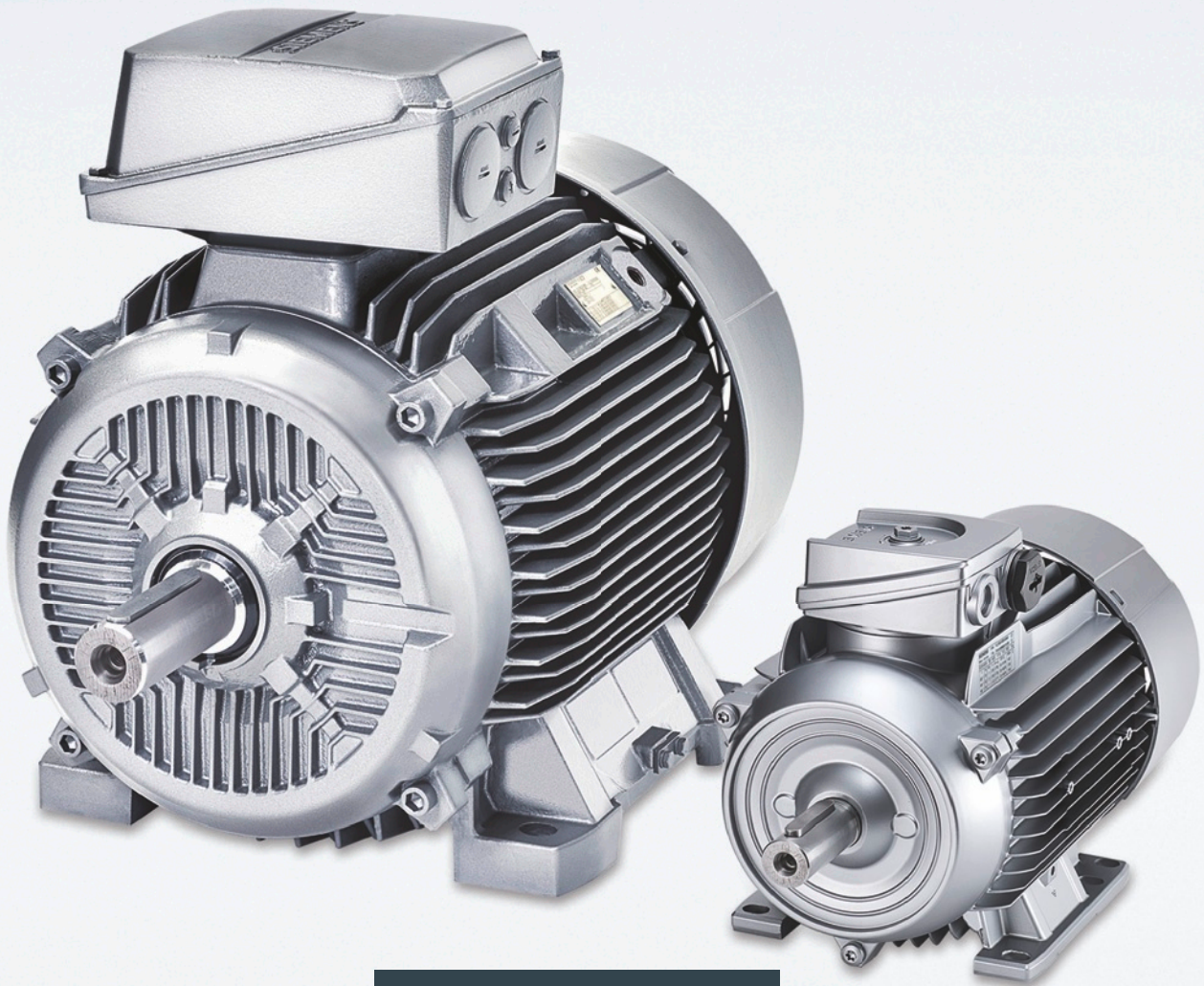


SIEMENS



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
10/2018

[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 station-ary 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

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.

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

English: www.siemens.com/dt-configurator

Offline access in the Interactive Catalog CA 01

The DT Configurator is also integrated on the DVD of the Interactive Catalog CA 01, the offline version of the Siemens Industry Mall. You can order the CA 01 with your respective Siemens sales person or on the Internet:

www.siemens.com/automation/ca01

Price Groups

Motors		
	Preferred Motors	Standard program according to catalog with standard delivery time
Type	1LE1	1FP1, 1LE1, 1LE5, 1MB1, 1PC1
Price group	3Z0	3Z1

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	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 N - W - - - - (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.

Additional documentation

You will find all information material, such as brochures, catalogs, manuals and operating instructions for standard drive systems up-to-date on the Internet at the address:

www.siemens.com/motors/printmaterial

You can order the listed documentation or download it in common file formats (PDF, ZIP).



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

Type series

1FP, 1LE, 1MB, 1PC

Price List D 81.1 P · 10/2018

Dear Customer,

We are pleased to present you with the new Price List D 81.1 P · 10/2018.
The new price list replaces Price List D 81.1 P · 12/2017.

The following price changes and adaptations were made as of October 1, 2018:

- Price changes for SIMOTICS GP, SD, DP, XP motors of the 1LE1 platform and derivatives: +3 %
- Expansion of the SIMOTICS SD next generation motor series with the SIMOTICS SD Add/Pro next generation motors in frame sizes 315 L, 355 L, 400 and 450
- Total discontinuation of motor types 1LA, 1LG, 1LL, 1LP, 1MA, 1PP and 1PQ
- "Bearing insulation NDE" option (order code L51) available for further motor types and frame sizes

The products listed in this price list are also part of the new edition of the Interactive Catalog CA 01 and in the Industry Mall. Please contact your local Siemens office for additional information.

The Drive Technology Configurator is likewise part of the Interactive Catalog CA 01 and is also available on the Internet at 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/lowvoltagemotors

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

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

We hope that you will often use our new Price List D 81.1 P · 10/2018 as a helpful ordering resource.

With kind regards,



Dagmar Eisinger
Director Sales Controlling
Siemens AG, Process Industries and Drives, Large Drives

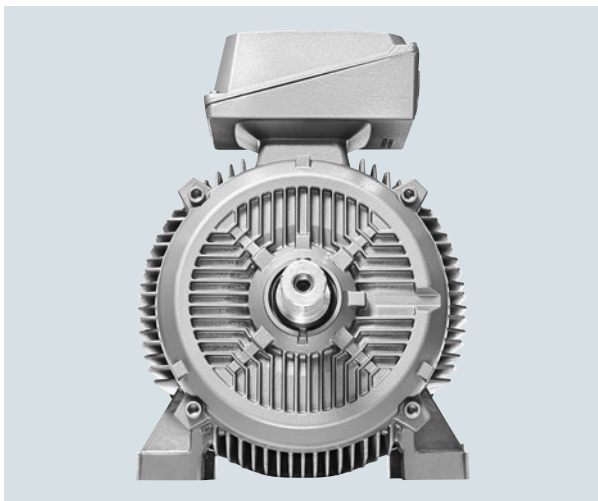


Henning Höhnert
Head of Product Management Standard Products
Siemens AG, Process Industries and Drives, Large Drives

SIMOTICS Low-Voltage Motors

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

Motors



Price List D 81.1 P · 10/2018

Supersedes:

Price List D 81.1 P · 12/2017

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

www.siemens.com/industrymall

The products contained in this Price List can also be found in the Interactive Catalog CA 01.

Article No.: E86060-D4001-A510-D8-7600

Please contact your local Siemens branch.

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Preferred Motors

Motors with IE3 Premium Efficiency
Motors with IE2 High Efficiency
Motors with IE1 Standard Efficiency

1

SIMOTICS GP/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

2

SIMOTICS SD Standard Motors next generation

3

SIMOTICS GP/SD Standard Motors for Converter Operation

VSD10 Line
VSD4000 Line

4

SIMOTICS XP Explosion-Proof Motors

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

5

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors
Marine motors
Steel plant motors

6

Appendix

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

8



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

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 IE2 and IE3 motors incl. a selected spectrum of options ex works within 48 hours.

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 2/13.

	Motor type	Efficiency class	Frame size	Number of poles	Overall length	Voltage	Type of construction	Motor protection & Terminal box	
Position of Article No.:	1 to 6	7	8 and 9	10	11	12 and 13	14	15	16
SIMOTICS GP	1LE100	3: IE3	0D: 80	A: 2-pole	2 or 3: M	2-2: 230 V/400 V	A IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3	A: without motor protection	4: terminal box on top
	1LE100		0E: 90	A: 2-pole B: 4-pole	0: S 4: L				
	1LE100	3: IE3	1A: 100		4 or 5: L			B: 3 PTC thermistors (tripping)	
	1LE100		1B: 112		2: M	2-2: 230 V/400 V 3-4: 400 V/690 V	F IM B5/IM 3001, IM V1, IM V3, stamped IM B5 flange		
	1LE100		1C: 132		0 or 1: S 2 or 3: M	3-4: 400 V/690 V	J IM B35 / IM 2001 flange		
	1LE100		1D: 160		2 or 3: M 4: L		K IM B14/IM 3601, IM V19/IM 363, IM V18/IM 3611 stamped IM B14; standard flange		
							N IM B34/IM 2101 standard flange		
	1LE100	3: IE3	1E: 180		2: M 4: L		A IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3	B: 3 PTC thermistors (tripping)	4: terminal box on top
	1LE100		2A: 200		4 or 5: L		F IM B5/IM 3001, IM V1, IM V3, stamped IM B5 flange		
	1LE150	3: IE3	1E: 180		2: M 4: L		A IM B3, IM B6, IM B7, IM B8, IM V5, IM V6, stamped IM B3		
SIMOTICS SD	1LE150		2A: 200		4 or 5: L				
	1LE150		2B: 225	B 4-pole	0: S 2: M				
	1LE150		2C: 250		2: M				
	1LE150		2D: 280		0: S				
	1LE150								

Basic versions of the SIMOTICS GP and SD motor range, deliverable within 48 hours (ex works) ¹⁾

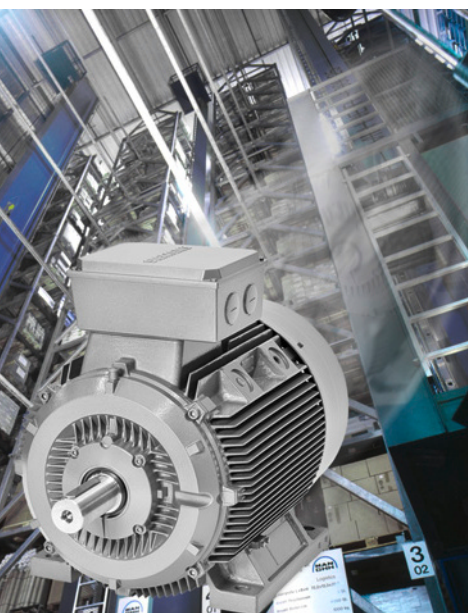
If an order can be delivered within 48 hours (ex works) depends on the ordered basic motor type and the ordered options. The exact delivery times can be found out via our ordering systems or the Siemens distributors. For projects with larger quantities, the delivery time must be requested separately 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
Example 1	SIMOTICS GP, IE2, 4-pole, FS112, 4 kW (50 Hz) 1LE1001-1BB22-2AA4 2 working days ex works	Order code H04 (External grounding) 2 working days ex works	2 working days ex works
Example 2	SIMOTICS GP, IE3, 4-pole, FS160, 15 kW (50 Hz) 1LE1003-1DB42-1AA4 10 working days ex works	Order code H04 (External grounding) 2 working days ex works Order code G11 (Mounting of rotary pulse encoder) 5 working days ex works	10 working days ex works
Example 3	SIMOTICS SD, IE3, 4-pole, FS225, 37 kW (50 Hz) 1LE1503-2BB03-4AB5 10 working days ex works	Order code S03 (Special finish sea air resistant C4) 15 working days ex works	15 working days ex works

¹⁾ Article number code see Catalog D 81.1 · 2016 in chapter 2.

Preferred Motors



Definition “Preferred Motors”

The most required basic versions are available under special terms as so-called “Preferred motors”.

- It is a defined selection of the complete motor range with limited choice of supply voltage, type of construction and motor protection.
- The delivery times are in accordance with the details in the Catalog
- The motors are available at reduced prices: price group 3Z0

1/2	Motors for converter operation only
1/2	SIMOTICS GP VSD10-Line – Aluminum series 1LE1092
1/2	SIMOTICS SD VSD10-Line – Cast-iron series 1LE1592
1/3	Motors with IE3 Premium Efficiency
1/3	SIMOTICS GP – Aluminum series 1LE1003
1/3	SIMOTICS SD – Cast-iron series 1LE1503
1/9	Motors with IE2 High Efficiency
1/9	SIMOTICS GP – Aluminum series 1LE1001
1/9	SIMOTICS SD – Cast-iron series 1LE1501
1/15	Motors with IE1 Standard Efficiency
1/15	SIMOTICS GP – Aluminum series 1LE1002
1/16	SIMOTICS GP – Aluminum series 1LE1011 and 1LE1012 in pole-changing versions

Preferred Motors

Motors for converter operation only

SIMOTICS GP VSD10-Line – Aluminum series 1LE1092 · SIMOTICS SD VSD10-Line – Cast-iron series 1LE1592**Selection and ordering data**

Basic type 1LE109/1LE159

- Cooling: self-ventilated (IC 411)
- Efficiency: Basic Efficiency - FOR CONVERTER OPERATION ONLY
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization temperature class F (155) in accordance with F
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

P _{rated} , 50 Hz kW	Frame size FS	Motor voltage →	50 Hz, 220 VΔ, 380 VY 60 Hz, 440 VΔ			
		Type of construction →	Without flange IM B3	With flange IM B5	With flange IM B35	With flange IM B14
		Motor protection →	Motor temperature detection with embedded temperature sensor KTY84-130			
		Article No.	Price plus MS EUR			
		1LE1092-1AB4-....	2-1AF4	2-1FF4	2-1JF4	2-1KF4
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz						
2.2	100 L	1LE1092-1AB4-....	773.–	852.70	–	852.70
3	100 L	1LE1092-1AB5-....	889.–	968.70	–	968.70
4	112 M	1LE1092-1BB2-....	1130.–	1229.–	–	1229.–
5.5	132 S	1LE1092-1CB0-....	1450.–	1579.–	1584.–	–
7.5	132 M	1LE1092-1CB2-....	1860.–	1989.–	1994.–	–
11	160 M	1LE1092-1DB2-....	2430.–	2597.–	2615.–	–
15	160 L	1LE1092-1DB4-....	3160.–	3327.–	3345.–	–
18.5	180 M	1LE1592-1EB2-....	4130.–	4394.–	4439.–	–
22	180 L	1LE1592-1EB4-....	4870.–	5134.–	5179.–	–
30	200 L	1LE1592-2AB5-....	6300.–	6620.–	6712.–	–
37	225 S	1LE1592-2BB0-....	7420.–	–	–	–
45	225 M	1LE1592-2BB2-....	8960.–	–	–	–
55	250 M	1LE1592-2CB2-....	10900.–	–	–	–
75	280 S	1LE1592-2DB0-....	15900.–	–	–	–
90	280 M	1LE1592-2DB2-....	18600.–	–	–	–
110	315 S	1LE1592-3AB0-....	22400.–	–	–	–
132	315 M	1LE1592-3AB2-....	26600.–	–	–	–
160	315 L	1LE1592-3AB4-....	31800.–	–	–	–
200	315 L	1LE1592-3AB5-....	39600.–	–	–	–

Standard delivery times in working days:

2

10

15

IE3**Preferred Motors**

Motors with IE3 Premium Efficiency

SIMOTICS GP – Aluminum series 1LE1003 · SIMOTICS SD – Cast-iron series 1LE1503

1

Selection and ordering data

Basic type 1LE

- Cooling: self-ventilated (IC 411)
- Efficiency: IE3 Premium Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY			
		Type of construction →	Without flange IM B3		With flange IM B5	
		Motor protection →	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR			
		1LE1003-■■■■■-.....	2-2AA4	2-2AB4	2-2FA4	2-2FB4
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz						
0.75	80 M	1LE1003-0DA2.-....	606.-	642.40	659.70	696.10
1.1	80 M	1LE1003-0DA3.-....	693.-	729.40	746.70	783.10
1.5	90 S	1LE1003-0EA0.-....	800.-	842.60	864.40	907.-
2.2	90 L	1LE1003-0EA4.-....	1030.-	1072.60	1094.40	1137.-
3	100 L	1LE1003-1AA4.-....	1160.-	1277.-	1239.70	1356.70
4	112 M	1LE1003-1BA2.-....	1370.-	1487.-	1469.-	1586.-
5.5	132 S	1LE1003-1CA0.-....	1720.-	1896.-	1849.-	2025.-
7.5	132 S	1LE1003-1CA1.-....	2190.-	2366.-	2319.-	2495.-

Preferred Motors

Motors with IE3 Premium Efficiency

SIMOTICS GP – Aluminum series 1LE1003 · SIMOTICS SD – Cast-iron series 1LE1503**Selection and ordering data** (continued)

Basic type 1LE

- Cooling: self-ventilated (IC 411)
- Efficiency: IE3 Premium Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 400 VΔ/690 VY 60 Hz, 460 VΔ			
		Type of construction →	Without flange IM B3		With flange IM B5	
		Motor protection →	Without motor protection		Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping
			PTC thermistor with 1 or 3 embedded temperature sensors for tripping			
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR			
		1LE1003-■■■■-.....	3-4AA4	3-4AB4	3-4FA4	3-4FB4
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz						
3	100 L	1LE1003-1AA4-.....	1160.-	1277.-	1239.70	1356.70
4	112 M	1LE1003-1BA2-.....	1370.-	1487.-	1469.-	1586.-
5.5	132 S	1LE1003-1CA0-.....	1720.-	1896.-	1849.-	2025.-
7.5	132 S	1LE1003-1CA1-.....	2190.-	2366.-	2319.-	2495.-
11	160 M	1LE1003-1DA2-.....	3040.-	3216.-	3207.-	3383.-
15	160 M	1LE1003-1DA3-.....	3980.-	4156.-	4147.-	4323.-
18.5	160 L	1LE1003-1DA4-.....	4740.-	4916.-	4907.-	5083.-
22	180 M	1LE1003-1EA2-.....	-	5514.-	-	-
22	180 M	1LE1503-1EA2-.....	5620.-	5854.-	-	6118.-
30	200 L	1LE1003-2AA4-.....	-	7094.-	-	-
30	200 L	1LE1503-2AA4-.....	7290.-	7524.-	-	7844.-
37	200 L	1LE1003-2AA5-.....	-	8834.-	-	-
37	200 L	1LE1503-2AA5-.....	9160.-	9394.-	-	9714.-
45	225 M	1LE1503-2BA2-.....	10300.-	10619.-	-	-
55	250 M	1LE1503-2CA2-.....	12400.-	12719.-	-	-
75	280 S	1LE1503-2DA0-.....	16600.-	16998.-	-	-
90	280 M	1LE1503-2DA2-.....	19600.-	19998.-	-	-

Selection and ordering data (continued)

Basic type 1LE1

- **Cooling:** self-ventilated (IC 411)
- **Efficiency:** IE3 Premium Efficiency
- **Insulation:** Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- **Metal factor for metal surcharges (MS):** N - W - - - -
- **Price group:** 3Z0

Voltage → Type of construction → Motor protection →			50 Hz, 230 V Δ /400 VY 60 Hz, 460 VY				
			Without flange IM B3		With flange IM B5		With flange IM B14
			Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection
P_{rated} , 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR				
		1LE1003-■■■■-.....	2-2AA4	2-2AB4	2-2FA4	2-2FB4	2-2KA4
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz							
0.55	80 M	1LE1003-0DB2-..... ¹⁾	599.–	635.40	652.70	689.10	652.70
0.75	80 M	1LE1003-0DB3-.....	655.–	691.40	708.70	745.10	708.70
1.1	90 S	1LE1003-0EB0-.....	777.–	819.60	841.40	884.–	841.40
1.5	90 L	1LE1003-0EB4-.....	920.–	962.60	984.40	1027.–	984.40
2.2	100 L	1LE1003-1AB4-.....	1060.–	1177.–	1139.70	1256.70	1139.70
3	100 L	1LE1003-1AB5-.....	1230.–	1347.–	1309.70	1426.70	1309.70
4	112 M	1LE1003-1BB2-.....	1490.–	1607.–	1589.–	1706.–	1589.–
5.5	132 S	1LE1003-1CB0-.....	1870.–	2046.–	1999.–	2175.–	–
7.5	132 M	1LE1003-1CB2-.....	2370.–	2546.–	2499.–	2675.–	–
11	160 M	1LE1003-1DB2-.....	3110.–	3286.–	3277.–	3453.–	–
15	160 L	1LE1003-1DB4-.....	4040.–	4216.–	4207.–	4383.–	–

¹⁾ IE3 Premium Efficiency will not be stamped, because the motor is not in the IE3 power range from 0.75 to 375 kW.

Motors with IE3 Premium Efficiency

SIMOTICS GP – Aluminum series 1LE1003 · SIMOTICS SD – Cast-iron series 1LE1503

Basic type 1LE1

- **Cooling:** self-ventilated (IC 411)
- **Efficiency:** IE3 Premium Efficiency
- **Insulation:** Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- **Metal factor for metal surcharges (MS):** N - W - - - -
- **Price group:** 3Z0

Voltage → Type of construction → Motor protection →			50 Hz, 400 V Δ/690 VY 60 Hz, 460 V Δ				
			Without flange IM B3		With flange IM B5		With flange IM B35
			Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection
P _{rated} , 50 Hz kW	Frame size FS	Article No. 1LE1■03-■■■■-....	Price plus MS EUR 3-4AA4	3-4AB4	3-4FA4	3-4FB4	3-4JA4
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz							
2.2	100 L	1LE1003-1AB4-....	1060.–	1177.–	1139.70	1256.70	–
3	100 L	1LE1003-1AB5-....	1230.–	1347.–	1309.70	1426.70	–
4	112 M	1LE1003-1BB2-....	1490.–	1607.–	1589.–	1706.–	–
5.5	132 S	1LE1003-1CB0-....	1870.–	2046.–	1999.–	2175.–	2004.–
7.5	132 M	1LE1003-1CB2-....	2370.–	2546.–	2499.–	2675.–	2504.–
11	160 M	1LE1003-1DB2-....	3110.–	3286.–	3277.–	3453.–	3295.–
15	160 L	1LE1003-1DB4-....	4040.–	4216.–	4207.–	4383.–	4225.–
18.5	180 M	1LE1003-1EB2-....	–	4724.–	–	4988.–	–
18.5	180 M	1LE1503-1EB2-....	4770.–	5004.–	5034.–	5268.–	5079.–
22	180 L	1LE1003-1EB4-....	–	5424.–	–	5688.–	–
22	180 L	1LE1503-1EB4-....	5550.–	5784.–	5814.–	6048.–	5859.–
30	200 L	1LE1003-2AB5-....	–	6994.–	–	7314.–	–
30	200 L	1LE1503-2AB5-....	7200.–	7434.–	7520.–	7754.–	7612.–
37	225 S	1LE1503-2BB0-....	8240.–	8559.–	–	–	–
45	225 M	1LE1503-2BB2-....	9700.–	10019.–	–	–	–
55	250 M	1LE1503-2CB2-....	11700.–	12019.–	–	–	–
75	280 S	1LE1503-2DB0-....	15700.–	16098.–	–	–	–
90	280 M	1LE1503-2DB2-....	18400.–	18798.–	–	–	–
110	315 S	1LE1503-3AB0-....	23000.–	23398.–	–	–	–
132	315 M	1LE1503-3AB2-....	27200.–	27598.–	–	–	–
160	315 L	1LE1503-3AB4-....	32900.–	33298.–	–	–	–
200	315 L	1LE1503-3AB5-....	40900.–	41298.–	–	–	–

Standard delivery times in working days:

2

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IE3**Preferred Motors**

Motors with IE3 Premium Efficiency

SIMOTICS GP – Aluminum series 1LE1003 · SIMOTICS SD – Cast-iron series 1LE1503

1

Selection and ordering data (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE3 Premium Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY				
		Type of construction →	Without flange IM B3	With flange IM B5	With flange IM B14		
		Motor protection →	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No. 1LE1003-■■■■-.....	Price plus MS EUR				
			2-2AA4	2-2AB4	2-2FA4	2-2FB4	2-2KA4
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz							
0.37	80 M	1LE1003-0DC2.-.... ¹⁾	582.-	618.40	635.70	672.10	635.70
0.55	80 M	1LE1003-0DC3.-.... ¹⁾	673.-	709.40	726.70	763.10	726.70
0.75	90 S	1LE1003-0EC0.-....	760.-	802.60	824.40	867.-	824.40
1.1	90 L	1LE1003-0EC4.-....	942.-	984.60	1006.40	1049.-	1006.40
1.5	100 L	1LE1003-1AC4.-....	1050.-	1167.-	1129.70	1246.70	1129.70
2.2	112 M	1LE1003-1BC2.-....	1330.-	1447.-	1429.-	1546.-	1429.-
3	132 S	1LE1003-1CC0.-....	1660.-	1836.-	1789.-	1965.-	1789.-
4	132 M	1LE1003-1CC2.-....	2050.-	2226.-	2179.-	2355.-	-
5.5	132 M	1LE1003-1CC3.-....	2580.-	2756.-	2709.-	2885.-	-
7.5	160 M	1LE1003-1DC2.-....	3270.-	3446.-	3437.-	3613.-	-
11	160 L	1LE1003-1DC4.-....	4510.-	4686.-	4677.-	4853.-	-

¹⁾ IE3 Premium Efficiency will not be stamped, because the motor is not in the IE3 power range from 0.75 to 375 kW.

IE3**2****10****15****Preferred Motors**

Motors with IE3 Premium Efficiency

SIMOTICS GP – Aluminum series 1LE1003 · SIMOTICS SD – Cast-iron series 1LE1503**1****Selection and ordering data** (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE3 Premium Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

			Voltage →	50 Hz, 400 VΔ/690 VY 60 Hz, 460 VΔ			
			Type of construction →	Without flange IM B3		With flange IM B5	
			Motor protection →	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping
P _{rated} , 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR				
		1LE1■03-■■■■-....	3-4AA4	3-4AB4	3-4FA4	3-4FB4	3-4JA4
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz							
1.5	100 L	1LE1003-1AC4-....	1050.–	1167.–	1129.70	1246.70	–
2.2	112 M	1LE1003-1BC2-....	1330.–	1447.–	1429.–	1546.–	–
3	132 S	1LE1003-1CC0-....	1660.–	1836.–	1789.–	1965.–	–
4	132 M	1LE1003-1CC2-....	2050.–	2226.–	2179.–	2355.–	2184.–
5.5	132 M	1LE1003-1CC3-....	2580.–	2756.–	2709.–	2885.–	2714.–
7.5	160 M	1LE1003-1DC2-....	3270.–	3446.–	3437.–	3613.–	3455.–
11	160 L	1LE1003-1DC4-....	4510.–	4686.–	4677.–	4853.–	4695.–
15	180 L	1LE1003-1EC4-....	5570.–	5804.–	5834.–	6068.–	5879.–
15	180 L	1LE1503-1EC4-....	5920.–	6154.–	6184.–	6418.–	6229.–
18.5	200 L	1LE1003-2AC4-....	6790.–	7024.–	7110.–	7344.–	7202.–
18.5	200 L	1LE1503-2AC4-....	7240.–	7474.–	7560.–	7794.–	7652.–
22	200 L	1LE1003-2AC5-....	7880.–	8114.–	8200.–	8434.–	8292.–
22	200 L	1LE1503-2AC5-....	8370.–	8604.–	8690.–	8924.–	8782.–
30	225 M	1LE1503-2BC2-....	10600.–	10919.–	–	–	–
37	250 M	1LE1503-2CC2-....	13000.–	13319.–	–	–	–
45	280 S	1LE1503-2DC0-....	15700.–	16098.–	–	–	–
55	280 M	1LE1503-2DC2-....	18400.–	18798.–	–	–	–
75	315 S	1LE1503-3AC0-....	25000.–	25398.–	–	–	–
90	315 M	1LE1503-3AC2-....	28200.–	28598.–	–	–	–
110	315 L	1LE1503-3AC4-....	34000.–	34398.–	–	–	–
132	315 L	1LE1503-3AC5-....	40400.–	40798.–	–	–	–
160	315 L	1LE1503-3AC6-....	49000.–	49398.–	–	–	–

Standard delivery times in working days:

2

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IE2**Preferred Motors**

Motors with IE2 High Efficiency

SIMOTICS GP – Aluminum series 1LE1001 · SIMOTICS SD – Cast-iron series 1LE1501

1

Selection and ordering data

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE2 High Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY			
		Type of construction →	Without flange IM B3		With flange IM B5	
		Motor protection →	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No. 1LE1001-■■■■-.....	Price plus MS EUR			
			2-2AA4	2-2AB4	2-2FA4	2-2FB4
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz						
0.75	80 M	1LE1001-0DA2.-....	505.-	541.40	558.70	595.10
1.1	80 M	1LE1001-0DA3.-....	577.-	613.40	630.70	667.10
1.5	90 S	1LE1001-0EA0.-....	666.-	708.60	730.40	773.-
2.2	90 L	1LE1001-0EA4.-....	859.-	901.60	923.40	966.-
3	100 L	1LE1001-1AA4.-....	1030.-	1147.-	1109.70	1226.70
4	112 M	1LE1001-1BA2.-....	1230.-	1347.-	1329.-	1446.-
5.5	132 S	1LE1001-1CA0.-....	1530.-	1706.-	1659.-	1835.-
7.5	132 S	1LE1001-1CA1.-....	1940.-	2116.-	2069.-	2245.-

IE2**2****10****15****Preferred Motors**

Motors with IE2 High Efficiency

SIMOTICS GP – Aluminum series 1LE1001 · SIMOTICS SD – Cast-iron series 1LE1501**1****Selection and ordering data** (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE2 High Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 400 VΔ/690 VY 60 Hz, 460 VΔ			
		Type of construction →	Without flange IM B3		With flange IM B5	
		Motor protection →	Without motor protection		Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping
			PTC thermistor with 1 or 3 embedded temperature sensors for tripping			PTC thermistor with 1 or 3 embedded temperature sensors for tripping
P_{rated}, 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR			
		1LE1001-1-.....	3-4AA4	3-4AB4	3-4FA4	3-4FB4
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz						
3	100 L	1LE1001-1AA4-.....	1030.-	1147.-	1110.-	1227.-
4	112 M	1LE1001-1BA2-.....	1230.-	1347.-	1329.-	1446.-
5.5	132 S	1LE1001-1CA0-.....	1530.-	1706.-	1659.-	1835.-
7.5	132 S	1LE1001-1CA1-.....	1940.-	2116.-	2069.-	2245.-
11	160 M	1LE1001-1DA2-.....	2700.-	2876.-	2867.-	3043.-
15	160 M	1LE1001-1DA3-.....	3520.-	3696.-	3687.-	3863.-
18.5	160 L	1LE1001-1DA4-.....	4200.-	4376.-	4367.-	4543.-
22	180 M	1LE1001-1EA2-.....	4790.-	5024.-	–	5288.-
22	180 M	1LE1501-1EA2-.....	5100.-	5334.-	–	5598.-
30	200 L	1LE1001-2AA4-.....	6210.-	6444.-	–	6764.-
30	200 L	1LE1501-2AA4-.....	6610.-	6844.-	–	7164.-
37	200 L	1LE1001-2AA5-.....	7800.-	8034.-	–	8354.-
37	200 L	1LE1501-2AA5-.....	8290.-	8524.-	–	8844.-
45	225 M	1LE1501-2BA2-.....	9570.-	9889.-	–	–
55	250 M	1LE1501-2CA2-.....	11300.-	11619.-	–	–
75	280 S	1LE1501-2DA0-.....	15600.-	15998.-	–	–
90	280 M	1LE1501-2DA2-.....	18400.-	18798.-	–	–

Standard delivery times in working days:

2

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IE2**Preferred Motors**

Motors with IE2 High Efficiency

SIMOTICS GP – Aluminum series 1LE1001 · SIMOTICS SD – Cast-iron series 1LE1501

1

Selection and ordering data (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE2 High Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →		50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY						
		Type of construction →		Without flange IM B3		With flange IM B5				
		Motor protection →		Without motor protection		PTC thermistor with 1 or 3 embedded temperature sensors for tripping				
				Without motor protection		PTC thermistor with 1 or 3 embedded temperature sensors for tripping				
P _{rated} , 50 Hz kW	Frame size FS	Article No.		Price plus MS EUR						
		1LE1001-■■■■-.....		2-2AA4		2-2AB4				
						2-2FA4				
						2-2FB4				
								2-2KA4		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz										
0.55	80 M	1LE1001-0DB2-..... ¹⁾		502.–	538.40	555.70	592.10	555.70		
0.75	80 M	1LE1001-0DB3-.....		546.–	582.40	599.70	636.10	599.70		
1.1	90 S	1LE1001-0EB0-.....		646.–	688.60	710.40	753.–	710.40		
1.5	90 L	1LE1001-0EB4-.....		767.–	809.60	831.40	874.–	831.40		
2.2	100 L	1LE1001-1AB4-.....		940.–	1057.–	1019.70	1136.70	1019.70		
3	100 L	1LE1001-1AB5-.....		1080.–	1197.–	1159.70	1276.70	1159.70		
4	112 M	1LE1001-1BB2-.....		1330.–	1447.–	1429.–	1546.–	1429.–		
5.5	132 S	1LE1001-1CB0-.....		1650.–	1826.–	1779.–	1955.–	–		
7.5	132 M	1LE1001-1CB2-.....		2100.–	2276.–	2229.–	2405.–	–		
11	160 M	1LE1001-1DB2-.....		2760.–	2936.–	2927.–	3103.–	–		
15	160 L	1LE1001-1DB4-.....		3560.–	3736.–	3727.–	3903.–	–		

¹⁾ IE2 High Efficiency will not be stamped, because the motor is not in the IE2 power range from 0.75 to 375 kW.

