              | 80                              | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC           | Ex eb<br>(zone 1) | IE3 |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| <b>1MB1042</b> - - - - - - - - - - <b>-Z</b>                                                                                                                                                                                                                                                | Order code                                                                          |            | <b>1MB1042</b>                  |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| <b>1MB . 5</b> - - - - - - - - - - <b>-Z</b>                                                                                                                                                                                                                                                |                                                                                     |            | <b>1MB1543 Basic Line</b>       |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| <b>1MB . 6</b> - - - - - - - - - - <b>-Z</b>                                                                                                                                                                                                                                                |                                                                                     |            |                                 | <b>1MB1643 Performance Line</b> |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            | <b>1MB5543 Basic Line</b>       |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            | <b>1MB5643 Performance Line</b> |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| <b>Colors and paint finish (continued)</b>                                                                                                                                                                                                                                                  |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | <b>S01</b>                                                                          |            | 20.50                           | 20.50                           | 20.50  | 27.30  | 27.30  | 27.30  | 43.50  | 43.50  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70  |               |                   |     |  |
| Special finish C3                                                                                                                                                                                                                                                                           | <b>S02</b>                                                                          |            | 36.10                           | 36.10                           | 36.10  | 36.10  | 61.80  | 61.80  | 82.40  | 82.40  | 113.–  | 124.–  | 185.–  | 227.–  | 268.–  | 299.–         | Only for: 1MB.5.. |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            | –                               | –                               | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | <b>S03</b>                                                                          |            | 494.–                           | 494.–                           | 494.–  | 494.–  | 525.–  | 525.–  | 577.–  | 577.–  | 618.–  | 659.–  | 700.–  | 742.–  | 783.–  | 814.–         |                   |     |  |
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | <b>S04</b>                                                                          |            | –                               | 2010.–                          | 2010.– | 2010.– | 2110.– | 2220.– | 2340.– | 2460.– | 2590.– | 2720.– | 3140.– | 4090.– | 5120.– | 7910.–        |                   |     |  |
| Internal coating                                                                                                                                                                                                                                                                            | <b>S05</b>                                                                          |            | –                               | –                               | –      | –      | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 108.–  | 124.–  | 134.–         |                   |     |  |
| Top coat polyurethane <sup>6)</sup>                                                                                                                                                                                                                                                         | <b>S06</b>                                                                          |            | 30.90                           | 30.90                           | 30.90  | 50.50  | 72.10  | 71.10  | 147.–  | 206.–  | 247.–  | 303.–  | 389.–  | 485.–  | 613.–  | 779.–         |                   |     |  |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | <b>Y53 •</b><br>and finish RAL .....                                                |            | 25.80                           | 25.80                           | 25.80  | 25.80  | 41.20  | 41.20  | 56.70  | 56.70  | 82.40  | 113.–  | 124.–  | 155.–  | 185.–  | 258.–         | Only for: 1MB.5.. |     |  |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                          | <b>Y56 •</b><br>and finish RAL .....                                                |            | 608.–                           | 608.–                           | 608.–  | 608.–  | 649.–  | 649.–  | 680.–  | 680.–  | 690.–  | 700.–  | 711.–  | 721.–  | 731.–  | 742.–         |                   |     |  |
| <b>Mechanical version and degrees of protection</b>                                                                                                                                                                                                                                         |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Low-noise version for 2-pole motors with clockwise direction of rotation <sup>7) 19)</sup>                                                                                                                                                                                                  | <b>F77</b>                                                                          |            | –                               | –                               | –      | –      | –      | –      | O. R.  | O. R.  | O. R.  | O. R.  | 1640.– | 1900.– | 2160.– | 2420.–        |                   |     |  |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation <sup>7) 19)</sup>                                                                                                                                                                                          | <b>F78</b>                                                                          |            | –                               | –                               | –      | –      | –      | –      | O. R.  | O. R.  | O. R.  | O. R.  | 1640.– | 1900.– | 2160.– | 2420.–        |                   |     |  |
| Protective cover                                                                                                                                                                                                                                                                            | <b>H00</b>                                                                          |            | 55.60                           | 55.60                           | 55.60  | 55.60  | 80.80  | 80.80  | 141.–  | 141.–  | 188.–  | 283.–  | 375.–  | 469.–  | 562.–  | 751.–         |                   |     |  |
| Screwed-on (instead of cast) feet                                                                                                                                                                                                                                                           | <b>H01</b>                                                                          |            | –                               | –                               | –      | –      | 102.–  | 111.–  | 121.–  | 129.–  | 364.–  | 428.–  | 507.–  | 753.–  | 846.–  | 974.–         |                   |     |  |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                                                                                                                                                                                                  | <b>H02</b>                                                                          |            | –                               | 127.–                           | 145.–  | 165.–  | 185.–  | 205.–  | 222.–  | 258.–  | 309.–  | 371.–  | 433.–  | 515.–  | 597.–  | 680.–         |                   |     |  |
| Condensation drainage holes <sup>8)</sup>                                                                                                                                                                                                                                                   | <b>H03</b>                                                                          |            | 63.90                           | 63.90                           | 66.30  | 74.–   | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                          | <b>H07</b>                                                                          |            | 65.90                           | 65.90                           | 67.–   | 67.–   | 81.10  | 81.10  | 95.90  | 95.90  | 110.–  | 125.–  | 167.–  | 199.–  | 207.–  | 275.–         |                   |     |  |
| IP66 degree of protection                                                                                                                                                                                                                                                                   | <b>H19</b>                                                                          |            | –                               | 310.–                           | 310.–  | 310.–  | 310.–  | 310.–  | 310.–  | 462.–  | 618.–  | 772.–  | 930.–  | 1090.– | 1240.– | 1390.–        |                   |     |  |
| IP65 degree of protection <sup>9)</sup>                                                                                                                                                                                                                                                     | <b>H20</b>                                                                          |            | 147.–                           | 147.–                           | 147.–  | 147.–  | 147.–  | 147.–  | 147.–  | 220.–  | 296.–  | 367.–  | 443.–  | 517.–  | 589.–  | 663.–         |                   |     |  |
| IP56 degree of protection <sup>9)</sup>                                                                                                                                                                                                                                                     | <b>H22</b>                                                                          |            | 163.–                           | 163.–                           | 163.–  | 163.–  | 163.–  | 163.–  | 163.–  | 242.–  | 322.–  | 405.–  | 487.–  | 568.–  | 650.–  | 728.–         |                   |     |  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar<br>Not possible for type of construction IM V3.                                                                                                                                                                             | <b>H23</b>                                                                          |            | 44.90                           | 44.90                           | 47.40  | 50.70  | 56.40  | 61.70  | 75.30  | 110.–  | 142.–  | 176.–  | 234.–  | 311.–  | 390.–  | 469.–         |                   |     |  |
| <b>Coolant temperature and installation altitude</b>                                                                                                                                                                                                                                        |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Coolant temperature –40 °C to +40 °C <sup>10)</sup>                                                                                                                                                                                                                                         | <b>D03</b>                                                                          |            | 325.–                           | 325.–                           | 390.–  | 456.–  | 585.–  | 715.–  | 909.–  | 1300.– | 1570.– | 1820.– | 2200.– | 2730.– | 3640.– | 5120.–        |                   |     |  |
| <b>Versions in accordance with standards and specifications</b>                                                                                                                                                                                                                             |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| IEC Ex certification                                                                                                                                                                                                                                                                        | <b>D37</b>                                                                          |            | –                               | 217.–                           | 217.–  | 217.–  | 217.–  | 217.–  | 217.–  | 228.–  | 228.–  | 332.–  | 332.–  | 439.–  | 643.–  | 764.–         |                   |     |  |
| <b>Bearings and lubrication</b>                                                                                                                                                                                                                                                             |                                                                                     |            |                                 |                                 |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                                                                                                                                                                                       | <b>L19</b>                                                                          |            | –                               | –                               | –      | –      | –      | –      | –      | –      | 375.–  | 422.–  | 469.–  | 562.–  | O      | O             |                   |     |  |
| Located bearing DE                                                                                                                                                                                                                                                                          | <b>L20</b>                                                                          |            | 39.–                            | 39.–                            | 39.–   | 41.40  | 71.40  | 84.60  | 104.–  | 142.–  | 300.–  | 416.–  | 585.–  | 753.–  | 974.–  | 1050.–        |                   |     |  |
| Located bearing NDE                                                                                                                                                                                                                                                                         | <b>L21</b>                                                                          |            | 39.–                            | 39.–                            | 39.–   | 41.40  | 71.40  | 84.60  | 104.–  | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Bearing design for increased cantilever forces <sup>11)</sup>                                                                                                                                                                                                                               | <b>L22</b>                                                                          |            | –                               | 72.10                           | 79.30  | 87.60  | 98.80  | 115.–  | 130.–  | 172.–  | 273.–  | 316.–  | 356.–  | 412.–  | 461.–  | 515.–         |                   |     |  |
| Regreasing device                                                                                                                                                                                                                                                                           | <b>L23</b>                                                                          |            | –                               | –                               | –      | –      | 311.–  | 319.–  | 329.–  | 356.–  | 375.–  | 422.–  | 469.–  | 562.–  | □      | □             | Only for: 1MB.5.. |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            | –                               | –                               | –      | –      | 311.–  | 319.–  | 329.–  | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                                                                                                                                                                                            | <b>L25</b>                                                                          |            | –                               | 134.–                           | 165.–  | 199.–  | 199.–  | 232.–  | 260.–  | 346.–  | 459.–  | 565.–  | 803.–  | 1110.– | □      | □             | Only for: 1MB.5.. |     |  |
|                                                                                                                                                                                                                                                                                             |                                                                                     |            | –                               | –                               | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |
| Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces                                                                                                                                                                                                          | <b>L28</b>                                                                          |            | –                               | –                               | –      | –      | –      | –      | –      | –      | 732.–  | 882.–  | 1150.– | 1520.– | –      | –             |                   |     |  |

For legends and footnotes, see Page 4/81.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors****25****40**

Article No. supplements and special versions

**Options · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line**

| Special versions                                                                                                                              | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |                          |        |        |        |        |        |        |        |        |        |        |        |        | Motor version |                   |     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-------------------|-----|--|
|                                                                                                                                               |                                                                                     | 63         | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | IEC           | Ex eb<br>(zone 1) | IE3 |  |
|                                                                                                                                               |                                                                                     |            | 1MB1042                  |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
|                                                                                                                                               |                                                                                     |            | 1MB1543 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
|                                                                                                                                               |                                                                                     |            | 1MB1643 Performance Line |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| 1MB1042 - .....-Z                                                                                                                             | Order code                                                                          |            | 1MB5543 Basic Line       |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| 1MB . 5 .....-Z                                                                                                                               |                                                                                     |            | 1MB5643 Performance Line |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| 1MB . 6 .....-Z                                                                                                                               |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Bearings and lubrication (continued)                                                                                                          |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Bearing insulation DE <sup>23)</sup>                                                                                                          | L50                                                                                 |            | –                        | –      | –      | –      | –      | –      | –      | –      | –      | –      | 1730.– | 1850.– | 1920.– | 2010.–        |                   |     |  |
| Bearing insulation NDE <sup>23)</sup>                                                                                                         | L51                                                                                 |            | –                        | –      | –      | –      | –      | –      | –      | –      | –      | –      | 1730.– | 1850.– | 1920.– | 2010.–        |                   |     |  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                                                       | Q01                                                                                 |            | –                        | –      | –      | –      | 252.–  | 282.–  | 311.–  | 343.–  | 370.–  | 400.–  | 430.–  | 459.–  | 488.–  | 518.–         |                   |     |  |
| Balance and vibration quantity                                                                                                                |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Vibration quantity level A                                                                                                                    |                                                                                     |            | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Vibration quantity level B                                                                                                                    | L00                                                                                 |            | 237.–                    | 237.–  | 250.–  | 265.–  | 278.–  | 321.–  | 411.–  | 509.–  | 798.–  | 803.–  | 882.–  | 1120.– | 1310.– | 1680.–        |                   |     |  |
| Half-key balancing                                                                                                                            |                                                                                     |            | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Balancing without key                                                                                                                         | L01                                                                                 |            | 21.40                    | 21.40  | 21.40  | 21.40  | 27.80  | 27.80  | 32.90  | 32.90  | 42.80  | 42.80  | 58.10  | 58.10  | 70.70  | 82.–          |                   |     |  |
| Full-key balancing                                                                                                                            | L02                                                                                 |            | 94.20                    | 94.20  | 94.20  | 109.–  | 109.–  | 109.–  | 126.–  | 126.–  | 159.–  | 159.–  | 205.–  | 205.–  | 205.–  | 205.–         |                   |     |  |
| Shaft and rotor                                                                                                                               |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Shaft extension with standard dimensions, without feather keyway                                                                              | L04                                                                                 |            | –                        | –      | –      | –      | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.–        |                   |     |  |
| Standard cylindrical shaft extension (second shaft extension), NDE in acc. with EN 50347 <sup>12)</sup>                                       | L05                                                                                 |            | 83.20                    | 83.20  | 95.90  | 95.90  | 140.–  | 140.–  | 185.–  | 213.–  | 322.–  | 357.–  | 376.–  | 392.–  | 464.–  | 509.–         |                   |     |  |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                                          | L06                                                                                 |            | 124.–                    | 124.–  | 124.–  | 144.–  | 165.–  | 227.–  | 350.–  | 556.–  | 662.–  | 988.–  | 1360.– | 1620.– | 2700.– | 5770.–        |                   |     |  |
| Concentricity of shaft extension in acc. with DIN 42955 Tolerance R <sup>13)</sup>                                                            | L07                                                                                 |            | 239.–                    | 239.–  | 239.–  | 239.–  | 263.–  | 263.–  | 400.–  | 400.–  | 207.–  | 233.–  | 277.–  | 363.–  | 363.–  | 554.–         |                   |     |  |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors <sup>13)</sup> | L08                                                                                 |            | 148.–                    | 148.–  | 176.–  | 207.–  | 236.–  | 265.–  | 296.–  | 367.–  | 443.–  | 517.–  | 589.–  | 663.–  | 739.–  | 811.–         |                   |     |  |
| Non-standard cylindrical shaft extension DE <sup>14)</sup>                                                                                    | Y58 • and customer specifications                                                   |            | 430.–                    | 430.–  | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.–        |                   |     |  |
| Non-standard cylindrical shaft extension NDE <sup>14)</sup>                                                                                   | Y59 • and customer specifications                                                   |            | 430.–                    | 430.–  | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.–        |                   |     |  |
| Heating and ventilation                                                                                                                       |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Sheet metal fan cover                                                                                                                         |                                                                                     |            | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Metal external fan <sup>15)</sup>                                                                                                             | F76                                                                                 |            | □                        | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             |                   |     |  |
| Anti-condensation heating for 230 V <sup>20)</sup>                                                                                            | Q02                                                                                 |            | 1020.–                   | 1020.– | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.–        |                   |     |  |
| Anti-condensation heating for 115 V <sup>20)</sup>                                                                                            | Q03                                                                                 |            | 1020.–                   | 1020.– | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.–        |                   |     |  |
| Rating plate and extra rating plates                                                                                                          |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Second rating plate, loose                                                                                                                    | M10                                                                                 |            | 20.70                    | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30         |                   |     |  |
| Rating plate, stainless steel                                                                                                                 | M11                                                                                 |            | 41.40                    | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 41.40  | 50.60  | 50.60  | □      | □      | □      | □             | Only for: 1MB.5.. |     |  |
|                                                                                                                                               |                                                                                     |            | –                        | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |
| Extra rating plate with deviating rating plate data                                                                                           | Y80 • and customer specifications                                                   |            | 72.10                    | 72.10  | 72.10  | 72.10  | 103.–  | 103.–  | 103.–  | 103.–  | 155.–  | 155.–  | 206.–  | 206.–  | 206.–  | 206.–         |                   |     |  |
| Extra rating plate with identification codes                                                                                                  | Y82 • and customer specifications                                                   |            | 40.70                    | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 84.90  | 84.90  | 107.–         |                   |     |  |
| Additional information on rating plate and on package label (max. 20 characters)                                                              | Y84 • and customer specifications                                                   |            | 40.70                    | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 84.90  | 84.90  | 107.–         |                   |     |  |
| Extension of the liability for defects                                                                                                        |                                                                                     |            |                          |        |        |        |        |        |        |        |        |        |        |        |        |               |                   |     |  |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery <sup>15)</sup>                            | Q80                                                                                 |            | –                        | –      | –      | –      | –      | –      | –      | –      | 252.–  | 338.–  | 423.–  | 536.–  | 731.–  | 1490.–        | Only for: 1MB.5.. |     |  |
|                                                                                                                                               |                                                                                     |            | –                        | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>16)</sup>                            | Q82                                                                                 |            | –                        | –      | –      | –      | –      | –      | –      | –      | 379.–  | 507.–  | 634.–  | 804.–  | 1100.– | 2240.–        | Only for: 1MB.5.. |     |  |
|                                                                                                                                               |                                                                                     |            | –                        | –      | –      | –      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □             | Only for: 1MB.6.. |     |  |

For legends and footnotes, see Page 4/81.

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## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

**Options · Aluminum serie 1MB1024; Cast-iron series 1MB1543, 1MB5543 Basic Line; 1MB1643, 1MB5643 Performance Line**

| Special versions       | Additional identification code -Z with order code and plain text if required | Frame size |                          |    |    |     |     |     |     |     |     |     |                          |     |     | Motor version |                |     |
|------------------------|------------------------------------------------------------------------------|------------|--------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|--------------------------|-----|-----|---------------|----------------|-----|
|                        |                                                                              | 63         | 71                       | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250                      | 280 | 315 | IEC           | Ex eb (zone 1) | IE3 |
|                        |                                                                              |            | 1MB1042                  |    |    |     |     |     |     |     |     |     |                          |     |     |               |                |     |
|                        |                                                                              |            | 1MB1543 Basic Line       |    |    |     |     |     |     |     |     |     |                          |     |     |               |                |     |
|                        |                                                                              |            | 1MB1643 Performance Line |    |    |     |     |     |     |     |     |     |                          |     |     |               |                |     |
| 1MB1042 - . . . . . -Z | Order code                                                                   |            |                          |    |    |     |     |     |     |     |     |     |                          |     |     |               |                |     |
| 1MB . 5 - . . . . . -Z |                                                                              |            |                          |    |    |     |     |     |     |     |     |     | 1MB5543 Basic Line       |     |     |               |                |     |
| 1MB . 6 - . . . . . -Z |                                                                              |            |                          |    |    |     |     |     |     |     |     |     | 1MB5643 Performance Line |     |     |               |                |     |

### Packaging, safety notes, documentation and test certificates

|                                                                                                                   |            |        |        |        |        |        |        |        |        |         |         |         |         |         |         |
|-------------------------------------------------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| Printed Operating Instructions (compact) for explosion-proof motors enclosed in English and German <sup>17)</sup> |            | □      | □      | □      | □      | □      | □      | □      | □      | □       | □       | □       | □       | □       |         |
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>18)</sup>                                        | <b>B02</b> | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10   | 28.10   | 28.10   | 28.10   | 28.10   |         |
| Document – Electrical data-sheet                                                                                  | <b>B60</b> | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |         |
| Document – Order dimensional drawing                                                                              | <b>B61</b> | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |         |
| Standard test (routine test) with acceptance                                                                      | <b>B65</b> | –      | –      | –      | –      | 1240.– | 1240.– | 1240.– | 1390.– | 1390.–  | 1390.–  | 1680.–  | 1720.–  | 1660.–  | 2010.–  |
| Type test with heat run for horizontal motors, without acceptance                                                 | <b>B82</b> | 3090.– | 3320.– | 4080.– | 4840.– | 5600.– | 6370.– | 7130.– | 7890.– | 8650.–  | 9410.–  | 10200.– | 10900.– | 11700.– | 12500.– |
| Type test with heat run for horizontal motors, with acceptance                                                    | <b>B83</b> | 4860.– | 4860.– | 5620.– | 6390.– | 7150.– | 7910.– | 8670.– | 9430.– | 10200.– | 11000.– | 11700.– | 12500.– | 13200.– | 14000.– |
| Documentation package "Basic"                                                                                     | <b>B90</b> | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   |
| Documentation package "Advanced"                                                                                  | <b>B91</b> | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   |
| Documentation package "Projects"                                                                                  | <b>B92</b> | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  |
| Connected in star for dispatch                                                                                    | <b>M01</b> | 23.50  | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | 37.20   | 46.–    | 46.–    | 46.–    |
| Connected in delta for dispatch                                                                                   | <b>M02</b> | 23.50  | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | □       | □       | □       | □       |

- Standard version – Not possible
- Without additional charge O. R. Possibile on request
- This order code only determines the price of the version – additional plain text is required.

- 1) Permissible paint film thickness up to 2 mm.
- 2) Please inquire regarding combination with order codes **D03** and **C02**.  
Not possible in combination with order codes **H20** and **H22**.
- 3) Motors in these frame sizes have a second rating plate (T1/T2 and T3) as standard.  
The T3 power is stamped on the rating plate as standard if the following motors are selected with PTC thermistor (protection by PTC thermistor only) or voltage code **90**:
  - 2-pole motors: Frame sizes 132 to 160
  - 4-pole motors: Frame size 180Alternatively, with order code **B33**, the "T1/T2 power is stamped on the rating plate".
  - 2-pole motors: Frame sizes 132 to 200
  - 4-pole motors: Frame sizes 180 to 200
- 4) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. A certified tripping unit is necessary for use in hazardous areas.
- 5) The maximum possible certified power will be supplied.  
For motors with T1/T2, T3 power, T3 power is supplied.  
The T1/T2 power must be ordered with the order code **B33**.
- 6) Order code S06 cannot be combined with order code **B32**.
- 7) The motors are up to 80 mm longer than normal. A second shaft extension is not possible.
- 8) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE for IP55, IP56 and IP65 degrees of protection. If condensation drainage holes are required in motors of the IM B6, IM B7 or IM B8 type of construction (feet located on side or top), it is necessary to relocate the bearing plates at the drive end (DE) and non-drive end (NDE) so that the condensation drainage holes situated between the feet on delivery are underneath.
- 9) Not possible in combination with version additionally for dust Ex tb – Zone 21; IP65 – order code **B32**. Degree of protection IP65 is prescribed for the version for Zone 21.
- 10) Not possible in combination with vibration-proof version, order code **H02**.
- 11) Not possible for 2-pole motors, frame size 315 L in vertical frame sizes; bearings for increased cantilever forces for vibration severity grade B are available on request for motors of frame size 225 M and above. Not possible for motors of frame size 225 M and above in combination with concentricity of shaft extension, coaxiality and linear movement according to DIN 42955 tolerance R for flange-mounting types.
- 12) For motors of frame size 180 M and above in vertical type of construction in version with second shaft extension on request. Not possible for low-noise version (2-pole) for frame sizes 132 S to 160 L. Version with protective cover not possible.
- 13) Can be combined with deep-groove bearings of series 60.., 62.. and 63...  
Not possible in combination with parallel roller bearings (e.g. bearings for increased cantilever forces, order code **L22**).
- 14) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case.  
For order codes **Y58**, **Y59** and **L05**:
  - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
  - Dimensions E and EA ≤ 2 × length E (normal) of the shaft extensionFor explanation of the order codes, see Catalog D 81.1 Section 1 "Introduction".
- 15) During a transition time, the metal outer fan will be standard without additional price. The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.
- 16) Wearing parts (bearings) are excluded from the warranty extension.
- 17) The Operating Instructions contain a DVD with all official EU languages, Chinese and Russian in PDF format. It is also available on the Internet at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- 18) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 19) The motors may exceed the noise levels defined by VIK.
- 20) For frame sizes 71 to 90 in combination with the order codes **Q02** and **Q03**, **R50** is the standard version (the additional price R50 is already contained in **Q02** and **Q03**).
- 21) Not permissible for frame size 315, 2-pole, except for elastic installation.
- 22) For frame sizes 100 and 112, only permissible in combination with order code **R50**.
- 23) It is not permissible to combine order codes **L50** and **L51**.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**30****40**

Options · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853

**Selection and ordering data**

| Special versions                                                                                                                  | Additional identification code -Z with order code and plain text if required | Frame size                         |           |           |           |           |           |        |        |           |           |        |        |        |        | Motor version               |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------|-----------|-----------|-----------|-----------|-----------|--------|--------|-----------|-----------|--------|--------|--------|--------|-----------------------------|--|--|
|                                                                                                                                   |                                                                              | 71                                 | 80        | 90        | 100       | 112       | 132       | 160    | 180    | 200       | 225       | 250    | 280    | 315    | 355    |                             |  |  |
|                                                                                                                                   |                                                                              | 1MB15.3, 1MB15.6, 1MB15.7          |           |           |           |           |           |        |        |           |           |        |        |        |        | IEC Ex db, Ex eb (zone 1)   |  |  |
|                                                                                                                                   |                                                                              | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| 1MB1 .....-Z                                                                                                                      | Order code                                                                   | 1MB1853                            |           |           |           |           |           |        |        |           |           |        |        |        |        | 1MB5853                     |  |  |
| 1MB5 .5 .....-Z                                                                                                                   |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| Explosion-proof version                                                                                                           |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| Version additionally for dust Ex tb – Zone 21; IP65 21) 26)                                                                       | B32                                                                          | 278.–                              | 288.–     | 303.–     | 316.–     | 335.–     | 398.–     | 556.–  | 845.–  | 1030.–    | 1170.–    | 1290.– | 1400.– | 1510.– | 1600.– |                             |  |  |
| VIK version 18)                                                                                                                   | C02                                                                          | 86.50                              | 86.50     | 86.50     | 86.50     | 88.60     | 105.–     | 105.–  | 181.–  | 190.–     | 214.–     | 327.–  | 563.–  | 874.–  | 1110.– |                             |  |  |
| Version Chemstar chemical Industry                                                                                                | C03                                                                          | 650.–                              | 660.–     | 660.–     | 850.–     | 870.–     | 970.–     | 1100.– | 1300.– | 1400.–    | 1800.–    | 2200.– | 2500.– | 2800.– | 4290.– | Only 1MB..5. for: Ex db IIC |  |  |
| Version Chemstar Oil & Gas Industry                                                                                               | C04                                                                          | 190.–                              | 190.–     | 200.–     | 310.–     | 340.–     | 390.–     | 510.–  | 650.–  | 810.–     | 1000.–    | 1300.– | 1350.– | 1400.– | 2670.– | Only 1MB..5. for: Ex db IIC |  |  |
| Version for converter operation                                                                                                   |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| Version for converter operation with power data on the PWM converter 6)                                                           | B43                                                                          | 92.70                              | 103.–     | 113.–     | 134.–     | 155.–     | 175.–     | 206.–  | 237.–  | 268.–     | 309.–     | 361.–  | 2330.– | 2470.– | 2590.– |                             |  |  |
| Version for converter operation with power data on the PWM converter, utilization in accordance with temperature class 155 (F) 6) | B44                                                                          | 92.70                              | 103.–     | 113.–     | 134.–     | 155.–     | 175.–     | 206.–  | 237.–  | 268.–     | 309.–     | 361.–  | 2330.– | 2470.– | 2590.– |                             |  |  |
| Motor protection                                                                                                                  |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| 2 Pt100 screw-in thermometers in basic configuration for bearing (2 terminals) 1)                                                 | Q72                                                                          | –                                  | –         | –         | –         | –         | –         | 4220.– | 4220.– | 4220.–    | 4220.–    | 4220.– | 4220.– | 4220.– | 4220.– |                             |  |  |
| 2 Pt100 screw-in thermometers in 3-wire input for bearing (6 terminals) 1)                                                        | Q78                                                                          | –                                  | –         | –         | –         | –         | –         | 4640.– | 4640.– | 4640.–    | 4640.–    | 4640.– | 4640.– | 4640.– | 4640.– |                             |  |  |
| 2 Pt100 double screw-in thermometers in 3-wire input for bearing (12 terminals) 1)                                                | Q79                                                                          | –                                  | –         | –         | –         | –         | –         | –      | –      | –         | 5560.–    | 5560.– | 5560.– | 5560.– |        |                             |  |  |
| Motor connection and terminal box                                                                                                 |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| External grounding                                                                                                                |                                                                              | □                                  | □         | □         | □         | □         | □         | □      | □      | □         | □         | □      | □      | □      | □      |                             |  |  |
| Second external grounding                                                                                                         | H70                                                                          | 15.50                              | 15.50     | 15.50     | 15.50     | 15.50     | 15.50     | 15.50  | 15.50  | 15.50     | 15.50     | 15.50  | 15.50  | 15.50  | 15.50  |                             |  |  |
| Rotation of the terminal box through 90°, entry from DE                                                                           | R10                                                                          | 44.20                              | 44.20     | 44.20     | 44.20     | 44.20     | 44.20     | 44.20  | 44.20  | 57.30     | 70.70     | 84.90  | 101.–  | 122.–  | 137.–  |                             |  |  |
| Rotation of the terminal box through 90°, entry from NDE                                                                          | R11                                                                          | 44.20                              | 44.20     | 44.20     | 44.20     | 44.20     | 44.20     | 44.20  | 44.20  | 57.30     | 70.70     | 84.90  | 101.–  | 122.–  | 137.–  |                             |  |  |
| Rotation of the terminal box through 180°                                                                                         | R12                                                                          | 44.20                              | 44.20     | 44.20     | 44.20     | 44.20     | 44.20     | 44.20  | 44.20  | 57.30     | 70.70     | 84.90  | 101    | 122    | 137    |                             |  |  |
| Metal cable gland, maximum configuration 20)                                                                                      | R18                                                                          | 127.–                              | 127.–     | 127.–     | 231.–     | 231.–     | 231.–     | 284.–  | 284.–  | 315.–     | 315.–     | 433.–  | 433.–  | 433.–  | 433.–  |                             |  |  |
| 1 cable gland, Ex eb, for armored cables (main supply)                                                                            | R45                                                                          | 240.–                              | 240.–     | 240.–     | 290.–     | 290.–     | 290.–     | 340.–  | 340.–  | 410.–     | 410.–     | 500.–  | 500.–  | 500.–  | 900.–  |                             |  |  |
| 2 cable glands, Ex eb, for armored cables (main supply)                                                                           | R46                                                                          | –                                  | –         | –         | 580.–     | 580.–     | 580.–     | 680.–  | 680.–  | 820.–     | 820.–     | 1000.– | 1000.– | 1000.– | 1000.– |                             |  |  |
| Main terminal box in in Ex db IIC 28)                                                                                             | R48                                                                          | 956.–                              | 956.–     | 956.–     | 956.–     | 956.–     | 1250.–    | 1250.– | 1840.– | 1840.–    | 1840.–    | 2120.– | 2120.– | 3420.– | 3420.– | Only 1MB..5. for: Ex db IIC |  |  |
| Auxiliary terminal box in Ex db IIC 28)                                                                                           | R49                                                                          | –                                  | –         | –         | –         | –         | –         | 1510.– | 1510.– | 1900.–    | 1900.–    | 1900.– | 1900.– | 1900.– | 2390.– | Only 1MB..5. for: Ex db IIC |  |  |
| Larger terminal box 17)                                                                                                           | R50                                                                          | 48.50                              | 101.–     | 101.–     | 210.–     | 210.–     | 269.–     | 307.–  | 466.–  | 513.–     | 1630.–    | 1860.– | 1860.– | 2190.– | –      |                             |  |  |
| Enlarged connection system for main terminal box 17)                                                                              | R54                                                                          | 459.–                              | 459.–     | 459.–     | 678.–     | 678.–     | 795.–     | 871.–  | 1190.– | 1280.–    | –         | –      | –      | –      | –      |                             |  |  |
| Cast-iron auxiliary terminal box (small)                                                                                          | R62                                                                          | 278.– 24)                          | 278.– 24) | 278.– 24) | 278.– 23) | 278.– 23) | 278.– 23) | 278.–  | 278.–  | 278.–     | 278.–     | 278.–  | 278.–  | 278.–  | 278.–  |                             |  |  |
| Cast-iron auxiliary terminal box (large)                                                                                          | R63                                                                          | –                                  | –         | –         | –         | –         | –         | –      | –      | 695.– 24) | 695.– 23) | 695.–  | 695.–  | 695.–  | 695.–  |                             |  |  |
| 2 small cast-iron auxiliary terminal boxes                                                                                        | R67                                                                          | 556.– 24)                          | 556.– 24) | 556.– 24) | 556.– 23) | 556.– 23) | 556.– 23) | 556.–  | 556.–  | 556.–     | 556.–     | 556.–  | 556.–  | 556.–  | 556.–  |                             |  |  |
| Non-standard threaded through hole (NPT or G thread)                                                                              | Y61 • and customer specifications                                            | 152.–                              | 152.–     | 152.–     | 152.–     | 152.–     | 152.–     | 152.–  | 199.–  | 265.–     | 331.–     | 394.–  | 530.–  | 657.–  | 752.–  |                             |  |  |
| Windings and insulation                                                                                                           |                                                                              |                                    |           |           |           |           |           |        |        |           |           |        |        |        |        |                             |  |  |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %                              | N05                                                                          | 41.20                              | 41.20     | 41.20     | 47.40     | 47.40     | 63.–      | 63.–   | 80.30  | 80.30     | 91.30     | 91.30  | 107.–  | 107.–  | 107.–  |                             |  |  |

For legends and footnotes, see Page 4/86.

Standard delivery times in working days:

30

40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Options · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853**

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code -Z with order code and plain text if required | Frame size                         |        |        |        |        |        |        |        |        |        |        |        |        |        | Motor version |                             |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|-----------------------------|-----|
|                                                                                                                                                                                                                                                                                             |                                                                              | 71                                 | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | 355    | IEC           | Ex db, Ex eb (zone 1)       | IE3 |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1MB15.3, 1MB15.6, 1MB15.7          |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
|                                                                                                                                                                                                                                                                                             |                                                                              | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| 1MB1 .....-Z                                                                                                                                                                                                                                                                                | Order code                                                                   | 1MB1853                            |        |        |        |        |        |        |        |        |        |        |        |        |        | 1MB5853       |                             |     |
| 1MB5 . 5 .....-Z                                                                                                                                                                                                                                                                            |                                                                              |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| Windings and insulation (continued)                                                                                                                                                                                                                                                         |                                                                              |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %                                                                                                                                                                                        | N06                                                                          |                                    | 41.20  | 41.20  | 41.20  | 47.40  | 47.40  | 63.–   | 63.–   | 80.30  | 80.30  | 91.30  | 91.30  | 107.–  | 107.–  | 107.–         |                             |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %                                                                                                                                                                                       | N07                                                                          |                                    | 64.40  | 72.90  | 85.80  | 106.–  | 129.–  | 164.–  | 204.–  | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  | 1160.–        |                             |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %                                                                                                                                                                                       | N08                                                                          |                                    | 64.40  | 72.90  | 85.80  | 106.–  | 129.–  | 164.–  | 204.–  | 263.–  | 320.–  | 474.–  | 597.–  | 764.–  | 993.–  | 1160.–        |                             |     |
| Increased air humidity/temperature, with 30 to 60 g water per m³ of air                                                                                                                                                                                                                     | N30                                                                          |                                    | 134.–  | 134.–  | 134.–  | 134.–  | 134.–  | 134.–  | 206.–  | 299.–  | 412.–  | 639.–  | 855.–  | 1080.– | 1320.– | 1490.–        |                             |     |
| Increased air humidity/temperature, with 60 to 100 g water per m³ of air <sup>22)</sup>                                                                                                                                                                                                     | N31                                                                          |                                    | 196.–  | 216.–  | 216.–  | 216.–  | 247.–  | 278.–  | 391.–  | 505.–  | 649.–  | 917.–  | 1180.– | 1490.– | 1780.– | 2000.–        |                             |     |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude                                                                                                                                                                           | Y50 • and spec. power, CT .. °C or 'IA .... m above sea level                |                                    | 159.–  | 159.–  | 159.–  | 159.–  | 192.–  | 247.–  | 304.–  | 393.–  | 483.–  | 711.–  | 894.–  | 1140.– | 1480.– | 1740.–        |                             |     |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                              |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                              |                                    | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■      | ■             |                             |     |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                          |                                    | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○             |                             |     |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                          |                                    | 20.50  | 20.50  | 27.30  | 27.30  | 27.30  | 43.50  | 43.50  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70  | 81.70         |                             |     |
| Special finish C3                                                                                                                                                                                                                                                                           | S02                                                                          |                                    | 36.10  | 36.10  | 36.10  | 61.80  | 61.80  | 82.40  | 82.40  | 113.–  | 124.–  | 185.–  | 227.–  | 268.–  | 299.–  | 322.–         |                             |     |
| Special finish sea air resistant C4                                                                                                                                                                                                                                                         | S03                                                                          |                                    | 494.–  | 494.–  | 494.–  | 525.–  | 525.–  | 577.–  | 577.–  | 618.–  | 659.–  | 700.–  | 742.–  | 783.–  | 814.–  | 837.–         |                             |     |
| Special paint for use offshore C5                                                                                                                                                                                                                                                           | S04                                                                          |                                    | 2010.– | 2010.– | 2010.– | 2110.– | 2220.– | 2340.– | 2460.– | 2590.– | 2720.– | 3140.– | 4090.– | 5120.– | 7910.– | 10000.–       |                             |     |
| Internal coating                                                                                                                                                                                                                                                                            | S05                                                                          |                                    | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 87.60  | 108.–  | 124.–  | 134.–  | 142.–         |                             |     |
| Top coat polyurethane <sup>16)</sup>                                                                                                                                                                                                                                                        | S06                                                                          |                                    | 30.90  | 30.90  | 50.50  | 72.10  | 71.10  | 147.–  | 206.–  | 247.–  | 303.–  | 389.–  | 485.–  | 613.–  | 779.–  | 903.–         |                             |     |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and finish RAL ....                                                    |                                    | 25.80  | 25.80  | 25.80  | 41.20  | 41.20  | 56.70  | 56.70  | 82.40  | 113.–  | 124.–  | 155.–  | 185.–  | 258.–  | 312.–         |                             |     |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                          | Y56 • and finish RAL ....                                                    |                                    | 608.–  | 608.–  | 608.–  | 649.–  | 649.–  | 680.–  | 680.–  | 690.–  | 700.–  | 711.–  | 721.–  | 731.–  | 742.–  | 752.–         |                             |     |
| Modular technology – Basic versions                                                                                                                                                                                                                                                         |                                                                              |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| Mounting of separately driven fan <sup>27)</sup>                                                                                                                                                                                                                                            | F70                                                                          |                                    | –      | –      | –      | –      | –      | –      | –      | –      | –      | 6800.– | 6800.– | 6800.– | 7400.– | 7400.–        | Only 1MB..5. for: Ex db IIC |     |
| Modular technology – Additional versions                                                                                                                                                                                                                                                    |                                                                              |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |               |                             |     |
| Brake supply voltage 24 V DC                                                                                                                                                                                                                                                                | F10                                                                          |                                    | –      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | –      | –      | –      | –      | –             | Only 1MB..5. for: Ex db IIC |     |
| Brake supply voltage 230 V AC, 50/60 Hz                                                                                                                                                                                                                                                     | F11                                                                          |                                    | –      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | –      | –      | –      | –      | –             | Only 1MB..5. for: Ex db IIC |     |
| Brake supply voltage 400 V AC, 50/60 Hz                                                                                                                                                                                                                                                     | F12                                                                          |                                    | –      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | ○      | –      | –      | –      | –      | –             | Only 1MB..5. for: Ex db IIC |     |
| Mechanical manual brake release with lever (no locking)                                                                                                                                                                                                                                     | F50                                                                          |                                    | –      | 1300.– | 1300.– | 1300.– | 1300.– | 1300.– | 1300.– | 1300.– | 1300.– | –      | –      | –      | –      | –             | Only 1MB..5. for: Ex db IIC |     |

For legends and footnotes, see Page 4/86.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Options · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853**

| Special versions                                                                                                | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                         |       |        |        |        |        |        |        |         |         |        |        |        |        | Motor version               |                                                 |                                                  |
|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|--------|-----------------------------|-------------------------------------------------|--------------------------------------------------|
|                                                                                                                 |                                                                                     | 71                                 | 80    | 90     | 100    | 112    | 132    | 160    | 180    | 200     | 225     | 250    | 280    | 315    | 355    | IEC                         | Ex db, Ex eb (zone 1)                           | IE3                                              |
|                                                                                                                 |                                                                                     | 1MB15.3, 1MB15.6, 1MB15.7          |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
|                                                                                                                 |                                                                                     | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| 1MB1.....-Z                                                                                                     | Order code                                                                          |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| 1MB5.5.....-Z                                                                                                   |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        | 1MB5853                     |                                                 |                                                  |
| Special technology                                                                                              |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| Mounting of brake in Ex db version <sup>29)</sup>                                                               | F20                                                                                 |                                    |       | 7270.– | 7730.– | 8220.– | 8740.– | 9300.– | 9860.– | 10500.– | 11100.– |        |        |        |        | Only for: 1MB..5. Ex db IIC | Not for: Combination with order code <b>D32</b> |                                                  |
| Mounting of explosion-proof rotary pulse encoder LL 841 (HTL); 1024 l <sup>18)</sup>                            | G30                                                                                 | –                                  | –     | –      | 8030.– | 8030.– | 8030.– | 8030.– | 8030.– | 8030.–  | 9170.–  | 9170.– | 9170.– | 9170.– | 9170.– | Only for: 1MB..5. Ex db IIC | Not for: Combination with order code <b>D32</b> |                                                  |
| Mechanical version and degrees of protection                                                                    |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| Low-noise version for 2-pole motors with clockwise direction of rotation <sup>27)</sup>                         | F77                                                                                 | –                                  | –     | –      | –      | –      | –      | 870.–  | 1130.– | 1390.–  | 1640.–  | 1900.– | 2160.– | 2420.– | 2610.– | Only for: 1MB..5. Ex db IIC |                                                 |                                                  |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation <sup>27)</sup>                 | F78                                                                                 | –                                  | –     | –      | –      | –      | –      | 870.–  | 1130.– | 1390.–  | 1640.–  | 1900.– | 2160.– | 2420.– | 2610.– | Only for: 1MB..5. Ex db IIC |                                                 |                                                  |
| Protective cover <sup>4)</sup>                                                                                  | H00                                                                                 |                                    | 55.60 | 55.60  | 55.60  | 80.80  | 80.80  | 141.–  | 141.–  | 188.–   | 283.–   | 375.–  | 469.–  | 562.–  | 751.–  | 892.–                       |                                                 |                                                  |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                      | H02                                                                                 |                                    | 127.– | 145.–  | 165.–  | 185.–  | 205.–  | 222.–  | 258.–  | 309.–   | 371.–   | 433.–  | 515.–  | 597.–  | 680.–  | 742.–                       | Not for: 1MB..5. Ex db IIC                      | Combination with order code <b>F20, F70, R50</b> |
| External screws, bolts and unpainted materials made of stainless steel (V4A) <sup>5)</sup>                      | H06                                                                                 |                                    | 227.– | 228.–  | 228.–  | 244.–  | 244.–  | 260.–  | 260.–  | 276.–   | 292.–   | 338.–  | 373.–  | 382.–  | 457.–  | 513.–                       |                                                 |                                                  |
| Rust-resistant screws (externally)                                                                              | H07                                                                                 |                                    | 65.90 | 67.–   | 67.–   | 81.10  | 81.10  | 95.90  | 95.90  | 110.–   | 125.–   | 167.–  | 199.–  | 207.–  | 275.–  | 326.–                       |                                                 |                                                  |
| IP66 degree of protection                                                                                       | H19                                                                                 |                                    | 310.– | 310.–  | 310.–  | 310.–  | 310.–  | 310.–  | 462.–  | 618.–   | 772.–   | 930.–  | 1090.– | 1240.– | 1390.– | 2120.–                      |                                                 |                                                  |
| IP65 degree of protection <sup>5)</sup>                                                                         | H20                                                                                 |                                    | 147.– | 147.–  | 147.–  | 147.–  | 147.–  | 147.–  | 220.–  | 296.–   | 367.–   | 443.–  | 517.–  | 589.–  | 663.–  | 719.–                       |                                                 |                                                  |
| IP56 degree of protection <sup>6)</sup>                                                                         | H22                                                                                 |                                    | 163.– | 163.–  | 163.–  | 163.–  | 163.–  | 163.–  | 242.–  | 322.–   | 405.–   | 487.–  | 568.–  | 650.–  | 728.–  | 787.–                       |                                                 |                                                  |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar<br>Not possible for type of construction IM V3. | H23                                                                                 |                                    | 44.90 | 47.40  | 50.70  | 56.40  | 61.70  | 75.30  | 110.–  | 142.–   | 176.–   | 234.–  | 311.–  | 390.–  | 469.–  | 527.–                       | Only for: 1MB..5. Ex db IIC                     |                                                  |
| Adjustment screws for feet in horizontal installation <sup>7)</sup>                                             | H30                                                                                 | –                                  | –     | –      | –      | –      | –      | –      | –      | –       | 494.–   | 549.–  | 609.–  | 676.–  | 751.–  | 833.–                       | Only for: 1MB..5. Ex db IIC                     |                                                  |
| Coolant temperature and installation altitude                                                                   |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| Coolant temperature –40 °C to +40 °C                                                                            | D03                                                                                 |                                    | 325.– | 390.–  | 456.–  | 585.–  | 715.–  | 909.–  | 1300.– | 1570.–  | 1820.–  | 2200.– | 2730.– | 3640.– | 5120.– | 5700.–                      | Only for: 1MB..5. Ex db IIC                     |                                                  |
| Versions in accordance with standards and specifications                                                        |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| Version IIC with stamping of IIB                                                                                | B31                                                                                 |                                    | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○       | ○       | ○      | ○      | ○      | ○      | ○                           | Only for: 1MB..5. Ex db IIC                     |                                                  |
| Ex certification for China <sup>25)</sup>                                                                       | D32                                                                                 |                                    | 217.– | 217.–  | 217.–  | 217.–  | 217.–  | 217.–  | 228.–  | 228.–   | 332.–   | 332.–  | 439.–  | 643.–  | 764.–  | 892.–                       | Only for: 1MB..5. Ex db IIC                     |                                                  |
| China Energy Efficiency Label <sup>25)</sup>                                                                    | D34                                                                                 |                                    | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○       | ○       | ○      | ○      | ○      | ○      | ○                           | Only for: 1MB..5. Ex db IIC                     |                                                  |
| EAC Ex certificate for the Eurasian customs union <sup>25)</sup>                                                | D35                                                                                 |                                    | 217.– | 217.–  | 217.–  | 217.–  | 217.–  | 217.–  | 228.–  | 228.–   | 332.–   | 332.–  | 439.–  | 643.–  | 764.–  | 855.–                       | Only for: 1MB..5. Ex db IIC                     |                                                  |
| IEC Ex certification                                                                                            | D37                                                                                 |                                    | 217.– | 217.–  | 217.–  | 217.–  | 217.–  | 217.–  | 228.–  | 228.–   | 332.–   | 332.–  | 439.–  | 643.–  | 764.–  | 855.–                       |                                                 |                                                  |
| MEPS Australia <sup>25)</sup>                                                                                   | D70                                                                                 |                                    | 692.– | 692.–  | 692.–  | 692.–  | 692.–  | 692.–  | 713.–  | 713.–   | 921.–   | 921.–  | 1130.– | 1550.– | 1780.– | 1970.–                      | Only for: 1MB..5. Ex db IIC                     |                                                  |
| Bearings and lubrication                                                                                        |                                                                                     |                                    |       |        |        |        |        |        |        |         |         |        |        |        |        |                             |                                                 |                                                  |
| Preparation for SPM measuring nipple – thread M8                                                                | G50                                                                                 | –                                  | –     | –      | 151.–  | 169.–  | 187.–  | 206.–  | 222.–  | 240.–   | 258.–   | 276.–  | 293.–  | 311.–  | 324.–  |                             |                                                 |                                                  |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                           | L19                                                                                 | –                                  | –     | –      | –      | –      | –      | 351.–  | 375.–  | 422.–   | 469.–   | 562.–  | ○      | ○      | ○      |                             |                                                 |                                                  |
| Located bearing DE                                                                                              | L20                                                                                 |                                    | □     | □      | □      | □      | □      | □      | □      | □       | □       | □      | □      | □      | □      |                             |                                                 |                                                  |
| Located bearing NDE                                                                                             | L21                                                                                 |                                    | 39.–  | 39.–   | 41.40  | 71.40  | 84.60  | 104.–  | 142.–  | 300.–   | 416.–   | 585.–  | 753.–  | 974.–  | 1050.– | 1110.–                      |                                                 |                                                  |
| Bearing design for increased cantilever forces <sup>19)</sup>                                                   | L22                                                                                 | –                                  | –     | –      | –      | –      | –      | 172.–  | 273.–  | 316.–   | 356.–   | 412.–  | 461.–  | 515.–  | 555.–  |                             |                                                 |                                                  |
| Regreasing device                                                                                               | L23                                                                                 | –                                  | –     | –      | –      | –      | –      | 356.–  | 375.–  | 422.–   | 469.–   | 562.–  | □      | □      | □      |                             |                                                 |                                                  |
| Bearing insulation NDE <sup>3)</sup>                                                                            | L51                                                                                 | –                                  | –     | –      | –      | –      | –      | 1620.– | 1640.– | 1670.–  | 1730.–  | 1850.– | 1920.– | 2010.– | 2080.– |                             |                                                 |                                                  |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                         | Q01                                                                                 | –                                  | –     | –      | 252.–  | 282.–  | 311.–  | 343.–  | 370.–  | 400.–   | 430.–   | 459.–  | 488.–  | 518.–  | 540.–  |                             |                                                 |                                                  |

For legends and footnotes, see Page 4/86.