IE2**2****10****15****Preferred Motors**

Motors with IE2 High Efficiency

SIMOTICS GP – Aluminum series 1LE1001 · SIMOTICS SD – Cast-iron series 1LE1501**Selection and ordering data** (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE2 High Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →		50 Hz, 400 VΔ/690 VY		60 Hz, 460 VΔ	
		Type of construction →	Without flange IM B3	With flange IM B5	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	With flange IM B35
		Motor protection →	Without motor protection	Without motor protection	Without motor protection	PTC thermistor with 1 or 3 embedded temperature sensors for tripping	Without motor protection
P_{rated}, 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR				
		1LE1001-1AB4-.....	3-4AA4	3-4AB4	3-4FA4	3-4FB4	3-4JA4
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz							
2.2	100 L	1LE1001-1AB4-.....	940.-	1057.-	1019.70	1136.70	-
3	100 L	1LE1001-1AB5-.....	1080.-	1197.-	1159.70	1276.70	-
4	112 M	1LE1001-1BB2-.....	1330.-	1447.-	1429.-	1546.-	-
5.5	132 S	1LE1001-1CB0-.....	1650.-	1826.-	1779.-	1955.-	1784.-
7.5	132 M	1LE1001-1CB2-.....	2100.-	2276.-	2229.-	2405.-	2234.-
11	160 M	1LE1001-1DB2-.....	2760.-	2936.-	2927.-	3103.-	2945.-
15	160 L	1LE1001-1DB4-.....	3560.-	3736.-	3727.-	3903.-	3745.-
18.5	180 M	1LE1001-1EB2-.....	4060.-	4294.-	4324.-	4558.-	4369.-
18.5	180 M	1LE1501-1EB2-.....	4320.-	4554.-	4584.-	4818.-	4629.-
22	180 L	1LE1001-1EB4-.....	4730.-	4964.-	4994.-	5228.-	5039.-
22	180 L	1LE1501-1EB4-.....	5030.-	5264.-	5294.-	5528.-	5339.-
30	200 L	1LE1001-2AB5-.....	6120.-	6354.-	6440.-	6674.-	6532.-
30	200 L	1LE1501-2AB5-.....	6510.-	6744.-	6830.-	7064.-	6922.-
37	225 S	1LE1501-2BB0-.....	7640.-	7959.-	-	-	-
45	225 M	1LE1501-2BB2-.....	9000.-	9319.-	-	-	-
55	250 M	1LE1501-2CB2-.....	10900.-	11219.-	-	-	-
75	280 S	1LE1501-2DB0-.....	14600.-	14998.-	-	-	-
90	280 M	1LE1501-2DB2-.....	17200.-	17598.-	-	-	-
110	315 S	1LE1501-3AB0-.....	21500.-	21898.-	-	-	-
132	315 M	1LE1501-3AB2-.....	25500.-	25898.-	-	-	-
160	315 L	1LE1501-3AB4-.....	30700.-	31098.-	-	-	-
200	315 L	1LE1501-3AB5-.....	38400.-	38798.-	-	-	-

Standard delivery times in working days:

2

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IE2**Preferred Motors**

Motors with IE2 High Efficiency

SIMOTICS GP – Aluminum series 1LE1001 · SIMOTICS SD – Cast-iron series 1LE1501

1

Selection and ordering data (continued)

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE2 High Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY				
		Type of construction →	Without flange IM B3	With flange IM B5	With flange IM B5	With flange IM B5	With flange IM B14
		Motor protection →	Without motor protection	PTC thermistor with 3 embedded temperature sensors for tripping	Without motor protection	PTC thermistor with 3 embedded temperature sensors for tripping	Without motor protection
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No. 1LE1001-■■■■-.....	Price plus MS EUR				
			2-2AA4	2-2AB4	2-2FA4	2-2FB4	2-2KA4
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz							
0.37	80 M	1LE1001-0DC2.-.... ¹⁾	484.-	520.40	537.70	574.10	537.70
0.55	80 M	1LE1001-0DC3.-.... ¹⁾	561.-	597.40	614.70	651.10	614.70
0.75	90 S	1LE1001-0EC0.-....	634.-	676.60	698.40	741.-	698.40
1.1	90 L	1LE1001-0EC4.-....	786.-	828.60	850.40	893.-	850.40
1.5	100 L	1LE1001-1AC4.-....	929.-	-	1008.70	1125.70	1008.70
2.2	112 M	1LE1001-1BC2.-....	1170.-	-	1269.-	1386.-	1269.-
3	132 S	1LE1001-1CC0.-....	1480.-	-	1609.-	1785.-	-
4	132 M	1LE1001-1CC2.-....	1820.-	-	1949.-	-	-
5.5	132 M	1LE1001-1CC3.-....	2300.-	-	-	-	-

¹⁾ IE2 High Efficiency will not be stamped, because the motor is not in the IE2 power range from 0.75 to 375 kW.

Motors with IE2 High Efficiency

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1

Basic type 1LE1

- Voltage** →

Type of construction →

Without flange
IM B3

Motor protection →

Without motor protection

PTC thermistor with
3 embedded
temperature sensors
for tripping

With flange
IM B5

Without motor protection

PTC thermistor with
3 embedded
temperature sensors
for tripping

6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz

Standard delivery times in working days:

2

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IE1**Preferred Motors**

Motors with IE1 Standard Efficiency

SIMOTICS GP – Aluminum series 1LE1002

1

Selection and ordering data

Basic type 1LE1

- Cooling: self-ventilated (IC 411)
- Efficiency: IE1 Standard Efficiency
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

		Voltage →	50 Hz, 230 VΔ/400 VY 60 Hz, 460 VY				
		Type of construction →	Without flange IM B3	PTC thermistor with 3 embedded temperature sensors for tripping	With flange IM B5 Without motor protection	PTC thermistor with 3 embedded temperature sensors for tripping	With flange IM B14 Without motor protection
		Motor protection →	Without motor protection	PTC thermistor with 3 embedded temperature sensors for tripping	With flange IM B5 Without motor protection	PTC thermistor with 3 embedded temperature sensors for tripping	With flange IM B14 Without motor protection
<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No.	Price plus MS EUR				
		1LE1002-0■■■■-.....	2-2AA4	2-2AB4	2-2FA4	2-2FB4	2-2KA4
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz							
0.18	63 M	1LE1002-0BA2-.....	298.-	335.-	340.60	377.70	340.60
0.25	63 M	1LE1002-0BA3-.....	316.-	353.-	358.60	395.70	358.60
0.37	71 M	1LE1002-0CA2-.....	320.-	358.40	367.30	405.70	367.30
0.55	71 M	1LE1002-0CA3-.....	358.-	396.40	405.30	443.70	405.30
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz							
0.12	63 M	1LE1002-0BB2-.....	293.-	330.-	335.60	372.70	335.60
0.18	63 M	1LE1002-0BB3-.....	316.-	353.-	358.60	395.70	358.60
0.25	71 M	1LE1002-0CB2-.....	317.-	355.40	364.30	402.70	364.30
0.37	71 M	1LE1002-0CB3-.....	352.-	390.40	399.30	437.70	399.30
0.55	80 M	1LE1002-0DB2-.....	414.-	450.40	467.70	504.10	467.70
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz							
0.09	63 M	1LE1002-0BC2-.....	317.-	354.-	359.60	396.70	359.60
0.18	71 M	1LE1002-0CC2-.....	337.-	375.40	384.30	422.70	384.30
0.25	71 M	1LE1002-0CC3-.....	375.-	413.40	422.30	460.70	422.30
0.37	80 M	1LE1002-0DC2-.....	433.-	469.40	486.70	523.10	486.70
0.55	80 M	1LE1002-0DC3-.....	501.-	537.40	554.70	591.10	554.70

Motors with IE1 Standard Efficiency

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1

Basic type 1LE1

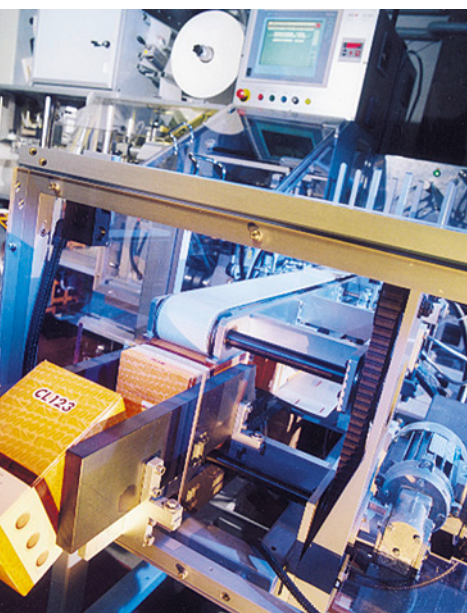
- Cooling: self-ventilated (IC 411)
- Pole-changing version: double pole-changing for square-law load torque, e.g. for driving fans
- Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)
- Metal factor for metal surcharges (MS): N - W - - - -
- Price group: 3Z0

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SIMOTICS GP/SD 1LE1/1PC1/1LA/1LG/1LP/1PP

Standard Motors

2



2/2	Motors with IE4 Super Premium Efficiency
2/2	Aluminum series 1LE1004
2/3	Cast-iron series 1LE1504/1LE1604
2/4	Motors with IE3 Premium Efficiency
2/4	Aluminum series 1LE1003
2/6	Cast-iron series 1LE1503/1LE1603
2/8	Cast-iron series 1LE1503/1LE1603 with increased power
2/9	Aluminum series 1LE1043
2/9	Aluminum series 1LE1043 with increased power
2/10	Cast-iron series 1LE1543/1LE1643
2/12	Cast-iron series 1LE1543/1LE1643 with increased power
2/13	Motors with IE2 High Efficiency
2/13	Aluminum series 1LE1001
2/13	Aluminum series 1LE1001 with increased power
2/15	Aluminum series 1PC1001
2/17	Cast-iron series 1LE1501/1LE1601
2/19	Cast-iron series 1LE1501/1LE1601 with increased power
2/20	Aluminum series 1LE1041
2/20	Aluminum series 1LE1041 with increased power
2/21	Cast-iron series 1LE1541
2/21	Cast-iron series 1LE1541 with increased power
2/22	Motors with IE1 Standard Efficiency
2/22	Aluminum series 1LE1002
2/22	Aluminum series 1LE1002 with increased power
2/24	Aluminum series 1PC1002
2/25	Cast-iron series 1LE1502
2/26	Cast-iron series 1LE1502 with increased power
2/27	NEMA Energy Efficient MG1 Motors Table 12-11
2/27	Aluminum series 1LE1021
2/28	Cast-iron series 1LE1521/1LE1621
2/29	NEMA Premium Efficient MG1 Motors Table 12-12
2/29	Aluminum series 1LE1023
2/30	Cast-iron series 1LE1523/1LE1623
2/32	Pole-changing motors
2/32	Aluminum series 1LE1011 for constant load torque
2/32	Aluminum series 1LE1011/1LE1012 for square-law load torque

2/33	Article No. supplements and special versions
2/33	<u>Voltages</u>
2/33	Aluminum series 1LE10, 1PC10
2/35	Aluminum series 1LE1011, 1LE1012 – pole-changing
2/36	Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line
2/38	<u>Types of construction</u>
2/38	Aluminum series 1LE10, 1PC10
2/42	Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line
2/46	<u>Motor protection</u>
2/46	Aluminum series 1LE10, 1PC10
2/47	Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line
2/48	<u>Terminal box position</u>
2/48	Aluminum series 1LE10, 1PC10
2/49	Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line
2/50	<u>Options</u>
2/50	Aluminum series 1LE10, 1PC10
2/57	Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

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

Overview

Category	Motors with IE4 Super Premium Efficiency
Series version	Aluminum series 1LE1004
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz				
3	IE4	100 L	1LE1004-1AA4-....	1400.-
4	IE4	112 M	1LE1004-1BA2-....	1660.-
5.5	IE4	132 S	1LE1004-1CA0-....	2090.-
7.5	IE4	132 S	1LE1004-1CA1-....	2650.-
11	IE4	160 M	1LE1004-1DA2-....	3690.-
15	IE4	160 M	1LE1004-1DA3-....	4800.-
18.5	IE4	160 L	1LE1004-1DA4-....	5740.-
22	IE4	180 M	1LE1004-1EA2-....	6480.-
30	IE4	200 L	1LE1004-2AA4-....	8280.-
37	IE4	200 L	1LE1004-2AA5-....	10400.-
4-pole: 1500 rpm at 50 Hz				
2.2	IE4	100 L	1LE1004-1AB4-....	1290.-
3	IE4	100 L	1LE1004-1AB5-....	1480.-
4	IE4	112 M	1LE1004-1BB2-....	1810.-
5.5	IE4	132 S	1LE1004-1CB0-....	2260.-
7.5	IE4	132 M	1LE1004-1CB2-....	2860.-
11	IE4	160 M	1LE1004-1DB2-....	3760.-
15	IE4	160 L	1LE1004-1DB4-....	4870.-
18.5	IE4	180 M	1LE1004-1EB2-....	5430.-
22	IE4	180 L	1LE1004-1EB4-....	6260.-
30	IE4	200 L	1LE1004-2AB5-....	8110.-

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 IE4 Super Premium Efficiency (continued)
Series version	Cast-iron series 1LE1504/1LE1604 Basic/Performance Line
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
3	IE4	100 L	1LE1504-1AA4-....	1530.-	1LE1604-1AA4-....	1720.-
4	IE4	112 M	1LE1504-1BA2-....	1810.-	1LE1604-1BA2-....	2050.-
5.5	IE4	132 S	1LE1504-1CA0-....	2260.-	1LE1604-1CA0-....	2560.-
7.5	IE4	132 M	1LE1504-1CA1-....	2890.-	1LE1604-1CA1-....	3270.-
11	IE4	160 M	1LE1504-1DA2-....	3990.-	1LE1604-1DA2-....	4500.-
15	IE4	160 M	1LE1504-1DA3-....	5190.-	1LE1604-1DA3-....	5890.-
18.5	IE4	160 L	1LE1504-1DA4-....	6210.-	1LE1604-1DA4-....	7010.-
22	IE4	180 L	1LE1504-1EA2-....	6820.-	1LE1604-1EA2-....	7510.-
30	IE4	200 L	1LE1504-2AA4-....	8690.-	1LE1604-2AA4-....	9580.-
37	IE4	200 L	1LE1504-2AA5-....	10900.-	1LE1604-2AA5-....	11900.-
45	IE4	225 M	1LE1504-2BA2-....	11900.-	1LE1604-2BA2-....	13200.-
55	IE4	250 M	1LE1504-2CA2-....	14100.-	1LE1604-2CA2-....	15600.-
75	IE4	280 S	1LE1504-2DA0-....	19200.-	1LE1604-2DA0-....	19800.-
90	IE4	280 M	1LE1504-2DA2-....	22500.-	1LE1604-2DA2-....	23200.-
110	IE4	315 S	1LE1504-3AA0-....	26700.-	1LE1604-3AA0-....	27400.-
132	IE4	315 M	1LE1504-3AA2-....	31900.-	1LE1604-3AA2-....	32900.-
160	IE4	315 L	1LE1504-3AA4-....	39800.-	1LE1604-3AA4-....	40900.-
200	IE4	315 L	1LE1504-3AA5-....	49600.-	1LE1604-3AA5-....	51100.-
4-pole: 1500 rpm at 50 Hz						
2.2	IE4	100 L	1LE1504-1AB4-....	1390.-	1LE1604-1AB4-....	1570.-
3	IE4	100 L	1LE1504-1AB5-....	1610.-	1LE1604-1AB5-....	1820.-
4	IE4	112 M	1LE1504-1BB2-....	1950.-	1LE1604-1BB2-....	2210.-
5.5	IE4	132 S	1LE1504-1CB0-....	2450.-	1LE1604-1CB0-....	2770.-
7.5	IE4	132 M	1LE1504-1CB2-....	3120.-	1LE1604-1CB2-....	3520.-
11	IE4	160 M	1LE1504-1DB2-....	4090.-	1LE1604-1DB2-....	4620.-
15	IE4	160 L	1LE1504-1DB4-....	5290.-	1LE1604-1DB4-....	5980.-
18.5	IE4	160 L	1LE1504-1EB2-....	5780.-	1LE1604-1EB2-....	6280.-
22	IE4	180 L	1LE1504-1EB4-....	6670.-	1LE1604-1EB4-....	7250.-
30	IE4	200 L	1LE1504-2AB5-....	8590.-	1LE1604-2AB5-....	9350.-
37	IE4	200 L	1LE1504-2BB0-....	9590.-	1LE1604-2BB0-....	10500.-
45	IE4	225 M	1LE1504-2BB2-....	11200.-	1LE1604-2BB2-....	12300.-
55	IE4	250 M	1LE1504-2CB2-....	13500.-	1LE1604-2CB2-....	14800.-
75	IE4	280 S	1LE1504-2DB0-....	18100.-	1LE1604-2DB0-....	18500.-
90	IE4	280 M	1LE1504-2DB2-....	21000.-	1LE1604-2DB2-....	21600.-
110	IE4	315 M	1LE1504-3AB0-....	26100.-	1LE1604-3AB0-....	26600.-
132	IE4	315 M	1LE1504-3AB2-....	30600.-	1LE1604-3AB2-....	31600.-
160	IE4	315 L	1LE1504-3AB4-....	37100.-	1LE1604-3AB4-....	38000.-
200	IE4	315 L	1LE1504-3AB5-....	46100.-	1LE1604-3AB5-....	47400.-

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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)	3Z1	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz									
0.75	IE3	80 M	1LE1003-0DA2.-....	606.-					
1.1	IE3	80 M	1LE1003-0DA3.-....	693.-					
1.5	IE3	90 S	1LE1003-0EA0.-....	800.-					
2.2	IE3	90 L	1LE1003-0EA4.-....	1030.-					
3	IE3	100 L	1LE1003-1AA4.-....	1160.-					
4	IE3	112 M	1LE1003-1BA2.-....	1370.-					
5.5	IE3	132 S	1LE1003-1CA0.-....	1720.-					
7.5	IE3	132 S	1LE1003-1CA1.-....	2190.-					
					11	IE3	132 M	1LE1003-1CA6.-....	3040.-
11	IE3	160 M	1LE1003-1DA2.-....	3040.-					
15	IE3	160 M	1LE1003-1DA3.-....	3980.-					
18.5	IE3	160 L	1LE1003-1DA4.-....	4740.-	22	IE3	160 L	1LE1003-1DA6.-....	5390.-
22	IE3	180 M	1LE1003-1EA2.-....	5280.-	30	IE3	180 M	1LE1003-1EA6.-....	6860.-
30	IE3	200 L	1LE1003-2AA4.-....	6860.-	45	IE3	200 L	1LE1003-2AA6.-....	10000.-
37	IE3	200 L	1LE1003-2AA5.-....	8600.-					
4-pole: 1500 rpm at 50 Hz									
0.55	IE3	80 M	1LE1003-0DB2.-....	599.-					
0.75	IE3	80 M	1LE1003-0DB3.-....	655.-					
1.1	IE3	90 S	1LE1003-0EB0.-....	777.-					
1.5	IE3	90 L	1LE1003-0EB4.-....	920.-					
2.2	IE3	100 L	1LE1003-1AB4.-....	1060.-					
3	IE3	100 L	1LE1003-1AB5.-....	1230.-					
4	IE3	112 M	1LE1003-1BB2.-....	1490.-					
5.5	IE3	132 S	1LE1003-1CB0.-....	1870.-					
7.5	IE3	132 M	1LE1003-1CB2.-....	2370.-	11	IE3	132 M	1LE1003-1CB6.-....	3110.-
11	IE3	160 M	1LE1003-1DB2.-....	3110.-					
15	IE3	160 L	1LE1003-1DB4.-....	4040.-	18.5	IE3	160 L	1LE1003-1DB6.-....	4570.-
18.5	IE3	180 M	1LE1003-1EB2.-....	4490.-					
22	IE3	180 L	1LE1003-1EB4.-....	5190.-	30	IE3	180 L	1LE1003-1EB6.-....	6760.-
30	IE3	200 L	1LE1003-2AB5.-....	6760.-	37	IE3	200 L	1LE1003-2AB6.-....	8010.-

Standard delivery times in working days:

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

Overview (continued)

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)	3Z1					3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)										
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
6-pole: 1000 rpm at 50 Hz										
	0.37	IE3	80 M	1LE1003-0DC2.-....	582.–					
	0.55	IE3	80 M	1LE1003-0DC3.-....	673.–					
	0.75	IE3	90 S	1LE1003-0EC0.-....	760.–					
	1.1	IE3	90 L	1LE1003-0EC4.-....	942.–					
	1.5	IE3	100 L	1LE1003-1AC4.-....	1050.–					
	2.2	IE3	112 M	1LE1003-1BC2.-....	1330.–					
	3	IE3	132 S	1LE1003-1CC0.-....	1660.–					
	4	IE3	132 M	1LE1003-1CC2.-....	2050.–					
	5.5	IE3	132 M	1LE1003-1CC3.-....	2580.–					
	7.5	IE3	160 M	1LE1003-1DC2.-....	3270.–					
	11	IE3	160 L	1LE1003-1DC4.-....	4510.–					
	15	IE3	180 L	1LE1003-1EC4.-....	5570.–	18.5	IE3	180 L	1LE1003-1EC6.-....	6790.–
	18.5	IE3	200 L	1LE1003-2AC4.-....	6790.–	30	IE3	200 L	1LE1003-2AC6.-....	10300.–
	22	IE3	200 L	1LE1003-2AC5.-....	7880.–					
8-pole: 750 rpm at 50 Hz										
	2.2	IE3	132 S	1LE1003-1CD0.-....	2560.–					
	3	IE3	132 M	1LE1003-1CD2.-....	3070.–					
	4	IE3	160 M	1LE1003-1DD2.-....	3780.–					
	5.5	IE3	160 M	1LE1003-1DD3.-....	4560.–					
	7.5	IE3	160 L	1LE1003-1DD4.-....	5420.–					
	11	IE3	180 L	1LE1003-1ED4.-....	6580.–					
	15	IE3	200 L	1LE1003-2AD5.-....	8630.–					

SIMOTICS SD 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 (continued)
Series version	Cast-iron series 1LE1503/1LE1603 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, 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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
0.37	IE3	71 M	1LE1503-0CA2-....	647.-		
0.55	IE3	71 M	1LE1503-0CA3-....	759.-		
0.75	IE3	80 M	1LE1503-0DA2-....	781.-		
1.1	IE3	80 M	1LE1503-0DA3-....	891.-		
1.5	IE3	90 S	1LE1503-0EA0-....	1030.-		
2.2	IE3	90 L	1LE1503-0EA4-....	1260.-		
3	IE3	100 L	1LE1503-1AA4-....	1270.-	1LE1603-1AA4-....	1410.-
4	IE3	112 M	1LE1503-1BA2-....	1500.-	1LE1603-1BA2-....	1690.-
5.5	IE3	132 S	1LE1503-1CA0-....	1870.-	1LE1603-1CA0-....	2120.-
7.5	IE3	132 S	1LE1503-1CA1-....	2400.-	1LE1603-1CA1-....	2700.-
11	IE3	160 M	1LE1503-1DA2-....	3290.-	1LE1603-1DA2-....	3730.-
15	IE3	160 M	1LE1503-1DA3-....	4310.-	1LE1603-1DA3-....	4850.-
18.5	IE3	160 L	1LE1503-1DA4-....	5130.-	1LE1603-1DA4-....	5800.-
22	IE3	180 M	1LE1503-1EA2-....	5620.-	1LE1603-1EA2-....	6120.-
30	IE3	200 L	1LE1503-2AA4-....	7290.-	1LE1603-2AA4-....	7930.-
37	IE3	200 L	1LE1503-2AA5-....	9160.-	1LE1603-2AA5-....	9950.-
45	IE3	225 M	1LE1503-2BA2-....	10300.-	1LE1603-2BA2-....	11200.-
55	IE3	250 M	1LE1503-2CA2-....	12400.-	1LE1603-2CA2-....	13300.-
75	IE3	280 S	1LE1503-2DA0-....	16600.-	1LE1603-2DA0-....	17000.-
90	IE3	280 M	1LE1503-2DA2-....	19600.-	1LE1603-2DA2-....	20500.-
110	IE3	315 S	1LE1503-3AA0-....	23500.-	1LE1603-3AA0-....	24600.-
132	IE3	315 M	1LE1503-3AA2-....	28200.-	1LE1603-3AA2-....	29500.-
160	IE3	315 L	1LE1503-3AA4-....	35000.-	1LE1603-3AA4-....	36700.-
200	IE3	315 L	1LE1503-3AA5-....	43700.-	1LE1603-3AA5-....	45800.-
4-pole: 1500 rpm at 50 Hz						
0.25	IE3	71 M	1LE1503-0CB2-....	642.-		
0.37	IE3	71 M	1LE1503-0CB3-....	719.-		
0.55	IE3	80 M	1LE1503-0DB2-....	774.-		
0.75	IE3	80 M	1LE1503-0DB3-....	845.-		
1.1	IE3	90 S	1LE1503-0EB0-....	998.-		
1.5	IE3	90 L	1LE1503-0EB4-....	1130.-		
2.2	IE3	100 L	1LE1503-1AB4-....	1150.-	1LE1603-1AB4-....	1300.-
3	IE3	100 L	1LE1503-1AB5-....	1330.-	1LE1603-1AB5-....	1500.-
4	IE3	112 M	1LE1503-1BB2-....	1620.-	1LE1603-1BB2-....	1830.-
5.5	IE3	132 S	1LE1503-1CB0-....	2020.-	1LE1603-1CB0-....	2300.-
7.5	IE3	132 M	1LE1503-1CB2-....	2580.-	1LE1603-1CB2-....	2910.-
11	IE3	160 M	1LE1503-1DB2-....	3390.-	1LE1603-1DB2-....	3810.-
15	IE3	160 L	1LE1503-1DB4-....	4370.-	1LE1603-1DB4-....	4940.-
18.5	IE3	180 M	1LE1503-1EB2-....	4770.-	1LE1603-1EB2-....	5170.-
22	IE3	180 L	1LE1503-1EB4-....	5550.-	1LE1603-1EB4-....	6040.-
30	IE3	200 L	1LE1503-2AB5-....	7200.-	1LE1603-2AB5-....	7820.-
37	IE3	225 S	1LE1503-2BB0-....	8240.-	1LE1603-2BB0-....	9000.-
45	IE3	225 M	1LE1503-2BB2-....	9700.-	1LE1603-2BB2-....	10600.-
55	IE3	250 M	1LE1503-2CB2-....	11700.-	1LE1603-2CB2-....	13000.-
75	IE3	280 S	1LE1503-2DB0-....	15700.-	1LE1603-2DB0-....	16100.-
90	IE3	280 M	1LE1503-2DB2-....	18400.-	1LE1603-2DB2-....	19000.-
110	IE3	315 S	1LE1503-3AB0-....	23000.-	1LE1603-3AB0-....	23500.-
132	IE3	315 M	1LE1503-3AB2-....	27200.-	1LE1603-3AB2-....	28000.-
160	IE3	315 L	1LE1503-3AB4-....	32900.-	1LE1603-3AB4-....	33800.-
200	IE3	315 L	1LE1503-3AB5-....	40900.-	1LE1603-3AB5-....	42100.-