Standard delivery times in working days:

30

40

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**Options · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853**

| Special versions                                                                                                               | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size                         |        |        |        |        |        |        |        |        |        |        |        |        |        | Motor version               |                       |     |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------------------------|-----------------------|-----|
|                                                                                                                                |                                                                                     | 71                                 | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200    | 225    | 250    | 280    | 315    | 355    | IEC                         | Ex db, Ex eb (zone 1) | IE3 |
|                                                                                                                                |                                                                                     | 1MB15.3, 1MB15.6, 1MB15.7          |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
|                                                                                                                                |                                                                                     | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| 1MB1853                                                                                                                        |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| 1MB1 .....-Z                                                                                                                   | Order code                                                                          |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| 1MB5 .5 .....-Z                                                                                                                |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        | 1MB5853                     |                       |     |
| Balance and vibration quantity                                                                                                 |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Vibration quantity level A                                                                                                     |                                                                                     | □                                  | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                             |                       |     |
| Vibration quantity level B <sup>2)</sup>                                                                                       | L00                                                                                 | 237.–                              | 250.–  | 265.–  | 278.–  | 321.–  | 411.–  | 509.–  | 798.–  | 803.–  | 882.–  | 1120.– | 1310.– | 1680.– | 1960.– |                             |                       |     |
| Half-key balancing                                                                                                             |                                                                                     | □                                  | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                             |                       |     |
| Balancing without key                                                                                                          | L01                                                                                 | 21.40                              | 21.40  | 21.40  | 27.80  | 27.80  | 32.90  | 32.90  | 42.80  | 42.80  | 58.10  | 58.10  | 70.70  | 82.–   | 90.50  |                             |                       |     |
| Full-key balancing                                                                                                             | L02                                                                                 | 94.20                              | 94.20  | 109.–  | 109.–  | 109.–  | 126.–  | 126.–  | 159.–  | 159.–  | 205.–  | 205.–  | 205.–  | 205.–  | 205.–  |                             |                       |     |
| Shaft and rotor                                                                                                                |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Shaft extension with standard dimensions, without feather keyway                                                               | L04                                                                                 | –                                  | –      | –      | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– | 1090.– |                             |                       |     |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347                                        | L05                                                                                 | 83.20                              | 95.90  | 95.90  | 140.–  | 140.–  | 185.–  | 213.–  | 322.–  | 357.–  | 376.–  | 392.–  | 464.–  | 509.–  | 543.–  |                             |                       |     |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                           |                                                                                     | 124.–                              | 124.–  | 144.–  | 165.–  | 227.–  | 350.–  | 556.–  | 662.–  | 988.–  | 1360.– | 1620.– | 2700.– | 5770.– | 6900.– |                             |                       |     |
| Concentricity of shaft extension in acc. with DIN 42955 Tolerance R                                                            | L07                                                                                 | 239.–                              | 239.–  | 239.–  | 263.–  | 263.–  | 400.–  | 400.–  | 207.–  | 233.–  | 277.–  | 363.–  | 363.–  | 554.–  | 698.–  |                             |                       |     |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                                 | 148.–                              | 176.–  | 207.–  | 236.–  | 265.–  | 296.–  | 367.–  | 443.–  | 517.–  | 589.–  | 663.–  | 739.–  | 811.–  | 865.–  |                             |                       |     |
| Non-standard cylindrical shaft extension DE <sup>8)</sup>                                                                      | Y58 • and customer specifications                                                   | 430.–                              | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– | 1090.– |                             |                       |     |
| Non-standard cylindrical shaft extension NDE <sup>8)</sup>                                                                     | Y59 • and customer specifications                                                   | 430.–                              | 459.–  | 486.–  | 515.–  | 542.–  | 569.–  | 598.–  | 694.–  | 764.–  | 833.–  | 903.–  | 972.–  | 1040.– | 1090.– |                             |                       |     |
| Heating and ventilation                                                                                                        |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Sheet metal fan cover                                                                                                          |                                                                                     | □                                  | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                             |                       |     |
| Metal fan made of brass                                                                                                        | F68                                                                                 | 151.–                              | 671.–  | 671.–  | 728.–  | 780.–  | 834.–  | 894.–  | 948.–  | 1000.– | 1060.– | 1110.– | 1170.– | 1230.– | 1270.– |                             |                       |     |
| Metal external fan <sup>9)</sup>                                                                                               | F76                                                                                 | 147.–                              | 147.–  | 147.–  | 185.–  | 220.–  | 256.–  | 296.–  | 332.–  | 367.–  | 405.–  | 443.–  | 479.–  | 517.–  | 546.–  |                             |                       |     |
| Anti-condensation heating for 230 V <sup>1) 10)</sup>                                                                          | Q02                                                                                 | 1020.–                             | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.– | 1430.– |                             |                       |     |
| Anti-condensation heating for 115 V <sup>1) 10)</sup>                                                                          | Q03                                                                                 | 1020.–                             | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.– | 1430.– |                             |                       |     |
| Anti-condensation heating for 220 V <sup>1) 10)</sup>                                                                          | Q04                                                                                 | 1020.–                             | 1020.– | 1020.– | 1020.– | 1030.– | 1080.– | 1130.– | 1180.– | 1240.– | 1290.– | 1340.– | 1340.– | 1390.– | 1430.– |                             |                       |     |
| Separately driven fan with non-standard voltage and/or frequency                                                               | Y81 • and customer specifications                                                   | –                                  | –      | –      | –      | –      | –      | –      | –      | –      | 7200.– | 7200.– | 7200.– | 7800.– | 7800.– | Only 1MB..5. for: Ex db IIC |                       |     |
| Rating plate and extra rating plates                                                                                           |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Second rating plate, loose                                                                                                     | M10                                                                                 | 20.70                              | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 20.70  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  | 66.30  |                             |                       |     |
| Rating plate, stainless steel                                                                                                  | M11                                                                                 | □                                  | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                             |                       |     |
| Extra rating plate with deviating rating plate data                                                                            | Y80 • and customer specifications                                                   | 72.10                              | 72.10  | 72.10  | 103.–  | 103.–  | 103.–  | 103.–  | 155.–  | 155.–  | 206.–  | 206.–  | 206.–  | 206.–  | 206.–  |                             |                       |     |
| Extra rating plate with identification codes                                                                                   | Y82 • and customer specifications                                                   | 40.70                              | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 85.–   | 85.–   | 107.–  | 107.–  |                             |                       |     |
| Additional information on rating plate and on package label (max. 20 characters)                                               | Y84 • and customer specifications                                                   | 40.70                              | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 40.70  | 68.–   | 68.–   | 68.–   | 85.–   | 85.–   | 107.–  | 107.–  |                             |                       |     |
| Extension of the liability for defects                                                                                         |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery                            | Q80                                                                                 | 48.10                              | 52.60  | 64.60  | 74.70  | 92.–   | 122.–  | 199.–  | 252.–  | 338.–  | 423.–  | 536.–  | 731.–  | 1490.– | 2590.– |                             |                       |     |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery                            | Q82                                                                                 | 72.10                              | 78.90  | 96.90  | 112.–  | 138.–  | 182.–  | 299.–  | 379.–  | 507.–  | 634.–  | 804.–  | 1100.– | 2240.– | 3880.– |                             |                       |     |
| Packaging, safety notes, documentation and test certificates                                                                   |                                                                                     |                                    |        |        |        |        |        |        |        |        |        |        |        |        |        |                             |                       |     |
| Printed Operating Instructions (compact) for explosion-proof motors enclosed in English and German <sup>11)</sup>              |                                                                                     | □                                  | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      | □      |                             |                       |     |

For legends and footnotes, see Page 4/86.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**30****40****Options · Cast-iron series 1MB15.3, 1MB15.6, 1MB15.7, 1MB1853, 1MB5553, 1MB5556, 1MB5557, 1MB5853**

| Special versions                                                                            | Additional identification code -Z with order code and plain text if required | Frame size                         |        |        |        |        |        |        |        |         |         |         |         |         |         | Motor version |                       |     |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------------|-----------------------|-----|
|                                                                                             |                                                                              | 71                                 | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     | 355     | IEC           | Ex db, Ex eb (zone 1) | IE3 |
|                                                                                             |                                                                              | 1MB15.3, 1MB15.6, 1MB15.7          |        |        |        |        |        |        |        |         |         |         |         |         |         |               |                       |     |
|                                                                                             |                                                                              | 1MB5553, 1MB5555, 1MB5556, 1MB5557 |        |        |        |        |        |        |        |         |         |         |         |         |         |               |                       |     |
| 1MB1853                                                                                     |                                                                              |                                    |        |        |        |        |        |        |        |         |         |         |         |         |         |               |                       |     |
| 1MB1 . . . . . -Z                                                                           |                                                                              |                                    |        |        |        |        |        |        |        |         |         |         |         | 1MB5853 |         |               |                       |     |
| 1MB5 . 5 . . . . . -Z                                                                       | Order code                                                                   |                                    |        |        |        |        |        |        |        |         |         |         |         |         |         |               |                       |     |
| Packaging, safety notes, documentation and test certificates (continued)                    |                                                                              |                                    |        |        |        |        |        |        |        |         |         |         |         |         |         |               |                       |     |
| Acceptance test certificate 3.1 in accordance with EN 10204 <sup>12)</sup>                  | B02                                                                          |                                    | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10  | 28.10   | 28.10   | 28.10   | 28.10   | 28.10   | 28.10   |               |                       |     |
| Document – Electrical datasheet                                                             | B60                                                                          |                                    | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |               |                       |     |
| Document – Order dimensional drawing                                                        | B61                                                                          |                                    | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–  | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   | 309.–   |               |                       |     |
| Standard test (routine test) with acceptance                                                | B65                                                                          |                                    | 1240.– | 1240.– | 1240.– | 1240.– | 1240.– | 1390.– | 1390.– | 1390.–  | 1680.–  | 1720.–  | 1660.–  | 2010.–  | 2060.–  |               |                       |     |
| Noise measurement without load with octave band analysis, without acceptance <sup>13)</sup> | B71                                                                          |                                    | 1220.– | 1350.– | 1480.– | 1620.– | 1740.– | 1880.– | 2010.– | 2150.–  | 2280.–  | 2420.–  | 2540.–  | 2680.–  | 2810.–  | 2930.–        |                       |     |
| Noise measurement without load with octave band analysis, with acceptance <sup>14)</sup>    | B72                                                                          |                                    | 1730.– | 1930.– | 2110.– | 2310.– | 2490.– | 2690.– | 2870.– | 3070.–  | 3250.–  | 3450.–  | 3640.–  | 3830.–  | 4020.–  | 4170.–        |                       |     |
| Type test with heat run for vertical motors, without acceptance <sup>13)</sup>              | B80                                                                          |                                    | 4090.– | 4850.– | 5610.– | 6380.– | 7140.– | 7900.– | 8510.– | 9270.–  | 10000.– | 10500.– | 11200.– | 12100.– | 12500.– | 13100.–       |                       |     |
| Type test with heat run for vertical motors, with acceptance <sup>14)</sup>                 | B81                                                                          |                                    | 4860.– | 5620.– | 6390.– | 7150.– | 7910.– | 8670.– | 9430.– | 10200.– | 11000.– | 11700.– | 12500.– | 13200.– | 14000.– | 14600.–       |                       |     |
| Type test with heat run for horizontal motors, without acceptance <sup>13)</sup>            | B82                                                                          |                                    | 4090.– | 4850.– | 5610.– | 6380.– | 7140.– | 7900.– | 8510.– | 9270.–  | 10000.– | 10500.– | 11200.– | 12100.– | 12500.– | 13100.–       |                       |     |
| Type test with heat run for horizontal motors, with acceptance                              | B83                                                                          |                                    | 4860.– | 5620.– | 6390.– | 7150.– | 7910.– | 8670.– | 9430.– | 10200.– | 11000.– | 11700.– | 12500.– | 13200.– | 14000.– | 14600.–       |                       |     |
| Documentation package “Basic” <sup>15)</sup>                                                | B90                                                                          |                                    | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–  | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   | 597.–   | 597.–         |                       |     |
| Documentation package “Advanced” <sup>15)</sup>                                             | B91                                                                          |                                    | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–  | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   | 906.–   | 906.–         |                       |     |
| Documentation package “Projects” <sup>15)</sup>                                             | B92                                                                          |                                    | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–  | 2470.–        |                       |     |
| Wire-lattice pallet packaging                                                               | B99                                                                          |                                    | ○      | ○      | ○      | ○      | ○      | ○      | ○      | –       | –       | –       | –       | –       | –       | –             |                       |     |
| Connected in star for dispatch                                                              | M01                                                                          |                                    | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | 37.20   | 46.–    | 46.–    | 46.–    | 46.–          |                       |     |
| Connected in delta for dispatch                                                             | M02                                                                          |                                    | 23.50  | 23.50  | 23.50  | 28.30  | 28.30  | 28.30  | 28.30  | 37.20   | 37.20   | □       | □       | □       | □       | □             |                       |     |

- Standard version
- Without additional charge

- This order code only determines the price of the version – additional plain text is required.
- Not possible

<sup>1)</sup> Maximum number of connections for accessories, see terminal box concept.

<sup>2)</sup> Not admissible in combination with converter operation (order codes **B43**, **B44**).

<sup>3)</sup> The frame sizes 280, 315, and 355 in combination with order code **B43** or **B44** are equipped with "Bearing insulation NDE" as standard (order code **L51** is included in **B43/B44**).

<sup>4)</sup> The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air flow.

<sup>5)</sup> 5) Rating plate, screws, grounding, and options with order codes **L19**, **L23**, **Q01** made of stainless steel (V4A).

<sup>6)</sup> Power data in converter operation according to the VSD rating lists. Winding monitoring with PTC thermistor mandatory.

– Only in combination with single voltages, e.g.: **M4A**.

– Frame size 280 and larger with insulated bearings on the fan side (NDE).

<sup>7)</sup> 4 adjustment screws with lock nut for types of construction with feet.

<sup>8)</sup> When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case.

For order codes **Y58**, **Y59** and **L05**:

–Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")

–Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension

For explanation of the order codes, see Catalog D 81.1 Section 1 "Introduction".

<sup>9)</sup> The material of the fan is aluminum, for frames sizes 225 to 355 steel. metal fans are painted with paint systems with film thickness 90 µm or more.

<sup>10)</sup> Connection in the main terminal box in the standard version.

<sup>11)</sup> The Operating Instructions are available in the Internet in PDF format for all official EU languages.

<sup>12)</sup> The delivery time for the acceptance test certificate may differ from the delivery time for the motor.

<sup>13)</sup> The delivery time is then approx. 20 working days longer.

<sup>14)</sup> The delivery time is then approx. 25 working days longer or the confirmed acceptance date.

<sup>15)</sup> Version and content of the documentation, see Catalog D 81.1 Chapter 1.

<sup>16)</sup> Not in combination with order codes **S00**, **S01**, and **S02**. Other colors, order codes **Y53** and **Y56**, on request.

<sup>17)</sup> Not in combination with order codes **R48** and **R49**.

<sup>18)</sup> For installation in a hostile and corrosive environment, paint system with order code **S03** or better is recommended.

<sup>19)</sup> Only in combination with regreasing, order code **L19** or **L23**.

<sup>20)</sup> Cable glands in Ex e version.

<sup>21)</sup> Frame size 315 only in combination with order code **R50**, frame sizes 250 and 280 not in combination with order code **R50**.

<sup>22)</sup> Standard paint finish C2, we recommend C3 or better (e.g. order code **S02**, **S03**, **S04**).

<sup>23)</sup> Only possible in combination with order code **R50**.

<sup>24)</sup> Only possible in combination with order code **R54**.

<sup>25)</sup> Not possible in combination with **1MB..56** or **1MB..57**.

<sup>26)</sup> Only in combination with paint finish option, order code **S04**.

<sup>27)</sup> Not available in combination with order code **D03**.

<sup>28)</sup> Supplied without cable gland.

<sup>29)</sup> Select brake connection voltage separately, order codes **F10**, **F11**, or **F12**. note further details in Chapter 1 under "Modular technology", "Brakes".

Standard delivery times in working days:

25

30

&gt; 30

40

50

On request

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

**Selection and ordering data**

| Special versions                                                                                                                                                                                                                                                                                                                                                                                                         | Additional identification code<br>-Z with order code and plain text if required | Frame size                | Motor version             |        |        |                                                                                                                                                          |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------|---------------------------|--------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
|                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                 | 315                       | 355                       | 400    | 450    |                                                                                                                                                          |     |
| 1MB55 . 4 - . . . . . -Z                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                 | 1MB5514, 1MB5524, 1MB5534 |                           |        |        | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2)                                                                                               | IE4 |
| 1MB55 . 3 - . . . . . -Z                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                 | 1MB5513, 1MB5523, 1MB5533 |                           |        |        |                                                                                                                                                          | IE3 |
| 1MB58 . 3 - . . . . . -Z                                                                                                                                                                                                                                                                                                                                                                                                 | Order code                                                                      |                           | 1MB5813, 1MB5823, 1MB5833 |        |        |                                                                                                                                                          |     |
| Explosion-proof version                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                 |                           |                           |        |        |                                                                                                                                                          |     |
| Design additional for dust Ex tc – zone 22                                                                                                                                                                                                                                                                                                                                                                               | B30                                                                             | 788.–                     | 854.–                     | 894.–  | 941.–  | Only for: 1MB553. - Ex ec (zone 2) frame sizes 315, 355                                                                                                  |     |
| Design IIC with marking IIB <sup>20)</sup>                                                                                                                                                                                                                                                                                                                                                                               | B31                                                                             | O                         | O                         | 204.–  | 204.–  | Only for: 1MB553. - Ex ec (zone 2) frame sizes 315, 355                                                                                                  |     |
| VIK version                                                                                                                                                                                                                                                                                                                                                                                                              | C02                                                                             | 874.–                     | 1360.–                    | 1680.– | 1910.– | Only for: 1MB553. - Ex ec (zone 2) frame sizes 315, 355                                                                                                  |     |
| Design for converter data                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                 |                           |                           |        |        |                                                                                                                                                          |     |
| Design for converter operation in basic version with operating data SINAMICS G120 with PM240-2.                                                                                                                                                                                                                                                                                                                          | B40                                                                             | O. R.                     | O. R.                     | O. R.  | O. R.  |                                                                                                                                                          |     |
| Design for converter operation in basic version with operating data SINAMICS S150.                                                                                                                                                                                                                                                                                                                                       | B41                                                                             | O. R.                     | O. R.                     | O. R.  | O. R.  |                                                                                                                                                          |     |
| Version of converter operation with operating data for voltage-source converter                                                                                                                                                                                                                                                                                                                                          | B43                                                                             | O. R.                     | O. R.                     | O. R.  | O. R.  |                                                                                                                                                          |     |
| Operating data such as the B40 order code with alternative SINAMICS converter on the rating plate<br>• G120 with PM230<br>• G120 with PM240<br>• G120C<br>• G120P with PM230<br>• G120P with PM240-2<br>• G120P with PM240P-2<br>• G120P with PM330<br>• G130, G150, G180<br>• S120 (BLM/SLM)<br>• V20<br>Operating data such as order code B41 with alternative SINAMICS converters on the rating plate<br>• S120 (ALM) | Y68 • and converter type                                                        | O. R.                     | O. R.                     | O. R.  | O. R.  |                                                                                                                                                          |     |
| Motor protection                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                 |                           |                           |        |        |                                                                                                                                                          |     |
| 1 or 3 PTC thermistors – for tripping (2 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                                        | Q11                                                                             | 398.–                     | 398.–                     | 935.–  | 935.–  | Not for: Combination with Motor protection code B (15th position of the Article No.);<br>Frame sizes 315 and 355 in combination with order code L50, L51 |     |
| 2 or 6 PTC thermistors – for alarm and tripping (4 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                              | Q12                                                                             | 666.–                     | 666.–                     | 1040.– | 1040.– | Not for: Combination with Motor protection code C (15th position of the Article No.)                                                                     |     |
| 3 NTC thermistors – for tripping (6 terminals)                                                                                                                                                                                                                                                                                                                                                                           | Q21                                                                             | –                         | –                         | 1800.– | 1800.– | Not for: Combination with Motor protection code F (15th position of the Article No.)                                                                     |     |
| 1 KTY84-130 temperature sensor (2 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                                               | Q23                                                                             | –                         | –                         | 1250.– | 1250.– | Not for: Combination with Motor protection code F (15th position of the Article No.)                                                                     |     |
| 2 KTY84-130 temperature sensors (4 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                                              | Q25                                                                             | –                         | –                         | 1960.– | 1960.– | Not for: Combination with Motor protection code G (15th position of the Article No.)                                                                     |     |
| 1 Pt1000 resistance thermometer (2 terminals)                                                                                                                                                                                                                                                                                                                                                                            | Q35                                                                             | 868.–                     | 868.–                     | 1250.– | 1250.– |                                                                                                                                                          |     |
| 2 Pt1000 resistance thermometers (4 terminals)                                                                                                                                                                                                                                                                                                                                                                           | Q36                                                                             | 1470.–                    | 1470.–                    | 1960.– | 1960.– |                                                                                                                                                          |     |
| 6 Pt1000 resistance thermometers (12 terminals)                                                                                                                                                                                                                                                                                                                                                                          | Q37                                                                             | –                         | –                         | 2300.– | 2300.– |                                                                                                                                                          |     |
| 3 Pt100 resistance thermometers – 2-wire input (6 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                               | Q60                                                                             | 1640.–                    | 1640.–                    | 1670.– | 1670.– | Not for: Combination with Motor protection code H (15th position of the Article No.)                                                                     |     |
| 6 Pt100 resistance thermometers – 2-wire input (12 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                              | Q61                                                                             | 2420.–                    | 2420.–                    | 2470.– | 2470.– | Not for: Combination with Motor protection code J (15th position of the Article No.)                                                                     |     |
| 1 Pt100 resistance thermometer – 2-wire input (2 terminals)                                                                                                                                                                                                                                                                                                                                                              | Q62                                                                             | 1310.–                    | 1310.–                    | 1340.– | 1340.– |                                                                                                                                                          |     |
| 3 Pt100 resistance thermometers – 3-wire input (9 terminals)                                                                                                                                                                                                                                                                                                                                                             | Q63                                                                             | 1970.–                    | 1970.–                    | 2010.– | 2010.– |                                                                                                                                                          |     |
| 6 Pt100 resistance thermometers – 3-wire input (18 terminals)                                                                                                                                                                                                                                                                                                                                                            | Q64                                                                             | 2900.–                    | 2900.–                    | 2960.– | 2960.– |                                                                                                                                                          |     |
| 2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                  | Q72                                                                             | 1630.–                    | 1630.–                    | 1660.– | 1660.– |                                                                                                                                                          |     |
| 2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                                 | Q78                                                                             | 2060.–                    | 2060.–                    | 2100.– | 2100.– |                                                                                                                                                          |     |
| 2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) <sup>1)</sup>                                                                                                                                                                                                                                                                                                                         | Q79                                                                             | 2370.–                    | 2370.–                    | 2950.– | 2950.– |                                                                                                                                                          |     |