Standard delivery times in working days:

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

Overview (continued)

Category	Motors with IE3 Premium Efficiency (continued)
Series version	Cast-iron series 1LE1503/1LE1603 Basic/Performance Line (continued)
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
6-pole: 1000 rpm at 50 Hz						
0.18	IE3	71 M	1LE1503-0CC2-....	623.-		
0.25	IE3	71 M	1LE1503-0CC3-....	737.-		
0.37	IE3	80 M	1LE1503-0DC2-....	751.-		
0.55	IE3	80 M	1LE1503-0DC3-....	865.-		
0.75	IE3	90 S	1LE1503-0EC0-....	980.-		
1.1	IE3	90 L	1LE1503-0EC4-....	1120.-		
1.5	IE3	100 L	1LE1503-1AC4-....	1130.-	1LE1603-1AC4-....	1290.-
2.2	IE3	112 M	1LE1503-1BC2-....	1430.-	1LE1603-1BC2-....	1630.-
3	IE3	132 S	1LE1503-1CC0-....	1820.-	1LE1603-1CC0-....	2050.-
4	IE3	132 M	1LE1503-1CC2-....	2220.-	1LE1603-1CC2-....	2500.-
5.5	IE3	132 M	1LE1503-1CC3-....	2800.-	1LE1603-1CC3-....	3160.-
7.5	IE3	160 M	1LE1503-1DC2-....	3530.-	1LE1603-1DC2-....	4010.-
11	IE3	160 L	1LE1503-1DC4-....	4890.-	1LE1603-1DC4-....	5550.-
15	IE3	180 L	1LE1503-1EC4-....	5920.-	1LE1603-1EC4-....	6430.-
18.5	IE3	200 L	1LE1503-2AC4-....	7240.-	1LE1603-2AC4-....	7870.-
22	IE3	200 L	1LE1503-2AC5-....	8370.-	1LE1603-2AC5-....	9120.-
30	IE3	225 M	1LE1503-2BC2-....	10600.-	1LE1603-2BC2-....	11500.-
37	IE3	250 M	1LE1503-2CC2-....	13000.-	1LE1603-2CC2-....	14000.-
45	IE3	280 S	1LE1503-2DC0-....	15700.-	1LE1603-2DC0-....	16000.-
55	IE3	280 M	1LE1503-2DC2-....	18400.-	1LE1603-2DC2-....	19000.-
75	IE3	315 S	1LE1503-3AC0-....	25000.-	1LE1603-3AC0-....	25800.-
90	IE3	315 M	1LE1503-3AC2-....	28200.-	1LE1603-3AC2-....	29000.-
110	IE3	315 L	1LE1503-3AC4-....	34000.-	1LE1603-3AC4-....	34900.-
132	IE3	315 L	1LE1503-3AC5-....	40400.-	1LE1603-3AC5-....	41600.-
160	IE3	315 L	1LE1503-3AC6-....	49000.-	1LE1603-3AC6-....	50400.-
8-pole: 750 rpm at 50 Hz						
2.2	IE3	132 S			1LE1603-1CD0-....	2790.-
3	IE3	132 M			1LE1603-1CD2-....	3410.-
4	IE3	160 M			1LE1603-1DD2-....	4170.-
5.5	IE3	160 M			1LE1603-1DD3-....	5130.-
7.5	IE3	160 L			1LE1603-1DD4-....	6200.-
11	IE3	180 L			1LE1603-1ED4-....	7110.-
15	IE3	200 L			1LE1603-2AD5-....	9390.-
18.5	IE3	225 M			1LE1603-2BD0-....	10700.-
22	IE3	225 M			1LE1603-2BD2-....	12300.-
30	IE3	250 M			1LE1603-2CD2-....	15800.-
37	IE3	280 S			1LE1603-2DD0-....	17800.-
45	IE3	280 M			1LE1603-2DD2-....	21600.-
55	IE3	315 S			1LE1603-3AD0-....	25600.-
75	IE3	315 M			1LE1603-3AD2-....	34300.-
90	IE3	315 L			1LE1603-3AD4-....	38200.-
110	IE3	315 L			1LE1603-3AD5-....	46100.-
132	IE3	315 L			1LE1603-3AD6-....	55100.-

SIMOTICS SD 1LE1 Standard Motors

Orientation

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

Overview (continued)

Category	Motors with IE3 Premium Efficiency (continued)						
Series version	Cast-iron series 1LE1503/1LE1603 Basic/Performance Line with increased power						
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)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)							
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz							
11	IE3	132 M	1LE1503-1CA6-....	3290.-	1LE1603-1CA6-....	3730.-	
22	IE3	160 L	1LE1503-1DA6-....	5730.-	1LE1603-1DA6-....	6240.-	
30	IE3	180 L	1LE1503-1EA6-....	7290.-	1LE1603-1EA6-....	7930.-	
45	IE3	200 L	1LE1503-2AA6-....	10600.-	1LE1603-2AA6-....	11600.-	
55	IE3	225 M	1LE1503-2BA6-....	12400.-	1LE1603-2BA6-....	13300.-	
75	IE3	250 M	1LE1503-2CA6-....	16800.-	1LE1603-2CA6-....	17200.-	
110	IE3	280 M	1LE1503-2DA6-....	23500.-	1LE1603-2DA6-....	24600.-	
4-pole: 1500 rpm at 50 Hz							
11	IE3	132 M	1LE1503-1CB6-....	3390.-	1LE1603-1CB6-....	3810.-	
18.5	IE3	160 L	1LE1503-1DB6-....	4860.-	1LE1603-1DB6-....	5290.-	
30	IE3	180 L	1LE1503-1EB6-....	7200.-	1LE1603-1EB6-....	7820.-	
37	IE3	200 L	1LE1503-2AB6-....	8530.-	1LE1603-2AB6-....	9310.-	
55	IE3	225 M	1LE1503-2BB6-....	11700.-	1LE1603-2BB6-....	13000.-	
75	IE3	250 M	1LE1503-2CB6-....	15900.-	1LE1603-2CB6-....	16300.-	
110	IE3	280 M	1LE1503-2DB6-....	23000.-	1LE1603-2DB6-....	23500.-	
6-pole: 1000 rpm at 50 Hz							
18.5	IE3	180 L	1LE1503-1EC6-....	7240.-	1LE1603-1EC6-....	7870.-	
30	IE3	200 L	1LE1503-2AC6-....	10900.-	1LE1603-2AC6-....	11900.-	
37	IE3	225 M	1LE1503-2BC6-....	13000.-	1LE1603-2BC6-....	14000.-	
45	IE3	250 M	1LE1503-2CC6-....	15800.-	1LE1603-2CC6-....	16200.-	
75	IE3	280 M	1LE1503-2DC6-....	25000.-	1LE1603-2DC6-....	25800.-	

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 (continued)	
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)	3Z1	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz									
0.75	IE3	80 M	1LE1043-0DA2.-....	642.-					
1.1	IE3	80 M	1LE1043-0DA3.-....	731.-					
1.5	IE3	90 S	1LE1043-0EA0.-....	849.-					
2.2	IE3	90 L	1LE1043-0EA4.-....	1090.-					
3	IE3	100 L	1LE1043-1AA4.-....	1240.-	4	IE3	100 L	1LE1043-1AA6.-....	1450.-
4	IE3	112 M	1LE1043-1BA2.-....	1450.-					
5.5	IE3	132 S	1LE1043-1CA0.-....	1830.-					
7.5	IE3	132 S	1LE1043-1CA1.-....	2330.-	11	IE3	132 L	1LE1043-1CA6.-....	3210.-
11	IE3	160 M	1LE1043-1DA2.-....	3210.-	15	IE3	132 M	1LE1043-1CA7.-....	4200.-
15	IE3	160 M	1LE1043-1DA3.-....	4200.-					
18.5	IE3	160 L	1LE1043-1DA4.-....	5030.-	22	IE3	160 L	1LE1043-1DA6.-....	5710.-
22	IE3	180 M	1LE1043-1EA2.-....	5600.-	30	IE3	180 M	1LE1043-1EA6.-....	7260.-
30	IE3	200 L	1LE1043-2AA4.-....	7270.-					
37	IE3	200 L	1LE1043-2AA5.-....	9130.-	45	IE3	200 L	1LE1043-2AA6.-....	10600.-
4-pole: 1500 rpm at 50 Hz									
0.75	80 M	IE3	1LE1043-0DB3.-....	698.-					
1.1	90 S	IE3	1LE1043-0EB0.-....	821.-					
1.5	IE3	90 L	1LE1043-0EB4.-....	975.-					
2.2	IE3	100 L	1LE1043-1AB4.-....	1120.-					
3	IE3	100 L	1LE1043-1AB5.-....	1300.-					
4	IE3	112 M	1LE1043-1BB2.-....	1580.-					
5.5	IE3	132 S	1LE1043-1CB0.-....	1980.-					
7.5	IE3	132 M	1LE1043-1CB2.-....	2510.-	11	IE3	132 M	1LE1043-1CB6.-....	3290.-
11	IE3	160 M	1LE1043-1DB2.-....	3290.-					
15	IE3	160 L	1LE1043-1DB4.-....	4280.-	18.5	IE3	160 L	1LE1043-1DB6.-....	4850.-
18.5	IE3	180 M	1LE1043-1EB2.-....	4760.-					
22	IE3	180 L	1LE1043-1EB4.-....	5520.-	30	IE3	180 L	1LE1043-1EB6.-....	7180.-
30	IE3	200 L	1LE1043-2AB5.-....	7170.-	37	IE3	200 L	1LE1043-2AB6.-....	8500.-
6-pole: 1000 rpm at 50 Hz									
0.75	IE3	90 S	1LE1043-0EC0.-....	810.-					
1.1	IE3	100 L	1LE1043-1AC3.-....	1110.-					
1.5	IE3	112 S	1LE1043-1BC1.-....	1440.-					
2.2	IE3	132 S	1LE1043-1CC1.-....	1440.-					
3	IE3	132 S	1LE1043-1CC0.-....	1770.-					
4	IE3	132 M	1LE1043-1CC2.-....	2170.-					
5.5	IE3	132 M	1LE1043-1CC3.-....	2730.-					
7.5	IE3	160 M	1LE1043-1DC2.-....	3470.-					
11	IE3	160 L	1LE1043-1DC4.-....	4780.-					
15	IE3	180 L	1LE1043-1EC4.-....	5900.-					
18.5	IE3	200 L	1LE1043-2AC4.-....	7220.-					
22	IE3	200 L	1LE1043-2AC5.-....	8350.-					

SIMOTICS SD 1LE1 Standard Motors – APAC Line

Orientation

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 (continued)
Series version	Cast-iron series 1LE1543/1LE1643 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)	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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
0.75	IE3	80 M	1LE1543-0DA2-....	831.-		
1.1	IE3	80 M	1LE1543-0DA3-....	731.-		
1.5	IE3	90 S	1LE1543-0EA0-....	1080.-		
2.2	IE3	90 L	1LE1543-0EA4-....	1330.-		
3	IE3	100 L	1LE1543-1AA4-....	1340.-	1LE1643-1AA4-....	1510.-
3.7	IE3	112 M	1LE1543-1BA2-....	1590.-	1LE1643-1BA2-....	1800.-
5.5	IE3	132 S	1LE1543-1CA0-....	1980.-	1LE1643-1CA0-....	2240.-
7.5	IE3	132 S	1LE1543-1CA1-....	2530.-	1LE1643-1CA1-....	2860.-
11	IE3	160 M	1LE1543-1DA2-....	3490.-	1LE1643-1DA2-....	3940.-
15	IE3	160 M	1LE1543-1DA3-....	4550.-	1LE1643-1DA3-....	5140.-
18.5	IE3	160 L	1LE1543-1DA4-....	5440.-	1LE1643-1DA4-....	6140.-
22	IE3	180 M	1LE1543-1EA2-....	5950.-	1LE1643-1EA2-....	6480.-
30	IE3	200 L	1LE1543-2AA4-....	7730.-	1LE1643-2AA4-....	8400.-
37	IE3	200 L	1LE1543-2AA5-....	9710.-	1LE1643-2AA5-....	10500.-
45	IE3	225 M	1LE1543-2BA2-....	10900.-	1LE1643-2BA2-....	11800.-
55	IE3	250 M	1LE1543-2CA2-....	13100.-	1LE1643-2CA2-....	14100.-
75	IE3	280 S	1LE1543-2DA0-....	17700.-	1LE1643-2DA0-....	18100.-
90	IE3	280 M	1LE1543-2DA2-....	20800.-	1LE1643-2DA2-....	21700.-
110	IE3	315 S	1LE1543-3AA0-....	24900.-	1LE1643-3AA0-....	26100.-
132	IE3	315 M	1LE1543-3AA2-....	29900.-	1LE1643-3AA2-....	31200.-
160	IE3	315 L	1LE1543-3AA4-....	37100.-	1LE1643-3AA4-....	38900.-
200	IE3	315 L	1LE1543-3AA5-....	46400.-	1LE1643-3AA5-....	48500.-
4-pole: 1500 rpm at 50 Hz						
0.75	IE3	80 M	1LE1543-0DB3-....	898.-		
1.1	IE3	90 S	1LE1543-0EB0-....	821.-		
1.5	IE3	90 L	1LE1543-0EB4-....	1190.-		
2.2	IE3	100 L	1LE1543-1AB4-....	1230.-	1LE1643-1AB4-....	1370.-
3	IE3	100 L	1LE1543-1AB5-....	1400.-	1LE1643-1AB5-....	1590.-
3.7	IE3	112 M	1LE1543-1BB2-....	1710.-	1LE1643-1BB2-....	1940.-
5.5	IE3	132 S	1LE1543-1CB0-....	2140.-	1LE1643-1CB0-....	2430.-
7.5	IE3	132 M	1LE1543-1CB2-....	2730.-	1LE1643-1CB2-....	3100.-
11	IE3	160 M	1LE1543-1DB2-....	3570.-	1LE1643-1DB2-....	4050.-
15	IE3	160 L	1LE1543-1DB4-....	4640.-	1LE1643-1DB4-....	5250.-
18.5	IE3	180 M	1LE1543-1EB2-....	5060.-	1LE1643-1EB2-....	5480.-
22	IE3	180 L	1LE1543-1EB4-....	5880.-	1LE1643-1EB4-....	6400.-
30	IE3	200 L	1LE1543-2AB5-....	7620.-	1LE1643-2AB5-....	8280.-
37	IE3	225 S	1LE1543-2BB0-....	8730.-	1LE1643-2BB0-....	9540.-
45	IE3	225 M	1LE1543-2BB2-....	10300.-	1LE1643-2BB2-....	11200.-
55	IE3	250 M	1LE1543-2CB2-....	12500.-	1LE1643-2CB2-....	13700.-
75	IE3	280 S	1LE1543-2DB0-....	16600.-	1LE1643-2DB0-....	17000.-
90	IE3	280 M	1LE1543-2DB2-....	19500.-	1LE1643-2DB2-....	20000.-
110	IE3	315 S	1LE1543-3AB0-....	24300.-	1LE1643-3AB0-....	24900.-
132	IE3	315 M	1LE1543-3AB2-....	28900.-	1LE1643-3AB2-....	29700.-
160	IE3	315 L	1LE1543-3AB4-....	34900.-	1LE1643-3AB4-....	35800.-
200	IE3	315 L	1LE1543-3AB5-....	43400.-	1LE1643-3AB5-....	44600.-

Standard delivery times in working days:

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Orientation

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

Overview (continued)

Category	Motors with IE3 Premium Efficiency (continued)
Series version	Cast-iron series 1LE1543/1LE1643 Basic/Performance Line (continued)
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
6-pole: 1000 rpm at 50 Hz						
0.75	IE3	90 S	1LE1543-0EC0-....	1040.-		
1.1	IE3	100 L	1LE1543-1AC3-....	O. R.	1LE1643-1AC3-....	1360.-
1.5	IE3	112 M	1LE1543-1BC1-....	1520.-	1LE1643-1BC1-....	1720.-
2.2	IE3	132 S	1LE1543-1CC1-....	1500.-	1LE1643-1CC1-....	1710.-
3	IE3	132 S	1LE1543-1CC0-....	1930.-	1LE1643-1CC0-....	2170.-
3.7	IE3	132 M	1LE1543-1CC2-....	2360.-	1LE1643-1CC2-....	2660.-
5.5	IE3	132 M	1LE1543-1CC3-....	2970.-	1LE1643-1CC3-....	3360.-
7.5	IE3	160 M	1LE1543-1DC2-....	3750.-	1LE1643-1DC2-....	4240.-
11	IE3	160 L	1LE1543-1DC4-....	5190.-	1LE1643-1DC4-....	5880.-
15	IE3	180 L	1LE1543-1EC4-....	6270.-	1LE1643-1EC4-....	6820.-
18.5	IE3	200 L	1LE1543-2AC4-....	7670.-	1LE1643-2AC4-....	8340.-
22	IE3	200 L	1LE1543-2AC5-....	8880.-	1LE1643-2AC5-....	9650.-
37	IE3	250 M	1LE1543-2CC2-....	13700.-	1LE1643-2CC2-....	14800.-
45	IE3	280 S	1LE1543-2DC0-....	16600.-	1LE1643-2DC0-....	16900.-
55	IE3	280 M	1LE1543-2DC2-....	19500.-	1LE1643-2DC2-....	20000.-
75	IE3	315 S	1LE1543-3AC0-....	26500.-	1LE1643-3AC0-....	27200.-
90	IE3	315 M	1LE1543-3AC2-....	29800.-	1LE1643-3AC2-....	30700.-
110	IE3	315 L	1LE1543-3AC4-....	35900.-	1LE1643-3AC4-....	37000.-
132	IE3	315 L	1LE1543-3AC5-....	42800.-	1LE1643-3AC5-....	44000.-
160	IE3	315 L	1LE1543-3AC6-....	51900.-	1LE1643-3AC6-....	53500.-

SIMOTICS SD 1LE1 Standard Motors – APAC Line

Orientation

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview (continued)

Category	Motors with IE3 Premium Efficiency (continued)						
Series version	Cast-iron series 1LE1543/1LE1643 Basic/Performance Line with increased power						
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)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)							
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz							
	4	IE3	100 L	1LE1543-1AA6.-....	1560.-	1LE1643-1AA6.-....	1780.-
	11	IE3	132 M	1LE1543-1CA6.-....	3490.-	1LE1643-1CA6.-....	3940.-
	15	IE3	132 M	1LE1543-1CA7.-....	4550.-	1LE1643-1CA7.-....	5140.-
	22	IE3	160 L	1LE1543-1DA6.-....	6080.-	1LE1643-1DA6.-....	6620.-
	30	IE3	180 L	1LE1543-1EA6.-....	7730.-	1LE1643-1EA6.-....	8400.-
	45	IE3	200 L	1LE1543-2AA6.-....	11200.-	1LE1643-2AA6.-....	12400.-
	55	IE3	225 M	1LE1543-2BA6.-....	13100.-	1LE1643-2BA6.-....	14100.-
4-pole: 1500 rpm at 50 Hz							
	11	IE3	132 M	1LE1543-1CB6.-....	3570.-	1LE1643-1CB6.-....	4050.-
	18.5	IE3	160 L	1LE1543-1DB6.-....	5150.-	1LE1643-1DB6.-....	5610.-
	30	IE3	180 L	1LE1543-1EB6.-....	7620.-	1LE1643-1EB6.-....	8280.-
	37	IE3	200 L	1LE1543-2AB6.-....	9040.-	1LE1643-2AB6.-....	9870.-
	55	IE3	225 M	1LE1543-2BB6.-....	12500.-	1LE1643-2BB6.-....	13700.-
	75	IE3	250 M	1LE1543-2CB6.-....	16800.-	1LE1643-2CB6.-....	17300.-
	110	IE3	280 M	1LE1543-2DB6.-....	24300.-	1LE1643-2DB6.-....	24800.-
6-pole: 1000 rpm at 50 Hz							
	18.5	IE3	180 L	1LE1543-1EC6.-....	7670.-	1LE1643-1EC6.-....	8340.-
	30	IE3	200 L	1LE1543-2AC6.-....	11600.-	1LE1643-2AC6.-....	12800.-
	37	IE3	225 M	1LE1543-2BC6.-....	13700.-	1LE1643-2BC6.-....	14800.-
	45	IE3	250 M	1LE1543-2CC6.-....	16700.-	1LE1643-2CC6.-....	17200.-
	75	IE3	280 M	1LE1543-2DC6.-....	26600.-	1LE1643-2DC6.-....	27300.-

Standard delivery times in working days:

2

10

15

20

On
request**SIMOTICS 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 (continued on next page)	Aluminum series 1LE1001 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)	3Z1	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz									
0.18	IE2	63 M	1LE1001-0BA2.-....	403.-					
0.25	IE2	63 M	1LE1001-0BA3.-....	425.-					
0.37	IE2	71 M	1LE1001-0CA2.-....	432.-					
0.55	IE2	71 M	1LE1001-0CA3.-....	486.-					
0.75	IE2	80 M	1LE1001-0DA2.-....	505.-					
1.1	IE2	80 M	1LE1001-0DA3.-....	577.-	1.5	IE2	80 M	1LE1001-0DA6.-....	666.-
1.5	IE2	90 S	1LE1001-0EA0.-....	666.-					
2.2	IE2	90 L	1LE1001-0EA4.-....	859.-	3	IE2	90 L	1LE1001-0EA6.-....	1030.-
3	IE2	100 L	1LE1001-1AA4.-....	1030.-	4	IE2	100 L	1LE1001-1AA6.-....	1230.-
4	IE2	112 M	1LE1001-1BA2.-....	1230.-	5.5	IE2	112 M	1LE1001-1BA6.-....	1530.-
5.5	IE2	132 S	1LE1001-1CA0.-....	1530.-					
7.5	IE2	132 S	1LE1001-1CA1.-....	1940.-					
					11	IE2	132 M	1LE1001-1CA6.-....	2700.-
11	IE2	160 M	1LE1001-1DA2.-....	2700.-					
15	IE2	160 M	1LE1001-1DA3.-....	3520.-					
18.5	IE2	160 L	1LE1001-1DA4.-....	4200.-	22	IE2	160 L	1LE1001-1DA6.-....	4960.-
22	IE2	180 M	1LE1001-1EA2.-....	4790.-	30	IE2	180 M	1LE1001-1EA6.-....	6210.-
30	IE2	200 L	1LE1001-2AA4.-....	6210.-	45	IE2	200 L	1LE1001-2AA6.-....	9300.-
37	IE2	200 L	1LE1001-2AA5.-....	7800.-					
4-pole: 1500 rpm at 50 Hz									
0.12	IE2	63 M	1LE1001-0BB2.-....	410.-					
0.18	IE2	63 M	1LE1001-0BB3.-....	443.-					
0.25	IE2	71 M	1LE1001-0CB2.-....	440.-					
0.37	IE2	71 M	1LE1001-0CB3.-....	493.-					
0.55	IE2	80 M	1LE1001-0DB2.-....	502.-					
0.75	IE2	80 M	1LE1001-0DB3.-....	546.-	1.1	IE2	80 M	1LE1001-0DB6.-....	646.-
1.1	IE2	90 S	1LE1001-0EB0.-....	646.-					
1.5	IE2	90 L	1LE1001-0EB4.-....	767.-	2.2	IE2	90 L	1LE1001-0EB6.-....	940.-
2.2	IE2	100 L	1LE1001-1AB4.-....	940.-	4	IE2	100 L	1LE1001-1AB6.-....	1330.-
3	IE2	100 L	1LE1001-1AB5.-....	1080.-					
4	IE2	112 M	1LE1001-1BB2.-....	1330.-	5.5	IE2	112 M	1LE1001-1BB6.-....	1650.-
5.5	IE2	132 S	1LE1001-1CB0.-....	1650.-					
7.5	IE2	132 M	1LE1001-1CB2.-....	2100.-	11	IE2	132 M	1LE1001-1CB6.-....	2760.-
11	IE2	160 M	1LE1001-1DB2.-....	2760.-					
15	IE2	160 L	1LE1001-1DB4.-....	3560.-	18.5	IE2	160 L	1LE1001-1DB6.-....	4210.-
18.5	IE2	180 M	1LE1001-1EB2.-....	4060.-					
22	IE2	180 L	1LE1001-1EB4.-....	4730.-	30	IE2	180 L	1LE1001-1EB6.-....	6120.-
30	IE2	200 L	1LE1001-2AB5.-....	6120.-	37	IE2	200 L	1LE1001-2AB6.-....	7430.-

SIMOTICS GP 1LE1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview (continued)

Category	Motors with IE2 High Efficiency (continued)									
Series version	Aluminum series 1LE1001 (continued)					Aluminum series 1LE1001 with increased power (continued)				
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)	3Z1					3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)										
	<i>P</i> _{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	<i>P</i> _{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
6-pole: 1000 rpm at 50 Hz										
0.37	IE2	80 M	1LE1001-0DC2-....	484.–						
0.55	IE2	80 M	1LE1001-0DC3-....	561.–						
0.75	IE2	90 S	1LE1001-0EC0-....	634.–						
1.1	IE2	90 L	1LE1001-0EC4-....	786.–						
1.5	IE2	100 L	1LE1001-1AC4-....	929.–	2.2	IE2	100 L	1LE1001-1AC6-....	1170.–	
2.2	IE2	112 M	1LE1001-1BC2-....	1170.–	3	IE2	112 M	1LE1001-1BC6-....	1480.–	
3	IE2	132 S	1LE1001-1CC0-....	1480.–						
4	IE2	132 M	1LE1001-1CC2-....	1820.–	7.5	IE2	132 M	1LE1001-1CC6-....	2900.–	
5.5	IE2	132 M	1LE1001-1CC3-....	2300.–						
7.5	IE2	160 M	1LE1001-1DC2-....	2900.–						
11	IE2	160 L	1LE1001-1DC4-....	4010.–	15	IE2	160 L	1LE1001-1DC6-....	5180.–	
15	IE2	180 L	1LE1001-1EC4-....	5040.–	18.5	IE2	180 L	1LE1001-1EC6-....	6160.–	
18.5	IE2	200 L	1LE1001-2AC4-....	6160.–	30	IE2	200 L	1LE1001-2AC6-....	9570.–	
22	IE2	200 L	1LE1001-2AC5-....	7150.–						
8-pole: 750 rpm at 50 Hz										
0.75	IE2	100 L	1LE1001-1AD4-....	1040.–						
1.1	IE2	100 L	1LE1001-1AD5-....	1320.–						
1.5	IE2	112 M	1LE1001-1BD2-....	1570.–						
2.2	IE2	132 S	1LE1001-1CD0-....	2020.–						
3	IE2	132 M	1LE1001-1CD2-....	2460.–						
4	IE2	160 M	1LE1001-1DD2-....	3020.–						
5.5	IE2	160 M	1LE1001-1DD3-....	3710.–						
7.5	IE2	160 L	1LE1001-1DD4-....	4470.–						
11	–	180 L	1LE1001-1ED4-....	5380.–	15	–	180 L	1LE1001-1ED6-....	7090.–	
15	–	200 L	1LE1001-2AD5-....	7090.–	18.5	–	200 L	1LE1001-2AD6-....	8610.–	

Standard delivery times in working days:

2

10

15

20

On
request**SIMOTICS GP 1PC1 Standard Motors**
Orientation

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

Overview

Category	Motors with IE2 High Efficiency (continued)
Series version	Aluminum series 1PC1001 ¹⁾ (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 ¹⁾
Efficiency	On request ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1



Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz				
1.4	IE2	100 L	1PC1001-1AA4-....	1310.-
1.6	IE2	112 M	1PC1001-1BA2-....	1500.-
3.1	IE2	132 S	1PC1001-1CA0-....	1820.-
4.3	IE2	132 S	1PC1001-1CA1-....	2240.-
6.3	IE2	160 M	1PC1001-1DA2-....	3000.-
6.5	IE2	160 M	1PC1001-1DA3-....	3840.-
9	IE2	160 L	1PC1001-1DA4-....	4530.-
4-pole: 1500 rpm at 50 Hz				
1.1	IE2	100 L	1PC1001-1AB4-....	1220.-
1.5	IE2	100 L	1PC1001-1AB5-....	1350.-
2	IE2	112 M	1PC1001-1BB2-....	1610.-
2.6	IE2	132 S	1PC1001-1CB0-....	1940.-
4	IE2	132 M	1PC1001-1CB2-....	2400.-
6	IE2	160 M	1PC1001-1DB2-....	3060.-
6.2	IE2	160 L	1PC1001-1DB4-....	3900.-

¹⁾ 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 GP 1PC1 Standard Motors

Orientation

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

Overview (continued)

Category	Motors with IE2 High Efficiency (continued)				
Series version	Aluminum series 1PC1001 ¹⁾ (continued)				
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 ¹⁾				
Efficiency	On request ¹⁾				
Metal factor for metal surcharges (MS)	N - W - - - -				
Price group (PG)	3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)					
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	
6-pole: 1000 rpm at 50 Hz					
0.85	O. R.	100 L	1PC1001-1AC4-....	1190.-	
1.2	O. R.	112 M	1PC1001-1BC2-....	1450.-	
1.5	O. R.	132 S	1PC1001-1CC0-....	1770.-	
2.5	O. R.	132 M	1PC1001-1CC2-....	2110.-	
2.7	O. R.	132 M	1PC1001-1CC3-....	2590.-	
5	O. R.	160 M	1PC1001-1DC2-....	3200.-	
6.5	O. R.	160 L	1PC1001-1DC4-....	4340.-	
8-pole: 750 rpm at 50 Hz					
0.37	-	100 L	1PC1001-1AD4-....	1310.-	
0.55	-	100 L	1PC1001-1AD5-....	1600.-	
0.75	-	112 M	1PC1001-1BD2-....	1840.-	
1.1	-	132 S	1PC1001-1CD0-....	2310.-	
1.5	-	132 M	1PC1001-1CD2-....	2760.-	
2.4	-	160 M	1PC1001-1DD2-....	3330.-	
3.3	-	160 M	1PC1001-1DD3-....	4040.-	
4.6	-	160 L	1PC1001-1DD4-....	4810.-	

Please note
minimum legal
efficiencies
in the European
Economic Area



¹⁾ 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:

2

10

15

20

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

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

Overview

Category	Motors with IE2 High Efficiency (continued)
Series version	Cast-iron series 1LE1501/1LE1601 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, 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)	3Z1



Please note
minimum legal
efficiencies
in the European
Economic Area!

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
0.37	IE2	71 M	1LE1501-0CA2-....	515.-		
0.55	IE2	71 M	1LE1501-0CA3-....	606.-		
0.75	IE2	80 M	1LE1501-0DA2-....	623.-		
1.1	IE2	80 M	1LE1501-0DA3-....	712.-		
1.5	IE2	90 S	1LE1501-0EA0-....	823.-		
2.2	IE2	90 L	1LE1501-0EA4-....	1010.-		
3	IE2	100 L	1LE1501-1AA4-....	1120.-	1LE1601-1AA4-....	1240.-
4	IE2	112 M	1LE1501-1BA2-....	1330.-	1LE1601-1BA2-....	1450.-
5.5	IE2	132 S	1LE1501-1CA0-....	1660.-	1LE1601-1CA0-....	1840.-
7.5	IE2	132 S	1LE1501-1CA1-....	2120.-	1LE1601-1CA1-....	2330.-
11	IE2	160 M	1LE1501-1DA2-....	2930.-	1LE1601-1DA2-....	3380.-
15	IE2	160 M	1LE1501-1DA3-....	3810.-	1LE1601-1DA3-....	4390.-
18.5	IE2	160 L	1LE1501-1DA4-....	4550.-	1LE1601-1DA4-....	5240.-
22	IE2	180 M	1LE1501-1EA2-....	5100.-	1LE1601-1EA2-....	5610.-
30	IE2	200 L	1LE1501-2AA4-....	6610.-	1LE1601-2AA4-....	7260.-
37	IE2	200 L	1LE1501-2AA5-....	8290.-	1LE1601-2AA5-....	9130.-
45	IE2	225 M	1LE1501-2BA2-....	9570.-	1LE1601-2BA2-....	10500.-
55	IE2	250 M	1LE1501-2CA2-....	11300.-	1LE1601-2CA2-....	12600.-
75	IE2	280 S	1LE1501-2DA0-....	15600.-	1LE1601-2DA0-....	16000.-
90	IE2	280 M	1LE1501-2DA2-....	18400.-	1LE1601-2DA2-....	19300.-
110	IE2	315 S	1LE1501-3AA0-....	22000.-	1LE1601-3AA0-....	23300.-
132	IE2	315 M	1LE1501-3AA2-....	26500.-	1LE1601-3AA2-....	27700.-
160	IE2	315 L	1LE1501-3AA4-....	32900.-	1LE1601-3AA4-....	34500.-
200	IE2	315 L	1LE1501-3AA5-....	41000.-	1LE1601-3AA5-....	43100.-
4-pole: 1500 rpm at 50 Hz						
0.25	IE2	71 M	1LE1501-0CB2-....	512.-		
0.37	IE2	71 M	1LE1501-0CB3-....	574.-		
0.55	IE2	80 M	1LE1501-0DB2-....	619.-		
0.75	IE2	80 M	1LE1501-0DB3-....	675.-		
1.1	IE2	90 S	1LE1501-0EB0-....	798.-		
1.5	IE2	90 L	1LE1501-0EB4-....	899.-		
2.2	IE2	100 L	1LE1501-1AB4-....	1020.-	1LE1601-1AB4-....	1120.-
3	IE2	100 L	1LE1501-1AB5-....	1170.-	1LE1601-1AB5-....	1300.-
4	IE2	112 M	1LE1501-1BB2-....	1430.-	1LE1601-1BB2-....	1590.-
5.5	IE2	132 S	1LE1501-1CB0-....	1800.-	1LE1601-1CB0-....	1970.-
7.5	IE2	132 M	1LE1501-1CB2-....	2290.-	1LE1601-1CB2-....	2500.-
11	IE2	160 M	1LE1501-1DB2-....	2990.-	1LE1601-1DB2-....	3440.-
15	IE2	160 L	1LE1501-1DB4-....	3870.-	1LE1601-1DB4-....	4470.-
18.5	IE2	180 M	1LE1501-1EB2-....	4320.-	1LE1601-1EB2-....	4750.-
22	IE2	180 L	1LE1501-1EB4-....	5030.-	1LE1601-1EB4-....	5520.-
30	IE2	200 L	1LE1501-2AB5-....	6510.-	1LE1601-2AB5-....	7170.-
37	IE2	225 S	1LE1501-2BB0-....	7640.-	1LE1601-2BB0-....	8400.-
45	IE2	225 M	1LE1501-2BB2-....	9000.-	1LE1601-2BB2-....	9900.-
55	IE2	250 M	1LE1501-2CB2-....	10900.-	1LE1601-2CB2-....	11900.-
75	IE2	280 S	1LE1501-2DB0-....	14600.-	1LE1601-2DB0-....	15100.-
90	IE2	280 M	1LE1501-2DB2-....	17200.-	1LE1601-2DB2-....	17800.-
110	IE2	315 S	1LE1501-3AB0-....	21500.-	1LE1601-3AB0-....	22100.-
132	IE2	315 M	1LE1501-3AB2-....	25500.-	1LE1601-3AB2-....	26300.-
160	IE2	315 L	1LE1501-3AB4-....	30700.-	1LE1601-3AB4-....	31700.-
200	IE2	315 L	1LE1501-3AB5-....	38400.-	1LE1601-3AB5-....	39600.-

SIMOTICS SD 1LE1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview (continued)

Category	Motors with IE2 High Efficiency (continued)						
Series version	Cast-iron series 1LE1501/1LE1601 Basic/Performance Line (continued)						
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)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
6-pole: 1000 rpm at 50 Hz							
0.18	IE2	71 M	1LE1501-0CC2-....	496.-			
0.25	IE2	71 M	1LE1501-0CC3-....	590.-			
0.37	IE2	80 M	1LE1501-0DC2-....	597.-			
0.55	IE2	80 M	1LE1501-0DC3-....	693.-			
0.75	IE2	90 S	1LE1501-0EC0-....	783.-			
1.1	IE2	90 L	1LE1501-0EC4-....	913.-			
1.5	IE2	100 L	1LE1501-1AC4-....	1010.-	1LE1601-1AC4-....	1110.-	
2.2	IE2	112 M	1LE1501-1BC2-....	1280.-	1LE1601-1BC2-....	1390.-	
3	IE2	132 S	1LE1501-1CC0-....	1610.-	1LE1601-1CC0-....	1770.-	
4	IE2	132 M	1LE1501-1CC2-....	1970.-	1LE1601-1CC2-....	2170.-	
5.5	IE2	132 M	1LE1501-1CC3-....	2480.-	1LE1601-1CC3-....	2730.-	
7.5	IE2	160 M	1LE1501-1DC2-....	3140.-	1LE1601-1DC2-....	3610.-	
11	IE2	160 L	1LE1501-1DC4-....	4350.-	1LE1601-1DC4-....	5010.-	
15	IE2	180 L	1LE1501-1EC4-....	5360.-	1LE1601-1EC4-....	5890.-	
18.5	IE2	200 L	1LE1501-2AC4-....	6550.-	1LE1601-2AC4-....	7220.-	
22	IE2	200 L	1LE1501-2AC5-....	7590.-	1LE1601-2AC5-....	8340.-	
30	IE2	225 M	1LE1501-2BC2-....	9840.-	1LE1601-2BC2-....	10800.-	
37	IE2	250 M	1LE1501-2CC2-....	11900.-	1LE1601-2CC2-....	13200.-	
45	IE2	280 S	1LE1501-2DC0-....	14500.-	1LE1601-2DC0-....	15000.-	
55	IE2	280 M	1LE1501-2DC2-....	17200.-	1LE1601-2DC2-....	17800.-	
75	IE2	315 S	1LE1501-3AC0-....	23500.-	1LE1601-3AC0-....	24100.-	
90	IE2	315 M	1LE1501-3AC2-....	26500.-	1LE1601-3AC2-....	27200.-	
110	IE2	315 L	1LE1501-3AC4-....	31800.-	1LE1601-3AC4-....	32800.-	
132	IE2	315 L	1LE1501-3AC5-....	37900.-	1LE1601-3AC5-....	39100.-	
160	IE2	315 L	1LE1501-3AC6-....	45900.-	1LE1601-3AC6-....	47400.-	
8-pole: 750 rpm at 50 Hz							
0.09	-	71 M	1LE1501-0CD2-....	577.-			
0.12	IE2	71 M	1LE1501-0CD3-....	643.-			
0.18	IE2	80 M	1LE1501-0DD2-....	676.-			
0.25	IE2	80 M	1LE1501-0DD3-....	831.-			
0.37	IE2	90 S	1LE1501-0ED0-....	975.-			
0.55	IE2	90 L	1LE1501-0ED4-....	1120.-			
0.75	IE2	100 L	1LE1501-1AD4-....	1130.-	1LE1601-1AD4-....	1250.-	
1.1	IE2	100 L	1LE1501-1AD5-....	1410.-	1LE1601-1AD5-....	1570.-	
1.5	IE2	112 M	1LE1501-1BD2-....	1680.-	1LE1601-1BD2-....	1860.-	
2.2	IE2	132 S	1LE1501-1CD0-....	2180.-	1LE1601-1CD0-....	2420.-	
3	IE2	132 M	1LE1501-1CD2-....	2670.-	1LE1601-1CD2-....	2950.-	
4	IE2	160 M	1LE1501-1DD2-....	3270.-	1LE1601-1DD2-....	3760.-	
5.5	IE2	160 M	1LE1501-1DD3-....	4030.-	1LE1601-1DD3-....	4620.-	
7.5	IE2	160 L	1LE1501-1DD4-....	4850.-	1LE1601-1DD4-....	5590.-	
11	-	180 L	1LE1501-1ED4-....	5720.-	1LE1601-1ED4-....	6300.-	
15	-	200 L	1LE1501-2AD5-....	7550.-	1LE1601-2AD5-....	8310.-	
18.5	-	225 S	1LE1501-2BD0-....	8860.-	1LE1601-2BD0-....	9740.-	
22	-	225 M	1LE1501-2BD2-....	10100.-	1LE1601-2BD2-....	11100.-	
30	-	250 M	1LE1501-2CD2-....	13100.-	1LE1601-2CD2-....	14400.-	
37	-	280 S	1LE1501-2DD0-....	15700.-	1LE1601-2DD0-....	16200.-	
45	-	280 M	1LE1501-2DD2-....	19100.-	1LE1601-2DD2-....	19700.-	
55	-	315 S	1LE1501-3AD0-....	22600.-	1LE1601-3AD0-....	23400.-	
75	-	315 M	1LE1501-3AD2-....	30300.-	1LE1601-3AD2-....	31300.-	
90	-	315 L	1LE1501-3AD4-....	33800.-	1LE1601-3AD4-....	34800.-	
110	-	315 L	1LE1501-3AD5-....	40700.-	1LE1601-3AD5-....	42000.-	
132	-	315 L	1LE1501-3AD6-....	48600.-	1LE1601-3AD6-....	50200.-	



Standard delivery times in working days:

2

10

15

20

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

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

Overview (continued)

Category	Motors with IE2 High Efficiency (continued)
Series version	Cast-iron series 1LE1501/1LE1601 Basic/Performance Line with increased power
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)	3Z1



Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
4	IE2	100 L	1LE1501-1AA6-....	1330.-	1LE1601-1AA6-....	1450.-
5.5	IE2	112 M	1LE1501-1BA6-....	1660.-	1LE1601-1BA6-....	1840.-
11	IE2	132 M	1LE1501-1CA6-....	2930.-	1LE1601-1CA6-....	3210.-
22	IE2	160 L	1LE1501-1DA6-....	5380.-	1LE1601-1DA6-....	6170.-
30	IE2	180 M	1LE1501-1EA6-....	6740.-	1LE1601-1EA6-....	7410.-
45	IE2	200 L	1LE1501-2AA6-....	10100.-	1LE1601-2AA6-....	11100.-
55	IE2	225 M	1LE1501-2BA6-....	11500.-	1LE1601-2BA6-....	12800.-
75	IE2	250 M	1LE1501-2CA6-....	15900.-	1LE1601-2CA6-....	16300.-
110	IE2	280 M	1LE1501-2DA6-....	22500.-	1LE1601-2DA6-....	23700.-
4-pole: 1500 rpm at 50 Hz						
4	IE2	100 L	1LE1501-1AB6-....	1430.-	1LE1601-1AB6-....	1590.-
5.5	IE2	112 M	1LE1501-1BB6-....	1800.-	1LE1601-1BB6-....	1970.-
11	IE2	132 M	1LE1501-1CB6-....	2990.-	1LE1601-1CB6-....	3290.-
18.5	IE2	160 L	1LE1501-1DB6-....	4560.-	1LE1601-1DB6-....	5260.-
30	IE2	180 M	1LE1501-1EB6-....	6640.-	1LE1601-1EB6-....	7300.-
37	IE2	200 L	1LE1501-2AB6-....	8060.-	1LE1601-2AB6-....	8880.-
55	IE2	225 M	1LE1501-2BB6-....	11100.-	1LE1601-2BB6-....	12300.-
75	IE2	250 M	1LE1501-2CB6-....	15000.-	1LE1601-2CB6-....	15500.-
110	IE2	280 M	1LE1501-2DB6-....	21900.-	1LE1601-2DB6-....	22600.-
6-pole: 1000 rpm at 50 Hz						
2.2	IE2	100 L	1LE1501-1AC6-....	1280.-	1LE1601-1AC6-....	1390.-
3	IE2	112 M	1LE1501-1BC6-....	1610.-	1LE1601-1BC6-....	1770.-
7.5	IE2	132 M	1LE1501-1CC6-....	3140.-	1LE1601-1CC6-....	3460.-
15	IE2	160 L	1LE1501-1DC6-....	5640.-	1LE1601-1DC6-....	6480.-
18.5	IE2	180 M	1LE1501-1EC6-....	6680.-	1LE1601-1EC6-....	7350.-
30	IE2	200 L	1LE1501-2AC6-....	10400.-	1LE1601-2AC6-....	11400.-
37	IE2	225 M	1LE1501-2BC6-....	12300.-	1LE1601-2BC6-....	13400.-
45	IE2	250 M	1LE1501-2CC6-....	14900.-	1LE1601-2CC6-....	15300.-
75	IE2	280 M	1LE1501-2DC6-....	23900.-	1LE1601-2DC6-....	24600.-
8-pole: 750 rpm at 50 Hz						
15	IE2	180 M	1LE1501-1ED6-....	7550.-	1LE1601-1ED6-....	8310.-
18.5	IE2	200 L	1LE1501-2AD6-....	9170.-	1LE1601-2AD6-....	10100.-
30	IE2	225 M	1LE1501-2BD6-....	13100.-	1LE1601-2BD6-....	14400.-
37	IE2	250 M	1LE1501-2CD6-....	15700.-	1LE1601-2CD6-....	16200.-
55	IE2	280 M	1LE1501-2DD6-....	22600.-	1LE1601-2DD6-....	23400.-

SIMOTICS GP 1LE1 Standard Motors – APAC Line

Orientation

Standard delivery times in working days:

2

10

15

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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 (continued)	
Series version	Aluminum series 1LE1041	Aluminum series 1LE1041 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, 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)	3Z1	3Z1

Please note
minimum legal
efficiencies
in the European
Economic Area!

Please note
minimum legal
efficiencies
in the European
Economic Area!

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz									
0.75	IE2	80 M	1LE1041-0DA2.-....	535.-					
1.5	IE2	90 S	1LE1041-0EA0.-....	706.-					
2.2	IE2	90 L	1LE1041-0EA4.-....	912.-					
					4	IE2	100 L	1LE1041-1AA6.-....	1300.-
4	IE2	112 M	1LE1041-1BA2.-....	1300.-	5.5	IE2	112 M	1LE1041-1BA6.-....	1620.-
5.5	IE2	132 S	1LE1041-1CA0.-....	1620.-					
7.5	IE2	132 S	1LE1041-1CA1.-....	2070.-					
					11	IE2	132 M	1LE1041-1CA6.-....	2860.-
11	IE2	160 M	1LE1041-1DA2.-....	2860.-					
15	IE2	160 M	1LE1041-1DA3.-....	3740.-					
18.5	IE2	160 L	1LE1041-1DA4.-....	4460.-	22	IE2	160 L	1LE1041-1DA6.-....	5260.-
4-pole: 1500 rpm at 50 Hz									
0.75	IE2	80 M	1LE1041-0DB3.-....	580.-					
1.5	IE2	90 L	1LE1041-0EB4.-....	814.-					
2.2	IE2	100 L	1LE1041-1AB4.-....	996.-	4	IE2	100 L	1LE1041-1AB6.-....	1400.-
4	IE2	112 M	1LE1041-1BB2.-....	1400.-	5.5	IE2	112 M	1LE1041-1BB6.-....	1760.-
5.5	IE2	132 S	1LE1041-1CB0.-....	1760.-					
7.5	IE2	132 M	1LE1041-1CB2.-....	2210.-	11	IE2	132 M	1LE1041-1CB6.-....	2930.-
11	IE2	160 M	1LE1041-1DB2.-....	2930.-					
15	IE2	160 L	1LE1041-1DB4.-....	3780.-	18.5	IE2	160 L	1LE1041-1DB6.-....	4470.-
6-pole: 1000 rpm at 50 Hz									
0.75	IE2	90 S	1LE1041-0EC0.-....	672.-					
1.5	IE2	100 L	1LE1041-1AC4.-....	985.-					
2.2	IE2	112 M	1LE1041-1BC2.-....	1250.-					
4	IE2	132 M	1LE1041-1CC2.-....	1930.-					
5.5	IE2	132 M	1LE1041-1CC3.-....	2430.-	7.5	IE2	132 M	1LE1041-1CC6.-....	3090.-
7.5	IE2	160 M	1LE1041-1DC2.-....	3090.-					
11	IE2	160 L	1LE1041-1DC4.-....	4240.-	15	IE2	160 L	1LE1041-1DC6.-....	5500.-

Standard delivery times in working days:

2

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15

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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	Motors with IE2 High Efficiency (continued)	
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)	3Z1	3Z1

Please note
minimum legal
efficiencies
in the European
Economic Area!Please note
minimum legal
efficiencies
in the European
Economic Area!Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR
2-pole: 3000 rpm at 50 Hz									
22	IE2	180 M	1LE1541-1EA2-....	5410.-					
30	IE2	200 L	1LE1541-2AA4-....	7000.-	30	IE2	180 L	1LE1541-1EA6-....	7150.-
37	IE2	200 L	1LE1541-2AA5-....	8800.-	45	IE2	200 L	1LE1541-2AA6-....	10700.-
45	IE2	225 M	1LE1541-2BA2-....	10100.-	55	IE2	225 M	1LE1541-2BA6-....	12300.-
55	IE2	250 M	1LE1541-2CA2-....	11900.-	75	IE2	250 M	1LE1541-2CA6-....	16800.-
75	IE2	280 S	1LE1541-2DA0-....	16500.-					
90	IE2	280 M	1LE1541-2DA2-....	19500.-	110	IE2	280 M	1LE1541-2DA6-....	23900.-
110	IE2	315 S	1LE1541-3AA0-....	23400.-					
132	IE2	315 M	1LE1541-3AA2-....	28000.-					
160	IE2	315 L	1LE1541-3AA4-....	34800.-					
200	IE2	315 L	1LE1541-3AA5-....	43500.-					
4-pole: 1500 rpm at 50 Hz									
18.5	IE2	180 M	1LE1541-1EB2-....	4560.-					
22	IE2	180 L	1LE1541-1EB4-....	5330.-	30	IE2	180 L	1LE1541-1EB6-....	7030.-
30	IE2	200 L	1LE1541-2AB5-....	6900.-	37	IE2	200 L	1LE1541-2AB6-....	8560.-
37	IE2	225 S	1LE1541-2BB0-....	8100.-					
45	IE2	225 M	1LE1541-2BB2-....	9540.-	55	IE2	225 M	1LE1541-2BB6-....	11700.-
55	IE2	250 M	1LE1541-2CB2-....	11500.-	75	IE2	250 M	1LE1541-2CB6-....	15900.-
75	IE2	280 S	1LE1541-2DB0-....	15600.-					
90	IE2	280 M	1LE1541-2DB2-....	18300.-	110	IE2	280 M	1LE1541-2DB6-....	23300.-
110	IE2	315 S	1LE1541-3AB0-....	22900.-					
132	IE2	315 M	1LE1541-3AB2-....	27000.-					
160	IE2	315 L	1LE1541-3AB4-....	32500.-					
200	IE2	315 L	1LE1541-3AB5-....	40800.-					
6-pole: 1000 rpm at 50 Hz									
15	IE2	180 L	1LE1541-1EC4-....	5680.-	18.5	IE2	180 L	1LE1541-1EC6-....	7080.-
18.5	IE2	200 L	1LE1541-2AC4-....	6940.-					
22	IE2	200 L	1LE1541-2AC5-....	8040.-	30	IE2	200 L	1LE1541-2AC6-....	11000.-
30	IE2	225 M	1LE1541-2BC2-....	10400.-	37	IE2	225 M	1LE1541-2BC6-....	13000.-
37	IE2	250 M	1LE1541-2CC2-....	12800.-	45	IE2	250 M	1LE1541-2CC6-....	15800.-
45	IE2	280 S	1LE1541-2DC0-....	15500.-					
55	IE2	280 M	1LE1541-2DC2-....	18300.-	75	IE2	280 M	1LE1541-2DC6-....	25200.-
75	IE2	315 S	1LE1541-3AC0-....	24800.-					
90	IE2	315 M	1LE1541-3AC2-....	28000.-					
110	IE2	315 L	1LE1541-3AC4-....	33800.-					
132	IE2	315 L	1LE1541-3AC5-....	40200.-	160	IE2	315 L	1LE1541-3AC6-....	48700.-

SIMOTICS GP 1LE1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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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 (continued on next page)	Aluminum series 1LE1002 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)	3Z1	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz									
0.18	IE1	63 M	1LE1002-0BA2-....	298.-	0.37	IE1	63 M	1LE1002-0BA6-....	320.-
0.25	IE1	63 M	1LE1002-0BA3-....	316.-					
0.37	IE1	71 M	1LE1002-0CA2-....	320.-					
0.55	IE1	71 M	1LE1002-0CA3-....	358.-	0.86	IE1	71 M	1LE1002-0CA6-....	433.-
0.75	IE1	80 M	1LE1002-0DA2-....	433.-					
1.1	IE1	80 M	1LE1002-0DA3-....	493.-					
1.5	IE1	90 M	1LE1002-0EA0-....	543.-					
2.2	IE1	90 M	1LE1002-0EA4-....	693.-					
3	IE1	100 L	1LE1002-1AA4-....	801.-	4	IE1	100 L	1LE1002-1AA6-....	988.-
4	IE1	112 M	1LE1002-1BA2-....	988.-	5.5	IE1	112 M	1LE1002-1BA6-....	1270.-
5.5	IE1	132 S	1LE1002-1CA0-....	1270.-					
7.5	IE1	132 S	1LE1002-1CA1-....	1630.-					
					11	IE1	132 M	1LE1002-1CA6-....	2270.-
11	IE1	160 M	1LE1002-1DA2-....	2270.-					
15	IE1	160 M	1LE1002-1DA3-....	2960.-					
18.5	IE1	160 L	1LE1002-1DA4-....	3530.-	22	IE1	160 L	1LE1002-1DA6-....	4170.-
22	IE1	180 M	1LE1002-1EA2-....	4030.-					
30	IE1	200 L	1LE1002-2AA4-....	5200.-					
37	IE1	200 L	1LE1002-2AA5-....	6820.-					
4-pole: 1500 rpm at 50 Hz									
0.12	IE1	63 M	1LE1002-0BB2-....	293.-	0.25	IE1	63 M	1LE1002-0BB6-....	317.-
0.18	IE1	63 M	1LE1002-0BB3-....	316.-					
0.25	IE1	71 M	1LE1002-0CB2-....	317.-					
0.37	IE1	71 M	1LE1002-0CB3-....	352.-	0.55	IE1	71 M	1LE1002-0CB6-....	436.-
0.55	IE1	80 M	1LE1002-0DB2-....	414.-					
0.75	IE1	80 M	1LE1002-0DB3-....	451.-					
1.1	IE1	90 M	1LE1002-0EB0-....	535.-					
1.5	IE1	90 M	1LE1002-0EB4-....	602.-					
2.2	IE1	100 L	1LE1002-1AB4-....	705.-	4	IE1	100 L	1LE1002-1AB6-....	1030.-
3	IE1	100 L	1LE1002-1AB5-....	812.-					
4	IE1	112 M	1LE1002-1BB2-....	1030.-	5.5	IE1	112 M	1LE1002-1BB6-....	1330.-
5.5	IE1	132 S	1LE1002-1CB0-....	1330.-					
7.5	IE1	132 M	1LE1002-1CB2-....	1690.-	11	IE1	132 M	1LE1002-1CB6-....	2320.-
11	IE1	160 M	1LE1002-1DB2-....	2320.-					
15	IE1	160 L	1LE1002-1DB4-....	3020.-	18.5	IE1	160 L	1LE1002-1DB6-....	3640.-
18	IE1	180 M	1LE1002-1EB2-....	3490.-					
22	IE1	180 L	1LE1002-1EB4-....	4130.-					
30	IE1	200 L	1LE1002-2AB5-....	5480.-					

Standard delivery times in working days:

2

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

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

Overview (continued)

Category	Motors with IE1 Standard Efficiency (continued)	
Series version	Aluminum series 1LE1002 (continued)	Aluminum series 1LE1002 with increased power (continued)
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)	3Z1	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
6-pole: 1000 rpm at 50 Hz									
0.09	IE1	63 M	1LE1002-0BC2.-....	317.-					
0.18	IE1	71 M	1LE1002-0CC2.-....	337.-					
0.25	IE1	71 M	1LE1002-0CC3.-....	375.-					
0.37	IE1	80 M	1LE1002-0DC2.-....	433.-					
0.55	IE1	80 M	1LE1002-0DC3.-....	501.-					
0.75	IE1	90 M	1LE1002-0EC0.-....	565.-					
1.1	IE1	90 M	1LE1002-0EC4.-....	697.-					
1.5	IE1	100 L	1LE1002-1AC4.-....	751.-	2.2	IE1	100 L	1LE1002-1AC6.-....	940.-
2.2	IE1	112 M	1LE1002-1BC2.-....	940.-	3	IE1	112 M	1LE1002-1BC6.-....	1180.-
3	IE1	132 S	1LE1002-1CC0.-....	1180.-					
4	IE1	132 M	1LE1002-1CC2.-....	1480.-	7.5	IE1	132 M	1LE1002-1CC6.-....	2430.-
5.5	IE1	132 M	1LE1002-1CC3.-....	1870.-					
7.5	IE1	160 M	1LE1002-1DC2.-....	2430.-					
11	IE1	160 L	1LE1002-1DC4.-....	3370.-	15	IE1	160 L	1LE1002-1DC6.-....	4370.-
15	IE1	180 L	1LE1002-1EC4.-....	4220.-					
18.5	IE1	200 L	1LE1002-2AC4.-....	5170.-					
22	IE1	200 L	1LE1002-2AC5.-....	6100.-					
8-pole: 750 rpm at 50 Hz									
0.09	IE1	71 M	1LE1002-0CD2.-....	353.-					
0.12	IE1	71 M	1LE1002-0CD3.-....	399.-					
0.75	IE1	100 L	1LE1002-1AD4.-....	781.-					
1.1	IE1	100 L	1LE1002-1AD5.-....	988.-					
1.5	IE1	112 M	1LE1002-1BD2.-....	1170.-					
2.2	IE1	132 S	1LE1002-1CD0.-....	1520.-					
3	IE1	132 M	1LE1002-1CD2.-....	1850.-					
4	IE1	160 M	1LE1002-1DD2.-....	2270.-					
5.5	IE1	160 M	1LE1002-1DD3.-....	2820.-					
7.5	IE1	160 L	1LE1002-1DD4.-....	3480.-					
13.2	IE1	180 L	1LE1002-1ED4.-....	4450.-					
15	IE1	200 L	1LE1002-2AD5.-....	5850.-					