For legends and footnotes, see Page 4/92.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

Standard delivery times in working days:

**25****30****> 30****40****50**On  
request**Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33**

| Special versions                                                                                                                | Additional identification code<br>-Z with order code and plain text if required | Frame size                |                           |        |        | Motor version                                                                                           |                                                        |     |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------|---------------------------|--------|--------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----|
|                                                                                                                                 |                                                                                 | 315                       | 355                       | 400    | 450    |                                                                                                         |                                                        |     |
| 1MB55 . 4 - . . . . . -Z                                                                                                        |                                                                                 | 1MB5514, 1MB5524, 1MB5534 |                           |        |        | IEC                                                                                                     | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4 |
| 1MB55 . 3 - . . . . . -Z                                                                                                        |                                                                                 | 1MB5513, 1MB5523, 1MB5533 |                           |        |        |                                                                                                         |                                                        | IE3 |
| 1MB58 . 3 - . . . . . -Z                                                                                                        | Order code                                                                      |                           | 1MB5813, 1MB5823, 1MB5833 |        |        |                                                                                                         |                                                        |     |
| Motor connection and terminal box                                                                                               |                                                                                 |                           |                           |        |        |                                                                                                         |                                                        |     |
| External grounding                                                                                                              |                                                                                 | □                         | □                         | □      | □      |                                                                                                         |                                                        |     |
| Terminal box at NDE                                                                                                             | H08                                                                             | 1180.–                    | 1240.–                    | 2710.– | 2710.– |                                                                                                         |                                                        |     |
| Two terminal boxes at NDE <sup>17)</sup>                                                                                        | H09                                                                             | –                         | –                         | 5420.– | 5420.– |                                                                                                         |                                                        |     |
| Second external grounding                                                                                                       | H70                                                                             | 15.50                     | 15.50                     | 15.80  | 15.80  |                                                                                                         |                                                        |     |
| Subsequently rotatable main terminal box                                                                                        | R09                                                                             | –                         | –                         | 691.–  | 804.–  |                                                                                                         |                                                        |     |
| Rotation of the terminal box through 90°, entry from DE <sup>12) 22)</sup>                                                      | R10                                                                             | 122.–                     | 122.–                     | 124.–  | 124.–  | Not for: Combination with Type of construction letter <b>F, G, J</b> (15th position of the Article No.) |                                                        |     |
| Rotation of the terminal box through 90°, entry from NDE                                                                        | R11                                                                             | 122.–                     | 122.–                     | 124.–  | 124.–  |                                                                                                         |                                                        |     |
| Rotation of the terminal box through 180°                                                                                       | R12                                                                             | 122.–                     | 122.–                     | 124.–  | 124.–  |                                                                                                         |                                                        |     |
| One metal cable gland                                                                                                           | R15                                                                             | 231.–                     | 515.–                     | –      | –      |                                                                                                         |                                                        |     |
| EMC cable gland, maximum configuration                                                                                          | R16                                                                             | –                         | –                         | 4750.– | 4750.– |                                                                                                         |                                                        |     |
| Stud terminals for cable connection, accessories pack (3 items)                                                                 | R17                                                                             | 185.–                     | 227.–                     | –      | –      | Only for: 1MB551. - Ex tb (zone 21)<br>1MB552. - Ex tc (zone 22)<br>frame sizes 315 and 355             |                                                        |     |
| Metal cable gland, maximum configuration                                                                                        | R18                                                                             | 409.–                     | 618.–                     | 3270.– | 3270.– |                                                                                                         |                                                        |     |
| Saddle terminals for connection without cable lug, accessories pack (6 items)                                                   | R19                                                                             | 721.–                     | 1550.–                    | 1580.– | 1580.– | Only for: 1MB551. - Ex tb (zone 21)<br>1MB552. - Ex tc (zone 22)<br>frame sizes 315 and 355             |                                                        |     |
|                                                                                                                                 |                                                                                 | □                         | □                         | –      | –      | Only for: 1MB553. - Ex ec (zone 2)<br>frame sizes 315 and 355                                           |                                                        |     |
| Larger terminal box <sup>13)</sup>                                                                                              | R50                                                                             | 2190.–                    | –                         | 9810.– | 9810.– |                                                                                                         |                                                        |     |
| Drilled removable entry plate                                                                                                   | R52                                                                             | 500.–                     | 618.–                     | □      | □      |                                                                                                         |                                                        |     |
| Undrilled removable entry plate                                                                                                 | R53                                                                             | –                         | –                         | □      | □      |                                                                                                         |                                                        |     |
| Cast-iron auxiliary terminal box (small)                                                                                        | R62                                                                             | 278.–                     | 309.–                     | 533.–  | 533.–  |                                                                                                         |                                                        |     |
| Cast-iron auxiliary terminal box (large)                                                                                        | R63                                                                             | 618.–                     | 618.–                     | 2070.– | 2070.– |                                                                                                         |                                                        |     |
| Stainless steel auxiliary terminal box (large)                                                                                  | R65                                                                             | –                         | –                         | 2030.– | 2030.– |                                                                                                         |                                                        |     |
| Non-standard threaded through hole (NPT or G thread) <sup>2)</sup>                                                              | Y61 • and customer specifications                                               | 657.–                     | 773.–                     | 1580.– | 1580.– |                                                                                                         |                                                        |     |
| Windings and insulation                                                                                                         |                                                                                 |                           |                           |        |        |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 155 (F), with service factor <sup>9)</sup>                                          | N01                                                                             | –                         | –                         | □      | □      |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % <sup>15) 23)</sup>         | N05                                                                             | 107.–                     | 107.–                     | 109.–  | 109.–  |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % <sup>15) 23)</sup>         | N06                                                                             | 107.–                     | 107.–                     | 109.–  | 109.–  |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % <sup>15) 23)</sup>        | N07                                                                             | 107.–                     | 107.–                     | 109.–  | 109.–  |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derat-ing approx. 18 % <sup>15)</sup>           | N08                                                                             | 993.–                     | 107.–                     | 1010.– | 109.–  |                                                                                                         |                                                        |     |
| Increased air humidity/temperature with 30 to 60 g water per m <sup>3</sup> of air                                              | N30                                                                             | 1320.–                    | 1440.–                    | 4780.– | 5300.– |                                                                                                         |                                                        |     |
| Increased air humidity/temperature with 60 to 100 g water per m <sup>3</sup> of air                                             | N31                                                                             | 1780.–                    | 1960.–                    | 5300.– | 6040.– |                                                                                                         |                                                        |     |
| Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude <sup>9)</sup> | Y50 • and spec. power, CT .. °C or IA .... m above sea level                    | 1480.–                    | 2060.–                    | 2630.– | 3150.– |                                                                                                         |                                                        |     |

For legends and footnotes, see Page 4/92.

## Standard delivery times in working days:

25

30

&gt; 30

40

50

On request

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

| Special versions                                                                                                                                                                                                                                                                            | Additional identification code -Z with order code and plain text if required | Frame size                | Motor version             |         |         |                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------|---------------------------|---------|---------|----------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                             |                                                                              | 315                       | 355                       | 400     | 450     |                                                                                                          |
| 1MB55.4 - .....-Z                                                                                                                                                                                                                                                                           |                                                                              | 1MB5514, 1MB5524, 1MB5534 |                           |         |         | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2)                                               |
| 1MB55.3 - .....-Z                                                                                                                                                                                                                                                                           |                                                                              | 1MB5513, 1MB5523, 1MB5533 |                           |         |         |                                                                                                          |
| 1MB58.3 - .....-Z                                                                                                                                                                                                                                                                           | Order code                                                                   |                           | 1MB5813, 1MB5823, 1MB5833 |         |         |                                                                                                          |
| Colors and paint finish                                                                                                                                                                                                                                                                     |                                                                              |                           |                           |         |         |                                                                                                          |
| Standard finish C2 in RAL 7030 stone gray                                                                                                                                                                                                                                                   |                                                                              | □                         | □                         | □       | □       |                                                                                                          |
| Unpainted (only cast-iron parts primed)                                                                                                                                                                                                                                                     | S00                                                                          | ○                         | ○                         | ○       | ○       |                                                                                                          |
| Unpainted, only primed                                                                                                                                                                                                                                                                      | S01                                                                          | 81.70                     | 81.70                     | 315.–   | 315.–   |                                                                                                          |
| Special finish C3                                                                                                                                                                                                                                                                           | S02                                                                          | 299.–                     | 361.–                     | 1360.–  | 1720.–  |                                                                                                          |
| Special finish sea air resistant C4 <sup>14)</sup>                                                                                                                                                                                                                                          | S03                                                                          | 814.–                     | 876.–                     | 2610.–  | 2990.–  |                                                                                                          |
| Special paint for use offshore C5 <sup>14)</sup>                                                                                                                                                                                                                                            | S04                                                                          | 7910.–                    | 8340.–                    | 12600.– | 14200.– |                                                                                                          |
| Internal coating                                                                                                                                                                                                                                                                            | S05                                                                          | 134.–                     | 155.–                     | 1200.–  | 1420.–  |                                                                                                          |
| Top coat polyurethane <sup>6)</sup>                                                                                                                                                                                                                                                         | S06                                                                          | 779.–                     | 824.–                     | □       | □       | Only for: 1MB553. - Ex ec (zone 2)<br>frame sizes 315 and 355                                            |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 Section 1 "Introduction") | Y53 • and finish RAL ....                                                    | 258.–                     | 309.–                     | 420.–   | 525.–   |                                                                                                          |
| Finish in special RAL colors: RAL colors, see "Special finish in special RAL colors" (see Catalog D 81.1 Section 1 "Introduction")                                                                                                                                                          | Y56 • and finish RAL ....                                                    | 742.–                     | 900.–                     | 1840.–  | 2330.–  |                                                                                                          |
| Modular technology – Basic version                                                                                                                                                                                                                                                          |                                                                              |                           |                           |         |         |                                                                                                          |
| Mounting of separately driven fan <sup>10)</sup>                                                                                                                                                                                                                                            | F70                                                                          | O. R.                     | O. R.                     | 13700.– | 13700.– |                                                                                                          |
| Special technology                                                                                                                                                                                                                                                                          |                                                                              |                           |                           |         |         |                                                                                                          |
| Mounting of explosion-proof rotary pulse encoder LL 841 (HTL); 1024 l <sup>24)</sup>                                                                                                                                                                                                        | G30                                                                          | O. R.                     | O. R.                     | 9540.–  | 9540.–  |                                                                                                          |
| Mounting of a special type of rotary pulse encoder                                                                                                                                                                                                                                          | Y70 • and customer specifications                                            | –                         | –                         | O. R.   | O. R.   |                                                                                                          |
| Mechanical design and degrees of protection                                                                                                                                                                                                                                                 |                                                                              |                           |                           |         |         |                                                                                                          |
| Low-noise version for 2-pole motors with clockwise direction of rotation                                                                                                                                                                                                                    | F77                                                                          | 2420.–                    | 2610.–                    | □       | □       | Only for: 2-pole motors<br>Not for: Frame sizes 315 and 355 in combination with order codes L05 ,and L51 |
| Low-noise version for 2-pole motors with counter-clockwise direction of rotation                                                                                                                                                                                                            | F78                                                                          | 2420.–                    | 2610.–                    | ○       | ○       | Only for: 2-pole motors<br>Not for: Frame sizes 315 and 355 in combination with order codes L05 ,and L51 |
| Prepared for mounted components, centering hole only                                                                                                                                                                                                                                        | G40                                                                          | –                         | –                         | □       | □       |                                                                                                          |
| Mechanical protection for encoders                                                                                                                                                                                                                                                          | G43                                                                          | O. R.                     | O. R.                     | 4520.–  | 4520.–  |                                                                                                          |
| Protective cover                                                                                                                                                                                                                                                                            | H00                                                                          | 751.–                     | 876.–                     | 2150.–  | 2570.–  |                                                                                                          |
| Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994                                                                                                                                                                                                  | H02                                                                          | 680.–                     | 773.–                     | –       | –       |                                                                                                          |
| Condensation drainage holes                                                                                                                                                                                                                                                                 | H03                                                                          | □                         | □                         | □       | □       |                                                                                                          |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                          | H07                                                                          | 275.–                     | 309.–                     | 1370.–  | 1370.–  |                                                                                                          |
| IP66 degree of protection                                                                                                                                                                                                                                                                   | H19                                                                          | 1390.–                    | 2120.–                    | –       | –       |                                                                                                          |
| IP65 degree of protection <sup>19) 25)</sup>                                                                                                                                                                                                                                                | H20                                                                          | 663.–                     | 680.–                     | 9240.–  | 11100.– | Only for: 1MB553. - Ex ec (zone 2)<br>frame sizes 315 and 355                                            |
| IP56 degree of protection <sup>26)</sup>                                                                                                                                                                                                                                                    | H22                                                                          | 721.–                     | 1440.–                    | 2020.–  | 2700.–  | Only for: 1MB553. - Ex ec (zone 2)<br>frame sizes 315 and 355                                            |
| Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar                                                                                                                                                                                                                             | H23                                                                          | 469.–                     | 546.–                     | –       | –       |                                                                                                          |
| Sealing ring made of fluoroelastomer (FKM)                                                                                                                                                                                                                                                  | H25                                                                          | 134.–                     | 227.–                     | 473.–   | 735.–   | Not for: Frame sizes 315 and 355 in combination with order code D03                                      |
| Adjustment screws for feet in horizontal installation                                                                                                                                                                                                                                       | H30                                                                          | O. R.                     | O. R.                     | –       | –       |                                                                                                          |
| Increased corrosion protection for external components                                                                                                                                                                                                                                      | H90                                                                          | –                         | –                         | 12600.– | 14200.– |                                                                                                          |

For legends and footnotes, see Page 4/92.

**SIMOTICS XP 1MB1, 1MB5 explosion-protected motors**

Article No. supplements and special versions

**25****30****> 30****40****50****On  
request****Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33**

| Special versions                                                                                                               | Additional identification code<br>-Z with order code and plain text if required | Frame size                | Motor version             |         |         |                                                            |     |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------|---------------------------|---------|---------|------------------------------------------------------------|-----|
|                                                                                                                                |                                                                                 | 315                       | 355                       | 400     | 450     |                                                            |     |
| 1MB55 . 4 - . . . . . -Z                                                                                                       |                                                                                 | 1MB5514, 1MB5524, 1MB5534 |                           |         |         | IEC Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) | IE4 |
| 1MB55 . 3 - . . . . . -Z                                                                                                       |                                                                                 | 1MB5513, 1MB5523, 1MB5533 |                           |         |         |                                                            | IE3 |
| 1MB58 . 3 - . . . . . -Z                                                                                                       | Order code                                                                      |                           | 1MB5813, 1MB5823, 1MB5833 |         |         |                                                            |     |
| Coolant temperature and installation altitude                                                                                  |                                                                                 |                           |                           |         |         |                                                            |     |
| Coolant temperature<br>-40 °C to +40 °C                                                                                        | D03                                                                             | 2580.-                    | 2780.-                    | 16700.- | 18400.- |                                                            |     |
| Designs in accordance with standards and specifications                                                                        |                                                                                 |                           |                           |         |         |                                                            |     |
| Electrical according to NEMA MG1-12 17)                                                                                        | D30                                                                             | -                         | -                         | □       | □       |                                                            |     |
| IECEX certification                                                                                                            | D37                                                                             | 764.-                     | 856.-                     | 1100.-  | 1310.-  |                                                            |     |
| MEPS Australia                                                                                                                 | D70                                                                             | 1380.-                    | -                         | -       | -       | Only for: 1MB55.3                                          |     |
| Bearings and lubrication                                                                                                       |                                                                                 |                           |                           |         |         |                                                            |     |
| Regreasing device with M10 × 1 grease nipple according to DIN 71412-A                                                          | L19                                                                             | ○                         | ○                         | ○       | ○       |                                                            |     |
| Located bearing DE                                                                                                             | L20                                                                             | 1050.-                    | 1240.-                    | □       | □       |                                                            |     |
| Located bearing NDE 11)                                                                                                        | L21                                                                             | □                         | □                         | 1370.-  | 1470.-  |                                                            |     |
| Bearing design for increased cantilever forces 7)8)                                                                            | L22                                                                             | 618.-                     | 1440.-                    | O. R.   | O. R.   |                                                            |     |
| Regreasing device                                                                                                              | L23                                                                             | □                         | □                         | □       | □       |                                                            |     |
| Reinforced bearings at both ends for DE and NDE, bearing size 63                                                               | L25                                                                             | □                         | □                         | -       | -       |                                                            |     |
| Drainage for used grease                                                                                                       | L30                                                                             | 185.-                     | □                         | O. R.   | O. R.   |                                                            |     |
| Special version with higher speeds                                                                                             | L37                                                                             | O. R.                     | O. R.                     | -       | -       |                                                            |     |
| Bearing insulation DE 21)                                                                                                      | L50                                                                             | 2010.-                    | 2160.-                    | 2630.-  | 3050.-  |                                                            |     |
| Bearing insulation NDE 21)                                                                                                     | L51                                                                             | 2010.-                    | 2160.-                    | 2630.-  | 3050.-  |                                                            |     |
| Measuring nipple for SPM shock pulse measurement for bearing inspection                                                        | Q01                                                                             | 518.-                     | 553.-                     | 564.-   | 564.-   |                                                            |     |
| Balance and vibration quantity                                                                                                 |                                                                                 |                           |                           |         |         |                                                            |     |
| Vibration quantity level A 21)                                                                                                 |                                                                                 | □                         | □                         | □       | □       |                                                            |     |
| Vibration quantity level B 21) 22) 23)                                                                                         | L00                                                                             | 1680.-                    | 1850.-                    | 4490.-  | 5300.-  | Not for: Frame sizes 315 and 355 2-pole                    |     |
| Half-key balancing                                                                                                             |                                                                                 | □                         | □                         | □       | □       |                                                            |     |
| Balancing without key 16)                                                                                                      | L01                                                                             | 82.-                      | 87.60                     | 210.-   | 210.-   |                                                            |     |
| Full-key balancing 16)                                                                                                         | L02                                                                             | 199.-                     | 199.-                     | 597.-   | 857.-   |                                                            |     |
| Shaft and rotor                                                                                                                |                                                                                 |                           |                           |         |         |                                                            |     |
| Shaft extension with standard dimensions, without feather keyway                                                               | L04                                                                             | 1040.-                    | 1080.-                    | 1150.-  | 1200.-  |                                                            |     |
| Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347 25)                                    | L05                                                                             | 509.-                     | 546.-                     | 1580.-  | 1790.-  |                                                            |     |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                           | L06                                                                             | 5770.-                    | 6900.-                    | -       | -       |                                                            |     |
| Concentricity of shaft extension in acc. with DIN 42955 Tolerance R                                                            | L07                                                                             | 554.-                     | 554.-                     | -       | -       |                                                            |     |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                             | 811.-                     | 811.-                     | 1370.-  | 1370.-  |                                                            |     |
| Non-standard cylindrical shaft extension DE 3)                                                                                 | Y58 • and customer specifications                                               | 1040.-                    | 1340.-                    | 5100.-  | 5100.-  |                                                            |     |
| Non-standard cylindrical shaft extension NDE 3)                                                                                | Y59 • and customer specifications                                               | 1040.-                    | 1340.-                    | 5100.-  | 5100.-  |                                                            |     |
| Special shaft steel                                                                                                            | Y60 • and customer specifications                                               | O. R.                     | O. R.                     | O. R.   | O. R.   |                                                            |     |
| Heating and ventilation                                                                                                        |                                                                                 |                           |                           |         |         |                                                            |     |
| Metal fan made of brass                                                                                                        | F68                                                                             | O. R.                     | O. R.                     | -       | -       |                                                            |     |
| Sheet metal fan cover                                                                                                          | F74                                                                             | □                         | □                         | □       | □       |                                                            |     |
| Metal external fan 27)                                                                                                         | F76                                                                             | □                         | □                         | □       | □       |                                                            |     |
| Without external fan and without fan cover                                                                                     | F90                                                                             | -                         | -                         | 210.-   | 210.-   |                                                            |     |
| Anti-condensation heating for 230 V                                                                                            | Q02                                                                             | 929.-                     | 1180.-                    | 1350.-  | 1500.-  |                                                            |     |
| Anti-condensation heating for 115 V                                                                                            | Q03                                                                             | 929.-                     | 1180.-                    | 1350.-  | 1500.-  |                                                            |     |
| Anti-condensation heating for 400 V (2 terminals)                                                                              | Q06                                                                             | 2710.-                    | 3280.-                    | 4020.-  | 4710.-  |                                                            |     |
| Separately driven fan with non-standard voltage and/or frequency                                                               | Y81 • and customer specifications                                               | O. R.                     | O. R.                     | O. R.   | O. R.   |                                                            |     |

For legends and footnotes, see Page 4/92.