SIMOTICS GP 1PC1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview

Category	Motors with IE1 Standard Efficiency (continued)
Series version	Aluminum series 1PC1002 ¹⁾
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 ¹⁾
Efficiency	On request ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1



Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz				
1.2	IE1	100 L	1PC1002-1AA4-....	974.-
1.6	IE1	112 M	1PC1002-1BA2-....	1150.-
2.2	IE1	132 S	1PC1002-1CA0-....	1480.-
3	IE1	132 S	1PC1002-1CA1-....	1810.-
4.4	IE1	160 M	1PC1002-1DA2-....	2360.-
6	IE1	160 M	1PC1002-1DA3-....	2950.-
7.4	IE1	160 L	1PC1002-1DA4-....	3460.-
4-pole: 1500 rpm at 50 Hz				
0.88	IE1	100 L	1PC1002-1AB4-....	873.-
1.2	IE1	100 L	1PC1002-1AB5-....	994.-
1.6	IE1	112 M	1PC1002-1BB2-....	1220.-
2.2	IE1	132 S	1PC1002-1CB0-....	1520.-
3	IE1	132 M	1PC1002-1CB2-....	1840.-
4.4	IE1	160 M	1PC1002-1DB2-....	2400.-
6	IE1	160 L	1PC1002-1DB4-....	3060.-
6-pole: 1000 rpm at 50 Hz				
0.6	IE1	100 L	1PC1002-1AC4-....	914.-
0.88	IE1	112 M	1PC1002-1BC2-....	1100.-
1.2	IE1	132 S	1PC1002-1CC0-....	1390.-
1.6	IE1	132 M	1PC1002-1CC2-....	1680.-
2.2	IE1	132 M	1PC1002-1CC3-....	2080.-
3	IE1	160 M	1PC1002-1DC2-....	2550.-
4.4	IE1	160 L	1PC1002-1DC4-....	3280.-
8-pole: 750 rpm at 50 Hz				
0.3	IE1	100 L	1PC1002-1AD4-....	960.-
0.44	IE1	100 L	1PC1002-1AD5-....	1150.-
0.6	IE1	112 M	1PC1002-1BD2-....	1350.-
0.88	IE1	132 S	1PC1002-1CD0-....	1720.-
1.2	IE1	132 M	1PC1002-1CD2-....	2000.-
1.6	IE1	160 M	1PC1002-1DD2-....	2340.-
2.2	IE1	160 M	1PC1002-1DD3-....	2790.-
3	IE1	160 L	1PC1002-1DD4-....	3340.-

¹⁾ 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:

2

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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	Motors with IE1 Standard Efficiency (continued)
Series version	Cast-iron series 1LE1502 Basic Line
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)	3Z1



2

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR
2-pole: 3000 rpm at 50 Hz					6-pole: 1000 rpm at 50 Hz				
3	IE1	100 L	1LE1502-1AA4-....	908.-	1.5	IE1	100 L	1LE1502-1AC4-....	848.-
4	IE1	112 M	1LE1502-1BA2-....	1120.-	2.2	IE1	112 M	1LE1502-1BC2-....	1060.-
5.5	IE1	132 S	1LE1502-1CA0-....	1380.-	3	IE1	132 S	1LE1502-1CC0-....	1320.-
7.5	IE1	132 S	1LE1502-1CA1-....	1800.-	4	IE1	132 M	1LE1502-1CC2-....	1630.-
11	IE1	160 M	1LE1502-1DA2-....	2400.-	5.5	IE1	132 M	1LE1502-1CC3-....	2070.-
15	IE1	160 M	1LE1502-1DA3-....	3170.-	7.5	IE1	160 M	1LE1502-1DC2-....	2630.-
18.5	IE1	160 L	1LE1502-1DA4-....	3800.-	11	IE1	160 L	1LE1502-1DC4-....	3610.-
22	IE1	180 M	1LE1502-1EA2-....	4140.-	15	IE1	180 L	1LE1502-1EC4-....	4370.-
30	IE1	200 L	1LE1502-2AA4-....	5390.-	18.5	IE1	200 L	1LE1502-2AC4-....	5360.-
37	IE1	200 L	1LE1502-2AA5-....	7050.-	22	IE1	200 L	1LE1502-2AC5-....	6300.-
45	IE1	225 M	1LE1502-2BA2-....	8270.-	30	IE1	225 M	1LE1502-2BC2-....	8360.-
55	IE1	250 M	1LE1502-2CA2-....	10100.-	37	IE1	250 M	1LE1502-2CC2-....	10100.-
75	IE1	280 S	1LE1502-2DA0-....	13800.-	45	IE1	280 S	1LE1502-2DC0-....	12500.-
90	IE1	280 M	1LE1502-2DA2-....	16800.-	55	IE1	280 M	1LE1502-2DC2-....	15000.-
110	IE1	315 S	1LE1502-3AA0-....	20500.-	75	IE1	315 S	1LE1502-3AC0-....	20500.-
132	IE1	315 M	1LE1502-3AA2-....	24500.-	90	IE1	315 M	1LE1502-3AC2-....	24500.-
160	IE1	315 L	1LE1502-3AA4-....	30400.-	110	IE1	315 L	1LE1502-3AC4-....	29600.-
200	IE1	315 L	1LE1502-3AA5-....	38000.-	132	IE1	315 L	1LE1502-3AC5-....	35000.-
					160	IE1	315 L	1LE1502-3AC6-....	42500.-
4-pole: 1500 rpm at 50 Hz					8-pole: 750 rpm at 50 Hz				
2.2	IE1	100 L	1LE1502-1AB4-....	795.-	0.75	IE1	100 L	1LE1502-1AD4-....	879.-
3	IE1	100 L	1LE1502-1AB5-....	917.-	1.1	IE1	100 L	1LE1502-1AD5-....	1120.-
4	IE1	112 M	1LE1502-1BB2-....	1170.-	1.5	IE1	112 M	1LE1502-1BD2-....	1330.-
5.5	IE1	132 S	1LE1502-1CB0-....	1450.-	2.2	IE1	132 S	1LE1502-1CD0-....	1680.-
7.5	IE1	132 M	1LE1502-1CB2-....	1840.-	3	IE1	132 M	1LE1502-1CD2-....	2030.-
11	IE1	160 M	1LE1502-1DB2-....	2500.-	4	IE1	160 M	1LE1502-1DD2-....	2400.-
15	IE1	160 L	1LE1502-1DB4-....	3230.-	5.5	IE1	160 M	1LE1502-1DD3-....	3030.-
18.5	IE1	180 M	1LE1502-1EB2-....	3610.-	7.5	IE1	160 L	1LE1502-1DD4-....	3780.-
22	IE1	180 L	1LE1502-1EB4-....	4260.-	11	IE1	180 L	1LE1502-1ED4-....	4570.-
30	IE1	200 L	1LE1502-2AB5-....	5670.-	15	IE1	200 L	1LE1502-2AD5-....	6050.-
37	IE1	225 S	1LE1502-2BB0-....	6660.-	18.5	IE1	225 S	1LE1502-2BD0-....	7080.-
45	IE1	225 M	1LE1502-2BB2-....	8050.-	22	IE1	225 S	1LE1502-2BD2-....	8220.-
55	IE1	250 M	1LE1502-2CB2-....	9790.-	30	IE1	250 M	1LE1502-2CD2-....	10800.-
75	IE1	280 S	1LE1502-2DB0-....	13400.-	37	IE1	280 S	1LE1502-2DD0-....	13100.-
90	IE1	280 M	1LE1502-2DB2-....	15800.-	45	IE1	280 S	1LE1502-2DD2-....	15900.-
110	IE1	315 S	1LE1502-3AB0-....	19600.-	55	IE1	315 S	1LE1502-3AD0-....	19400.-
132	IE1	315 M	1LE1502-3AB2-....	23200.-	75	IE1	315 M	1LE1502-3AD2-....	26000.-
160	IE1	315 L	1LE1502-3AB4-....	28600.-	90	IE1	315 L	1LE1502-3AD4-....	30600.-
200	IE1	315 L	1LE1502-3AB5-....	35500.-	110	IE1	315 L	1LE1502-3AD5-....	37000.-
					132	IE1	315 L	1LE1502-3AD6-....	44300.-

SIMOTICS SD 1LE1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview (continued)

Category	Motors with IE1 Standard Efficiency (continued)
Series version	Cast-iron series 1LE1502 Basic Line with increased power
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)	3Z1



Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR
2-pole: 3000 rpm at 50 Hz				
4	IE1	100 L	1LE1502-1AA6-....	1120.-
5.5	IE1	112 M	1LE1502-1BA6-....	1380.-
11	IE1	132 M	1LE1502-1CA6-....	2400.-
22	IE1	160 L	1LE1502-1DA6-....	4140.-
30	IE1	180 L	1LE1502-1EA6-....	5390.-
45	IE1	200 L	1LE1502-2AA6-....	7820.-
55	IE1	225 M	1LE1502-2BA6-....	9180.-
75	IE1	250 M	1LE1502-2CA6-....	11900.-
110	IE1	280 M	1LE1502-2DA6-....	18500.-
4-pole: 1500 rpm at 50 Hz				
4	IE1	100 L	1LE1502-1AB6-....	1170.-
5.5	IE1	112 M	1LE1502-1BB6-....	1450.-
11	IE1	132 M	1LE1502-1CB6-....	2500.-
18.5	IE1	160 L	1LE1502-1DB6-....	3610.-
30	IE1	180 L	1LE1502-1EB6-....	5670.-
37	IE1	200 L	1LE1502-2AB6-....	6660.-
55	IE1	225 M	1LE1502-2BB6-....	8910.-
75	IE1	250 M	1LE1502-2CB6-....	11500.-
110	IE1	280 M	1LE1502-2DB6-....	17600.-
6-pole: 1000 rpm at 50 Hz				
2.2	IE1	100 L	1LE1502-1AC6-....	1060.-
3	IE1	112 M	1LE1502-1BC6-....	1320.-
7.5	IE1	132 M	1LE1502-1CC6-....	2630.-
15	IE1	160 L	1LE1502-1DC6-....	4370.-
18.5	IE1	180 S	1LE1502-1EC6-....	5360.-
30	IE1	200 L	1LE1502-2AC6-....	8360.-
37	IE1	225 M	1LE1502-2BC6-....	9260.-
45	IE1	250 M	1LE1502-2CC6-....	11300.-
75	IE1	280 M	1LE1502-2DC6-....	17800.-
8-pole: 750 rpm at 50 Hz				
15	IE1	180 L	1LE1502-1ED6-....	6050.-
18.5	IE1	200 L	1LE1502-2AD6-....	7080.-
30	IE1	225 M	1LE1502-2BD6-....	9560.-
37	IE1	250 M	1LE1502-2CD6-....	11900.-
55	IE1	280 M	1LE1502-2DD6-....	17600.-

Standard delivery times in working days:

2

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15

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

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

Overview

Category	NEMA Energy Efficient MG1 Motors Table 12-11
Series version	Aluminum series 1LE1021 ¹⁾
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	4, 6
Frame sizes (FS)	80 M
Rated power	0.37 ... 0.55 kW at 50 Hz 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 ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

$P_{rated, 50 Hz}$ kW	$P_{rated, 60 Hz}$ hp	Frame size FS	Article No.	Base price EUR
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz				
0.55	0.75	80 M	1LE1021-0DB2-....	620.–
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz				
0.37	0.5	80 M	1LE1021-0DC2-....	480.–
0.55	0.75	80 M	1LE1021-0DC3-....	556.–

¹⁾ 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

SIMOTICS SD 1LE1 Standard Motors – Eagle Line

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview

Category	NEMA Energy Efficient MG1 Motors Table 12-11 (continued)				
Series version	Cast-iron series 1LE1521 Basic Line ¹⁾				
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 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 ¹⁾				
Metal factor for metal surcharges (MS)	N - W - - - -				
Price group (PG)	3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)					
	<i>P</i> _{rated} , 50 Hz kW	<i>P</i> _{rated} , 60 Hz hp	Frame size FS	Article No. Basic Line	Base price EUR
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz					
	0.37	0.5	71 M	1LE1521-0CA2-.....	596.–
	0.55	0.75	71 M	1LE1521-0CA3-.....	687.–
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz					
	0.25	0.33	71 M	1LE1521-0CB2-.....	593.–
	0.37	0.5	71 M	1LE1521-0CB3-.....	655.–
	0.55	0.75	80 M	1LE1521-0DB2-.....	755.–
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz					
	0.18	0.25	71 M	1LE1521-0CC2-.....	577.–
	0.25	0.33	71 M	1LE1521-0CC3-.....	671.–
	0.37	0.5	80 M	1LE1521-0DC2-.....	685.–
	0.55	0.75	80 M	1LE1521-0DC3-.....	780.–
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz					
	0.09	0.12	71 M	1LE1521-0CD2-.....	658.–
	0.12	0.16	71 M	1LE1521-0CD3-.....	724.–
	0.18	0.25	80 M	1LE1521-0DD2-.....	762.–
	0.25	0.33	80 M	1LE1521-0DD3-.....	918.–
	0.37	0.5	90 S	1LE1521-0ED0-.....	1070.–
	0.55	0.75	90 L	1LE1521-0ED4-.....	1230.–

¹⁾ 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

Standard delivery times in working days:

2

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On
requestSIMOTICS GP 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	Aluminum series 1LE1023 ¹⁾
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 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 ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	P_{rated} , 60 Hz hp	Frame size FS	Article No.	Base price EUR	P_{rated} , 50 Hz kW	P_{rated} , 60 Hz hp	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz					6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz				
0.75	1	80 M	1LE1023-0DA2-....	694.-	0.37	0.5	80 M	1LE1023-0DC2-....	666.-
1.1	1.5	80 M	1LE1023-0DA3-....	794.-	0.55	0.75	80 M	1LE1023-0DC3-....	771.-
1.5	2	90 S	1LE1023-0EA0-....	917.-	0.75	1	90 S	1LE1023-0EC0-....	873.-
2.2	3	90 L	1LE1023-0EA4-....	1180.-	1.1	1.5	100 L	1LE1023-1AC3-....	1080.-
3	4	100 L	1LE1023-1AA4-....	1310.-	3	4	132 S	1LE1023-1CC0-....	1870.-
4	5	112 M	1LE1023-1BA2-....	1550.-	4	5	132 M	1LE1023-1CC2-....	2310.-
5.5	7.5	132 S	1LE1023-1CA0-....	1940.-	5.5	7.5	132 M	1LE1023-1CC3-....	2890.-
7.5	10	132 S	1LE1023-1CA1-....	2460.-	7.5	10	160 M	1LE1023-1DC2-....	3670.-
11	15	160 M	1LE1023-1DA2-....	3420.-	11	15	160 L	1LE1023-1DC4-....	5070.-
15	20	160 M	1LE1023-1DA3-....	4460.-	15	20	180 L	1LE1023-1EC4-....	6250.-
18.5	25	160 L	1LE1023-1DA4-....	5310.-	18.5	25	200 L	1LE1023-2AC4-....	7700.-
22	30	180 M	1LE1023-1EA2-....	5970.-	22	30	200 L	1LE1023-2AC5-....	8790.-
30	40	200 L	1LE1023-2AA4-....	7770.-					
37	50	200 L	1LE1023-2AA5-....	9520.-					
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz					8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz				
0.55	0.75	80 M	1LE1023-0DB2-....	689.-	2.2	3	132 S	1LE1023-1CD0-....	2880.-
0.75	1	80 M	1LE1023-0DB3-....	752.-	3	4	132 M	1LE1023-1CD2-....	3460.-
1.1	1.5	90 S	1LE1023-0EB0-....	889.-	3.7	5	160 M	1LE1023-1DD2-....	4250.-
1.5	2	90 L	1LE1023-0EB4-....	1050.-	5.5	7.5	160 M	1LE1023-1DD3-....	5140.-
2.2	3	100 L	1LE1023-1AB4-....	1180.-	7.5	10	160 L	1LE1023-1DD4-....	6110.-
3	4	100 L	1LE1023-1AB5-....	1360.-	11	15	180 L	1LE1023-1ED4-....	7410.-
4	5	112 M	1LE1023-1BB2-....	1670.-	15	20	200 L	1LE1023-2AD5-....	9720.-
5.5	7.5	132 S	1LE1023-1CB0-....	2100.-					
7.5	10	132 M	1LE1023-1CB2-....	2660.-					
11	15	160 M	1LE1023-1DB2-....	3490.-					
15	20	160 L	1LE1023-1DB4-....	4530.-					
18.5	25	180 M	1LE1023-1EB2-....	5170.-					
22	30	180 L	1LE1023-1EB4-....	5900.-					
30	40	200 L	1LE1023-2AB5-....	7660.-					

¹⁾ 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

SIMOTICS SD 1LE1 Standard Motors – Eagle Line

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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Overview of selection and ordering data with base prices and standard delivery times

Overview

Category	NEMA Premium Efficient MG1 Motors Table 12-12 (continued)
Series version	Cast-iron series 1LE1523 Basic Line, 1LE1623 Performance Line ¹⁾
Cooling	(continued on next page) 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 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 ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	P_{rated} , 60 Hz hp	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz						
0.37	0.5	71 M	1LE1523-0CA2-....	775.-		
0.55	0.75	71 M	1LE1523-0CA3-....	892.-		
0.75	1	80 M	1LE1523-0DA2-....	930.-		
1.1	1.5	80 M	1LE1523-0DA3-....	1050.-		
1.5	2	90 S	1LE1523-0EA0-....	1220.-		
2.2	3	90 L	1LE1523-0EA4-....	1480.-		
3	4	100 L	1LE1523-1AA4-....	1400.-	1LE1623-1AA4-....	1530.-
4	5	112 M	1LE1523-1BA2-....	1670.-	1LE1623-1BA2-....	1810.-
5.5	7.5	132 S	1LE1523-1CA0-....	2110.-	1LE1623-1CA0-....	2290.-
7.5	10	132 S	1LE1523-1CA1-....	2670.-	1LE1623-1CA1-....	2880.-
11	15	160 M	1LE1523-1DA2-....	3710.-	1LE1623-1DA2-....	4130.-
15	20	160 M	1LE1523-1DA3-....	4830.-	1LE1623-1DA3-....	5400.-
18.5	25	160 L	1LE1523-1DA4-....	5770.-	1LE1623-1DA4-....	6440.-
22	30	180 M	1LE1523-1EA2-....	6310.-	1LE1623-1EA2-....	6800.-
30	40	200 L	1LE1523-2AA4-....	8200.-	1LE1623-2AA4-....	8840.-
37	50	200 L	1LE1523-2AA5-....	10300.-	1LE1623-2AA5-....	11100.-
45	60	225 M	1LE1523-2BA2-....	11300.-	1LE1623-2BA2-....	12400.-
55	75	250 M	1LE1523-2CA2-....	13400.-	1LE1623-2CA2-....	14500.-
75	100	280 S	1LE1523-2DA0-....	18200.-	1LE1623-2DA0-....	18600.-
90	125	280 M	1LE1523-2DA2-....	21600.-	1LE1623-2DA2-....	22500.-
110	150	315 S	1LE1523-3AA0-....	26000.-	1LE1623-3AA0-....	27000.-
132	175	315 M	1LE1523-3AA2-....	31100.-	1LE1623-3AA2-....	32300.-
150	200	315 L	1LE1523-3AA4-....	38500.-	1LE1623-3AA4-....	40200.-
185	250	315 L	1LE1523-3AA5-....	45100.-	1LE1623-3AA5-....	47100.-
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz						
0.25	0.33	71 M	1LE1523-0CB2-....	771.-		
0.37	0.5	71 M	1LE1523-0CB3-....	852.-		
0.55	0.75	80 M	1LE1523-0DB2-....	923.-		
0.75	1	80 M	1LE1523-0DB3-....	999.-		
1.1	1.5	90 S	1LE1523-0EB0-....	1170.-		
1.5	2	90 L	1LE1523-0EB4-....	1320.-		
2.2	3	100 L	1LE1523-1AB4-....	1290.-	1LE1623-1AB4-....	1380.-
3	4	100 L	1LE1523-1AB5-....	1490.-	1LE1623-1AB5-....	1600.-
4	5	112 M	1LE1523-1BB2-....	1830.-	1LE1623-1BB2-....	1960.-
5.5	7.5	132 S	1LE1523-1CB0-....	2270.-	1LE1623-1CB0-....	2450.-
7.5	10	132 M	1LE1523-1CB2-....	2880.-	1LE1623-1CB2-....	3110.-
11	15	160 M	1LE1523-1DB2-....	3780.-	1LE1623-1DB2-....	4230.-
15	20	160 L	1LE1523-1DB4-....	4910.-	1LE1623-1DB4-....	5500.-
18.5	25	180 M	1LE1523-1EB2-....	5360.-	1LE1623-1EB2-....	5780.-
22	30	180 L	1LE1523-1EB4-....	6230.-	1LE1623-1EB4-....	6720.-
30	40	200 L	1LE1523-2AB5-....	8060.-	1LE1623-2AB5-....	8720.-
37	50	225 S	1LE1523-2BB0-....	9060.-	1LE1623-2BB0-....	9820.-
45	60	225 M	1LE1523-2BB2-....	10700.-	1LE1623-2BB2-....	11500.-
55	75	250 M	1LE1523-2CB2-....	13000.-	1LE1623-2CB2-....	13900.-
75	100	280 S	1LE1523-2DB0-....	17300.-	1LE1623-2DB0-....	17800.-
90	125	280 M	1LE1523-2DB2-....	20300.-	1LE1623-2DB2-....	20800.-
110	150	315 S	1LE1523-3AB0-....	25200.-	1LE1623-3AB0-....	26000.-
132	175	315 M	1LE1523-3AB2-....	29900.-	1LE1623-3AB2-....	30600.-
150	200	315 L	1LE1523-3AB4-....	36300.-	1LE1623-3AB4-....	37100.-
185	250	315 L	1LE1523-3AB5-....	42200.-	1LE1623-3AB5-....	43300.-

¹⁾ 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

10

15

20

On
requestSIMOTICS SD 1LE1 Standard Motors – Eagle Line
Orientation

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

Overview (continued)

Category	NEMA Premium Efficient MG1 Motors Table 12-12 (continued)
Series version	Cast-iron series 1LE1523 Basic Line, 1LE1623 Performance Line ¹⁾ (continued)
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 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 ¹⁾
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	P_{rated} , 60 Hz hp	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz						
0.18	0.25	71 M	1LE1523-0CC2-....	750.-		
0.25	0.33	71 M	1LE1523-0CC3-....	873.-		
0.37	0.5	80 M	1LE1523-0DC2-....	896.-		
0.55	0.75	80 M	1LE1523-0DC3-....	1020.-		
0.75	1	90 S	1LE1523-0EC0-....	1150.-		
3	4	132 S	1LE1523-1CC0-....	2020.-	1LE1623-1CC0-....	2190.-
4	5	132 M	1LE1523-1CC2-....	2490.-	1LE1623-1CC2-....	2700.-
5.5	7.5	132 M	1LE1523-1CC3-....	3140.-	1LE1623-1CC3-....	3400.-
7.5	10	160 M	1LE1523-1DC2-....	3990.-	1LE1623-1DC2-....	4460.-
11	15	160 L	1LE1523-1DC4-....	5500.-	1LE1623-1DC4-....	6140.-
15	20	180 L	1LE1523-1EC4-....	6640.-	1LE1623-1EC4-....	7180.-
18.5	25	200 L	1LE1523-2AC4-....	8130.-	1LE1623-2AC4-....	8790.-
22	30	200 L	1LE1523-2AC5-....	9410.-	1LE1623-2AC5-....	10200.-
30	40	225 M	1LE1523-2BC2-....	11600.-	1LE1623-2BC2-....	12800.-
37	50	250 M	1LE1523-2CC2-....	14100.-	1LE1623-2CC2-....	15300.-
45	60	280 S	1LE1523-2DC0-....	17100.-	1LE1623-2DC0-....	17600.-
55	75	280 M	1LE1523-2DC2-....	20300.-	1LE1623-2DC2-....	20800.-
75	100	315 S	1LE1523-3AC0-....	27500.-	1LE1623-3AC0-....	28200.-
90	125	315 M	1LE1523-3AC2-....	31100.-	1LE1623-3AC2-....	31800.-
110	150	315 L	1LE1523-3AC4-....	37400.-	1LE1623-3AC4-....	38200.-
132	175	315 L	1LE1523-3AC5-....	44500.-	1LE1623-3AC5-....	45600.-
160	200	315 L	1LE1523-3AC6-....	50500.-	1LE1623-3AC6-....	51800.-
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz						
2.2	3	132 S			1LE1623-1CD0-....	3160.-
3	4	132 M			1LE1623-1CD2-....	3840.-
3.7	5	160 M			1LE1623-1DD2-....	4720.-
5.5	7.5	160 M			1LE1623-1DD3-....	5800.-
7.5	10	160 L			1LE1623-1DD4-....	7000.-
11	15	180 L			1LE1623-1ED4-....	7820.-
15	20	200 L			1LE1623-2AD5-....	10300.-
18.5	25	225 M			1LE1623-2BD0-....	11700.-
22	30	250 M			1LE1623-2BD2-....	13400.-
30	40	250 M			1LE1623-2CD2-....	17300.-
37	50	280 S			1LE1623-2DD0-....	19500.-
45	60	280 M			1LE1623-2DD2-....	23800.-
55	75	315 S			1LE1623-3AD0-....	28200.-
75	100	315 M			1LE1623-3AD2-....	37700.-
90	125	315 L			1LE1623-3AD4-....	42100.-
110	150	315 L			1LE1623-3AD5-....	50800.-
132	175	315 L			1LE1623-3AD6-....	60600.-

¹⁾ 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 GP 1LE1 Standard Motors

Orientation

Standard delivery times in working days:

2	10	15	20	On request
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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)	3Z1					3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 2/33, for delivery times refer to colored background following the respective price)										
	$P_{\text{rated 1}}$ 50 Hz kW	$P_{\text{rated 2}}$ 50 Hz kW	Frame size FS	Article No.	Base price EUR	$P_{\text{rated 1}}$ 50 Hz kW	$P_{\text{rated 2}}$ 50 Hz kW	Frame size FS	Article No.	Base price EUR
4-/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit										
	1500 rpm	3000 rpm				1500 rpm	3000 rpm			
	1.9	2.4	100 L	1LE1011-1AJ4.-....	994.–	0.65	2.4	100 L	1LE1011-1AP4.-....	994.–
	2.5	3.1	100 L	1LE1011-1AJ5.-....	1180.–	0.8	3.1	100 L	1LE1011-1AP5.-....	1180.–
	3.7	4.4	112 M	1LE1011-1BJ2.-....	1480.–	1.1	4.4	112 M	1LE1011-1BP2.-....	1480.–
	4.7	5.9	132 S	1LE1011-1CJ0.-....	1900.–	1.45	5.9	132 S	1LE1011-1CP0.-....	1900.–
	6.5	8	132 M	1LE1011-1CJ2.-....	2470.–	2	8	132 M	1LE1011-1CP2.-....	2470.–
	9.3	11.5	160 M	1LE1011-1DJ2.-....	3280.–	2.9	11.5	160 M	1LE1011-1DP2.-....	3280.–
	13	16	160 L	1LE1011-1DJ6.-....	4750.–	4.3	16	160 L	1LE1011-1DP6.-....	4750.–
6-/4-pole: 1000/1500 rpm at 50 Hz with two windings										
						1000 rpm	1500 rpm			
						0.6	1.7	100 L	1LE1012-1AQ4.-....	1060.–
						0.8	2.1	100 L	1LE1012-1AQ5.-....	1180.–
						0.9	3	112 M	1LE1012-1BQ2.-....	1370.–
						1.2	3.9	132 S	1LE1012-1CQ0.-....	1700.–
						1.7	5.4	132 M	1LE1012-1CQ2.-....	2100.–
						2.5	7.2	160 M	1LE1012-1DQ2.-....	3060.–
						3.7	12	160 L	1LE1012-1DQ4.-....	4460.–
						6.5	19	180 L	1LE1012-1EQ4.-....	7070.–
						9.5	26	200 L	1LE1012-2AQ5.-....	10100.–
8-/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit										
	750 rpm	1500 rpm				750 rpm	1500 rpm			
	0.55	1.1	100 L	1LE1011-1AL4.-....	835.–	0.5	2	100 L	1LE1011-1AR4.-....	835.–
	0.9	1.5	100 L	1LE1011-1AL5.-....	964.–	0.65	2.5	100 L	1LE1011-1AR5.-....	964.–
	1.1	1.9	112 M	1LE1011-1BL2.-....	1120.–	0.9	3.6	112 M	1LE1011-1BR2.-....	1120.–
	1.6	3.2	132 S	1LE1011-1CL0.-....	1570.–	1.1	4.7	132 S	1LE1011-1CR0.-....	1570.–
	2.2	4.4	132 M	1LE1011-1CL2.-....	2020.–	1.4	6.4	132 M	1LE1011-1CR2.-....	2020.–
	3.5	7	160 M	1LE1011-1DL2.-....	2780.–	2.2	9.5	160 M	1LE1011-1DR2.-....	2780.–
	5.6	11	160 L	1LE1011-1DL4.-....	4120.–	3.3	14	160 L	1LE1011-1DR4.-....	4120.–
						4.5	16	180 M	1LE1011-1ER2.-....	4880.–
						5	18.5	180 L	1LE1011-1ER4.-....	6380.–
						7.5	28	200 L	1LE1011-2AR5.-....	9490.–

Standard delivery times in working days:

2

5

10

15

SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

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				
			1LE1001											IE2	③				
			1PC1001												④				
			1LE1002											IE1	⑤				
			1PC1002												⑥				
			1LE1043										APAC Line	IE3	⑦				
			1LE1041											IE2	⑧				
1LE1023										Eagle Line	NPE (NEMA)	⑨							
1LE1021											NEE (NEMA)	⑩							
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 ¹⁾	3	4	–	■	■	■	■	■	■	■	■	Not for:	APAC Line Eagle Line	⑦, ⑧ ⑨, ⑩					
50 Hz 400 VΔ, 60 Hz 460 VΔ ¹⁾				–	–	■	■	■	■	■	■				■	■	Only for:	APAC Line Eagle Line	⑦, ⑧ ⑨, ⑩
50 Hz 400 VY, 60 Hz 460 VY ^{2) 3)}	0	2	–	–	–	■	■	■	■	■	■								
50 Hz 400 VΔ, 60 Hz 460 VΔ ⁴⁾	0	4	–	–	–	■	■	■	■	■	■								
50 Hz 500 VY, 60 Hz 575 VY ⁷⁾	2	7	–	○	○	○	○	○	○	○	○	Not for:	IEC IE4	①					
50 Hz 500 VΔ, 60 Hz 575 VΔ	4	0	–	○	○	–	–	○	○	○	○				Not for:	IEC IE4	①		
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.–	136.–	136.–						
50 Hz 380 VΔ/660 VY ¹⁾ , 60 Hz 440 VΔ	3	3	–	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line	⑦, ⑧ ⑨, ⑩			
50 Hz 380 VΔ ¹⁾				–	–	–	–	52.90	64.–	82.10	101.–	136.–	136.–				Only for:	APAC Line Eagle Line	⑦, ⑧ ⑨, ⑩
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.–	136.–	136.–						
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	–	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–						
60 Hz 220 VΔ/380 VY	1	7	–	–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	156.–	Not for:	IEC IE1	⑤, ⑥			
60 Hz 230 VΔ/400 VY	1	8	–	–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	156.–				Not for:	IEC IE1	⑤, ⑥
60 Hz 380 VΔ/660 VY ¹⁾	3	0	–	–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	IEC IE1 Eagle Line	⑤, ⑥ ⑨, ⑩			
60 Hz 380 VΔ ¹⁾				–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–				Only for:	Eagle Line	⑨, ⑩
60 Hz 400 VΔ/690 VY ¹⁾				–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–						
60 Hz 400 VΔ ¹⁾			–	–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Only for:	Eagle Line	⑨, ⑩			
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 APAC Line IE2	⑤, ⑥ ⑧			
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 APAC Line IE2	⑤, ⑥ ⑧
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 APAC Line IE2	⑤, ⑥ ⑧			
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 APAC Line IE2	⑤, ⑥ ⑧

For legends and footnotes, see Page 2/34.

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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		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
							1LE1001							IE2	③
							1PC1001								④
							1LE1002							IE1	⑤
															⑥
							1LE1043						APAC Line	IE3	⑦
							1LE1041							IE2	⑧
							1LE1023						Eagle Line	NPE (NEMA)	⑨
														NEE (NEMA)	⑩
							1LE1021								

Voltage at 60 Hz and required power at 60 Hz															
220 VΔ/380 VY; 50 Hz power	9	0	M2A	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
220 VΔ/380 VY; 60 Hz power	9	0	M1A	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
380 VΔ/660 VY; 50 Hz power ¹⁾	9	0	M2B	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
380 VΔ; 50 Hz power ¹⁾				–	–	–	–	52.90	64.–	82.10	101.–	136.–	136.–	Only for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
380 VΔ/660 VY; 60 Hz power ^{1) 5)}	9	0	M1B	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
440 VY; 50 Hz power	9	0	M2C	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
440 VY; 60 Hz power	9	0	M1C	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
440 VΔ; 50 Hz power	9	0	M2D	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
440 VΔ; 60 Hz power	9	0	M1D	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
460 VY; 50 Hz power	9	0	M2E	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
460 VY; 60 Hz power	9	0	M1E	O	O	O	O	O	O	O	O	O	O	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
460 VΔ; 50 Hz power	9	0	M2F	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
460 VΔ; 60 Hz power	9	0	M1F	O	O	O	O	O	O	O	O	O	O	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
575 VY; 50 Hz power ⁷⁾	9	0	M2G	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	IEC IE4 ①
575 VY; 60 Hz power ⁷⁾	9	0	M1G	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
575 VΔ; 50 Hz power ⁷⁾	9	0	M2H	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	IEC IE4 ①
575 VΔ; 60 Hz power ⁷⁾	9	0	M1H	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	APAC Line Eagle Line ⑦, ⑧ ⑨, ⑩
400 VΔ/690 VY; 50 Hz power ¹⁾	9	0	M2J	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	Eagle Line ⑨, ⑩
400 VΔ; 50 Hz power				–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Only for:	Eagle Line ⑨, ⑩
400 VΔ/690 VY; 60 Hz power	9	0	M1J	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	Eagle Line ⑨, ⑩
480 VY; 50 Hz power	9	0	M2K	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
480 VY; 60 Hz power	9	0	M1K	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	Eagle Line ⑨, ⑩
480 VΔ; 50 Hz power	9	0	M2L	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
480 VΔ; 60 Hz power	9	0	M1L	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	Eagle Line ⑨, ⑩
230 VΔ/400 VY; 50 Hz power	9	0	M2M	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
230 VΔ/400 VY; 60 Hz power	9	0	M1M	28.60	32.10	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–	Not for:	Eagle Line ⑨, ⑩
Voltage at 87 Hz and 87 Hz power															
400 VΔ ⁵⁾	9	0	M3A	–	–	36.40	42.60	52.90	64.–	82.10	101.–	136.–	136.–		
Non-standard voltage and/or frequencies															
Non-standard winding ⁶⁾	9	0	M1Y • and customer specifications	57.70	64.90	72.90	85.80	106.–	129.–	164.–	204.–	263.–	263.–		

- 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 and 1LE1023 NEMA Premium Efficient, 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.

⁵⁾ 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**On
request**SIMOTICS GP 1LE1 Standard Motors**
Article No. supplements and special versions

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

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 ¹⁾	9	0	M1Y • and customer specifications	106.–	129.–	164.–	204.–	263.–	

- 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

¹⁾ 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 SD 1LE1 Standard Motors

Article No. supplements and special versions

Voltages · Cast-iron series 1LE15 Basic Line, 1LE16 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	71	80	90	100	112	132	160	180	200	225	250	280	315	IEC	IE4	①											
			1LE1504 Basic Line																②										
			1LE1604 Performance Line																										
			1LE1503 Basic Line																	IE3	③								
			1LE1603 Performance Line																										
			1LE1501 Basic Line																			IE2	⑤						
			1LE1601 Performance Line																										
			1LE1502 Basic Line																					IE1	⑦				
			1LE1543 Basic Line																										
			1LE1643 Performance Line																										
			1LE1541 Basic Line																							APAC Line	IE3	⑧	
			1LE1523 Basic Line																										
1LE1623 Performance Line														Eagle Line	NPE (NEMA)	⑪													
1LE1521 Basic Line																	⑫												
																		NEE (NEMA)	⑬										

For legends and footnotes, see Page 2/37.

Standard delivery times in working days:

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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
		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 IE3 ⑧
		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 ... - ... - ... - ...	Order code		
Voltage at 60 Hz and required power (continued)			
460 VY; 60 Hz power ²⁾	9 0	M1E	– – – O O O O O O O O Not for: APAC Line ⑧, ⑨, ⑩ Eagle Line ⑪, ⑫, ⑬
460 VΔ; 50 Hz power	9 0	M2F	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.–
460 VΔ; 60 Hz power ²⁾	9 0	M1F	– – – O O O O O O O O Not for: APAC Line ⑧, ⑨, ⑩ Eagle Line ⑪, ⑫, ⑬
575 VY; 50 Hz power	9 0	M2G	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Not for: IEC IE4 ①, ② frame sizes 100 ... 160
575 VY; 60 Hz power ²⁾	9 0	M1G	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Not for: ⑩, ⑪, ⑫, ⑬ and ①, ② frame sizes 100 ... 160
575 VΔ; 50 Hz power	9 0	M2H	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Not for: IEC IE4 ①, ② frame sizes 100 ... 160
575 VΔ; 60 Hz power ²⁾	9 0	M1H	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Not for: ⑩, ⑪, ⑫, ⑬ and ①, ② frame sizes 100 ... 160
400 VΔ/690 VY; 50 Hz power ¹⁾	9 0	M2J	32.10 36.40 42.60 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Not for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
400 VΔ; 50 Hz power ¹⁾			32.10 36.40 42.60 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.– Only for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
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.– Not for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
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.– Not for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
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.– Not for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
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.– Not for: IEC IE1 ⑦ Eagle Line ⑪, ⑫
Voltage at 87 Hz and 87 Hz power			
400 VΔ ⁵⁾	9 0	M3A	– – – 52.90 64.– 82.10 101.– 136.– 156.– 211.– 241.– 311.– 404.–
Non-standard voltage and/or frequencies			
Non-standard winding ⁶⁾	9 0	M1Y • and cus- tomer specifi- cations	64.30 72.90 85.80 106.– 129.– 164.– 204.– 263.– 320.– 474.– 597.– 764.– 993.–

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

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

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

³⁾ Delta connection is not possible.

⁴⁾ Star connection is not possible.

⁵⁾ 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.

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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			
1LE10 (-Z) 1PC10 (-Z)	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	1LE1004										IEC	IE4	①
			1LE1003											IE3	②
			1LE1001											IE2	③
			1PC1001												④
			1LE1002											IE1	⑤
			1PC1002												⑥
			1LE1043										APAC Line	IE3	⑦
			1LE1041											IE2	⑧
			1LE1023										Eagle Line	NPE (NEMA)	⑨
			1LE1021											NEE (NEMA)	⑩
													Pole-changing		⑪
															⑫
Without flange															
IM B3 ^{1) 2) 3)}		A	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM B6 ^{2) 3)}		T	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM B7 ^{2) 3) 9)}		U	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM B8 ^{2) 3)}		V	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM V6 ^{2) 3)}		D	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM V5 without protective cover ^{2) 3)}		C	—	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩
IM V5 with protective cover ^{2) 3) 4) 5) 6)}		C	H00	—	—	55.60	55.60	80.80	80.80	141.—	141.—	188.—	283.—	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩ Combination with order code F90
With flange		EN 50347 DIN 42948	FF115 A 140	FF130 A 160	FF165 A 200	FF165 A 200	FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400			
IM B5 ^{2) 7)}		F	—	42.60 47.30	53.70 64.40	53.70 64.40	79.70 99.—	99.— 129.—	129.— 167.—	167.— 264.—	264.— 320.—	320.—			
IM V1 without protective cover ²⁾		G	—	42.60 47.30	53.70 64.40	53.70 64.40	79.70 99.—	99.— 129.—	129.— 167.—	167.— 263.—	263.— 318.—	318.—			
IM V1 with protective cover ^{2) 4) 5) 6)}		G	H00	—	—	109.30 120.—	160.50 179.80	270.— 308.—	308.— 451.—	451.— 601.—	601.—	601.—	Not for:	Combination with order code F90	
IM V3 ⁴⁾		H	—	42.60 47.30	53.70 64.40	53.70 64.40	79.70 99.—	99.— 129.—	129.— 167.—	167.— 264.—	264.— 320.—	320.—			
IM B35 ³⁾		J	—	48.— 52.—	57.— 67.—	57.— 67.—	88.— 108.—	134.— 185.—	185.— 309.—	309.— 412.—	412.—	412.—	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩	

For legends and footnotes, see Page 2/41.

Standard delivery times in working days:

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SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

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 -Z	Frame size										Motor version		
				63	71	80	90	100	112	132	160	180	200			
									1LE1004					IEC	IE4	①
									1LE1003						IE3	②
				1LE1001											IE2	③
									1PC1001							④
				1LE1002										Eagle Line	IE1	⑤
									1PC1002							⑥
									1LE1043					APAC Line	IE3	⑦
									1LE1041						IE2	⑧
					1LE1023					Eagle Line	NPE (NEMA)	⑨				
					1LE1021						NEE (NEMA)	⑩				
1LE10 -Z					1LE1011					Pole-changing				⑪		
1PC10 -Z					1LE1012									⑫		
With special flange next larger		EN 50347 DIN 42948						-	-	FF265 A 300	FF265 A 300	FF300 A 350	-	-	-	
IM B5 ^{2) 7)}		F	P01	-	-	-	-	126.50	145.80	187.40	-	-	-			
IM V1 without protective cover ²⁾		G	P01	-	-	-	-	126.50	145.80	175.80	-	-	-			
IM V1 with protective cover ^{2) 4) 5) 6)}		G	P01+H00	-	-	-	-	207.30	226.60	328.40	-	-	-	Not for:	Combination with order code F90	
IM V3 ⁴⁾		H	P01	-	-	-	-	126.50	145.80	187.40	-	-	-			
IM B35 ³⁾		J	P01	-	-	-	-	134.40	154.80	192.40	-	-	-	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩	
With special flange next smaller		EN 50347 DIN 42948						FF130 A 160	FF165 A 200	FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF265 A 300	FF300 A 350	
IM B5 ^{2) 7)}		F	P02	-	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
IM V1 without protective cover ²⁾		G	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
IM V1 with protective cover ^{2) 4) 5) 6)}		G	P02+H00	-	-	-	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Not for: Combination with order code F90
IM V3 ⁴⁾		H	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
IM B35 ³⁾		J	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Not for: APAC Line IE2 ⑧ Eagle Line NEE ⑩

For legends and footnotes, see Page 2/41.

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SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

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 -Z	Frame size										Motor version		
				63	71	80	90	100	112	132	160	180	200			
									1LE1004					IEC	IE4	①
									1LE1003						IE3	②
				1LE1001											IE2	③
									1PC1001					Eagle Line	④	
				1LE1002											IE1	⑤
									1PC1002						⑥	
									1LE1043					APAC Line	IE3	⑦
									1LE1041						IE2	⑧
					1LE1023					Eagle Line	⑨					
					1LE1021						NEE (NEMA) ⑩					
1LE10 -Z					1LE1011					Pole-changing ⑪						
1PC10 -Z					1LE1012					⑫						
With flange		EN 50347 DIN 42948		FT75 C 90	FT85 C 105	FT100 C 120	FT115 C 140	FT130 C 160	FT130 C 160	FT165 C 200	FT215 C 250	-	-			
IM B14 ^{2) 8)}		K	-	42.60	47.30	53.70	64.40	79.70	99.-	129.-	167.-	-	-			
IM V19 ²⁾		L	-	42.60	47.30	53.70	64.40	79.70	99.-	129.-	167.-	-	-			
IM V18 without protective cover ²⁾		M	-	42.60	47.30	53.70	64.40	79.70	99.-	129.-	167.-	-	-			
IM V18 with protective cover ^{2) 4) 5) 6)}		M	H00	-	-	109.30	120.-	160.50	179.80	270.-	308.-	-	-	Not for:	Combination with order code F90	
IM B34 ³⁾		N	-	42.60	47.30	56.70	67.-	87.60	108.-	134.-	185.-	-	-	Not for:	Eagle Line NEE ⑩	
With special flange next larger ¹⁰⁾		EN 50347 DIN 42948				FT130 C 160	FT130 C 160	FT165 C 200	FT165 C 200	FT215 C 250	-	-	-			
IM B14 ^{2) 8) 10)}		K	P01	-	-	100.50	111.20	126.50	145.80	187.40	-	-	-			
IM V19 ²⁾		L	P01	-	-	100.50	111.20	126.50	145.80	187.40	-	-	-			
IM V18 without protective cover ²⁾		M	P01	-	-	100.50	111.20	126.50	145.80	187.40	-	-	-			
IM V18 with protective cover ^{2) 4) 5) 6)}		M	P01+H00	-	-	156.10	166.80	207.30	226.60	328.40	-	-	-	Not for:	Combination with order code F90	
IM B34 ³⁾		N	P01	-	-	103.50	113.80	134.40	154.80	192.40	-	-	-	Not for:	APAC Line IE2 ⑧ Eagle Line NEE ⑩	

For legends and footnotes, see Page 2/41.

Standard delivery times in working days:

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SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Types of construction · Aluminum series 1LE10, 1PC10

Types of construction	Article No. supplement	Frame size										Motor version		
		63	71	80	90	100	112	132	160	180	200			
1LE10 -Z 1PC10 -Z	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					1LE1004						IEC	IE4	①
						1LE1003							IE3	②
		1LE1001											IE2	③
						1PC1001								④
		1LE1002											IE1	⑤
						1PC1002								⑥
						1LE1043						APAC Line	IE3	⑦
						1LE1041							IE2	⑧
						1LE1023						Eagle Line	NPE (NEMA)	⑨
						1LE1021							NEE (NEMA)	⑩
1LE10 -Z 1PC10 -Z	Order code					1LE1011						Pole-changing		⑪
						1LE1012								⑫
With special flange next smaller	EN 50347 DIN 42948					FT115	FT115	FT130	FT165					
						C 140	C 140	C 160	C 200					
IM B14 ^{2) 8)}		K	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	-	-	Not for: EC IE4 ①
IM V19 ²⁾		L	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	-	-	Not for: IEC IE4 ①
IM V18 without protective cover ²⁾		M	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	-	-	Not for: IEC IE4 ①
IM V18 with protective cover ^{2) 4) 5) 6)}		M	P02+H00	-	-	-	-	O. R.	O. R.	O. R.	O. R.	-	-	Not for: IEC IE4 ① Combination with order code F90
IM B34 ³⁾		N	P02	-	-	-	-	O. R.	O. R.	O. R.	O. R.	-	-	Not for: IEC IE4 ① APAC Line IE2 ⑧ Eagle Line NEE ⑩

□ 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) 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 ≤ 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).

- 6) 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 B5 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.
- 10) 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	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					
	A	For types of construction with order code(s) Article No. with additional identification code -Z	1LE1504 Basic Line															IEC	IE4	①		
			1LE1604 Performance Line																			
			1LE1503 Basic Line															IE3	③	②		
			1LE1603 Performance Line																			
			1LE1501 Basic Line															IE2	⑤	④		
			1LE1601 Performance Line																			
			1LE1502 Basic Line															IE1	⑦	⑥		
			1LE1543 Basic Line																			
			1LE1643 Performance Line															APAC Line	IE3	⑧		
			1LE1541 Basic Line																			
			1LE1523 Basic Line															Eagle Line	NPE (NEMA)	⑩		
			1LE1623 Performance Line																			
			1LE1521 Basic Line															NEE (NEMA)	⑪	⑨		
1LE1 -Z																						
Without flange																						
IM B3 1) 2) 3)		A	—	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑩, ③ 2-, 4-, 6-pole ≤ 200 hp; ⑪, ② 8-pole ≤ 200 hp			
IM B6 2) 3)		T	—	□	□	□	□	□	□	□	□	□	□	□	□	□						
IM B7 2) 3) 9)		U	—	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑩, ③ 2-, 4-, 6-pole ≤ 200 hp; ⑪, ② 8-pole ≤ 200 hp			
IM B8 2) 3)		V	—	□	□	□	□	□	□	□	□	□	□	□	□	□						
IM V6 2) 3)		D	—	□	□	□	□	□	□	□	□	□	□	□	□	451.–	□	Not for:	⑩, ③ 2-, 4-, 6-pole ≤ 200 hp; ⑪, ② 8-pole ≤ 200 hp			
IM V5 without protective cover 2) 3)		C	—	□	□	□	□	□	□	□	□	□	□	□	□	451.–	□					
IM V5 with protective cover 2) 3) 4) 5)		C	H00	55.60	55.60	55.60	80.80	80.80	141.–	141.–	188.–	283.–	375.–	469.–	562.–	751.–	751.–	Not for:	⑩, ③ 2-, 4-, 6-pole ≤ 200 hp; ⑪, ② 8-pole ≤ 200 hp			

For legends and footnotes, see Page 2/45.

Standard delivery times in working days:

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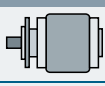
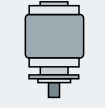
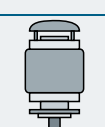
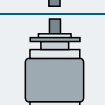
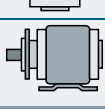
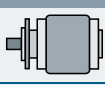
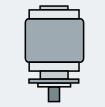
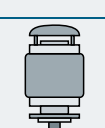
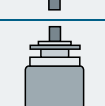
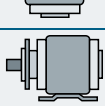
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SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

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

Types of construction	Article No. supplement 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				
		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	⑧
		1LE1643 Performance Line																⑨		
		1LE1541 Basic Line																IE2	⑩	
		1LE1523 Basic Line																	Eagle Line	⑪
1LE1623 Performance Line																NPE (NEMA)	⑫			
1LE1521 Basic Line																NEE (NEMA)	⑬			
1LE1 -Z																				

With flange		EN 50347 DIN 42948	FF130 A 160	FF165 A 200	FF165 A 200	FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450	FF500 A 550	FF600 A 660	FF600 A 660	FF600 A 660		
IM B5 2) 6)		F	—	47.30	53.70	64.40	79.70	99.—	129.—	167.—	264.—	320.—	414.—	497.—	724.—	1000.—	—	—
IM V1 without protec- tive cover 2)		G	—	47.30	53.70	64.40	79.70	99.—	129.—	167.—	263.—	318.—	416.—	507.—	727.—	1040.—	1470.—	1040.—
IM V1 with protec- tive cover 2) 4) 5)		G	H00	102.90	109.30	120.—	160.50	179.80	270.—	308.—	451.—	601.—	791.—	976.—	1289.—	1791.—	2221.—	1791.—
IM V3 5)		H	—	47.30	53.70	64.40	79.70	99.—	129.—	167.—	264.—	320.—	414.—	497.—	724.—	1000.—	—	—
IM B35 3)		J	—	51.50	56.70	67.—	87.60	108.—	134.—	185.—	309.—	412.—	515.—	721.—	927.—	1150.—	1150.—	1150.—
With special flange next larger		EN 50347 DIN 42948	—	—	—	FF265 A 300	FF265 A 300	FF300 A 350	—	—	—	—	—	—	—	—	—	—
IM B5 2) 6)		F	P01	—	—	—	126.50	145.80	187.40	—	—	—	—	—	—	—	—	—
IM V1 without protec- tive cover 2)		G	P01	—	—	—	126.50	145.80	187.40	—	—	—	—	—	—	—	—	—
IM V1 with protec- tive cover 2) 4) 5)		G	P01+ H00	—	—	—	207.30	226.60	328.40	—	—	—	—	—	—	—	—	—
IM V3 5)		H	P01	—	—	—	126.50	145.80	187.40	—	—	—	—	—	—	—	—	—
IM B35 3)		J	P01	—	—	—	134.40	154.80	192.40	—	—	—	—	—	—	—	—	—

Not for:	⑩, ③ 2-, 4-, 6-pole ≤ 200 hp; ⑪, ② 8-pole ≤ 200 hp; ①, ② on request
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For legends and footnotes, see Page 2/45.

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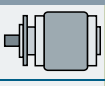
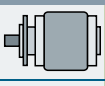
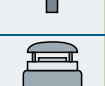
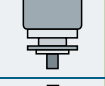
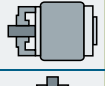
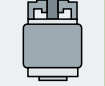
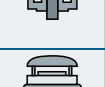
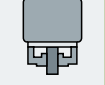
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SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

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

Types of construction	Article No. supplement	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. For types of construction with order code(s) Article No. with additional identification code -Z Order code	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	IE3	⑧
		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
With special flange next smaller	EN 50347 DIN 42948	-	FF130 A 160	FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	-	-	-	-	-	-	-	-	-	
IM B5 2) 6)		F	P02	-	O.R.	O.R.	O.R.	O.R.	-	-	-	-	-	-	-	-	
IM V1 without protective cover 2)		G	P02	-	-	-	O.R.	O.R.	O.R.	O.R.	-	-	-	-	-	-	
IM V1 with protective cover 2) 4) 5)		G	P02+ H00	-	-	-	O.R.	O.R.	O.R.	O.R.	-	-	-	-	-	-	
IM V3 5)		H	P02	-	-	-	O.R.	O.R.	O.R.	O.R.	-	-	-	-	-	-	
IM B35 3)		J	P02	-	-	-	O.R.	O.R.	O.R.	O.R.	-	-	-	-	-	-	Not for: ⑩, ③ 2-, 4-, 6-pole ≤ 200 hp ⑪, ⑫ 8-pole ≤ 200 hp
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	-	-	-	-	-	-	-	-	
IM B14 2) 7)		K	-	-	-	-	79.70	99.-	129.-	167.-	-	-	-	-	-	-	
IM V19 2)		L	-	-	-	-	79.70	99.-	129.-	167.-	-	-	-	-	-	-	
IM V18 without protective cover 2)		M	-	-	-	-	79.70	99.-	129.-	167.-	-	-	-	-	-	-	
IM V18 with protective cover 2) 4) 5)		M	H00	-	-	-	160.50	179.80	270.-	308.-	-	-	-	-	-	-	
IM B34 3)		N	-	51.50	56.70	67.-	87.60	108.-	134.-	185.-	-	-	-	-	-	-	Not for: ⑩, ③ 2-, 4-, 6-pole ≤ 200 hp ⑪, ⑫ 8-pole ≤ 200 hp

For legends and footnotes, see Page 2/45.

Standard delivery times in working days:

2

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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	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		
1LE1 -Z	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	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	IE3	⑧
		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
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	–	–	–	126.50	145.80	187.40	–	–	–	–	–	–	–		
IM V19 2) 8)		L	P01	–	–	–	126.50	145.80	187.40	–	–	–	–	–	–	–		
IM V18 without protective cover 2) 8)		M	P01	–	–	–	126.50	145.80	187.40	–	–	–	–	–	–	–		
IM V18 with protective cover 2) 4) 5) 8)		M	P01+H00	–	–	–	207.30	226.60	328.40	–	–	–	–	–	–	–		
IM B34 3) 8)		N	P01	–	–	–	134.40	154.80	192.40	–	–	–	–	–	–	–	Not for:	⑩, ⑧ 2-, 4-, 6-pole ≤ 200 hp ⑪, ⑫ 8-pole ≤ 200 hp

- Standard version
 O. R. Possible on request
 – 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) 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 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
			1LE1001											IE2	③
							1PC1001								④
			1LE1002											IE1	⑤
							1PC1002								⑥
							1LE1043						APAC Line	IE3	⑦
							1LE1041							IE2	⑧
							1LE1023						Eagle Line	NPE (NEMA)	⑨
							1LE1021							NEE (NEMA)	⑩
1LE10							1LE1011						Pole-changing		
1PC10							1LE1012								
		Order code													

Motor protection															
Without (Standard)	A	–	□	□	□	□	□	□	□	□	□	□	□	□	□
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	37.10	38.40	36.40	42.60	117.–	117.–	176.–	176.–	234.–	234.–			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	173.–	173.–	173.–	173.–	201.–	201.–	269.–	269.–	413.–	413.–			
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	103.–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–			
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	207.–	207.–	207.–	207.–	236.–	236.–	352.–	352.–	539.–	539.–			
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	H	–	–	–	–	–	1480.–	1480.–	1480.–	1480.–	1480.–	1480.–			
1 Pt1000 resistance thermometer – 2-wire circuit (2 terminals) ^{1) 2)}	K	–	103.–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–			
2 Pt1000 resistance thermometers (4 terminals) ^{1) 2)}	L	–	207.–	207.–	207.–	207.–	236.–	236.–	352.–	352.–	539.–	539.–			
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) ¹⁾	P	–	–	–	–	–	1020.–	1020.–	1020.–	1020.–	1310.–	1310.–			
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ¹⁾	Q	–	–	–	–	–	1280.–	1280.–	1280.–	1280.–	1970.–	1970.–			
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ¹⁾	R	–	–	–	–	–	1980.–	1980.–	1980.–	1980.–	2900.–	2900.–			
3 NTC resistors - for tripping (6 terminals) ¹⁾	Z	Q2A	–	–	–	–	236.–	236.–	350.–	350.–	–	–			
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	115.–	115.–	115.–	115.–	131.–	131.–	192.–	192.–	265.–	265.–			

- Standard version
– Not possible

¹⁾ 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.
²⁾ 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

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	IE4	①																	
			1LE1504 Basic Line												②																				
			1LE1604 Performance Line																																
			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	IE3	⑧						
			1LE1643 Performance Line																											⑨					
			1LE1541 Basic Line																												IE2	⑩			
			1LE1523 Basic Line																														Eagle Line	NPE (NEMA)	⑪
			1LE1623 Performance Line																																
1LE1521 Basic Line												NEE (NEMA)	⑬																						

- Standard version
– Not possible

Note:

Options are available specifically for bearing protection –
For order codes and descriptions, see from Page 2/57.

¹⁾ 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.

²⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

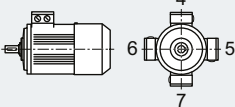
³⁾ Not UL-certified. Not possible in combination with the option D31.

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SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Terminal box position · Aluminum series 1LE10, 1PC10**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	63	71	80	90	100	112	132	160	180	200			
							1LE1004						IEC	IE4	①
					1LE1003									IE3	②
			1LE1001											IE2	③
							1PC1001								④
			1LE1002											IE1	⑤
							1PC1002								⑥
					1LE1043								APAC Line	IE3	⑦
					1LE1041									IE2	⑧
					1LE1023								Eagle Line	NPE (NEMA)	⑨
					1LE1021									NEE (NEMA)	⑩
1LE10							1LE1011						Pole-changing		⑪
1PC10		Order code					1LE1012								⑫
Terminal box position															
Terminal box top ¹⁾	4	–	□	□	□	□	□	□	□	□	□	□			
Terminal box on RHS ²⁾	5	–	–	–	35.20	39.80	102.–	111.–	121.–	129.–	182.–	214.–			
Terminal box on LHS ²⁾	6	–	–	–	35.20	39.80	102.–	111.–	121.–	129.–	182.–	214.–			
Terminal box bottom ^{2) 3)}	7	–	–	–	–	–	102.–	111.–	121.–	129.–	–	–			

- ☐ Standard version
 – Not possible

¹⁾ 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.

²⁾ For types of construction with feet, screwed-on feet are standard.

³⁾ Not generally possible for motors with feet.