## Standard delivery times in working days:

25

30

&gt; 30

40

50

On request

## SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

## Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

| Special versions                                                                                                      | Additional identification code -Z with order code and plain text if required | Frame size                | Motor version |                                                        |         |     |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------|---------------|--------------------------------------------------------|---------|-----|
|                                                                                                                       |                                                                              |                           | 315           | 355                                                    | 400     | 450 |
| 1MB55 . 4 - ..... -Z                                                                                                  |                                                                              | 1MB5514, 1MB5524, 1MB5534 | IEC           | Ex tb (zone 21),<br>Ex tc (zone 22),<br>Ex ec (zone 2) |         | IE4 |
| 1MB55 . 3 - ..... -Z                                                                                                  |                                                                              | 1MB5513, 1MB5523, 1MB5533 |               |                                                        |         | IE3 |
| 1MB58 . 3 - ..... -Z                                                                                                  | Order code                                                                   |                           |               | 1MB5813, 1MB5823,<br>1MB5833                           |         |     |
| <b>Rating plate and extra rating plates</b>                                                                           |                                                                              |                           |               |                                                        |         |     |
| Second rating plate, loose                                                                                            | M10                                                                          | 66.30                     | 66.30         | 204.–                                                  | 204.–   |     |
| Rating plate, stainless steel                                                                                         | M11                                                                          | □                         | □             | □                                                      | □       |     |
| Extra rating plate with deviating rating plate data                                                                   | Y80 • and customer specifications                                            | 206.–                     | 206.–         | 349.–                                                  | 349.–   |     |
| Extra rating plate with identification codes                                                                          | Y82 • and customer specifications                                            | 107.–                     | 107.–         | 204.–                                                  | 204.–   |     |
| Additional information on rating plate and on package label (max. 20 characters)                                      | Y84 • and customer specifications                                            | 107.–                     | 107.–         | 204.–                                                  | 204.–   |     |
| Adhesive label, supplied loose printed with: Article No., Serial No.; 2 lines of text)                                | Y85 • and customer specifications                                            | 66.30                     | 66.30         | –                                                      | –       |     |
| <b>Extension of the liability for defects</b>                                                                         |                                                                              |                           |               |                                                        |         |     |
| Extension of the liability for defects by 12 months to a total of 24 months (2 years) from delivery <sup>4) 28)</sup> | Q80                                                                          | 2.30%                     | 2.30%         | 2.3 %                                                  | 2.3 %   |     |
| Extension of the liability for defects by 18 months to a total of 30 months (2.5 years) from delivery <sup>4)</sup>   | Q81                                                                          | –                         | –             | 3.4 %                                                  | 3.4 %   |     |
| Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery <sup>4) 28)</sup> | Q82                                                                          | 4.40%                     | 4.40 %        | 4.4 %                                                  | 4.4 %   |     |
| Extension of the liability for defects by 30 months to a total of 42 months (3.5 years) from delivery <sup>4)</sup>   | Q83                                                                          | –                         | –             | 6.2 %                                                  | 6.2 %   |     |
| Extension of the liability for defects by 36 months to a total of 48 months (4 years) from delivery <sup>4)</sup>     | Q84                                                                          | –                         | –             | 8.0 %                                                  | 8.0 %   |     |
| Extension of the liability for defects by 48 months to a total of 60 months (5 years) from delivery <sup>4)</sup>     | Q85                                                                          | –                         | –             | 11.2 %                                                 | 11.2 %  |     |
| <b>Packaging, safety notes, documentation and test certificates</b>                                                   |                                                                              |                           |               |                                                        |         |     |
| Inspection certificate 3.1 according to EN 10204 <sup>4)</sup>                                                        | B02                                                                          | 28.10                     | 28.10         | 28.70                                                  | 28.70   |     |
| Printed German/English operating instructions enclosed <sup>5)</sup>                                                  | B04                                                                          | □                         | □             | □                                                      | □       |     |
| Equivalent circuit diagram                                                                                            | B51                                                                          | 1080.–                    | 1080.–        | 1100.–                                                 | 1100.–  |     |
| Starting diagram (torque vs. speed and current vs. speed)                                                             | B52                                                                          | 1550.–                    | 1550.–        | 1580.–                                                 | 1580.–  |     |
| Document – Electrical datasheet                                                                                       | B60                                                                          | 309.–                     | 309.–         | 1190.–                                                 | 1190.–  |     |
| Document – Order dimensional drawing                                                                                  | B61                                                                          | 309.–                     | 309.–         | 315.–                                                  | 315.–   |     |
| Standard test (routine test) with acceptance                                                                          | B65                                                                          | 3810.–                    | 7210.–        | 7350.–                                                 | 8190.–  |     |
| Temperature test without acceptance                                                                                   | B67                                                                          | 16300.–                   | 17800.–       | 18200.–                                                | 21400.– |     |
| Temperature test with acceptance                                                                                      | B68                                                                          | 19400.–                   | 20900.–       | 21300.–                                                | 24600.– |     |
| Type test with heat run for vertical motors, without acceptance <sup>29)</sup>                                        | B80                                                                          | 19300.–                   | 19300.–       | 19700.–                                                | 19700.– |     |
| Type test with heat run for vertical motors, with acceptance <sup>29)</sup>                                           | B81                                                                          | 22600.–                   | 22600.–       | 23100.–                                                | 23100.– |     |
| Type test with heat run for horizontal motors, without acceptance                                                     | B82                                                                          | 12500.–                   | 12500.–       | 27100.–                                                | 27100.– |     |
| Type test with heat run for horizontal motors, with acceptance                                                        | B83                                                                          | 14000.–                   | 14600.–       | 28700.–                                                | 28700.– |     |
| "Basic" documentation package                                                                                         | B90                                                                          | 597.–                     | 597.–         | 597.–                                                  | 597.–   |     |
| "Advanced" documentation package                                                                                      | B91                                                                          | 898.–                     | 898.–         | 898.–                                                  | 898.–   |     |
| "Projects" documentation package                                                                                      | B92                                                                          | 2470.–                    | 2470.–        | 2450.–                                                 | 2450.–  |     |
| Connected in star for dispatch                                                                                        | M01                                                                          | 46.–                      | 51.50         | 94.90                                                  | O. R.   |     |
| Connected in delta for dispatch                                                                                       | M02                                                                          | 46.–                      | 51.50         | 94.90                                                  | O. R.   |     |

For legends and footnotes, see Page 4/92.

# SIMOTICS XP 1MB1, 1MB5 explosion-protected motors

Article No. supplements and special versions

Options · Cast-iron series 1MB5514, 1MB5524, 1MB5534, 1MB5.13, 1MB5.23, 1MB5.33

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible
- R. Possible on request

4

- 1) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 2) Parallel Whitworth threaded pipe DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) threaded pipe for connections not sealed in the thread (cylindrical), external = G.
- 3) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case.  
For order codes **Y58**, **Y59** and **L05**:  
– Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")  
– Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension  
For explanation of the order codes, see Catalog D 81.1 Section 1 "Introduction".
- 4) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 5) The Operating Instructions (compact) are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/40761976>
- 6) Order code **S06** cannot be combined with order codes **S00** and **S01**. It can be combined with **Y53** in frame sizes 315, 355 on request.
- 7) A minimum cantilever force  $F_{min}$  von  $0.5 \cdot F_{max}$  is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.
- 8) Admissible cantilever forces with reinforced bearings for frame sizes 400 and 450 on request. Please indicate cantilever force and lever arm.
- 9) Only possible with motors for mains-fed operation.
- 10) Separately driven fan motor is carried out with voltage code **3-4** (4000 V/50 Hz; 460 V/60 Hz).
- 11) Not possible at vertical type of construction for frame sizes 400 and 450.
- 12) Only possible in combination with option **H08** for motors with flange (IM B5, IM B35, IM V1).
- 13) Restrictions are possible when terminal box mounted.
- 14) Only possible for 1MB552 (Ex tc zone 22).
- 15) Not possible for 8-pole motors frame size 450.
- 16) Not possible in combination with order code **C02**.
- 17) Not possible in combination with order code **R50**.
- 18) Customer specification: voltage between 380 V and 690 V (voltages outside this range on request), frequency, type of connection, requested rated power in kW.
- 19) Standard version at 1MB5.1 (Ex tb for zone 21).
- 20) Combination with order code **D03** and **C02** non request. Not possible in combination with order codes **H20** and **H22**.
- 21) For IM V1-motors (frame sizes 315 and 355): (Load) tests are performed as IM B3 (horizontal) (IM-identification acc. to EN 60034-7)
- 22) Frame sizes 315 and 355: In combination with order code **B40** or **B41** "bearing insulation BS" is standard (order code **L51** is including in **B40/B41**)
- 23) At frame sizes 315 and 355 there is no derating in combination with order codes **M2A**, **M2B**, **M2C**, **M2D**, **M2E**, **M2F**, **M2G**, **M2H**.
- 24) For frame sizes 315 and 355 applies: Can be combined with order codes **N30**, **N31**, **L51** on request. Not admissible in combination with order code **L05**. Protective cover not possible.
- 25) Order code **H20** (IP65 degree of protection) can only be ordered for zone 2. For zone 21, IP65 degree of protection is standard. Not possible for zone 22, because only IP55 degree of protection is required.
- 26) Order code **H22** IP56 degree of protection is only possible for zone 2. Degree of protection IP56 is not permissible for zone 21 (IP65 degree of protection) and zone 22 (IP55 degree of protection).
- 27) Not possible with flange A800 mounting on DE side – as standard for frame size 315. Not possible with flange A900 mounting on DE side – as standard for frame size 355, combination with option **H08** it is possible.
- 28) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 29) For chemical industry must be used steel fan.
- 30) Combination of **L50** and **L51** is not possible for explosion-proof motors.

## SIMOTICS DP application-specific motors



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**Marine motors**

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Special versions

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## Standard Motors

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- SIMOTICS GP – Aluminum series 1LE10

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- SIMOTICS SD – Cast-iron series 1LE15/1LE16 Basic/Performance Line

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- SIMOTICS SD next generation – Cast-iron series 1LE55/1LE56 Basic/Performance Line

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## Explosion-Proof Motors

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- SIMOTICS XP – Aluminum series 1MB10, Cast-iron series 1MB15/1MB16

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**Steel plant motors**

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Motors with IE3 Premium Efficiency

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SIMOTICS DP Self-ventilated motors – Cast-iron series 1PC1433

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Motors for converter operation

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SIMOTICS DP Self-ventilated motors – Cast-iron series 1PC1443

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SIMOTICS DP Self-ventilated motors – Cast-iron series 1PC1463

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Article No. supplements and special versions

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## Voltages

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- Cast iron series 1PC1433, 1PC1443, 1PC1463

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## Types of construction

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- Cast iron series 1PC1433, 1PC1443, 1PC1463

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## Motor protection

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- Cast iron series 1PC1433, 1PC1443, 1PC1463

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## Terminal box position

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- Cast iron series 1PC1433, 1PC1443, 1PC1463

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## Options

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- Cast iron series 1PC1433, 1PC1443, 1PC1463

**SIMOTICS DP Application-Specific Motors**

Marine motors

**Special versions · SIMOTICS GP Standard Motors – Aluminum series 1LE10****Selection and ordering data**

| Special versions                        | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size |    |         |    |         |     |     |            |            |               | Motor version |  |
|-----------------------------------------|-------------------------------------------------------------------------------------|------------|----|---------|----|---------|-----|-----|------------|------------|---------------|---------------|--|
|                                         |                                                                                     | 63         | 71 | 80      | 90 | 100     | 112 | 132 | 160        | 180        | 200           |               |  |
|                                         |                                                                                     |            |    |         |    | 1LE1004 |     |     |            |            | IEC           | IE4           |  |
|                                         |                                                                                     |            |    | 1LE1003 |    |         |     |     | IE2        | IE3        |               |               |  |
|                                         |                                                                                     | 1LE1001    |    |         |    |         | IE1 | IE2 |            |            |               |               |  |
|                                         |                                                                                     | 1LE1002    |    |         |    |         |     | IE1 |            |            |               |               |  |
|                                         |                                                                                     |            |    | 1LE1023 |    |         |     |     | Eagle Line | NPE (NEMA) |               |               |  |
|                                         |                                                                                     |            |    | 1LE1021 |    |         |     |     |            | NEE (NEMA) |               |               |  |
|                                         |                                                                                     |            |    |         |    | 1LE1011 |     |     |            |            | Pole-changing |               |  |
|                                         |                                                                                     |            |    |         |    | 1LE1012 |     |     |            |            |               |               |  |
| 1LE10 ... - - - - - - - - - - <b>-Z</b> | Order code                                                                          |            |    |         |    |         |     |     |            |            |               |               |  |

**Marine version - Basic version**

|                                                                                                                                              |            |       |       |       |       |       |       |       |       |        |        |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--|--|
| With type test certificate according to Lloyds Register (LR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)              | <b>E21</b> | –     | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)               | <b>E31</b> | 190.– | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)   | <b>E41</b> | –     | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)    | <b>E46</b> | 190.– | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)                   | <b>E51</b> | 190.– | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F) | <b>E52</b> | –     | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |
| With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)  | <b>E54</b> | –     | 190.– | 250.– | 290.– | 320.– | 360.– | 430.– | 823.– | 1090.– | 1450.– |  |  |

**Marine version – Acceptance/certification**

|                                                                |            |        |        |        |        |        |        |        |        |         |         |  |  |
|----------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--|--|
| Individual acceptance by marine classification society         | <b>B10</b> | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 8200.–  | 8200.–  |  |  |
| Type test with heat run for horizontal motors, with acceptance | <b>B83</b> | 4180.– | 4960.– | 5730.– | 6520.– | 7290.– | 8070.– | 8840.– | 9620.– | 10400.– | 11200.– |  |  |

Standard delivery times in working days:

**10**On  
request**SIMOTICS DP Application-Specific Motors**  
Marine motors

Special versions · SIMOTICS SD Standard Motors – Cast-iron series 1LE15/1LE16 Basic/Performance Line

**Selection and ordering data**

| Special versions                                                                                                                             | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |        |                          |        |        |        |        |         |         |         |         |         | Motor version |            |            |           |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|--------|--------------------------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------------|------------|------------|-----------|
|                                                                                                                                              |                                                                                     | 71                       | 80     | 90     | 100                      | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     |               |            |            |           |
|                                                                                                                                              |                                                                                     |                          |        |        | 1LE1504 Basic Line       |        |        |        |        |         |         |         |         |         |               | IEC        | IE4        | ①         |
|                                                                                                                                              |                                                                                     |                          |        |        | 1LE1604 Performance Line |        |        |        |        |         |         |         |         |         |               |            |            | ②         |
|                                                                                                                                              |                                                                                     | 1LE1503 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               | IE3        |            | ③         |
|                                                                                                                                              |                                                                                     | 1LE1603 Performance Line |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            | ④         |
|                                                                                                                                              |                                                                                     | 1LE1501 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               | IE2        |            | ⑤         |
|                                                                                                                                              |                                                                                     | 1LE1601 Performance Line |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            | ⑥         |
|                                                                                                                                              |                                                                                     | 1LE1502 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               | IE1        |            | ⑦         |
|                                                                                                                                              |                                                                                     | 1LE1543 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            | APAC Line |
|                                                                                                                                              |                                                                                     | 1LE1643 Performance Line |        |        |                          |        |        |        |        |         |         |         |         |         |               | ⑨          |            |           |
|                                                                                                                                              |                                                                                     | 1LE1541 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               | IE2        | ⑩          |           |
|                                                                                                                                              |                                                                                     | 1LE1523 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               | Eagle Line | NPE (NEMA) | ⑪         |
|                                                                                                                                              |                                                                                     | 1LE1623 Performance Line |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            | ⑫         |
|                                                                                                                                              |                                                                                     | 1LE1521 Basic Line       |        |        |                          |        |        |        |        |         |         |         |         |         |               |            | NEE (NEMA) | ⑬         |
| 1LE1 ...-.....-Z                                                                                                                             |                                                                                     | Order code               |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            |           |
| Marine version - Basic version                                                                                                               |                                                                                     |                          |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            |           |
| With type test certificate according to Lloyds Register (LR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)              | E21                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 1600.–  | 1800.–  | 2200.–  | 2550.–        |            |            |           |
| With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)               | E31                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–         |            |            |           |
| With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)   | E41                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–         |            |            |           |
| With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)    | E46                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–         |            |            |           |
| With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)                   | E51                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–         |            |            |           |
| With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F) | E52                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 3850.–  | 470.–   | 780.–         |            |            |           |
| With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)  | E54                                                                                 |                          | 190.–  | 250.–  | 290.–                    | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–         |            |            |           |
| Marine version – Acceptance/certification                                                                                                    |                                                                                     |                          |        |        |                          |        |        |        |        |         |         |         |         |         |               |            |            |           |
| Individual acceptance by marine classification society                                                                                       | B10                                                                                 |                          | 7280.– | 7280.– | 7280.–                   | 7280.– | 7280.– | 7280.– | 7280.– | 8200.–  | 8200.–  | 8200.–  | 9260.–  | 9260.–  | 9260.–        |            |            |           |
| Type test with heat run for horizontal motors, with acceptance                                                                               | B83                                                                                 |                          | 4960.– | 5730.– | 6520.–                   | 7290.– | 8070.– | 8840.– | 9620.– | 10400.– | 11200.– | 11900.– | 12800.– | 13500.– | 14300.–       |            |            |           |

**SIMOTICS DP Application-Specific Motors**

Marine motors

**30**On  
request

Special versions · SIMOTICS SD Standard Motors next generation – Cast-iron series 1LE55/1LE56 Basic/Performance Line

**Selection and ordering data**

| Special versions                                                                                                                             | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               | Motor version |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|---------------|
|                                                                                                                                              |                                                                                     | <b>315</b> <b>355</b>    |               |
|                                                                                                                                              |                                                                                     | 1LE5504 Basic Line       | IEC IE4       |
|                                                                                                                                              |                                                                                     | 1LE5604 Performance Line |               |
|                                                                                                                                              |                                                                                     | 1LE5534 Basic Line       |               |
|                                                                                                                                              |                                                                                     | 1LE5634 Performance Line |               |
|                                                                                                                                              |                                                                                     | 1LE5503 Basic Line       | IE3           |
|                                                                                                                                              |                                                                                     | 1LE5603 Performance Line |               |
|                                                                                                                                              |                                                                                     | 1LE5533 Basic Line       |               |
|                                                                                                                                              |                                                                                     | 1LE5633 Performance Line |               |
| <b>1LE5</b> .....-Z                                                                                                                          | Order code                                                                          |                          |               |
| <b>Marine version - Basic version</b>                                                                                                        |                                                                                     |                          |               |
| With type test certificate according to Lloyds Register (LR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)              | <b>E21</b>                                                                          | 780.–                    | 1150.–        |
| With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)   | <b>E41</b>                                                                          | 780.–                    | 1150.–        |
| With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)    | <b>E46</b>                                                                          | 780.–                    | 1150.–        |
| With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)                   | <b>E51</b>                                                                          | 780.–                    | 1150.–        |
| With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F) | <b>E52</b>                                                                          | 780.–                    | 1150.–        |
| <b>Marine version – Acceptance/certification</b>                                                                                             |                                                                                     |                          |               |
| Individual acceptance by marine classification society                                                                                       | <b>B10</b>                                                                          | 9260.–                   | 9260.–        |
| Type test with heat run for vertical motors, with acceptance                                                                                 | <b>B81</b>                                                                          | 23100.–                  | 23100.–       |
| Type test with heat run for horizontal motors, with acceptance                                                                               | <b>B83</b>                                                                          | 14300.–                  | 14300.–       |

Standard delivery times in working days:

**10**On  
request**SIMOTICS DP Application-Specific Motors**

Marine motors

Special versions · SIMOTICS XP Explosion-Proof Motors – Aluminum series 1MB10, Cast-iron series 1MB15/1MB16

**Selection and ordering data**

| Special versions                                                                                                                             | Additional identification code <b>-Z</b> with order code and plain text if required | Frame size               |        |        |        |        |        |        |        |         |         |         |         |         | Motor version                                |                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|----------------------------------------------|---------------------------------|--|
| Aluminum series                                                                                                                              |                                                                                     | 71                       | 80     | 90     | 100    | 112    | 132    | 160    | 180    | 200     | 225     | 250     | 280     | 315     | IEC Ex t<br>(zone 21/22)<br>Ex n<br>(zone 2) | IE3<br>IE2<br>IE1<br>IE3<br>IE2 |  |
|                                                                                                                                              |                                                                                     | 1MB10.3                  |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
|                                                                                                                                              |                                                                                     | 1MB10.1                  |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
|                                                                                                                                              |                                                                                     | 1MB10.2                  |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
| Cast-iron series                                                                                                                             |                                                                                     | 1MB15.3 Basic Line       |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
|                                                                                                                                              |                                                                                     | 1MB16.3 Performance Line |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
|                                                                                                                                              |                                                                                     | 1MB15.1 Basic Line       |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
| 1MB1 . . . . . -Z                                                                                                                            | Order code                                                                          | 1MB16.1 Performance Line |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
| Marine version - Basic version                                                                                                               |                                                                                     |                          |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
| With type test certificate according to Lloyds Register (LR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)              | E21                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 1600.–  | 1800.–  | 2200.–  | 2550.–                                       |                                 |  |
| With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)               | E31                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 1600.–  | 1800.–  | 2200.–  | 2550.–                                       |                                 |  |
| With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)   | E41                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–                                        |                                 |  |
| With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)    | E46                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–                                        |                                 |  |
| With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)                   | E51                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–                                        |                                 |  |
| With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F) | E52                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–                                        |                                 |  |
| With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)  | E54                                                                                 |                          | 190.–  | 250.–  | 290.–  | 320.–  | 360.–  | 430.–  | 823.–  | 1090.–  | 1450.–  | 380.–   | 380.–   | 470.–   | 780.–                                        |                                 |  |
| Marine version – Acceptance/certification                                                                                                    |                                                                                     |                          |        |        |        |        |        |        |        |         |         |         |         |         |                                              |                                 |  |
| Individual acceptance by marine classification society                                                                                       | B10                                                                                 |                          | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 7280.– | 8200.–  | 8200.–  | 8200.–  | 9260.–  | 9260.–  | 9260.–                                       |                                 |  |
| Type test with heat run for horizontal motors, with acceptance                                                                               | B83                                                                                 |                          | 4960.– | 5730.– | 6520.– | 7290.– | 8070.– | 8840.– | 9620.– | 10200.– | 11000.– | 11700.– | 12500.– | 13200.– | 14300.–                                      |                                 |  |

**SIMOTICS DP Application-Specific Motors**

Steel plant motors

**Overview of selection and ordering data with base prices and standard delivery times****Overview**

|                                        |                                           |
|----------------------------------------|-------------------------------------------|
| Category                               | <b>Motors with IE3 Premium Efficiency</b> |
| Series version                         | <b>Cast-iron series 1PC1433</b>           |
| Cooling                                | Self-ventilated (IC 411)                  |
| Degree of protection                   | IP55, optionally IP56 or IP65             |
| Insulation                             | Thermal class 155 (F)                     |
| Number of poles                        | 4, 6                                      |
| Frame sizes (FS)                       | 112 M ... 280 M                           |
| Rated power at 50 Hz                   | 2.2 ... 90 kW                             |
| Synchronous speed at 50 Hz             | 1000 ... 1500 rpm                         |
| Rated torque at 50 Hz                  | 22 ... 579 Nm                             |
| Efficiency                             | IE3 High Efficiency                       |
| Metal factor for metal surcharges (MS) | N - W - - -                               |
| Price group (PG)                       | 3Z3                                       |