Standard delivery times in working days:

2

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10

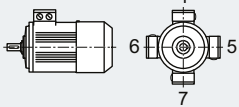
15

SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

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		
		71	80	90	100	112	132	160	180	200	225	250	280	315		
	Terminal box position code 16th position of the Article No.				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	IE3 ⑧
					1LE1643 Performance Line											⑨
					1LE1541 Basic Line										IE2	⑩
					1LE1523 Basic Line										Eagle Line	NPE ⑪
					1LE1623 Performance Line											(NEMA) ⑫
					1LE1521 Basic Line										NEE (NEMA)	⑬
	Order code															

Terminal box position																
Terminal box top ¹⁾	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Terminal box on RHS ²⁾	5	–	–	51,50	72,10	102.–	111.–	121.–	129.–	364.–	428.–	507.–	753.–	846.–	974.–	–
Terminal box on LHS ²⁾	6	–	–	51,50	72,10	102.–	111.–	121.–	129.–	364.–	428.–	507.–	753.–	846.–	974.–	–
Terminal box bottom ³⁾	7	–	–	–	–	102.–	111.–	121.–	129.–	–	–	–	–	–	–	–

- ☐ Standard version
 – Not possible

¹⁾ 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.

SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Standard delivery times in working days:

2**5****10****15**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
		1LE1001											IE2	③
						1PC1001								④
		1LE1002											IE1	⑤
						1PC1002								⑥
				1LE1043								APAC Line	IE3	⑦
				1LE1041									IE2	⑧
				1LE1023								Eagle Line	NPE (NEMA)	⑨
						1LE1021							NEE (NEMA)	⑩
1LE10 -Z						1LE1011						Pole-changing		⑪
1PC10 -Z	Order code					1LE1012								⑫
Motor protection														
1 or 3 PTC thermistors – for tripping (2 terminals)	Q11	34.–	34.–	36.40	42.60	117.–	117.–	176.–	176.–	234.–	234.–			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	Q12	173.–	173.–	173.–	173.–	201.–	201.–	269.–	269.–	413.–	413.–			
1 temperature sensor KTY84-130 (2 terminals)	Q23	103.–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–			
2 temperature sensors KTY84-130 (2 terminals)	Q25	207.–	207.–	207.–	207.–	236.–	236.–	352.–	352.–	539.–	539.–			
3 bimetal sensors (NC contact) for tripping (2 terminals)	Q31	–	–	115.–	115.–	131.–	131.–	192.–	192.–	265.–	265.–			
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32	–	–	206.–	206.–	236.–	236.–	345.–	345.–	468.–	468.–			
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33	–	–	–	–	–	–	–	–	275.–	275.–			
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34	–	–	–	–	–	–	–	–	478.–	478.–			
1 Pt1000 resistance thermometer (2 terminals) ⁴⁰⁾	Q35	103.–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–			
2 Pt1000 resistance thermometers (4 terminals) ⁴⁰⁾	Q36	207.–	207.–	207.–	207.–	236.–	236.–	352.–	352.–	539.–	539.–			
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	Q60	–	–	–	–	1220.–	1220.–	1220.–	1220.–	1480.–	1480.–			
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)	Q61	–	–	–	–	1880.–	1880.–	1880.–	1880.–	2420.–	2420.–			
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62	–	–	–	–	1020.–	1020.–	1020.–	1020.–	1310.–	1310.–			
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63	–	–	–	–	1280.–	1280.–	1280.–	1280.–	1970.–	1970.–			
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64	–	–	–	–	1980.–	1980.–	1980.–	1980.–	2900.–	2900.–			
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)	Q72	–	–	–	–	O. R.	O. R.	O. R.	O. R.	4220.–	4220.–			
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78	–	–	–	–	O. R.	O. R.	O. R.	O. R.	4640.–	4640.–			
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79	–	–	–	–	O. R.	O. R.	O. R.	O. R.	5560.–	5560.–			
Motor connection and terminal box														
External grounding	H04	23.50	23.50	23.50	23.50	28.30	28.30	28.30	28.30	36.40	36.40			
Terminal box on NDE ³⁾	H08	61.80	72.10	82.40	94.80	117.–	144.–	186.–	253.–	948.–	979.–			
Rotation of the terminal box through 90°, entry from DE ¹⁾	R10	O	O	O	O	O	O	O	O	44.20	57.30			
Rotation of the terminal box through 90°, entry from NDE	R11	O	O	O	O	O	O	O	O	44.20	57.30			
Rotation of the terminal box through 180°	R12	O	O	O	O	O	O	O	O	44.20	57.30			
Terminal box in position 0°; connection from right ⁴¹⁾	R13	O	O	O	O	O	O	O	–	–	–			
One metal cable gland	R15	58.60	58.60	58.60	58.60	110.–	110.–	110.–	140.–	140.–	162.–			
One metal cable gland, maximum configuration	R18	–	84.50	84.50	84.50	156.–	156.–	156.–	205.–	205.–	236.–			
3 cables protruding, 0.5 m long ⁴⁾⁵⁾	R20	56.50	56.50	56.20	56.20	67.40	80.80	98.70	116.–	–	–		Not for: ⑪, ⑫	

For legends and footnotes, see Page 2/56.

Standard delivery times in working days:

2

5

10

15

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
		1LE1001											IE2	③
						1PC1001								④
		1LE1002										IE1	⑤	
						1PC1002								⑥
						1LE1043						APAC Line	IE3	⑦
						1LE1041							IE2	⑧
						1LE1023						Eagle Line	NPE (NEMA)	⑨
						1LE1021							NEE (NEMA)	⑩
		1LE10-Z				1LE1011						Pole-changing		⑪
1PC10-Z				1LE1012								⑫		
Motor connection and terminal box (continued)														
3 cables protruding, 1.5 m long ^{4) 5)}	R21		68.–	68.–	68.–	68.–	81.30	97.70	119.–	141.–	O. R.	O. R.	Not for: ⑪, ⑫	
6 cables protruding, 0.5 m long ⁴⁾	R22		87.10	87.10	87.10	87.10	104.–	125.–	155.–	182.–	O. R.	O. R.		
6 cables protruding, 1.5 m long ⁴⁾	R23		111.–	111.–	111.–	111.–	133.–	161.–	195.–	232.–	O. R.	O. R.		
6 cables protruding, 3 m long ⁴⁾	R24		177.–	177.–	177.–	177.–	214.–	252.–	316.–	378.–	O. R.	O. R.		
Reduction piece for M cable gland in accordance with British Standard, both cable entries mounted ²⁾	R30		–	–	–	–	190.–	214.–	214.–	239.–	–	–		
Larger terminal box	R50		48.50	48.50	101.–	101.–	210.–	210.–	269.–	307.–	466.–	513.–	Not for: ③, ⑩ < frame size 100	
	–		–	–	□	□	□	□	□	□	□	□	Only for: ③, ⑩ < frame size 100	
Auxiliary terminal box, aluminum	R60		–	–	–	–	–	–	–	–	278.–	278.–		
Motor connector Han-Drive 10e for 230 VΔ/400 VY ³⁰⁾	R70		143.–	143.–	143.–	143.–	380.–	380.–	435.–	–	–	–		
Motor connector Han-Drive 10e with EMC for 230 VΔ/400 VY ³⁰⁾	R71		265.–	265.–	265.–	265.–	517.–	517.–	593.–	–	–	–		
Small motor connector CQ12 with EMC	R72		–	–	216.–	216.–	–	–	–	–	–	–		
Small motor connector CQ12 without EMC	R73		–	–	94.30	94.30	–	–	–	–	–	–		
Windings and insulation														
Temperature class 155 (F), utilized acc. to 155 (F), with service factor (SF)	N01		–	–	–	–	47.40	47.40	63.–	63.–	80.–	80.–		
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	N02		–	–	–	–	47.40	47.40	63.–	63.–	80.–	80.–		
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	N03		41.20	41.20	40.70	40.70	47.40	47.40	63.–	63.–	80.–	80.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	N05		41.20	41.20	40.70	40.70	47.40	47.40	63.–	63.–	80.–	80.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	N06		41.20	41.20	40.70	40.70	47.40	47.40	63.–	63.–	80.–	80.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	N07		61.80	64.40	72.90	85.80	106.–	129.–	164.–	204.–	263.–	320.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	N08		61.80	64.40	72.90	85.80	106.–	129.–	164.–	204.–	263.–	320.–		
Temperature class 180 (H) ³¹⁾	N10		155.–	155.–	155.–	155.–	–	–	–	–	–	–	Not for: ①, ⑦, ⑧, ⑩, ⑫	
Temperature class 180 (H) at rated power and max. CT 60 °C ^{6) 31)}	N11		216.–	216.–	216.–	216.–	252.–	299.–	397.–	484.–	688.–	963.–	Not for: ①	
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30		134.–	134.–	134.–	134.–	134.–	134.–	134.–	206.–	299.–	412.–		
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N31		196.–	196.–	216.–	216.–	216.–	247.–	278.–	391.–	505.–	649.–		

For legends and footnotes, see Page 2/56.

SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Standard delivery times in working days:

2	5	10	15	On request
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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
		1LE1001											IE2	③
						1PC1001								④
		1LE1002											IE1	⑤
								1PC1002						⑥
				1LE1043								APAC Line	IE3	⑦
				1LE1041									IE2	⑧
				1LE1023								Eagle Line	NPE (NEMA)	⑨
				1LE1021									NEE (NEMA)	⑩
1LE10-Z						1LE1011						Pole-changing		⑪
1PC10-Z	Order code					1LE1012								⑫

Windings and insulation (continued)

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	92.70	101.–	109.–	129.–	159.–	192.–	247.–	304.–	393.–	483.–		
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	Y52 • and spec. power, CT ... °C or IA m above sea level	40.70	40.70	40.70	40.70	47.40	40.70	63.–	63.–	80.30	80.30		
Temperature class 180 (H), utilized acc. to 155 (F), other requirements	Y75 • and spec. power, CT ... °C or IA m above sea level	–	–	–	–	O. R.	O. R.	O. R.	O. R.	–	–	Not for:	①

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	20.50	20.50	20.50	27.30	27.30	27.30	43.50	43.50	81.70	81.70		
Special finish C3	S02	36.10	36.10	36.10	36.10	61.80	61.80	82.40	82.40	113.–	124.–		
Special finish sea air resistant C4	S03	494.–	494.–	494.–	494.–	525.–	525.–	577.–	577.–	618.–	659.–		
Internal coating	S05	87.60	87.60	87.60	87.60	87.60	87.60	87.60	87.60	87.60	87.60		
Top coat polyurethane ³⁴⁾	S06	30.90	30.90	30.90	50.50	72.10	98.90	147.–	206.–	247.–	303.–		
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	82.40	113.–		
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.–	608.–	649.–	649.–	680.–	680.–	690.–	700.–		

Modular technology – Basic versions ⁷⁾

Mounting of holding brake (standard assignment) ^{5) 28)}	F01	309.–	381.–	459.–	551.–	644.–	783.–	1010.–	2000.–	4420.–	6180.–	Not for:	④, ⑥
Mounting of brake for higher switching frequency (operating brake)	F02	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	–	–		
Mounting of separately driven fan ²⁹⁾	F70	824.–	824.–	824.–	824.–	824.–	968.–	1050.–	1220.–	1340.–	2010.–	Not for:	④, ⑥
Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I	G11	O. R.	O. R.	680.–	721.–	762.–	814.–	855.–	896.–	937.–	979.–		
Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I	G12	O. R.	O. R.	979.–	1050.–	1120.–	1190.–	1270.–	1340.–	1410.–	1480.–		

For legends and footnotes, see Page 2/56.

Standard delivery times in working days:

2

5

10

15

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
		1LE1001											IE2 ③
						1PC1001							④
		1LE1002										IE1	⑤
								1PC1002					⑥
				1LE1043								APAC Line	IE3 ⑦
				1LE1041									IE2 ⑧
				1LE1023								Eagle Line	NPE (NEMA) ⑨
				1LE1021									NEE (NEMA) ⑩
1LE10.....-Z						1LE1011						Pole-changing	⑪
1PC10.....-Z	Order code					1LE1012							⑫
Modular technology – Additional versions													
Brake supply voltage 24 V DC	F10	34.50	34.50	34.50	34.50	51.90	51.90	51.90	51.90	69.20	69.20	Not for:	④, ⑥
Brake supply voltage 230 V AC, 50/60 Hz	F11	34.50	34.50	34.50	34.50	O	O	O	O	O	O	Not for:	④, ⑥
Brake supply voltage 400 V AC, 50/60 Hz	F12	34.50	34.50	34.50	34.50	51.90	51.90	51.90	51.90	69.20	69.20	Not for:	④, ⑥
Mechanical manual brake release with lever (no locking)	F50	245.–	245.–	245.–	245.–	259.–	259.–	288.–	418.–	608.–	709.–	Not for:	④, ⑥
Special technology ⁷⁾													
Mounting of LL 861 900 220 rotary pulse encoder ⁹⁾	G04	–	–	–	–	2940.–	2940.–	2940.–	2940.–	2940.–	2940.–	Not for:	④, ⑥
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁹⁾	G05	–	–	–	–	3470.–	3470.–	3470.–	3470.–	4480.–	4480.–	Not for:	④, ⑥
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁹⁾	G06	–	–	–	–	4480.–	4480.–	4480.–	4480.–	4480.–	4480.–	Not for:	④, ⑥
Mechanical design and degrees of protection													
Low-noise version for 2-pole motors with clockwise direction of rotation	F77	–	–	–	–	–	–	613.–	870.–	1130.–	1390.–	Not for:	④, ⑥
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	F78	–	–	–	–	–	–	613.–	870.–	1130.–	1390.–	Not for:	④, ⑥
Prepared for mountings, center hole only ¹⁰⁾	G40	–	–	68.70	68.70	68.70	68.70	91.20	105.–	□	□	Not for:	④, ⑥
Prepared for mountings with D12 shaft ¹⁵⁾	G41	140.–	140.–	140.–	149.–	149.–	165.–	185.–	221.–	453.–	453.–	Not for:	④, ⑥
Prepared for mountings with D16 shaft ¹⁵⁾	G42	–	–	O. R.	O. R.	149.–	165.–	185.–	221.–	453.–	453.–	Not for:	④, ⑥
Mechanical protection for encoders	G43	O. R.	O. R.	70.90	70.90	79.10	79.10	138.–	138.–	208.–	208.–	Not for:	④, ⑥
Protective cover ^{9) 11)}	H00	55.60	55.60	55.60	55.60	80.80	80.80	141.–	141.–	188.–	283.–	Not for:	④, ⑥
Screwed-on (instead of cast) feet	H01	–	–	89.–	89.–	102.–	111.–	121.–	129.–	□	□		
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 ³⁹⁾	H02	113.–	127.–	145.–	165.–	185.–	205.–	222.–	258.–	309.–	371.–		
Condensation drainage holes ¹⁴⁾	H03	61.80	63.90	66.30	74.–	81.10	88.50	95.90	103.–	110.–	117.–		
Rust-resistant screws (externally)	H07	55.60	55.60	152.–	152.–	81.10	81.10	95.90	95.90	110.–	125.–		
Enclosure with screw mounting ³²⁾	H10	–	–	48.30	48.30	–	–	–	–	52.–	52.–	Only for:	②, ③, ⑦, ⑧ (frame sizes 80, 90), ⑨, ⑩
IP65 degree of protection ¹³⁾	H20	147.–	147.–	147.–	147.–	147.–	147.–	147.–	220.–	296.–	367.–		
IP56 degree of protection ¹²⁾	H22	163.–	163.–	163.–	163.–	163.–	163.–	163.–	242.–	322.–	405.–		
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar ¹⁶⁾	H23	41.20	44.90	47.40	50.70	56.40	61.70	75.30	110.–	142.–	176.–		
Coolant temperature and installation altitude													
Coolant temperature –40 to +40 °C ^{16) 28)}	D03	227.–	227.–	252.–	316.–	378.–	479.–	555.–	637.–	707.–	820.–		
Coolant temperature –30 to +40 °C ^{16) 28)}	D04	42.20	42.20	55.60	55.60	69.40	69.40	83.30	83.30	111.–	139.–		
Designs in accordance with standards and specifications													
VIK version	C02	–	–	168.–	190.–	214.–	248.–	317.–	401.–	–	–	Only for:	②, ③
CCC China Compulsory Certification ¹⁷⁾	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:	③, ④, ⑤, ⑥
Electrical according to NEMA MG1-12 ¹⁸⁾	D30	39.80	39.80	39.80	39.80	39.80	39.80	39.80	39.80	68.–	68.–	Not for:	⑨, ⑩
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑨, ⑩

For legends and footnotes, see Page 2/56.

SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Standard delivery times in working days:

2	5	10	15	On request
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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
		1LE1001											IE2	③
						1PC1001								④
		1LE1002											IE1	⑤
								1PC1002						⑥
				1LE1043								APAC Line	IE3	⑦
				1LE1041									IE2	⑧
				1LE1023								Eagle Line	NPE (NEMA)	⑨
				1LE1021									NEE (NEMA)	⑩
1LE10 -Z						1LE1011						Pole-changing		⑪
1PC10 -Z	Order code					1LE1012								⑫

Designs in accordance with standards and specifications (continued)

Design according to UL with "Recognition Mark" ¹⁹⁾	D31		70.60	75.10	80.–	89.20	99.–	117.–	150.–	183.–	294.–	403.–	Not for: ⑨, ⑩
	–		□	□	□	□	□	□	□	□	□	□	Only for: ⑨, ⑩
KEMCO Korea Energy Efficiency Label	D33		–	–	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	Only for: ⑦, ⑧
China Energy Efficiency Label ³⁸⁾	D34		–	–	○	○	○	○	○	○	○	○	Not for: ①, ⑤, ⑪, ⑫
Canadian regulations (CSA) ^{33) 37)}	D40		70.60	75.10	80.–	89.20	99.–	117.–	150.–	183.–	248.–	331.–	Not for: ⑤, ⑨, ⑩, ⑪, ⑫
	–				□	□	□	□	□	□	□	□	Only for: ⑨, ⑩
TR CU product safety certificate EAC for Eurasian customs union ³⁵⁾	D47		15.50	20.60	25.80	30.90	41.20	51.50	82.40	134.–	175.–	247.–	
Train-compatible version IC 411, EN IEC 60349, without EN 45545, with external fan and plastic fan cover	L90		–	–	158.–	167.–	178.–	183.–	294.–	350.–	383.–	453.–	
Train-compatible version IC 411, EN IEC 60349, with EN 45545, with external fan and metal fan cover	L91		361.–	361.–	361.–	375.–	430.–	476.–	628.–	729.–	798.–	922.–	
Train-compatible version IC 418, EN IEC 60349, acc. to EN 45545, without external fan and without fan cover	L92		274.–	274.–	274.–	283.–	295.–	300.–	410.–	467.–	500.–	570.–	
Bearings and lubrication													
Regreasing device with M10 x 1 grease nipple according to DIN 71412-A	L19		–	–	–	–	–	–	–	–	375.–	216.–	
Located bearing DE	L20		39.–	39.–	39.–	41.40	71.40	84.60	104.–	142.–	300.–	416.–	
Located bearing NDE	L21		39.–	39.–	39.–	41.40	43.30	45.60	48.30	□	□	□	
Bearing design for increased cantilever forces ³⁶⁾	L22		–	–	79.30	87.60	98.80	115.–	130.–	172.–	273.–	316.–	
Regreasing device ²⁰⁾	L23		–	–	–	–	311.–	319.–	329.–	356.–	375.–	422.–	
Reinforced bearings at both ends for DE and NDE, bearing size 63	L25		–	–	165.–	199.–	199.–	232.–	260.–	346.–	459.–	565.–	
Bearing insulation NDE	L51	New!	–	–	–	–	530.–	550.–	1230.–	1270.–	1320.–	1340.–	
Measuring nipple for SPM shock pulse measurement for bearing inspection ²⁰⁾	Q01		–	–	–	–	252.–	282.–	311.–	343.–	370.–	400.–	
Balance and vibration quantity													
Vibration quantity level A			□	□	□	□	□	□	□	□	□	□	
Vibration quantity level B	L00		227.–	237.–	250.–	265.–	278.–	321.–	411.–	509.–	798.–	803.–	
Half-key balancing (standard)			□	□	□	□	□	□	□	□	□	□	
Balancing without key	L01		21.40	21.40	21.40	21.40	27.80	27.80	32.90	32.90	42.80	42.80	
Full-key balancing	L02		–	–	94.20	109.–	109.–	109.–	126.–	126.–	159.–	159.–	
Shaft and rotor													
Shaft extension with standard dimensions, without feather keyway	L04		–	–	–	–	515.–	542.–	569.–	598.–	694.–	764.–	
Standard cylindrical shaft extension (second shaft extension) NDE in acc. with EN 50347	L05		83.20	83.20	95.90	95.90	140.–	140.–	185.–	213.–	322.–	357.–	Not for: ④, ⑥
Standard shaft made of stainless steel (e.g. 1.4021)	L06		803.–	803.–	822.–	822.–	943.–	943.–	1090.–	1360.–	2420.–	2800.–	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07		239.–	239.–	239.–	239.–	263.–	263.–	400.–	400.–	207.–	233.–	
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.–	443.–	517.–	

For legends and footnotes, see Page 2/56.

Standard delivery times in working days:

2	5	10	15	On request
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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
		1LE1001											IE2 ③
						1PC1001							④
		1LE1002										IE1	⑤
								1PC1002					⑥
				1LE1043								APAC Line	IE3 ⑦
				1LE1041									IE2 ⑧
				1LE1023								Eagle Line	NPE (NEMA) ⑨
				1LE1021									NEE (NEMA) ⑩
1LE10 -Z						1LE1011						Pole-changing	⑪
1PC10 -Z	Order code					1LE1012							⑫
Shaft and rotor (continued)													
Non-standard shaft extension, DE ²¹⁾	Y58 • and customer specifications	391.–	430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–		
Non-standard shaft extension, NDE ²¹⁾	Y59 • and customer specifications	391.–	430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–		
Heating and ventilation													
Mounting of separately driven fan	F70	824.–	824.–	824.–	824.–	824.–	968.–	1050.–	1220.–	1340.–	2010.–	Not for:	④, ⑥
Sheet metal fan cover	F74	–	–	55.60	61.20	66.60	72.30	77.80	83.30	83.30	102.–	Not for:	④, ⑥
Fan cover for textile industry ²²⁾	F75	103.–	103.–	117.–	192.–	310.–	443.–	561.–	663.–	663.–	925.–	Not for:	④, ⑥
Metal external fan ^{23) 29)}	F76	147.–	147.–	147.–	147.–	185.–	220.–	256.–	296.–	332.–	367.–	Not for:	④, ⑥
Without external fan and without fan cover	F90	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	Not for:	④, ⑥, ⑪, ⑫
Anti-condensation heating for 230 V (2 terminals)	Q02	406.–	406.–	406.–	406.–	422.–	450.–	509.–	565.–	626.–	720.–		
Anti-condensation heating for 115 V (2 terminals)	Q03	406.–	406.–	406.–	406.–	422.–	450.–	509.–	565.–	626.–	720.–		
Rating plate and extra rating plates													
Extra rating plate for voltage tolerance ²⁴⁾	B07	40.70	40.70	40.70	40.70	40.70	40.70	40.70	40.70	68.–	68.–	Not for:	④, ⑥, ⑪, ⑫, 8-pole motors
Second rating plate, loose ²⁵⁾	M10	20.70	20.70	20.70	20.70	20.70	20.70	20.70	20.70	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		
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.–		
Extra rating plate with customer specifications	Y82 • and customer specifications	40.70	40.70	40.70	40.70	40.70	40.70	40.70	40.70	68.–	68.–		
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.–		
Adhesive label, supplied loose (contents: Article No., Serial No.; 2 lines of text)	Y85 • and customer specifications	–	–	–	–	40.70	40.70	40.70	40.70	66.30	66.30		
Packaging, safety notes, documentation and test certificates													
With a safety and commissioning instruction enclosed in each wire-lattice pallet ²⁷⁾	B01	O	O	O	O	O	O	O	O	O	O		
Acceptance test certificate 3.1 according to EN 10204 ²⁸⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10		
Document – Electrical data sheet	B60	–	–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–		
Document – Order dimensional drawing	B61	–	–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–		
Type test with heat run for horizontal motors, with acceptance	B83	4100.–	4860.–	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–	10200.–	11000.–		
Documentation package "Basic"	B90	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–		
Documentation package "Advanced"	B91	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–		
Documentation package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–		
Wire-lattice pallet packaging	B99	O	O	O	O	O	O	O	O	O	O		
Connected in star for dispatch	M01	–	–	–	–	28.30	28.30	28.30	28.30	37.20	37.20		
Connected in delta for dispatch	M02	–	–	–	–	28.30	28.30	28.30	28.30	37.20	37.20		

For legends and footnotes, see Page 2/56.

SIMOTICS GP 1LE1/1PC1 Standard Motors

Article No. supplements and special versions

Options · Aluminum series 1LE10, 1PC1

- 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
- In prep. In preparation
- Not possible

2

- 1) With IM B5 flange, only possible in combination with **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**.

Standard delivery times in working days:

2

10

15

20

>30

On
request**SIMOTICS SD 1LE1 Standard Motors**
Article No. supplements and special versions

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

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	IEC	IE4	①			
						1LE1504 Basic Line												IE3	③	
						1LE1604 Performance Line														
						1LE1503 Basic Line												IE2	⑤	
						1LE1603 Performance Line														
						1LE1501 Basic Line												IE1	⑦	
						1LE1601 Performance Line														
						1LE1502 Basic Line														
						1LE1543 Basic Line											APAC Line	IE3	⑧	
						1LE1643 Performance Line														
						1LE1541 Basic Line											Eagle Line	NPE (NEMA)	⑩	
						1LE1523 Basic Line														
						1LE1623 Performance Line														
						1LE1521 Basic Line														
		1LE1...-.....-Z		Order code															NEE (NEMA)	⑪
Motor protection																				
Prepared for mounting a SIPLUS CMS 1000 vibration sensor	Q05		–	–	–	299.–	312.–	325.–	340.–	370.–	400.–	430.–	459.–	488.–	518.–					
1 or 3 PTC thermistors – for tripping (2 terminals)	Q11		–	–	–	117.–	117.–	176.–	176.–	234.–	234.–	319.–	319.–	398.–	398.–					
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	Q12		–	–	–	201.–	201.–	269.–	269.–	413.–	413.–	537.–	537.–	666.–	666.–					
1 temperature sensor KTY84-130 (2 terminals)	Q23		–	–	–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–					
2 temperature sensors KTY84-130 (4 terminals)	Q25		–	–	–	236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–					
3 bimetal sensors (NC contact) for tripping (2 terminals)	Q31		–	–	–	131.–	131.–	192.–	192.–	265.–	265.–	358.–	358.–	444.–	444.–					
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32		–	–	–	236.–	236.–	345.–	345.–	468.–	468.–	634.–	634.–	785.–	785.–					
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33		–	–	–	141.–	141.–	202.–	202.–	275.–	275.–	369.–	369.–	454.–	454.–					
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34		–	–	–	246.–	246.–	355.–	355.–	478.–	478.–	645.–	645.–	795.–	795.–					
1 Pt1000 resistance thermometer (2 terminals) ⁴⁰⁾	Q35		–	–	–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–					
2 Pt1000 resistance thermometers (4 terminals) ⁴⁰⁾	Q36		–	–	–	236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–					
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	Q60		–	–	–	1220.–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	1640.–	1640.–	1640.–					
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) ²⁷⁾	Q61		–	–	–	1880.–	1880.–	1880.–	1880.–	2420.–	2420.–	2420.–	2420.–	2420.–	2420.–					
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62		–	–	–	1020.–	1020.–	1020.–	1020.–	1310.–	1310.–	1310.–	1310.–	1310.–	1310.–					
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ³⁰⁾	Q63		–	–	–	1280.–	1280.–	1280.–	1280.–	1970.–	1970.–	1970.–	1970.–	1970.–	1970.–					
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ³⁰⁾	Q64		–	–	–	1980.–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	2900.–	2900.–	2900.–					
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) ²⁾	Q72		–	–	–	–	–	–	–	4220.–	4220.–	4220.–	4220.–	4220.–	4220.–					
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78		–	–	–	–	–	–	–	4640.–	4640.–	4640.–	4640.–	4640.–	4640.–					
2 double Pt100 screw-in thermo- meters in 3-wire circuit for bearings (12 terminals)	Q79		–	–	–	–	–	–	–	5560.–	5560.–	5560.–	5560.–	5560.–	5560.–					
Motor connection and terminal box																				
External grounding	H04		23.50	23.50	23.50	28.30	28.30	28.30	28.30	□	□	□	□	□	□					
Terminal box on NDE ²⁷⁾	H08		124.–	124.–	142.–	176.–	216.–	280.–	380.–	948.–	979.–	1030.–	1080.–	1130.–	1180.–					
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.–					

For legends and footnotes, see Page 2/66.