**Range of motors in standard version with Article No., delivery time and base price plus MS**  
 (for article number supplements and special versions see from Page 5/9, for delivery times refer to colored background following the respective price)

| $P_{rated}$ ,<br>50 Hz<br>kW     | IE<br>class | Frame<br>size<br>FS | Article No.        | Base<br>price<br>EUR |
|----------------------------------|-------------|---------------------|--------------------|----------------------|
| <b>4-pole: 1500 rpm at 50 Hz</b> |             |                     |                    |                      |
| 4                                | IE3         | 112 M               | 1PC1433-1BB2-..... | 4960.-               |
| 5.5                              | IE3         | 132 S               | 1PC1433-1CB0-..... | 6760.-               |
| 7.5                              | IE3         | 132 M               | 1PC1433-1CB2-..... | 7910.-               |
| 11                               | IE3         | 160 M               | 1PC1433-1DB2-..... | 9920.-               |
| 15                               | IE3         | 160 L               | 1PC1433-1DB4-..... | 11100.-              |
| 18.5                             | IE3         | 180 M               | 1PC1433-1EB2-..... | 13400.-              |
| 22                               | IE3         | 180 L               | 1PC1433-1EB4-..... | 14600.-              |
| 30                               | IE3         | 200 L               | 1PC1433-2AB5-..... | 18500.-              |
| 37                               | IE3         | 225 S               | 1PC1433-2BB0-..... | 22000.-              |
| 45                               | IE3         | 225 M               | 1PC1433-2BB2-..... | 23900.-              |
| 55                               | IE3         | 250 M               | 1PC1433-2CB2-..... | 28400.-              |
| 75                               | IE3         | 280 S               | 1PC1433-2DB0-..... | 35100.-              |
| 90                               | IE3         | 280 M               | 1PC1433-2DB2-..... | 42800.-              |
| <b>6-pole: 1000 rpm at 50 Hz</b> |             |                     |                    |                      |
| 2.2                              | IE3         | 112 M               | 1PC1433-1BC2-..... | 4790.-               |
| 3                                | IE3         | 132 S               | 1PC1433-1CC0-..... | 6340.-               |
| 4                                | IE3         | 132 M               | 1PC1433-1CC2-..... | 7200.-               |
| 5.5                              | IE3         | 132 M               | 1PC1433-1CC3-..... | 9370.-               |
| 5.5                              | IE3         | 160 M               | 1PC1433-1DC2-..... | 10600.-              |
| 7.5                              | IE3         | 160 L               | 1PC1433-1DC4-..... | 13800.-              |
| 15                               | IE3         | 180 L               | 1PC1433-1EC4-..... | 16600.-              |
| 18.5                             | IE3         | 200 L               | 1PC1433-2AC4-..... | 17300.-              |
| 18.5                             | IE3         | 200 L               | 1PC1433-2AC5-..... | 21400.-              |
| 30                               | IE3         | 225 M               | 1PC1433-2BC2-..... | 22500.-              |
| 37                               | IE3         | 250 M               | 1PC1433-2CC2-..... | 27900.-              |
| 45                               | IE3         | 280 S               | 1PC1433-2DC0-..... | 33800.-              |
| 55                               | IE3         | 280 M               | 1PC1433-2DC2-..... | 42100.-              |

Standard delivery times in working days:

30

## SIMOTICS DP Application-Specific Motors

Steel plant motors

## Overview of selection and ordering data with base prices and standard delivery times

## Overview (continued)

|                                                                                                                                                                                                                                                      |                                            |                     |             |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|-------------|----------------------|
| Category                                                                                                                                                                                                                                             | Motors for converter operation             |                     |             |                      |
| Series version                                                                                                                                                                                                                                       | Cast-iron series 1PC1443                   |                     |             |                      |
| Cooling                                                                                                                                                                                                                                              | Self-ventilated (IC 411)                   |                     |             |                      |
| Degree of protection                                                                                                                                                                                                                                 | IP55, optionally IP56 or IP65              |                     |             |                      |
| Insulation                                                                                                                                                                                                                                           | Thermal class 155 (F)                      |                     |             |                      |
| Number of poles                                                                                                                                                                                                                                      | 4, 6                                       |                     |             |                      |
| Frame sizes (FS)                                                                                                                                                                                                                                     | 112 M ... 280 M                            |                     |             |                      |
| Rated power at 50 Hz                                                                                                                                                                                                                                 | 2.2 ... 90 kW                              |                     |             |                      |
| Synchronous speed at 50 Hz                                                                                                                                                                                                                           | 1000 ... 1500 rpm                          |                     |             |                      |
| Rated torque at 50 Hz                                                                                                                                                                                                                                | 21 ... 525 Nm                              |                     |             |                      |
|                                                                                                                                                                                                                                                      |                                            |                     |             |                      |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                               | N - W - - -                                |                     |             |                      |
| Price group (PG)                                                                                                                                                                                                                                     | 3Z3                                        |                     |             |                      |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 5/9, for delivery times refer to colored background following the respective price) |                                            |                     |             |                      |
|                                                                                                                                                                                                                                                      | <i>P</i> <sub>rated</sub> ,<br>50 Hz<br>kW | Frame<br>size<br>FS | Article No. | Base<br>price<br>EUR |
| 4-pole: 1500 rpm at 50 Hz                                                                                                                                                                                                                            |                                            |                     |             |                      |
| 4                                                                                                                                                                                                                                                    | 112 M                                      | 1PC1443-1BB2-.....  | 4960.–      |                      |
| 5.5                                                                                                                                                                                                                                                  | 132 S                                      | 1PC1443-1CB0-.....  | 6760.–      |                      |
| 7.5                                                                                                                                                                                                                                                  | 132 M                                      | 1PC1443-1CB2-.....  | 7910.–      |                      |
| 11                                                                                                                                                                                                                                                   | 160 M                                      | 1PC1443-1DB2-.....  | 9920.–      |                      |
| 15                                                                                                                                                                                                                                                   | 160 L                                      | 1PC1443-1DB4-.....  | 11100.–     |                      |
| 18.5                                                                                                                                                                                                                                                 | 180 M                                      | 1PC1443-1EB2-.....  | 13400.–     |                      |
| 22                                                                                                                                                                                                                                                   | 180 L                                      | 1PC1443-1EB4-.....  | 14600.–     |                      |
| 30                                                                                                                                                                                                                                                   | 200 L                                      | 1PC1443-2AB5-.....  | 18500.–     |                      |
| 37                                                                                                                                                                                                                                                   | 225 S                                      | 1PC1443-2BB0-.....  | 22000.–     |                      |
| 45                                                                                                                                                                                                                                                   | 225 M                                      | 1PC1443-2BB2-.....  | 23900.–     |                      |
| 55                                                                                                                                                                                                                                                   | 250 M                                      | 1PC1443-2CB2-.....  | 28400.–     |                      |
| 75                                                                                                                                                                                                                                                   | 280 S                                      | 1PC1443-2DB0-.....  | 35100.–     |                      |
| 90                                                                                                                                                                                                                                                   | 280 M                                      | 1PC1443-2DB2-.....  | 42800.–     |                      |
| 6-pole: 1000 rpm at 50 Hz                                                                                                                                                                                                                            |                                            |                     |             |                      |
| 2.2                                                                                                                                                                                                                                                  | 112 M                                      | 1PC1443-1BC2-.....  | 4750.–      |                      |
| 3                                                                                                                                                                                                                                                    | 132 S                                      | 1PC1443-1CC0-.....  | 6330.–      |                      |
| 4                                                                                                                                                                                                                                                    | 132 M                                      | 1PC1443-1CC2-.....  | 7460.–      |                      |
| 5.5                                                                                                                                                                                                                                                  | 132 M                                      | 1PC1443-1CC3-.....  | 9380.–      |                      |
| 7.5                                                                                                                                                                                                                                                  | 160 M                                      | 1PC1443-1DC2-.....  | 10600.–     |                      |
| 11                                                                                                                                                                                                                                                   | 160 L                                      | 1PC1443-1DC4-.....  | 13800.–     |                      |
| 15                                                                                                                                                                                                                                                   | 180 L                                      | 1PC1443-1EC4-.....  | 16600.–     |                      |
| 18.5                                                                                                                                                                                                                                                 | 200 L                                      | 1PC1443-2AC4-.....  | 17400.–     |                      |
| 22                                                                                                                                                                                                                                                   | 200 L                                      | 1PC1443-2AC5-.....  | 21600.–     |                      |
| 30                                                                                                                                                                                                                                                   | 225 M                                      | 1PC1443-2BC2-.....  | 22500.–     |                      |
| 37                                                                                                                                                                                                                                                   | 250 M                                      | 1PC1443-2CC2-.....  | 28400.–     |                      |
| 45                                                                                                                                                                                                                                                   | 280 S                                      | 1PC1443-2DC0-.....  | 33800.–     |                      |
| 55                                                                                                                                                                                                                                                   | 280 M                                      | 1PC1443-2DC2-.....  | 42100.–     |                      |

**SIMOTICS DP Application-Specific Motors**

Steel plant motors

**Overview of selection and ordering data with base prices and standard delivery times****Overview** (continued)

|                                                                                                                                                                                                                                                      |                                            |                     |             |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------|-------------|----------------------|
| Category                                                                                                                                                                                                                                             | Motors for converter operation (continued) |                     |             |                      |
| Series version                                                                                                                                                                                                                                       | Cast-iron series 1PC1463                   |                     |             |                      |
| Cooling                                                                                                                                                                                                                                              | Self-ventilated (IC 411)                   |                     |             |                      |
| Degree of protection                                                                                                                                                                                                                                 | IP55, optionally IP56 or IP65              |                     |             |                      |
| Insulation                                                                                                                                                                                                                                           | Thermal class 155 (F)                      |                     |             |                      |
| Number of poles                                                                                                                                                                                                                                      | 4, 6                                       |                     |             |                      |
| Frame sizes (FS)                                                                                                                                                                                                                                     | 112 M ... 280 M                            |                     |             |                      |
| Rated power at 50 Hz                                                                                                                                                                                                                                 | 3.1 ... 36 kW                              |                     |             |                      |
| Synchronous speed at 50 Hz                                                                                                                                                                                                                           | 1000 ... 1500 rpm                          |                     |             |                      |
| Rated torque at 50 Hz                                                                                                                                                                                                                                | 20 ... 346 Nm                              |                     |             |                      |
|                                                                                                                                                                                                                                                      |                                            |                     |             |                      |
| Metal factor for metal surcharges (MS)                                                                                                                                                                                                               | N - W - - -                                |                     |             |                      |
| Price group (PG)                                                                                                                                                                                                                                     | 3Z3                                        |                     |             |                      |
| Range of motors in standard version with Article No., delivery time and base price plus MS<br>(for article number supplements and special versions see from Page 5/9, for delivery times refer to colored background following the respective price) |                                            |                     |             |                      |
|                                                                                                                                                                                                                                                      | $P_{\text{rated}}$ ,<br>50 Hz<br>kW        | Frame<br>size<br>FS | Article No. | Base<br>price<br>EUR |
| 4-pole: 1500 rpm at 50 Hz                                                                                                                                                                                                                            |                                            |                     |             |                      |
| 3.1                                                                                                                                                                                                                                                  | 112 M                                      | 1PC1463-1BB2-.....  | 4420.-      |                      |
| 4.8                                                                                                                                                                                                                                                  | 132 S                                      | 1PC1463-1CB0-.....  | 6000.-      |                      |
| 6.1                                                                                                                                                                                                                                                  | 132 M                                      | 1PC1463-1CB2-.....  | 7010.-      |                      |
| 8                                                                                                                                                                                                                                                    | 160 M                                      | 1PC1463-1DB4-.....  | 9610.-      |                      |
| 9.3                                                                                                                                                                                                                                                  | 160 L                                      | 1PC1463-1DB6-.....  | 10600.-     |                      |
| 11                                                                                                                                                                                                                                                   | 180 M                                      | 1PC1463-1EB2-.....  | 12600.-     |                      |
| 13                                                                                                                                                                                                                                                   | 180 L                                      | 1PC1463-1EB4-.....  | 13900.-     |                      |
| 6-pole: 1000 rpm at 50 Hz                                                                                                                                                                                                                            |                                            |                     |             |                      |
| 8.5                                                                                                                                                                                                                                                  | 180 L                                      | 1PC1463-1EC4-.....  | 15900.-     |                      |
| 14.5                                                                                                                                                                                                                                                 | 200 L                                      | 1PC1463-2AC5-.....  | 19900.-     |                      |
| 21                                                                                                                                                                                                                                                   | 225 M                                      | 1PC1463-2BC2-.....  | 21600.-     |                      |
| 25                                                                                                                                                                                                                                                   | 250 M                                      | 1PC1463-2CC2-.....  | 23700.-     |                      |
| 30                                                                                                                                                                                                                                                   | 280 S                                      | 1PC1463-2DC0-.....  | 30900.-     |                      |
| 36                                                                                                                                                                                                                                                   | 280 M                                      | 1PC1463-2DC2-.....  | 40200.-     |                      |

Standard delivery times in working days:

**30**On  
request**SIMOTICS DP Application-Specific Motors**  
Steel plant motors

Article No. supplements and special versions · Voltages · Cast-iron series 1PC1433, 1PC1443, 1PC1463

**Selection and ordering data**

| Voltages                                       | Article No. supplement                                 |                                                                           | Frame size                               | 112   | 132   | 160   | 180   | 200   | 225   | 250   | 280   | Motor version   |                    |
|------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|--------------------|
|                                                | Voltage code 12th and 13th position of the Article No. | Additional identification code with order code and plain text if required |                                          |       |       |       |       |       |       |       |       | Operation       | Cooling method     |
| <b>1PC14</b> .....■-■...                       |                                                        |                                                                           | <b>1PC1433</b>                           |       |       |       |       |       |       |       |       | Line (DOL)      | TEFC (IC411) IE3   |
|                                                |                                                        |                                                                           | <b>1PC1443</b>                           |       |       |       |       |       |       |       |       | Converter (VSD) | –                  |
|                                                |                                                        |                                                                           | <b>1PC1463</b>                           |       |       |       |       |       |       |       |       |                 | TENV (IC410)       |
|                                                |                                                        | Order code                                                                |                                          |       |       |       |       |       |       |       |       |                 |                    |
| <b>Voltage at 50 Hz or 60 Hz</b>               |                                                        |                                                                           |                                          |       |       |       |       |       |       |       |       |                 |                    |
| 50 Hz 400 VY, 60 Hz 460 VY                     | 0                                                      | 2                                                                         | –                                        | □     | □     | □     | –     | –     | –     | –     | –     | Only for:       | 1PC1443<br>1PC1463 |
| 50 Hz 230 VΔ/400 VY, 60 Hz 460 VY              | 2                                                      | 2                                                                         | –                                        | □     | □     | □     | □     | □     | □     | □     | □     | Only for:       | 1PC1433            |
| 50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ              | 3                                                      | 4                                                                         | –                                        | □     | □     | □     | □     | □     | □     | □     | □     | Only for:       | 1PC1433            |
| 50 Hz 400 VΔ, 60 Hz 460 VΔ                     | 0                                                      | 4                                                                         | –                                        | –     | –     | –     | □     | □     | □     | □     | □     | Only for:       | 1PC1443<br>1PC1463 |
| 50 Hz 500 VY                                   | 2                                                      | 7                                                                         | –                                        | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | Only for:       | 1PC1433            |
| 50 Hz 500 VΔ                                   | 4                                                      | 0                                                                         | –                                        | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | Only for:       | 1PC1433            |
| 50 Hz 220 VΔ/380 VY, 60 Hz 440 VΔ              | 2                                                      | 1                                                                         | –                                        | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ              | 3                                                      | 3                                                                         | –                                        | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 50 Hz 380 VΔ                                   |                                                        |                                                                           |                                          | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 50 Hz 240 VΔ/415 VY, 60 Hz 480 VY              | 2                                                      | 3                                                                         | –                                        | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 50 Hz 415 VΔ, 60 Hz 480 VΔ                     | 3                                                      | 5                                                                         | –                                        | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| <b>Voltage at 60 Hz and required power</b>     |                                                        |                                                                           |                                          |       |       |       |       |       |       |       |       |                 |                    |
| 220 VΔ/380 VY; 50 Hz power                     | 9                                                      | 0                                                                         | <b>M2A</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 220 VΔ/380 VY; 60 Hz power                     | 9                                                      | 0                                                                         | <b>M1A</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 380 VΔ/660 VY; 50 Hz power                     | 9                                                      | 0                                                                         | <b>M2B</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 380 VΔ; 50 Hz power                            |                                                        |                                                                           |                                          | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 380 VΔ/660 VY; 60 Hz power                     | 9                                                      | 0                                                                         | <b>M1B</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 440 VY; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2C</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 440 VY; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1C</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 440 VΔ; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2D</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 440 VΔ; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1D</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 460 VY; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2E</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 460 VY; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1E</b>                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | Only for:       | 1PC1433            |
| 460 VΔ; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2F</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 460 VΔ; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1F</b>                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | Only for:       | 1PC1433            |
| 575 VY; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2G</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 575 VY; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1G</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 575 VΔ; 50 Hz power                            | 9                                                      | 0                                                                         | <b>M2H</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| 575 VΔ; 60 Hz power                            | 9                                                      | 0                                                                         | <b>M1H</b>                               | 54.–  | 65.30 | 83.70 | 103.– | 139.– | 159.– | 215.– | 246.– | Only for:       | 1PC1433            |
| <b>Non-standard voltage and/or frequencies</b> |                                                        |                                                                           |                                          |       |       |       |       |       |       |       |       |                 |                    |
| Non-standard winding <sup>1)</sup>             | 9                                                      | 0                                                                         | <b>M1Y</b> • and customer specifications | 108.– | 132.– | 167.– | 208.– | 268.– | 326.– | 483.– | 609.– |                 |                    |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- Not possible

<sup>1)</sup> Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

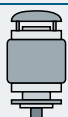
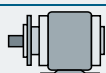
## SIMOTICS DP Application-Specific Motors

## Steel plant motors

30

On request

## Selection and ordering data

| Types of construction                   | Article No. supplement<br>Type of construction letter<br>14th position of the Article No. | For types of construction with order code(s) Article No. with additional identification code <b>-Z</b> Order code | Frame size     |                |                |                |                |                |                |                | Motor version   |                |     |
|-----------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----|
|                                         |                                                                                           |                                                                                                                   | 112            | 132            | 160            | 180            | 200            | 225            | 250            | 280            | Operation       | Cooling method |     |
|                                         |                                                                                           |                                                                                                                   | 1PC1433        |                |                |                |                |                |                |                | Line (DOL)      | TEFC (IC411)   | IE3 |
|                                         |                                                                                           |                                                                                                                   | 1PC1443        |                |                |                |                |                |                |                | Converter (VSD) |                | —   |
|                                         |                                                                                           |                                                                                                                   | 1PC1463        |                |                |                |                |                |                |                |                 | TENV (IC410)   |     |
| 1PC14...-.....-...Z                     |                                                                                           |                                                                                                                   |                |                |                |                |                |                |                |                |                 |                |     |
| Without flange                          |                                                                                           |                                                                                                                   |                |                |                |                |                |                |                |                |                 |                |     |
| IM B3                                   |          | A                                                                                                                 | —              | □              | □              | □              | □              | □              | □              | □              | □               |                |     |
| With flange                             |                                                                                           | acc. to EN 50347<br>acc. to DIN 42948                                                                             | FF215<br>A 250 | FF265<br>A 300 | FF300<br>A 350 | FF300<br>A 350 | FF350<br>A 400 | FF400<br>A 450 | FF500<br>A 550 | FF500<br>A 550 |                 |                |     |
| IM B5                                   |          | F                                                                                                                 | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          | 422.—          | 507.—          | 738.—          |                 |                |     |
| IM V1<br>without<br>protective<br>cover |          | G                                                                                                                 | 101.—          | 132.—          | 170.—          | 268.—          | 324.—          | 424.—          | 517.—          | 742.—          |                 |                |     |
| IM V1<br>with<br>protective<br>cover    |          | G                                                                                                                 | H00            | 183.40         | 276.—          | 314.—          | 460.—          | 613.—          | 807.—          | 995.—          | 1315.—          |                |     |
| IM V3                                   |         | H                                                                                                                 | 101.—          | 132.—          | 170.—          | 269.—          | 326.—          | 422.—          | 507.—          | 738.—          |                 |                |     |
| IM B35                                  |        | J                                                                                                                 | 110.—          | 137.—          | 189.—          | 315.—          | 420.—          | 525.—          | 735.—          | 946.—          |                 |                |     |

- Standard version

Standard delivery times in working days:

**30**On  
request**SIMOTICS DP Application-Specific Motors**

Steel plant motors

Article No. supplements and special versions · Motor protection · Cast-iron series 1PC1433, 1PC1443, 1PC1463

**Selection and ordering data**

| Motor protection                                                | Article No. supplement                                 |                                                                           | Frame size |        |        |        |        |        |        |        |           | Motor version      |              |     |
|-----------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|-----------|--------------------|--------------|-----|
|                                                                 | Motor protection code 15th position of the Article No. | Additional identification code with order code and plain text if required | 112        | 132    | 160    | 180    | 200    | 225    | 250    | 280    | Operation | Cooling method     |              |     |
|                                                                 |                                                        |                                                                           | 1PC1433    |        |        |        |        |        |        |        |           | Line (DOL)         | TEFC (IC411) | IE3 |
|                                                                 |                                                        |                                                                           | 1PC1443    |        |        |        |        |        |        |        |           | Converter (VSD)    | –            |     |
|                                                                 |                                                        |                                                                           | 1PC1463    |        |        |        |        |        |        |        |           | TENV (IC410)       |              |     |
| 1PC14.....                                                      |                                                        | Order code                                                                |            |        |        |        |        |        |        |        |           |                    |              |     |
| Motor protection                                                |                                                        |                                                                           |            |        |        |        |        |        |        |        |           |                    |              |     |
| Without (Standard)                                              | A                                                      | –                                                                         | □          | □      | □      | □      | □      | □      | □      | □      | Only for: | 1PC1433            |              |     |
|                                                                 |                                                        | –                                                                         | –          | –      | –      | –      | –      | –      | –      | –      | Only for: | 1PC1443<br>1PC1463 |              |     |
| 3 PTC thermistors – for tripping (2 terminals)                  | B                                                      | –                                                                         | 119.–      | 180.–  | 180.–  | 239.–  | 239.–  | 325.–  | 325.–  | 406.–  |           |                    |              |     |
| 6 PTC thermistors – for alarm and tripping (4 terminals)        | C                                                      | –                                                                         | □          | □      | □      | □      | □      | □      | □      | □      | Only for: | 1PC1443<br>1PC1463 |              |     |
|                                                                 |                                                        |                                                                           | 205.–      | 274.–  | 274.–  | 421.–  | 421.–  | 548.–  | 548.–  | 679.–  | Only for: | 1PC1433            |              |     |
| 1 temperature sensor KTY84-130 (2 terminals)                    | F                                                      | –                                                                         | 119.–      | 180.–  | 180.–  | 339.–  | 339.–  | 463.–  | 601.–  | 601.–  |           |                    |              |     |
| 2 temperature sensors KTY84-130 (4 terminals)                   | G                                                      | –                                                                         | 242.–      | 357.–  | 357.–  | 550.–  | 550.–  | 756.–  | 1020.– | 1020.– |           |                    |              |     |
| 3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)  | H                                                      | –                                                                         | 1240.–     | 1240.– | 1240.– | 1510.– | 1510.– | 1510.– | 1670.– | 1670.– |           |                    |              |     |
| 6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) | J                                                      | –                                                                         | –          | –      | –      | 2470.– | 2470.– | 2470.– | 2470.– | 2470.– |           |                    |              |     |

- Standard version  
– Not possible

Note:

Options are available specifically for bearing protection –  
For order codes and descriptions, see from Page 5/13.

<sup>1)</sup> Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

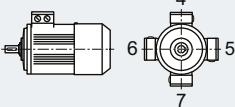
<sup>2)</sup> Not UL-certified. Not possible in combination with the option **D31**.

**SIMOTICS DP Application-Specific Motors**

Steel plant motors

Article No. supplements and special versions · Terminal box position · Cast-iron series 1PC1433, 1PC1443, 1PC1463

**Selection and ordering data**

| Terminal box position                                                             | Article No. supplement                                      |                                                                           | Frame size     |            |            |            |            |            |            |            | Motor version   |                |     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------|----------------|------------|------------|------------|------------|------------|------------|------------|-----------------|----------------|-----|
|  | Terminal box position code 16th position of the Article No. | Additional identification code with order code and plain text if required | <b>112</b>     | <b>132</b> | <b>160</b> | <b>180</b> | <b>200</b> | <b>225</b> | <b>250</b> | <b>280</b> | Operation       | Cooling method |     |
|                                                                                   |                                                             |                                                                           | <b>1PC1433</b> |            |            |            |            |            |            |            | Line (DOL)      | TEFC (IC411)   | IE3 |
|                                                                                   |                                                             |                                                                           | <b>1PC1443</b> |            |            |            |            |            |            |            | Converter (VSD) |                | –   |
|                                                                                   |                                                             |                                                                           | <b>1PC1463</b> |            |            |            |            |            |            |            |                 | TENV (IC410)   |     |
|                                                                                   |                                                             |                                                                           |                |            |            |            |            |            |            |            |                 |                |     |
| <b>1PC14 . . . . .</b>                                                            |                                                             | Order code                                                                |                |            |            |            |            |            |            |            |                 |                |     |
| Terminal box position <sup>1)</sup>                                               |                                                             |                                                                           |                |            |            |            |            |            |            |            |                 |                |     |
| Terminal box top                                                                  | <b>4</b>                                                    | –                                                                         | □              | □          | □          | □          | □          | □          | □          | □          |                 |                |     |
| Terminal box on RHS                                                               | <b>5</b>                                                    | –                                                                         | 113.–          | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      |                 |                |     |
| Terminal box on LHS                                                               | <b>6</b>                                                    | –                                                                         | 113.–          | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      | 113.–      |                 |                |     |

□ Standard version

<sup>1)</sup> For types of construction with feet, cast feet are standard.

Standard delivery times in working days:

**30**On  
request**SIMOTICS DP Application-Specific Motors**  
Steel plant motors

Article No. supplements and special versions · Options · Cast-iron series 1PC1433, 1PC1443, 1PC1463

**Selection and ordering data**

| Special versions                                                                                                                                                                                                                                                                     | Additional identification code -Z with order code and plain text if required | Frame size |        |        |        |        |        |        |        | Motor version   |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|-----------------|--------------------|
|                                                                                                                                                                                                                                                                                      |                                                                              | 112        | 132    | 160    | 180    | 200    | 225    | 250    | 280    | Operation       | Cooling method     |
|                                                                                                                                                                                                                                                                                      |                                                                              | 1PC1433    |        |        |        |        |        |        |        | Line (DOL)      | TEFC (IC411) IE3   |
|                                                                                                                                                                                                                                                                                      |                                                                              | 1PC1443    |        |        |        |        |        |        |        | Converter (VSD) | TENV (IC410)       |
| 1PC14.....-Z                                                                                                                                                                                                                                                                         | Order code                                                                   |            |        |        |        |        |        |        |        |                 |                    |
| <b>Motor protection</b>                                                                                                                                                                                                                                                              |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Prepared for mounting a SIPLUS CMS 1000 vibration sensor                                                                                                                                                                                                                             | Q05                                                                          | 318.-      | 332.-  | 347.-  | 377.-  | 408.-  | 439.-  | 468.-  | 498.-  |                 |                    |
| <b>Motor connection and terminal box</b>                                                                                                                                                                                                                                             |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| External grounding                                                                                                                                                                                                                                                                   |                                                                              | □          | □      | □      | □      | □      | □      | □      | □      |                 |                    |
| Terminal box on NDE                                                                                                                                                                                                                                                                  | H08                                                                          | -          | -      | -      | 967.-  | 999.-  | 1050.- | 1100.- | 1150.- |                 |                    |
| Second external grounding                                                                                                                                                                                                                                                            | H70                                                                          | 15.80      | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  | 15.80  |                 |                    |
| Rotation of the terminal box through 90°, entry from DE                                                                                                                                                                                                                              | R10                                                                          | 23.40      | 23.40  | 23.40  | 45.10  | 58.40  | 72.10  | 86.60  | 103.-  |                 |                    |
| Rotation of the terminal box through 90°, entry from NDE                                                                                                                                                                                                                             | R11                                                                          | 23.40      | 23.40  | 23.40  | 45.10  | 58.40  | 72.10  | 86.60  | 103.-  |                 |                    |
| Rotation of the terminal box through 180°                                                                                                                                                                                                                                            | R12                                                                          | ○          | ○      | ○      | 45.10  | 58.40  | 72.10  | 86.60  | 103.-  |                 |                    |
| One metal cable gland                                                                                                                                                                                                                                                                | R15                                                                          | 112.-      | 112.-  | 143.-  | 143.-  | 165.-  | 165.-  | 236.-  | 236.-  |                 |                    |
| EMC cable gland, maximum configuration                                                                                                                                                                                                                                               | R16                                                                          | -          | -      | -      | 362.-  | 610.-  | 610.-  | 1090.- | 1090.- |                 |                    |
| Metal cable gland, maximum configuration                                                                                                                                                                                                                                             | R18                                                                          | 159.-      | 159.-  | 209.-  | 209.-  | 241.-  | 241.-  | 417.-  | 417.-  |                 |                    |
| Larger terminal box                                                                                                                                                                                                                                                                  | R50                                                                          | 214.-      | 274.-  | 313.-  | 475.-  | 523.-  | 1660.- | 1900.- | 1900.- |                 |                    |
| Terminal box without cable entry opening                                                                                                                                                                                                                                             | R51                                                                          | -          | -      | -      | ○      | ○      | ○      | ○      | ○      |                 |                    |
| Silicon-free version                                                                                                                                                                                                                                                                 | R74                                                                          | □          | □      | □      | □      | □      | □      | 357.-  | 357.-  |                 |                    |
| <b>Windings and insulation</b>                                                                                                                                                                                                                                                       |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Temperature class 180 (H) at rated power and max. CT 60 °C <sup>1)</sup>                                                                                                                                                                                                             | N11                                                                          | 305.-      | 405.-  | 494.-  | 702.-  | 982.-  | 1200.- | 1470.- | 1790.- |                 |                    |
| <b>Colors and paint finish</b>                                                                                                                                                                                                                                                       |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Standard finish in RAL 7030 stone gray                                                                                                                                                                                                                                               |                                                                              | □          | □      | □      | □      | □      | □      | □      | □      |                 |                    |
| Special finish                                                                                                                                                                                                                                                                       | S02                                                                          | □          | □      | □      | □      | □      | □      | □      | □      |                 |                    |
| Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5002, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog Section 1 "Introduction") | Y53 • and finish RAL....                                                     | 42.-       | 57.80  | 57.80  | 84.-   | 115.-  | 126.-  | 158.-  | 189.-  |                 |                    |
| Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog Section 1 "Introduction")                                                                                                                                                      | Y56 • and finish RAL....                                                     | 662.-      | 694.-  | 694.-  | 704.-  | 714.-  | 357.-  | 378.-  | 399.-  |                 |                    |
| <b>Special technology</b>                                                                                                                                                                                                                                                            |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Mounting of LL 861 900 220 rotary pulse encoder <sup>3)</sup>                                                                                                                                                                                                                        | G04                                                                          | 3000.-     | 3000.- | 3000.- | 3000.- | 3000.- | 4180.- | 4180.- | 4180.- |                 |                    |
| Mounting of HOG 9 D 1024 I rotary pulse encoder <sup>3)</sup>                                                                                                                                                                                                                        | G05                                                                          | 3540.-     | 3540.- | 3540.- | 4570.- | 4570.- | 4950.- | 4950.- | 4950.- |                 |                    |
| Mounting of HOG 10 D 1024 I rotary pulse encoder <sup>3)</sup>                                                                                                                                                                                                                       | G06                                                                          | 4570.-     | 4570.- | 4570.- | 4570.- | 4570.- | 6000.- | 6000.- | 6000.- |                 |                    |
| <b>Designs in accordance with standards and specifications</b>                                                                                                                                                                                                                       |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Design according to UL with "Recognition Mark" <sup>9)</sup>                                                                                                                                                                                                                         | D31                                                                          | 119.-      | 153.-  | 187.-  | 300.-  | 411.-  | 517.-  | 610.-  | 756.-  |                 |                    |
| Canadian regulations (CSA) <sup>10)</sup>                                                                                                                                                                                                                                            | D40                                                                          | 119.-      | 153.-  | 187.-  | 253.-  | 338.-  | 422.-  | 507.-  | 675.-  |                 |                    |
| <b>Mechanical design and degrees of protection</b>                                                                                                                                                                                                                                   |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Prepared for mountings with D16 shaft                                                                                                                                                                                                                                                | G42                                                                          | 168.-      | 189.-  | 225.-  | 462.-  | 462.-  | 589.-  | 924.-  | 924.-  |                 |                    |
| Protective cover <sup>2) 3) 4)</sup>                                                                                                                                                                                                                                                 | H00                                                                          | 82.40      | 144.-  | 144.-  | 192.-  | 289.-  | 383.-  | 478.-  | 573.-  | Only for:       | 1PC1433<br>1PC1443 |
| Condensation drainage holes                                                                                                                                                                                                                                                          |                                                                              | □          | □      | □      | □      | □      | □      | □      | □      |                 |                    |
| Rust-resistant screws (externally)                                                                                                                                                                                                                                                   | H07                                                                          | ○          | ○      | ○      | ○      | ○      | 170.-  | 203.-  | 211.-  |                 |                    |
| IP65 degree of protection <sup>5)</sup>                                                                                                                                                                                                                                              | H19                                                                          | 316.-      | 316.-  | 471.-  | 630.-  | 787.-  | 949.-  | 1106.- | 1264.- |                 |                    |
| IP65 degree of protection <sup>5)</sup>                                                                                                                                                                                                                                              | H20                                                                          | 150.-      | 150.-  | 224.-  | 302.-  | 374.-  | 452.-  | 527.-  | 601.-  |                 |                    |
| <b>Bearings and lubrication</b>                                                                                                                                                                                                                                                      |                                                                              |            |        |        |        |        |        |        |        |                 |                    |
| Regreasing device                                                                                                                                                                                                                                                                    | L23                                                                          | 325.-      | 336.-  | 363.-  | 383.-  | 430.-  | □      | □      | □      |                 |                    |
| Bearing insulation NDE                                                                                                                                                                                                                                                               | L51                                                                          | 561.-      | 1250.- | 1300.- | 1350.- | 1370.- | 1760.- | 1890.- | 1960.- |                 |                    |

For legends and footnotes, see Page 5/14.

# SIMOTICS DP Application-Specific Motors

## Steel plant motors

**30**On  
request

### Article No. supplements and special versions · Options · Cast-iron series 1PC1433, 1PC1443, 1PC1463

| Special versions                                                                                                               | Additional identification code -Z with order code and plain text if required | Frame size |        |        |        |        |        |        |        | Motor version Operation | Cooling method |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------|--------|--------|--------|--------|--------|--------|--------|-------------------------|----------------|
|                                                                                                                                |                                                                              | 112        | 132    | 160    | 180    | 200    | 225    | 250    | 280    |                         |                |
|                                                                                                                                |                                                                              | 1PC1433    |        |        |        |        |        |        |        |                         |                |
|                                                                                                                                |                                                                              | 1PC1443    |        |        |        |        |        |        |        |                         |                |
|                                                                                                                                |                                                                              | 1PC1463    |        |        |        |        |        |        |        |                         |                |
| 1PC14.....-Z                                                                                                                   | Order code                                                                   |            |        |        |        |        |        |        |        |                         |                |
| <b>Balance and vibration quantity</b>                                                                                          |                                                                              |            |        |        |        |        |        |        |        |                         |                |
| Vibration quantity level A                                                                                                     |                                                                              | □          | □      | □      | □      | □      | □      | □      | □      |                         |                |
| Vibration quantity level B                                                                                                     | L00                                                                          | 327.–      | 419.–  | 519.–  | 814.–  | 819.–  | 900.–  | 1140.– | 1340.– |                         |                |
| Balancing without key                                                                                                          | L01                                                                          | 28.40      | 33.60  | 33.60  | 43.70  | 43.70  | 59.30  | 59.30  | 72.10  |                         |                |
| Full-key balancing                                                                                                             | L02                                                                          | 111.–      | 129.–  | 129.–  | 162.–  | 162.–  | 209.–  | 209.–  | 209.–  |                         |                |
| <b>Shaft and rotor</b>                                                                                                         |                                                                              |            |        |        |        |        |        |        |        |                         |                |
| Shaft extension with standard dimensions, without feather keyway                                                               | L04                                                                          | 553.–      | 580.–  | 610.–  | 708.–  | 779.–  | 850.–  | 921.–  | 991.–  |                         |                |
| Standard shaft made of stainless steel (e.g. 1.4021)                                                                           | L06                                                                          | –          | –      | –      | 675.–  | 1010.– | 1390.– | 1650.– | 2750.– |                         |                |
| Concentricity of shaft extension in accordance with DIN 42955 Tolerance R                                                      | L07                                                                          | 268.–      | 408.–  | 408.–  | 211.–  | 238.–  | 283.–  | 370.–  | 370.–  |                         |                |
| Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors | L08                                                                          | 270.–      | 302.–  | 374.–  | 452.–  | 527.–  | 601.–  | 676.–  | 754.–  |                         |                |
| Non-standard cylindrical shaft extension DE <sup>6)</sup>                                                                      | Y58 • and customer specifications                                            | 553.–      | 580.–  | 610.–  | 708.–  | 779.–  | 610.–  | 708.–  | 779.–  |                         |                |
| Special shaft steel as requested by customer                                                                                   | Y60 • and customer specifications                                            | O. R.      | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  | O. R.  |                         |                |
| <b>Heating and ventilation</b>                                                                                                 |                                                                              |            |        |        |        |        |        |        |        |                         |                |
| Metal external fan                                                                                                             | F76                                                                          | 224.–      | 261.–  | 302.–  | 339.–  | 374.–  | 413.–  | 452.–  | 489.–  |                         |                |
| Anti-condensation heating for 230 V                                                                                            | Q02                                                                          | 459.–      | 519.–  | 576.–  | 639.–  | 734.–  | 881.–  | 910.–  | 910.–  |                         |                |
| Anti-condensation heating for 115 V                                                                                            | Q03                                                                          | 459.–      | 519.–  | 576.–  | 639.–  | 734.–  | 881.–  | 910.–  | 910.–  |                         |                |
| <b>Rating plate and extra rating plates</b>                                                                                    |                                                                              |            |        |        |        |        |        |        |        |                         |                |
| Second rating plate, loose                                                                                                     | M10                                                                          | 21.10      | 21.10  | 21.10  | 67.60  | 67.60  | 67.60  | 67.60  | 67.60  |                         |                |
| Extra rating plate with deviating rating plate data                                                                            | Y80 • and customer specifications                                            | 105.–      | 105.–  | 105.–  | 158.–  | 158.–  | 210.–  | 210.–  | 210.–  |                         |                |
| Extra rating plate with customer specifications                                                                                | Y82 • and customer specifications                                            | 41.50      | 41.50  | 41.50  | 69.40  | 69.40  | 69.40  | 86.60  | 86.60  |                         |                |
| <b>Packaging, safety notes, documentation and test certificates</b>                                                            |                                                                              |            |        |        |        |        |        |        |        |                         |                |
| Acceptance test certificate 3.1 according to EN 10204 <sup>7)</sup>                                                            | B02                                                                          | 28.70      | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  | 28.70  |                         |                |
| Documentation package "Basic"                                                                                                  | B90                                                                          | 609.–      | 609.–  | 609.–  | 609.–  | 609.–  | 609.–  | 609.–  | 609.–  |                         |                |
| Documentation package "Advanced"                                                                                               | B91                                                                          | 924.–      | 924.–  | 924.–  | 924.–  | 924.–  | 924.–  | 924.–  | 924.–  |                         |                |
| Documentation package "Projects"                                                                                               | B92                                                                          | 2520.–     | 2520.– | 2520.– | 2520.– | 2520.– | 2520.– | 2520.– | 2520.– |                         |                |

- Standard version
- Without additional charge
- This order code only determines the price of the version – additional plain text is required.
- O. R. Possible on request
- Not possible

<sup>1)</sup> Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Section 0 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.

<sup>2)</sup> The 1XP8 rotary pulse encoders are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

<sup>3)</sup> The LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

<sup>4)</sup> Order code **H00** provides mechanical protection for encoders.

<sup>5)</sup> Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).

<sup>6)</sup> When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded stems, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE The feather keys are supplied in every case. For order code **Y58**:

- Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
- Dimensions E and EA ≤ 2 × length E (normal) of the shaft extension.

<sup>7)</sup> The delivery time for the factory test certificate may differ from the delivery time for the motor.

<sup>8)</sup> The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>.

<sup>9)</sup> Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range.

<sup>10)</sup> The rated voltage is indicated on the rating plate without voltage range.

## Appendix

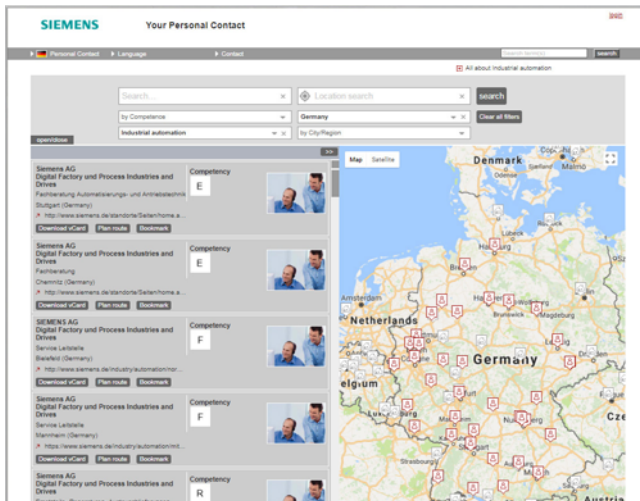


|             |                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------|
| <b>6/2</b>  | <b>Partner</b>                                                                                     |
| 6/2         | Partner at Siemens                                                                                 |
| <b>6/3</b>  | <b>Industry Services</b>                                                                           |
| 6/4         | <u>Industry Services – Portfolio overview</u>                                                      |
| 6/4         | Digital Services                                                                                   |
| 6/4         | Support and Consulting Services                                                                    |
| 6/4         | Training Services                                                                                  |
| 6/4         | Spare Parts Services                                                                               |
| 6/5         | Repair Services                                                                                    |
| 6/5         | Retrofit and Modernization Services                                                                |
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| 6/6         | <u>Online Support</u>                                                                              |
| <b>6/7</b>  | <b>Metal surcharges</b>                                                                            |
| 6/7         | <u>Explanation of the raw material/metal surcharges</u>                                            |
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| 6/8         | <u>Explanation of the raw material/metal surcharges for dysprosium and neodymium (rare earths)</u> |
| 6/8         | Surcharge calculation                                                                              |
| 6/8         | Three-month average price                                                                          |
| 6/8         | Structure of the metal factor                                                                      |
| 6/8         | Weight method                                                                                      |
| 6/8         | Metal factor examples                                                                              |
| 6/9         | <u>Values of the metal factor</u>                                                                  |
| <b>6/10</b> | <b>Conditions of sale and delivery</b>                                                             |
| 6/10        | General Provisions                                                                                 |
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| 6/10        | Additional Terms and Conditions                                                                    |
| 6/11        | Export regulations                                                                                 |

## Appendix

### Partner

#### Partner at Siemens



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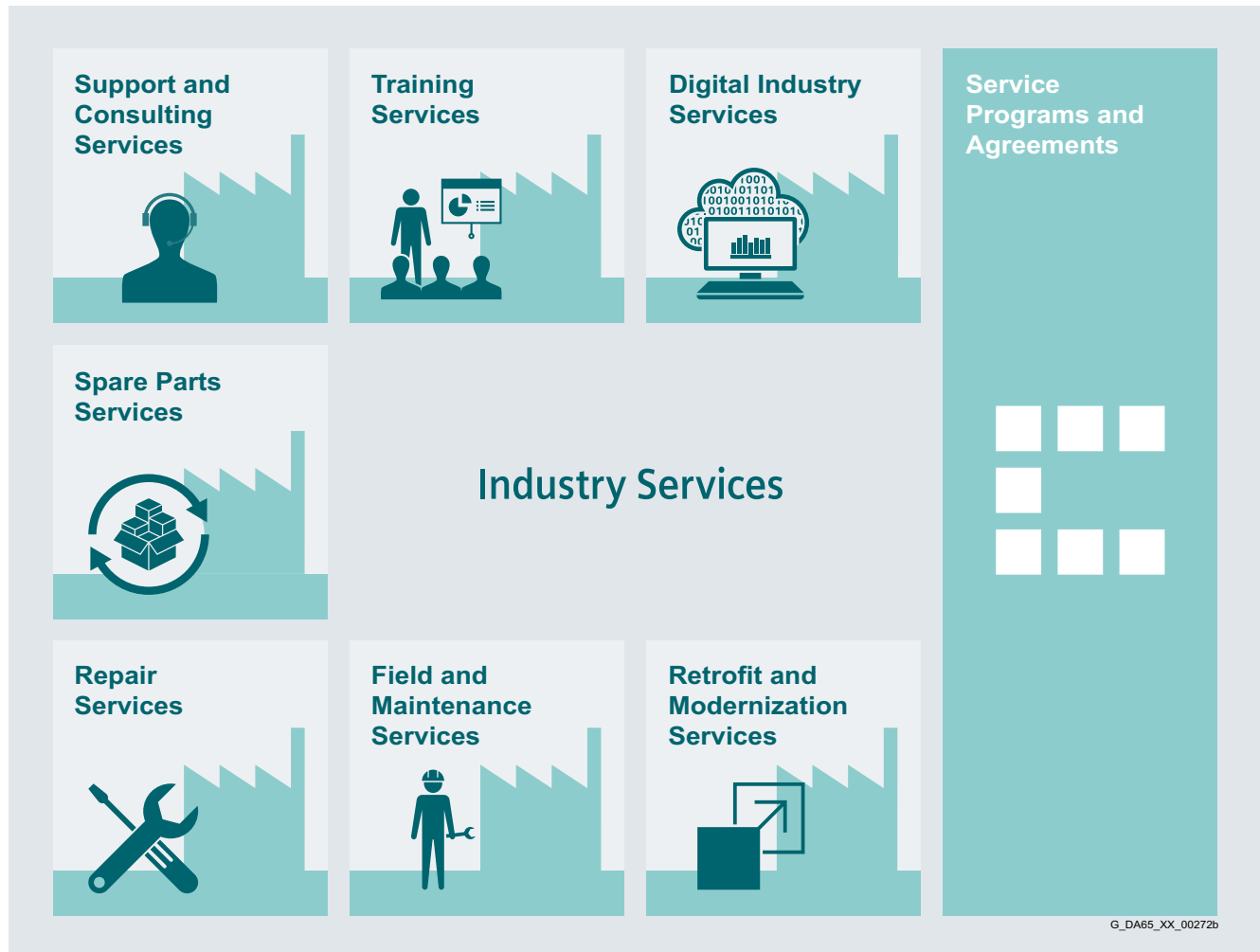
Your partner can be found in our Personal Contacts Database at:  
[www.siemens.com/automation-contact](http://www.siemens.com/automation-contact)

You start by selecting

- the required competence,
- products and branches,
- a country and a city

or by a

location search or free text search.

**Overview**

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## Appendix

### Industry Services

#### Industry Services – Portfolio overview

##### Übersicht

##### Digital Industry Services



Digital Services make your industrial processes transparent to gain improvements in productivity, asset availability, and energy efficiency.

Production data is generated, filtered and translated with intelligent analytics to enhance decision-making.

This is done whilst taking data security into consideration and with continuous protection against cyber-attack threats.

<https://www.siemens.com/global/en/home/products/services/industry/digital-services.html>

##### Support and Consulting Services



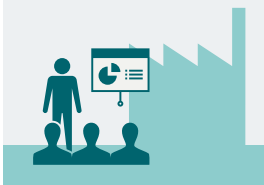
**Industry Online Support** site for comprehensive information, application examples, FAQs and support requests.

**Technical and Engineering Support** for advice and answers for all inquiries about functionality, handling, and fault clearance. The Service Card as prepaid support for value added services such as Priority Call Back or Extended Support offers the clear advantage of quick and easy purchasing.

**Information & Consulting Services**, e.g. SIMATIC System Audit; clarity about the state and service capability of your automation system or Lifecycle Information Services; transparency on the lifecycle of the products in your plants.

<https://support.industry.siemens.com/cs/ww/en/sc/2235>

##### Training Services



From the basics and advanced to specialist skills, SITRAIN courses provide expertise right from the manufacturer – and encompass the entire spectrum of Siemens products and systems for the industry.

Worldwide, SITRAIN courses are available wherever you need a training course in more than 170 locations in over 60 countries.

<https://support.industry.siemens.com/cs/ww/en/sc/2226>

##### Spare Parts Services



Spare Parts Services are available worldwide for smooth and fast supply of spare parts – and thus optimal plant availability. Genuine spare parts are available for up to ten years. Logistic experts take care of procurement, transport, custom clearance, storage and order management. Reliable logistics processes ensure that components reach their destination as needed.

Since not all spare parts can be kept in stock at all times, Siemens offers a preventive measure for spare parts provisioning on the customer's premises with optimized **Spare Parts Packages** for individual products, custom-assembled drive components and entire integrated drive trains – including risk consulting.

**Asset Optimization Services** help you design a strategy for parts supply where your investment and carrying costs are reduced and the risk of obsolescence is avoided.

<https://support.industry.siemens.com/cs/ww/en/sc/2110>

**Overview** (continued)

**Repair Services**


Repair Services are offered on-site and in regional repair centers for fast restoration of faulty devices' functionality.

Also available are extended repair services, which include additional diagnostic and repair measures, as well as emergency services.

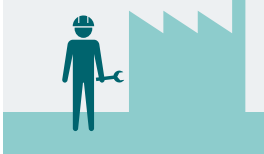
<https://support.industry.siemens.com/cs/ww/en/sc/2154>

**Retrofit and Modernization Services**


Provide a cost-effective solution for the expansion of entire plants, optimization of systems or upgrading existing products to the latest technology and software, e.g. migration services for automation systems.

Service experts support projects from planning through commissioning and, if desired over the entire extended lifespan, e.g. Retrofit for Integrated Drive Systems for an extended lifetime of your machines and plants.

<https://support.industry.siemens.com/cs/ww/en/sc/2286>

**Field and Maintenance Services**


Siemens specialists are available globally to provide expert field and maintenance services, including commissioning, functional testing, preventive maintenance and fault clearance. All services can be included in customized service agreements with defined reaction times or fixed maintenance intervals.

<https://support.industry.siemens.com/cs/ww/en/sc/2265>

**Service Programs and Agreements**


A technical Service Program or Agreement enables you to easily bundle a wide range of services into a single annual or multi-year agreement.

You pick the services you need to match your unique requirements or fill gaps in your organization's maintenance capabilities.

Programs and agreements can be customized as KPI-based and/or performance-based contracts.

<https://support.industry.siemens.com/cs/ww/en/sc/2275>

## Appendix

### Industry Services

#### Online Support

##### Overview



Online Support – fast, intuitive, whenever you want, wherever you need

**Web**  
[www.siemens.com/online-support](http://www.siemens.com/online-support)

**App**  
 Available on Google Play, App Store, and Microsoft Store.

Scan the QR code for information on our Online Support app.

**FAQ / Application examples**  
 Information about industrial products, programming and configuration as well as application examples

**Technical information**  
 Videos, documentation, manuals, updates, product notes, compatibility tool, certificates, planning data such as dimensional drawings, product data, 3D models

**Forum**  
 Exchange information and experience with other users and experts

## Online Support for Siemens Industry Products

Siemens Industry and Online Support with some 1.7 million visitors per month is one of the most popular web services provided by Siemens. It is the central access point for comprehensive technical know-how about products, systems and services for automation and drives applications as well as for process industries.

In connection with the challenges and opportunities related to digitalization you can look forward to continued support with innovative offerings.

### Explanation of the raw material/metal surcharges<sup>1)</sup>

#### Surcharge calculation

To compensate for variations in the price of the raw materials silver, copper, aluminum, lead, gold, dysprosium<sup>2)</sup> and/or neodym<sup>2)</sup>, surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The surcharges are calculated in accordance with the following criteria:

- Basic official price of the raw material  
Basic official price from the day prior to receipt of the order or prior to release order (daily price) for<sup>3)</sup>
  - Silver (sales price, processed)
  - Gold (sales price, processed)
- and for<sup>4)</sup>
  - Copper (lower DEL notation + 1 %)
  - Aluminum (aluminum in cables)
  - Lead (lead in cables)

#### Metal factor of the products

Certain products are displayed with a metal factor. The metal factor determines the official price (for those raw materials concerned) as of which the metal surcharges are applied and the calculation method used (weight or percentage method). An exact explanation is given below.

#### Structure of the metal factor

The metal factor consists of several digits; the first digit indicates whether the percentage method of calculation refers to the list price or a possible discounted price (customer net price) (L = list price / N = customer net price).

The remaining digits indicate the method of calculation used for the respective raw material. If no surcharge is added for a raw material, a "-" is used.

|           |                                                        |
|-----------|--------------------------------------------------------|
| 1st digit | List or customer net price using the percentage method |
| 2nd digit | for silver (AG)                                        |
| 3rd digit | for copper (CU)                                        |
| 4th digit | for aluminum (AL)                                      |
| 5th digit | for lead (PB)                                          |
| 6th digit | for gold (AU)                                          |
| 7th digit | for dysprosium (Dy) <sup>2)</sup>                      |
| 8th digit | for neodym (Nd) <sup>2)</sup>                          |

#### Weight method

The weight method uses the basic official price, the daily price and the raw material weight. In order to calculate the surcharge, the basic official price must be subtracted from the daily price. The difference is then multiplied by the raw material weight.

The basic official price can be found in the table below using the number (1 to 9) of the respective digit of the metal factor. The raw material weight can be found in the respective product descriptions.

#### Percentage method

Use of the percentage method is indicated by the letters A-Z at the respective digit of the metal factor.

The surcharge is increased - dependent on the deviation of the daily price compared with the basic official price - using the percentage method in "steps" and consequently offers surcharges that remain constant within the framework of this "step range". A higher percentage rate is charged for each new step. The respective percentage level can be found in the table below.

#### Metal factor examples

|                        |                                                                                                                                                                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>L E A - - - -</b>   | <p>Basis for % surcharge: List price</p> <p>Silver Basis 150 €, Step 50 €, 0.5 %</p> <p>Copper Basis 150 €, Step 50 €, 0.1 %</p> <p>No surcharge for aluminum</p> <p>No surcharge for lead</p> <p>No surcharge for gold</p> <p>No surcharge for dysprosium</p> <p>No surcharge for neodym</p>                    |
| <b>N - A 6 - - - -</b> | <p>Basis for % surcharge: Customer net price</p> <p>No surcharge for silver</p> <p>Copper Basis 150 €, Step 50 €, 0.1 %</p> <p>Aluminum acc. to weight, basic offic. price 225 €</p> <p>No surcharge for lead</p> <p>No surcharge for gold</p> <p>No surcharge for dysprosium</p> <p>No surcharge for neodym</p> |
| <b>- - 3 - - - -</b>   | <p>No basis necessary</p> <p>No surcharge for silver</p> <p>Copper acc. to weight, basic official price 150 €</p> <p>No surcharge for aluminum</p> <p>No surcharge for lead</p> <p>No surcharge for gold</p> <p>No surcharge for dysprosium</p> <p>No surcharge for neodym</p>                                   |

<sup>1)</sup> Refer to the separate explanation on the next page regarding the raw materials dysprosium and neodym (= rare earths).

<sup>2)</sup> For a different method of calculation, refer to the separate explanation for these raw materials on the next page.

<sup>3)</sup> Source: Umicore, Hanau ([www.metalsmanagement.umicore.com](http://www.metalsmanagement.umicore.com)).

<sup>4)</sup> Source: Schutzvereinigung DEL-Notiz e.V. ([www.del-notiz.org](http://www.del-notiz.org)).

## Appendix

### Metal surcharges

#### Explanation of the raw material/metal surcharges for dysprosium and neodym (rare earths)

##### Surcharge calculation

To compensate for variations in the price of the raw materials silver<sup>1)</sup>, copper<sup>1)</sup>, aluminum<sup>1)</sup>, lead<sup>1)</sup>, gold<sup>1)</sup>, dysprosium and/or neodym, surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. The surcharge for dysprosium and neodym is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The surcharge is calculated in accordance with the following criteria:

- Basic official price of the raw material<sup>2)</sup>  
Three-month basic average price (see below) in the period before the quarter in which the order was received or the release order took place (= average official price) for  
- dysprosium (Dy metal, 99 % min. FOB China; USD/kg)  
- neodym (Nd metal, 99 % min. FOB China; USD/kg)
- Metal factor of the products  
Certain products are displayed with a metal factor. The metal factor indicates (for those raw materials concerned) the basic official price as of which the surcharges for dysprosium and neodym are calculated using the weight method. An exact explanation of the metal factor is given below.

##### Three-month average price

The prices of rare earths vary according to the foreign currency, and there is no freely accessible stock exchange listing. This makes it more difficult for all parties involved to monitor changes in price. In order to avoid continuous adjustment of the surcharges, but to still ensure fair, transparent pricing, an average price is calculated over a three-month period using the average monthly foreign exchange rate from USD to EUR (source: European Central Bank). Since not all facts are immediately available at the start of each month, a one-month buffer is allowed before the new average price applies.

Examples of calculation of the average official price:

| Period for calculation of the average price: | Period during which the order/release order is effected and the average price applies: |
|----------------------------------------------|----------------------------------------------------------------------------------------|
| Sep 2012 - Nov 2012                          | Q1 in 2013 (Jan - Mar)                                                                 |
| Dec 2012 - Feb 2013                          | Q2 in 2013 (Apr - Jun)                                                                 |
| Mar 2013 - May 2013                          | Q3 in 2013 (Jul - Sep)                                                                 |
| Jun 2013 - Aug 2013                          | Q4 in 2013 (Oct - Dec)                                                                 |

##### Structure of the metal factor

The metal factor consists of several digits; the first digit is not relevant to the calculation of dysprosium and neodym.

The remaining digits indicate the method of calculation used for the respective raw material. If no surcharge is added for a raw material, a "-" is used.

|           |                                                        |
|-----------|--------------------------------------------------------|
| 1st digit | List or customer net price using the percentage method |
| 2nd digit | for silver (AG) <sup>1)</sup>                          |
| 3rd digit | for copper (CU) <sup>1)</sup>                          |
| 4th digit | for aluminum (AL) <sup>1)</sup>                        |
| 5th digit | for lead (PB) <sup>1)</sup>                            |
| 6th digit | for gold (AU) <sup>1)</sup>                            |
| 7th digit | for dysprosium (Dy)                                    |
| 8th digit | for neodym (Nd)                                        |

##### Weight method

The weight method uses the basic official price, the average price and the raw material weight. In order to calculate the surcharge, the basic official price must be subtracted from the average price. The difference is then multiplied by the raw material weight.

The basic official price can be found in the table below using the number (1 to 9) of the respective digit of the metal factor. Your Sales contact can inform you of the raw material weight.

##### Metal factor examples

|         |                                                       |
|---------|-------------------------------------------------------|
| -----71 |                                                       |
| ↑       | No basis necessary                                    |
| ↑       | No surcharge for silver                               |
| ↑       | No surcharge for copper                               |
| ↑       | No surcharge for aluminum                             |
| ↑       | No surcharge for lead                                 |
| ↑       | No surcharge for gold                                 |
| ↑       | Dysprosium acc. to weight, basic official price 300 € |
| ↑       | Neodym acc. to weight, basic official price 50 €      |

<sup>1)</sup> For a different method of calculation, refer to the separate explanation for these raw materials on the previous page.

<sup>2)</sup> Source: Asian Metal Ltd ([www.asianmetal.com](http://www.asianmetal.com))

### Values of the metal factor

| Percentage<br>method    | Basic official<br>price<br>in €                                     | Step range<br>in €                       | % surcharge<br>1st step | % surcharge<br>2nd step | % surcharge<br>3rd step | % surcharge<br>4th step | % sur-<br>charge<br>per addi-<br>tional step |
|-------------------------|---------------------------------------------------------------------|------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------------------------|
|                         |                                                                     |                                          | Price in €              | Price in €              | Price in €              | Price in €              |                                              |
|                         |                                                                     |                                          | 150.01 - 200.00         | 200.01 - 250.00         | 250.01 - 300.00         | 300.01 - 350.00         |                                              |
| A                       | 150                                                                 | 50                                       | 0.1                     | 0.2                     | 0.3                     | 0.4                     | 0.1                                          |
| B                       | 150                                                                 | 50                                       | 0.2                     | 0.4                     | 0.6                     | 0.8                     | 0.2                                          |
| C                       | 150                                                                 | 50                                       | 0.3                     | 0.6                     | 0.9                     | 1.2                     | 0.3                                          |
| D                       | 150                                                                 | 50                                       | 0.4                     | 0.8                     | 1.2                     | 1.6                     | 0.4                                          |
| E                       | 150                                                                 | 50                                       | 0.5                     | 1.0                     | 1.5                     | 2.0                     | 0.5                                          |
| F                       | 150                                                                 | 50                                       | 0.6                     | 1.2                     | 1.8                     | 2.4                     | 0.6                                          |
| G                       | 150                                                                 | 50                                       | 1.0                     | 2.0                     | 3.0                     | 4.0                     | 1.0                                          |
| H                       | 150                                                                 | 50                                       | 1.2                     | 2.4                     | 3.6                     | 4.8                     | 1.2                                          |
| I                       | 150                                                                 | 50                                       | 1.6                     | 3.2                     | 4.8                     | 6.4                     | 1.6                                          |
| J                       | 150                                                                 | 50                                       | 1.8                     | 3.6                     | 5.4                     | 7.2                     | 1.8                                          |
|                         |                                                                     |                                          | 175.01 - 225.00         | 225.01 - 275.00         | 275.01 - 325.00         | 325.01 - 375.00         |                                              |
| O                       | 175                                                                 | 50                                       | 0.1                     | 0.2                     | 0.3                     | 0.4                     | 0.1                                          |
| P                       | 175                                                                 | 50                                       | 0.2                     | 0.4                     | 0.6                     | 0.8                     | 0.2                                          |
| R                       | 175                                                                 | 50                                       | 0.5                     | 1.0                     | 1.5                     | 2.0                     | 0.5                                          |
|                         |                                                                     |                                          | 225.01 - 275.00         | 275.01 - 325.00         | 325.01 - 375.00         | 375.01 - 425.00         |                                              |
| S                       | 225                                                                 | 50                                       | 0.2                     | 0.4                     | 0.6                     | 0.8                     | 0.2                                          |
| U                       | 225                                                                 | 50                                       | 1.0                     | 2.0                     | 3.0                     | 4.0                     | 1.0                                          |
| V                       | 225                                                                 | 50                                       | 1.0                     | 1.5                     | 2.0                     | 3.0                     | 1.0                                          |
| W                       | 225                                                                 | 50                                       | 1.2                     | 2.5                     | 3.5                     | 4.5                     | 1.0                                          |
|                         |                                                                     |                                          | 150.01 - 175.00         | 175.01 - 200.00         | 200.01 - 225.00         | 225.01 - 250.00         |                                              |
| Y                       | 150                                                                 | 25                                       | 0.3                     | 0.6                     | 0.9                     | 1.2                     | 0.3                                          |
|                         |                                                                     |                                          | 400.01 - 425.00         | 425.01 - 450.00         | 450.01 - 475.00         | 475.01 - 500.00         |                                              |
| Z                       | 400                                                                 | 25                                       | 0.1                     | 0.2                     | 0.3                     | 0.4                     | 0.1                                          |
| Price basis (1st digit) |                                                                     |                                          |                         |                         |                         |                         |                                              |
| L                       | Calculation based on the list price                                 |                                          |                         |                         |                         |                         |                                              |
| N                       | Calculation based on the customer net price (discounted list price) |                                          |                         |                         |                         |                         |                                              |
| Weight<br>method        | Basic official price in €                                           |                                          |                         |                         |                         |                         |                                              |
| 1                       | 50                                                                  | Calculation based on raw material weight |                         |                         |                         |                         |                                              |
| 2                       | 100                                                                 |                                          |                         |                         |                         |                         |                                              |
| 3                       | 150                                                                 |                                          |                         |                         |                         |                         |                                              |
| 4                       | 175                                                                 |                                          |                         |                         |                         |                         |                                              |
| 5                       | 200                                                                 |                                          |                         |                         |                         |                         |                                              |
| 6                       | 225                                                                 |                                          |                         |                         |                         |                         |                                              |
| 7                       | 300                                                                 |                                          |                         |                         |                         |                         |                                              |
| 8                       | 400                                                                 |                                          |                         |                         |                         |                         |                                              |
| 9                       | 555                                                                 |                                          |                         |                         |                         |                         |                                              |
| Miscella-<br>neous      |                                                                     |                                          |                         |                         |                         |                         |                                              |
| -                       | No metal surcharge                                                  |                                          |                         |                         |                         |                         |                                              |

## Appendix

### Conditions of sale and delivery

#### 1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

##### 1.1 For customers with a seat or registered office in European Union

For customers with a seat or registered office in European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for stand-alone software products and software products forming a part of a product or project, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or registered Office in Germany"<sup>1)</sup> and/or
- for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen der Division DF – Deutschland" (available only in German) and/or
- for other services, the „Supplementary Terms and Conditions for Services ("BL")"<sup>1)</sup> and/or
- for other supplies the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>.

In case such supplies should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>, a notice will be contained in the scope of delivery in which the applicable conditions for Open Source Software are specified. This shall apply mutatis mutandis for notices referring to other third party software components.

##### 1.2 For customers with a seat or registered office outside European Union

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the "Standard Terms and Conditions for Consulting Services of the Division DF for Customers with a Seat or Registered Office Outside of Germany"<sup>1)</sup> and/or
- for other services the "International Terms & Conditions for Services"<sup>1)</sup> supplemented by "Software Licensing Conditions"<sup>1)</sup> and/or
- for other supplies of hard- and software the "International Terms & Conditions for Products"<sup>1)</sup> supplemented by "Software Licensing Conditions"<sup>1)</sup>

##### 1.3 For customers with master or framework agreement

To the extent our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

#### 2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials.

A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation.

You will find a detailed explanation of the metal factor on the page headed "Metal surcharges".

To calculate the surcharge (except in the cases of dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a one-month buffer (details on the calculation can be found in the explanation of the metal factor).

#### 3. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

<sup>1)</sup> The text of the Terms and Conditions of Siemens AG can be downloaded at  
[https://mall.industry.siemens.com/legal/ww/en/terms\\_of\\_trade\\_en.pdf](https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf)

### 4. Export regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

Export may be subject to license. We shall indicate in the delivery details whether licenses are required under German, European and US export lists.

Our products are controlled by the U.S. Government (when labeled with "ECCN" unequal "N") and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations. Products labeled with "AL" unequal "N" are subject to European / national export authorization.

The export indications can be viewed in advance in the description of the respective goods on the Industry Mall, our online catalog system. Only the export labels "AL" and "ECCN" indicated on order confirmations, delivery notes and invoices are authoritative.

Products without label, with label "AL:N" / "ECCN:N", or label "AL:9X9999" / "ECCN: 9X9999" may require authorization from responsible authorities depending on the final end-use, or the destination.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you shall comply with all applicable national and international (re-)export control regulations. In any event of such transfer of goods, works and services you shall comply with the (re-) export control regulations of the Federal Republic of Germany, of the European Union and of the United States of America.

Prior to any transfer of goods, works and services provided by us to a third party you shall in particular check and guarantee by appropriate measures that

- there will be no infringement of an embargo imposed by the European Union, by the United States of America and/ or by the United Nations by such transfer, by brokering of contracts concerning those goods, works and services or by provision of other economic resources in connection with those goods, works and services, also considering the limitations of domestic business and prohibitions of by-passing those embargoes;
- such goods, works and services are not intended for use in connection with armaments, nuclear technology or weapons, if and to the extent such use is subject to prohibition or authorization, unless required authorization is provided;
- the regulations of all applicable Sanctioned Party Lists of the European Union and the United States of America concerning the trading with entities, persons and organizations listed therein are considered.

If required to enable authorities or us to conduct export control checks, you, upon request by us, shall promptly provide us with all information pertaining to the particular end customer, the particular destination and the particular intended use of goods, works and services provided by us, as well as any export control restrictions existing.

You acknowledge that under the EU embargo regulations against Iran, Syria and Russia respectively the sale of certain listed goods and related services is subject to authorization by the competent export control authorities of the European Union. If (i) the goods or services ordered by you are destined for Iran, Syria or Russia, and (ii) the contract for our supplies and/or services is subject to prior authorization of the competent export control authorities of the European Union, the contract between you and us shall come into force in this respect only upon granting of such authorization.

The products listed in this catalog may be subject to European/German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities.

Errors excepted and subject to change without prior notice.

## Appendix

### Conditions of sale and delivery

#### Notes





# INDUSTRY MALL



## Industry Mall

Product catalogue and online ordering system for the Industry Automation and Drive Technology

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[Product Search](#)




[Product Catalogue](#)


[Minimize](#)

- Drive technology
- Automation technology
- Energy
- Building Technologies
- Low-Voltage controls and distribution
- Safety Systems - Safety Integrated
- Market-specific solutions
- Industry Services
- Software
- and everything else you need

[Configurator Overview](#)

### Country overview

Welcome in the Siemens Industry Mall  
Please select in the list below your country to access your regional industry mall.

|                                                                                   |                                |                                                                                   |                             |
|-----------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------|-----------------------------|
|  | <a href="#">Argentina</a>      |  | <a href="#">Mexico</a>      |
|  | <a href="#">Australia</a>      |  | <a href="#">Netherlands</a> |
|  | <a href="#">Austria</a>        |  | <a href="#">New Zealand</a> |
|  | <a href="#">Belgium</a>        |  | <a href="#">Norway</a>      |
|  | <a href="#">Bulgaria</a>       |  | <a href="#">Oman</a>        |
|  | <a href="#">Canada</a>         |  | <a href="#">Peru</a>        |
|  | <a href="#">Chile</a>          |  | <a href="#">Philippines</a> |
|  | <a href="#">China</a>          |  | <a href="#">Poland</a>      |
|  | <a href="#">Colombia</a>       |  | <a href="#">Portugal</a>    |
|  | <a href="#">Croatia</a>        |  | <a href="#">Qatar</a>       |
|  | <a href="#">Czech Republic</a> |  | <a href="#">Romania</a>     |
|  | <a href="#">Denmark</a>        |  | <a href="#">Russia</a>      |
|  | <a href="#">Ecuador</a>        |  | <a href="#">Singapore</a>   |
|  | <a href="#">Estonia</a>        |  | <a href="#">Slovakia</a>    |

The Industry Mall is a Siemens AG Internet ordering platform. It provides you with online access to a comprehensive product spectrum that is presented in an informative, well-organized way.

Data transfer allows the entire procedure, from selection through ordering to tracking and tracing, to be carried out online. Availability checks, individual customer discounting, and quotation preparation are also possible.

[illegible]

You can download catalogs and brochures in PDF format from Siemens Industry Online Support without having to register.

[www.siemens.com/industry-catalogs](http://www.siemens.com/industry-catalogs)

Addresses can be found at  
[www.siemens.com/automation-contact](http://www.siemens.com/automation-contact)

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