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 -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
					1LE1501 Basic Line										IE2	⑤
					1LE1601 Performance Line											⑥
					1LE1502 Basic Line										IE1	⑦
					1LE1543 Basic Line									APAC Line	IE3	⑧
					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																
Motor connection and terminal box (continued)																
Rotation of the terminal box through 180°	R12		O	O	O	O	O	O	O	44.20	57.30	70.70	84.90	101.–	122.–	
One EMC cable gland	R14	67.–	67.–	67.–	123.–	123.–	123.–	171.–	171.–	293.–	293.–	519.–	519.–	519.–		
One metal cable gland	R15	58.70	58.70	58.70	110.–	110.–	110.–	140.–	140.–	162.–	162.–	231.–	231.–	231.–		
EMC cable gland, maximum configuration	R16	134.–	134.–	134.–	245.–	245.–	245.–	355.–	355.–	598.–	598.–	1070.–	1070.–	1070.–		
Stud terminal for cable connection, accessories pack (3 items)	R17	–	–	–	–	–	–	–	–	–	–	147.–	147.–	185.–		
One metal cable gland, maximum configuration	R18	84.50	84.50	84.50	156.–	156.–	156.–	205.–	205.–	236.–	236.–	409.–	409.–	409.–		
Saddle terminal for connection without cable lug, accessories pack	R19	–	–	–	–	–	–	–	–	–	–	721.–	721.–	721.–		
3 cables protruding, 0.5 m long	R20	56.20	56.20	56.20	67.40	80.80	98.70	116.–	140.–	–	–	–	–	–		
3 cables protruding, 1.5 m long	R21	68.–	68.–	68.–	81.30	97.70	119.–	141.–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
6 cables protruding, 0.5 m long	R22	87.10	87.10	87.10	104.–	125.–	155.–	182.–	218.–	–	–	–	–	–		
6 cables protruding, 1.5 m long	R23	111.–	111.–	111.–	133.–	161.–	195.–	232.–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
6 cables protruding, 3 m long	R24	177.–	177.–	177.–	214.–	252.–	316.–	378.–	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	–	–	–	190.–	214.–	214.–	239.–	–	–	–	–	–	–		
Larger terminal box	R50	48.50	101.–	101.–	210.–	210.–	269.–	307.–	466.–	513.–	1630.–	1860.–	1860.–	2190.–		
Terminal box without cable entry opening	R51	–	–	–	O	O	O	O	O	O	O	O	O	O		
Drilled removable entry plate	R52	–	–	–	–	–	–	–	268.–	288.–	288.–	479.–	479.–	500.–		
Undrilled removable entry plate	R53	–	–	–	–	–	–	–	268.–	288.–	288.–	479.–	479.–	500.–		
Cast-iron auxiliary terminal box (small) ³⁰⁾	R62	–	–	–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–		
		–	–	–	270.–	270.–	270.–	–	–	–	–	–	–	–	Only for:	Motors with order code R50
Silicon-free version	R74	–	–	–	□	□	□	□	□	□	□	350.–	350.–	350.–		
Non-standard threaded through hole (NPT or G thread)	Y61 • and customer specifications	–	–	–	152.–	152.–	152.–	152.–	199.–	265.–	331.–	394.–	530.–	657.–		
Windings and insulation																
Temperature class 155 (F), utilized acc. to 155 (F), with service factor	N01	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 155 (F), with increased power	N02	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 155 (F), with increased coolant temperature	N03	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 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.–		

For legends and footnotes, see Page 2/66.

Standard delivery times in working days:

2

10

15

20

>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	IEC	IE4	① ② ③ ④ ⑤ ⑥ ⑦
					1LE1504 Basic Line												
					1LE1604 Performance Line												
		1LE1503 Basic Line															
					1LE1603 Performance Line												
		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															
1LE1 ... - ... - ... -Z Order code															APAC Line	IE3	⑧ ⑨ ⑩
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.–		
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.–		
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.–		
Temperature class 180 (H)	N10		155.–	155.–	155.–	180.–	213.–	283.–	346.–	484.–	688.–	948.–	1240.–	1490.–	1750.–	Not for:	①, ②, ⑧, ⑨, ⑩, ⑪, ⑫, ⑬
Temperature class 180 (H) at rated power and max. CT 60 °C ^{4) 5)}	N11		216.–	216.–	216.–	252.–	299.–	397.–	484.–	688.–	963.–	1180.–	1440.–	1750.–	2160.–	Not for:	①, ②
Increased air humidity/temperature with 30 to 60 g water per m ³ 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 m ³ 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		98.–	106.–	125.–	159.–	192.–	247.–	304.–	393.–	483.–	711.–	894.–	1140.–	1480.–		
Temperature class 155 (F), utilized according to 155 (F), other requirements ⁵⁾	Y52 • and spec. power, CT ... °C or IA m above sea level		40.70	40.70	40.70	47.40	47.40	63.–	63.–	80.30	80.30	91.70	91.70	107.–	107.–		
Temperature class 180 (H), utilized according to 155 (F)	Y75 • and spec. power, CT ... °C or IA m above sea level		–	–	–	252.–	299.–	397.–	484.–	891.–	963.–	1400.–	1610.–	2240.–	2410.–	Not for:	①, ②
Colors and paint finish																	
Standard finish C2 in RAL 7030 stone gray			■	■	■	■	■	■	■	■	■	■	■	■	■	Only for:	①, ③, ⑤, ⑦, ⑧, ⑩, ⑪
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	61.80	82.40	82.40	113.–	124.–	185.–	227.–	268.–	299.–	Not for:	②, ④, ⑥, ⑨, ⑫
	–		■	■	■	■	■	■	■	■	■	■	■	■	■	Only for:	②, ④, ⑥, ⑨, ⑫
Special finish sea air resistant C4	S03		494.–	494.–	494.–	525.–	525.–	577.–	577.–	618.–	659.–	700.–	742.–	783.–	814.–		

For legends and footnotes, see Page 2/66.

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 -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	IEC	IE4	①	
					1LE1504 Basic Line												②	
					1LE1604 Performance Line												IE3	③
					1LE1503 Basic Line													④
					1LE1603 Performance Line												IE2	⑤
					1LE1501 Basic Line													⑥
					1LE1601 Performance Line												IE1	⑦
					1LE1502 Basic Line													⑧
					1LE1543 Basic Line												APAC Line	⑨
					1LE1643 Performance Line													⑩
					1LE1541 Basic Line												Eagle Line	NPE (NEMA)
					1LE1523 Basic Line													⑪
					1LE1623 Performance Line												⑫	
			1LE1521 Basic Line										NEE (NEMA)					
1LE1.....-.....-Z			Order code															
Colors and paint finish (continued)																		
Special paint for use offshore C5	S04		2010.-	2010.-	2010.-	2110.-	2220.-	2340.-	2460.-	2590.-	2720.-	3140.-	4090.-	5120.-	7910.-			
Internal coating	S05		–	–	–	87.60	87.60	87.60	87.60	87.60	87.60	87.60	108.-	124.-	134.-			
Top coat polyurethane ³³⁾	S06		30.90	30.90	50.50	72.10	98.90	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")	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:	①, ③, ⑤, ⑦, ⑧, ⑩, ⑪	
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 versions ⁶⁾																		
Mounting of holding brake (standard assignment) ^{7) 31) 32)}	F01		–	–	–	644.-	783.-	1010.-	2000.-	4420.-	6180.-	7850.-	25100.-	31000.-	37200.-	Not for:	Motors in combination with order code F90	
Mounting of PRECIMA brake	F04		–	–	–	–	–	–	–	–	–	14300.-	17300.-	24300.-	28300.-			
Mounting of separately driven fan ^{28) 34)}	F70		824.-	824.-	824.-	824.-	968.-	1050.-	1220.-	1340.-	2010.-	2500.-	3120.-	3720.-	4190.-	Not for:	Motors in combination with order code F90	
Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I	G11		639.-	680.-	721.-	762.-	814.-	855.-	896.-	937.-	979.-	1040.-	1080.-	1120.-	1160.-			
Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I	G12		906.-	979.-	1050.-	1120.-	1190.-	1270.-	1340.-	1410.-	1480.-	1560.-	1630.-	1700.-	1770.-			
Modular technology – Additional versions																		
Brake supply voltage 24 V DC	F10		–	–	–	51.90	51.90	51.90	51.90	69.20	69.20	69.20	69.20	69.20	69.20	Not for:	Motors in combination with order code F90	
Brake supply voltage 230 V AC, 50/60 Hz	F11		–	–	–	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 ³²⁾	F12		–	–	–	51.90	51.90	51.90	51.90	69.20	69.20	69.20	69.20	69.20	69.20	Not for:	Motors in combination with order code F90	
Reverse running stop, reverse movement left locked, rotating direction right	F40		–	–	–	–	–	5360.-	5670.-	5960.-	5960.-	6180.-	6800.-	7880.-	9370.-			
Reverse running stop, reverse movement right locked, rotating direction left	F41		–	–	–	–	–	5360.-	5670.-	5960.-	5960.-	6180.-	6800.-	7880.-	9370.-			
Mechanical manual brake release with lever (no locking)	F50		–	–	–	259.-	259.-	288.-	418.-	608.-	709.-	851.-	968.-	1070.-	1360.-	Not for:	Motors in combination with order code F90	

For legends and footnotes, see Page 2/66.

Standard delivery times in working days:

2

10

15

20

>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		
		1LE1501 Basic Line													IE2	⑤		
		1LE1601 Performance Line														⑥		
		1LE1502 Basic Line													IE1	⑦		
		1LE1543 Basic Line									APAC Line	IE3	⑧					
		1LE1643 Performance Line											⑨					
								1LE1541 Basic Line							IE2	⑩		
		1LE1523 Basic Line														Eagle Line	NPE (NEMA)	⑪
		1LE1623 Performance Line												⑫				
		1LE1 -Z		Order code	1LE1521 Basic Line												NEE (NEMA)	⑬
Special technology ⁶⁾																		
Mounting of LL 861 900 220 rotary pulse encoder ¹⁰⁾	G04	-	-	-	2940.-	2940.-	2940.-	2940.-	2940.-	2940.-	4100.-	4100.-	4100.-	4100.-	Not for:	Motors in combination with order code F90		
Mounting of HOG 9 DN 1024 I rotary pulse encoder ¹⁰⁾	G05	-	-	-	3470.-	3470.-	3470.-	3470.-	4480.-	4480.-	4850.-	4850.-	4850.-	4850.-	Not for:	Motors in combination with order code F90		
Mounting of HOG 10 D 1024 I rotary pulse encoder ¹⁰⁾	G06	-	-	-	4480.-	4480.-	4480.-	4480.-	4480.-	4480.-	5880.-	5880.-	5880.-	5880.-	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) ¹¹⁾	G07	-	-	-	-	-	-	-	6250.-	6280.-	6310.-	6360.-	6400.-	6460.-	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) ¹¹⁾	G08	-	-	-	-	-	-	-	14400.-	14600.-	17600.-	17600.-	17600.-	17600.-	Not for:	Motors in combination with order code F90		
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection	G15	-	-	-	5470.-	5520.-	5550.-	5580.-	5620.-	5650.-	5690.-	5730.-	5780.-	5820.-	Not for:	Motors in combination with order code F90		
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box dust protection	G16	-	-	-	5470.-	5520.-	5550.-	5580.-	5620.-	5650.-	5690.-	5730.-	5780.-	5820.-	Not for:	Motors in combination with order code F90		
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	-	-	-	-	-	-	-	8640.-	8660.-	8700.-	8730.-	8790.-	8840.-	Not for:	Motors in combination with order code F90		
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	-	-	-	-	-	-	-	8640.-	8660.-	8700.-	8730.-	8790.-	8840.-	Not for:	Motors in combination with order code F90		
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	-	-	-	-	-	-	-	14700.-	14800.-	15000.-	15200.-	15300.-	15500.-	Not for:	Motors in combination with order code F90		
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.	O. R.	O. R.	O. R.				

For legends and footnotes, see Page 2/66.

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 -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
		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
		1LE1623 Performance Line													⑫		
		1LE1521 Basic Line														NEE (NEMA)	⑬
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.–	Not for:	Motors in combination with order code F90	
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	F78	–	–	–	–	–	613.–	870.–	1130.–	1390.–	1640.–	1900.–	2160.–	2420.–	Not for:	Motors in combination with order code F90	
Prepared for mountings, center hole only	G40	–	68.70	68.70	68.70	68.70	91.20	105.–	□	□	□	□	□	□	Not for:	Motors in combination with order code F90	
Prepared for mountings with D12 shaft	G41	140.–	140.–	149.–	149.–	165.–	185.–	221.–	453.–	453.–	577.–	906.–	906.–	906.–	Not for:	Motors in combination with order code F90	
Prepared for mountings with D16 shaft	G42	–	140.–	140.–	149.–	165.–	185.–	221.–	453.–	453.–	577.–	906.–	906.–	906.–	Not for:	Motors in combination with order code F90	
Mechanical protection for encoders	G43	70.90	70.90	70.90	79.10	79.10	138.–	138.–	208.–	208.–	208.–	208.–	208.–	208.–	Not for:	Motors in combination with order code F90	
Protective cover ^{8) 10) 12)}	H00	55.60	55.60	55.60	80.80	80.80	141.–	141.–	188.–	283.–	375.–	469.–	562.–	751.–	Not for:	Motors in combination with order code F90	
Screwed-on (instead of cast) feet	H01	–	–	–	102.–	111.–	121.–	129.–	364.–	428.–	507.–	753.–	846.–	974.–			
Vibration-proof version; vibration resistance to Class 3M4 acc. to IEC 60721-3-3:1994 ³⁹⁾	H02	127.–	145.–	165.–	185.–	205.–	222.–	258.–	309.–	371.–	433.–	515.–	597.–	680.–			
Condensation drainage holes ³⁸⁾	H03	63.90	66.30	74.–	□	□	□	□	□	□	□	□	□	□			
Rust-resistant screws (externally)	H07	55.60	67.–	67.–	81.10	81.10	95.90	95.90	110.–	125.–	167.–	199.–	207.–	275.–			
IP65 degree of protection ¹⁴⁾	H20	147.–	147.–	147.–	147.–	147.–	147.–	220.–	296.–	367.–	443.–	517.–	589.–	663.–			
IP54 degree of protection	H21	–	–	–	–	–	–	–	824.–	824.–	824.–	824.–	824.–	824.–			
IP56 degree of protection ¹⁵⁾	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 ^{13) 29)}	H23	44.90	47.40	50.70	56.40	61.70	75.30	110.–	142.–	176.–	234.–	311.–	390.–	469.–			
Grounding brush for converter operation	L52	–	–	–	–	–	–	–	–	–	–	–	2580.–	2580.–			
Coolant temperature and installation altitude																	
Coolant temperature –50 to +40 °C (IP54 degree of protection)	D02	–	–	–	721.–	773.–	927.–	1080.–	2540.–	2720.–	3920.–	4370.–	5290.–	6270.–			
Coolant temperature –40 to +40 °C ¹⁶⁾	D03	227.–	252.–	316.–	378.–	479.–	555.–	637.–	707.–	820.–	1050.–	1300.–	1850.–	2390.–			
Coolant temperature –30 to +40 °C ¹⁷⁾	D04	42.20	55.60	55.60	69.40	69.40	83.30	83.30	111.–	139.–	556.–	1300.–	1850.–	2390.–			

For legends and footnotes, see Page 2/66.

Standard delivery times in working days:

2

10

15

20

>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	
		1LE1501 Basic Line															IE2	⑤
		1LE1601 Performance Line															⑥	
		1LE1502 Basic Line															IE1	⑦
		1LE1543 Basic Line															APAC Line	IE3
		1LE1643 Performance Line													⑨			
		1LE1541 Basic Line															IE2	⑩
		1LE1523 Basic Line															Eagle Line	NPE (NEMA)
		1LE1623 Performance Line													⑫			
		1LE1521 Basic Line															NEE (NEMA)	⑬
1LE1 -Z		Order code																
Designs in accordance with standards and specifications																		
VIK version	C02		–	–	–	214.–	248.–	317.–	401.–	573.–	719.–	866.–	1110.–	1500.–	2000.–	Not for:	①, ②	
China Compulsory Certification	D01		43.–	43.–	43.–	–	–	–	–	–	–	–	–	–	–			
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	D22		○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	①, ②	
Electrical according to NEMA MG1-12 ¹⁸⁾	D30		–	–	–	39.80	39.80	39.80	39.80	68.–	68.–	68.–	84.90	84.90	102.–	Not for:	⑪, ⑫, ⑬	
	–		□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑪, ⑫, ⑬	
Design according to UL with "Recognition Mark" ¹⁸⁾	D31		–	80.–	89.20	99.–	117.–	150.–	183.–	294.–	403.–	507.–	598.–	741.–	967.–	Not for:	⑪, ⑫, ⑬	
	–		□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑪, ⑫, ⑬	
KEMCO Korea Energy Efficiency Label	D33		–	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	41.90	Only for:	⑧, ⑨, ⑩	
China Energy Efficiency Label	D34		○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	① and motors with increased power	
Canadian regulations (CSA) ¹⁷⁾	D40		75.10	80.–	89.20	99.–	117.–	150.–	183.–	248.–	331.–	414.–	497.–	662.–	821.–	Not for:	⑪, ⑫, ⑬	
	–		□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑪, ⑫, ⑬	
TR CU product safety certificate EAC for Eurasian customs union ³⁵⁾	D47		20.60	25.80	30.90	41.20	51.50	82.40	134.–	175.–	247.–	319.–	422.–	618.–	721.–			
Bearings and lubrication																		
Regreasing device with M10 x 1 grease nipple according to DIN 71412-A	L19		–	–	–	–	–	–	–	375.–	422.–	469.–	562.–	○	○	Only for:	①, ③, ⑤, ⑧, ⑩, ⑪, ⑬	
			–	–	–	–	–	–	–	○	○	○	○	○	○	Only for:	②, ④, ⑥, ⑨, ⑫	
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 ³⁶⁾	L22		72.10	79.30	87.60	98.80	115.–	130.–	172.–	273.–	316.–	356.–	412.–	461.–	515.–			
Regreasing device ¹⁾	L23		–	–	–	311.–	319.–	329.–	356.–	375.–	422.–	469.–	562.–	□	□	Not for:	②, ④, ⑥, ⑨, ⑫	
			–	–	–	302.–	310.–	319.–	□	□	□	□	□	□	□	Only for:	②, ④, ⑥, ⑨, ⑫	
Reinforced bearings at both ends for DE and NDE, bearing size 63 ¹⁹⁾	L25		134.–	165.–	199.–	199.–	232.–	260.–	346.–	459.–	565.–	803.–	1110.–	□	□	Not for:	②, ④, ⑥, ⑨, ⑫	
	–		□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	②, ④, ⑥, ⑨, ⑫	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	L28		–	–	–	–	–	–	–	732.–	882.–	1150.–	1520.–	–	–			
Bearing insulation DE	L50		–	–	–	–	–	–	–	–	–	1730.–	1850.–	1920.–	2010.–			
Bearing insulation NDE	L51		–	–	–	530.–	550.–	1230.–	1270.–	1320.–	1340.–	1730.–	1850.–	1920.–	2010.–			
Measuring nipple for SPM shock pulse measurement for bearing inspection ¹⁾	Q01		–	–	–	252.–	282.–	311.–	343.–	370.–	400.–	430.–	459.–	488.–	518.–			

For legends and footnotes, see Page 2/66.

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			
		1LE1501 Basic Line													IE2	⑤		
					1LE1601 Performance Line											⑥		
					1LE1502 Basic Line										IE1	⑦		
					1LE1543 Basic Line											APAC Line	IE3	⑧
					1LE1643 Performance Line										⑨			
					1LE1541 Basic Line										IE2	⑩		
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑪	
					1LE1623 Performance Line												⑫	
		1LE1-Z		Order code		1LE1521 Basic Line											NEE (NEMA)	⑬
		Balance and vibration quantity																
Vibration quantity level A			□	□	□	□	□	□	□	□	□	□	□	□				
Vibration quantity level B ²⁰⁾	L00		237.–	250.–	265.–	278.–	321.–	411.–	509.–	798.–	803.–	882.–	1120.–	1310.–	1680.–			
Half-key balancing (standard)			□	□	□	□	□	□	□	□	□	□	□	□	□			
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.–			
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	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 accordance 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 accordance 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 shaft extension, DE ²¹⁾	Y58 • and customer specifications		430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–			
Non-standard shaft extension, NDE ²¹⁾	Y59 • and customer specifications		430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–			
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.	O. R.	O. R.			
Heating and ventilation																		
Sheet metal fan cover	F74		□	□	□	66.60	72.30	77.80	83.30	83.30	102.–	114.–	164.–	210.–	231.–	Only for: ①, ③, ⑤, ⑦, ⑧, ⑩, ⑪, ⑬		
	–		□	□	□	□	□	□	□	□	□	□	□	□	□		Only for: ②, ④, ⑥, ⑨, ⑫	
Metal external fan ^{22) 28)}	F76		147.–	147.–	147.–	185.–	220.–	256.–	296.–	332.–	367.–	405.–	443.–	479.–	517.–			
Without external fan and without fan cover	F90		116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–	116.–			
Anti-condensation heating for 230 V (2 terminals)	Q02		406.–	406.–	406.–	422.–	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–	929.–			
Anti-condensation heating for 115 V (2 terminals)	Q03		406.–	406.–	406.–	422.–	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–	929.–			
Separately driven fan with non-standard voltage and/or frequency	Y81 • and customer specifications		–	–	–	–	–	–	–	–	–	474.–	597.–	764.–	993.–			

For legends and footnotes, see Page 2/66.

Standard delivery times in working days:

2

10

15

20

>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	IEC	IE4	① ② ③ ④ ⑤ ⑥ ⑦				
					1LE1504 Basic Line																
					1LE1604 Performance Line																
					1LE1503 Basic Line																
					1LE1603 Performance Line																
					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																		
1LE1...-.....-Z			Order code													APAC Line	IE3	⑧ ⑨ ⑩			
																			Eagle Line	NPE (NEMA) ⑪ ⑫	NEE (NEMA) ⑬
Rating plate and extra rating plates																					
Extra rating plate for voltage tolerance ²³⁾	B07		40.70	40.70	40.70	40.70	40.70	40.70	40.70	68.–	68.–	68.–	84.90	84.90	107.–	Not for:	8-pole motors				
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	68.–	68.–	68.–	68.–	Only for:	①, ③, ⑤, ⑦, ⑧, ⑩, ⑪, ⑬				
		–	–	–	–	–	–	–	–	–	–	–	–	–	–	Only for:	④, ⑥, ⑨, ⑫				
		–	–	–	–	–	–	–	–	–	–	–	–	–	–	Only for:	②				
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 customer specifications	Y82 • and customer specifications		40.70	40.70	40.70	40.70	40.70	40.70	40.70	68.–	68.–	68.–	84.60	84.60	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.–						
Adhesive label, supplied loose (contents: Article No., Serial No.; 2 lines of text)	Y85 • and customer specifications		–	–	–	40.70	40.70	40.70	40.70	66.30	66.30	66.30	66.30	66.30	66.30						
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 ²⁴⁾	Q80		–	–	–	–	–	–	–	2.30 %	2.30 %	2.30 %	2.30 %	2.30 %	2.30 %	Only for:	①, ③, ⑤, ⑦, ⑧, ⑩, ⑪, ⑬				
	–		–	–	–	–	–	–	–	□	□	□	□	□	□	Only for:	②, ④, ⑥, ⑨, ⑫, 36 months				
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery ²⁴⁾	Q82		–	–	–	–	–	–	–	4.60 %	4.60 %	4.60 %	4.60 %	4.60 %	4.60 %	Only for:	①, ③, ⑤, ⑦, ⑧, ⑩, ⑪, ⑬				
	–		–	–	–	–	–	–	–	□	□	□	□	□	□	Only for:	②, ④, ⑥, ⑨, ⑫, 36 months				
Packaging, safety notes, documentation and test certificates																					
Acceptance test certificate 3.1 in accordance with EN 10204 ²⁵⁾	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 data sheet	B60		–	–	–	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.–						
Standard test (routine test) with acceptance	B65		–	–	–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–						
Type test with heat run for horizontal motors, without acceptance	B82		3320.–	4080.–	4840.–	5600.–	6370.–	7130.–	7890.–	8650.–	9410.–	10200.–	10900.–	11700.–	12500.–						
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.–						
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	37.20	46.–	46.–	46.–						

For legends and footnotes, see Page 2/66.

SIMOTICS SD 1LE1 Standard Motors

Article No. supplements and special versions

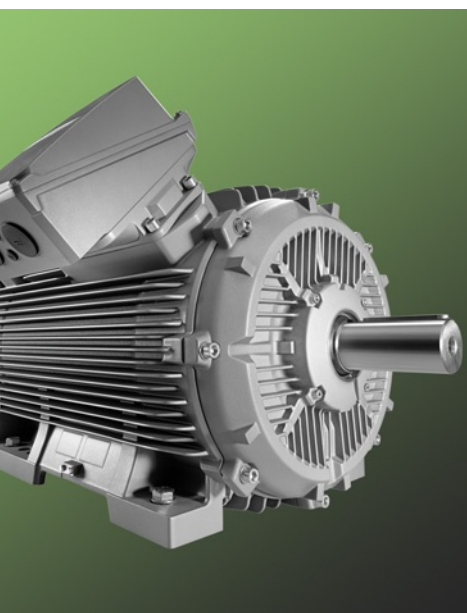
Options · Cast-iron series 1LE15 Basic Line, 1LE16 Performance Line

- 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

2

- 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 VΔ/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**.

SIMOTICS SD Standard Motors next generation



3/2	SIMOTICS SD Standard Motors
3/2	<u>Motors with IE4 Super Premium Efficiency</u>
3/2	• 1LE5504 Basic Line
3/2	• 1LE5604 Performance Line
3/3	<u>Motors with IE3 Premium Efficiency</u>
3/3	• 1LE5503 Basic Line
3/3	• 1LE5603 Performance Line
3/4	SIMOTICS SD Add Standard Motors
3/4	<u>Motors with IE4 Super Premium Efficiency</u>
3/4	• 1LE5534 Basic Line
3/4	• 1LE5634 Performance Line
3/5	• 1LE5534
3/6	<u>Motors with IE3 Premium Efficiency</u>
3/6	• 1LE5533 Basic Line
3/6	• 1LE5633 Performance Line
3/7	• 1LE5533
3/2	SIMOTICS SD Pro Standard Motors
3/8	<u>Motors with IE3 Premium Efficiency</u>
3/8	• 1LE5583 Basic Line
3/8	• 1LE5683 Performance Line
3/9	• 1LE5583
3/10	Article No. supplements and special versions
3/10	<u>Voltages</u>
3/12	<u>Types of construction</u>
3/15	<u>Motor protection</u>
3/17	<u>Terminal box position</u>
3/19	<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	Motors with IE4 Super Premium Efficiency
Series version	Cast-iron series 1LE5504/1LE5604 Basic/Performance Line
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
250	IE4	315 L	1LE5504-3AA6-.....	55400.-	1LE5604-3AA6-.....	57100.-
315	IE4	315 L	1LE5504-3AA7-.....	69800.-	1LE5604-3AA7-.....	72000.-
355	IE4	355 L			1LE5604-3BA3-.....	81300.-
400	IE4	355 L			1LE5604-3BA4-.....	92900.-
500	IE4	355 L			1LE5604-3BA5-.....	122000.-
4-pole: 1500 rpm at 50 Hz						
250	IE4	315 L	1LE5504-3AB6-.....	51900.-	1LE5604-3AB6-.....	53600.-
315	IE4	315 L	1LE5504-3AB7-.....	65500.-	1LE5604-3AB7-.....	67500.-
355	IE4	355 L			1LE5604-3BB3-.....	76400.-
400	IE4	355 L			1LE5604-3BB4-.....	86500.-
500	IE4	355 L			1LE5604-3BB5-.....	112000.-
6-pole: 1000 rpm at 50 Hz						
200	IE4	315 L	1LE5504-3AC7-.....	61300.-	1LE5604-3AC7-.....	63100.-
250	IE4	315 L	1LE5504-3AC8-.....	77100.-	1LE5604-3AC8-.....	79500.-
315	IE4	355 L			1LE5604-3BC2-.....	102000.-
355	IE4	355 L			1LE5604-3BC3-.....	109000.-
400	IE4	355 L			1LE5604-3BC4-.....	118000.-
8-pole: 750 rpm at 50 Hz						
160	IE4	315 L	1LE5504-3AD7-.....	61300.-	1LE5604-3AD7-.....	63100.-
200	IE4	315 L	1LE5504-3AD8-.....	75400.-	1LE5604-3AD8-.....	77700.-
250	IE4	355 S			1LE5604-3BD1-.....	101000.-
315	IE4	355 M			1LE5604-3BD2-.....	124000.-

Standard delivery times in working days:

20

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SIMOTICS SD Standard Motors next generation

Orientation

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

Overview

Category	Motors with IE3 Super Premium Efficiency						
Series version	Cast-iron series 1LE5503/1LE5603 Basic/Performance Line						
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)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
2-pole: 3000 rpm at 50 Hz							
250	IE3	315 L	1LE5503-3AA6-.....	49300.-	1LE5603-3AA6-.....	50900.-	
315	IE3	315 L	1LE5503-3AA7-.....	62200.-	1LE5603-3AA7-.....	64100.-	
355	IE3	355 L			1LE5603-3BA3-.....	72500.-	
400	IE3	355 L			1LE5603-3BA4-.....	82900.-	
500	IE3	355 L			1LE5603-3BA5-.....	108000.-	
4-pole: 1500 rpm at 50 Hz							
250	IE3	315 L	1LE5503-3AB6-.....	46200.-	1LE5603-3AB6-.....	47700.-	
315	IE3	315 L	1LE5503-3AB7-.....	58500.-	1LE5603-3AB7-.....	60200.-	
355	IE3	355 L			1LE5603-3BB3-.....	68100.-	
400	IE3	355 L			1LE5603-3BB4-.....	77100.-	
500	IE3	355 L			1LE5603-3BB5-.....	100000.-	
6-pole: 1000 rpm at 50 Hz							
200	IE3	315 L	1LE5503-3AC7-.....	54600.-	1LE5603-3AC7-.....	56200.-	
250	IE3	315 L	1LE5503-3AC8-.....	68800.-	1LE5603-3AC8-.....	70800.-	
315	IE3	355 L			1LE5603-3BC2-.....	91300.-	
355	IE3	355 L			1LE5603-3BC3-.....	97500.-	
400	IE3	355 L			1LE5603-3BC4-.....	106000.-	
8-pole: 750 rpm at 50 Hz							
160	IE3	315 L	1LE5503-3AD7-.....	54600.-	1LE5603-3AD7-.....	56200.-	
200	IE3	315 L	1LE5503-3AD8-.....	67300.-	1LE5603-3AD8-.....	69300.-	
250	IE3	355 S			1LE5603-3BD1-.....	89600.-	
315	IE3	355 M			1LE5603-3BD2-.....	110000.-	

SIMOTICS SD Add Standard Motors next generation

Orientation

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

Category	Motors with IE4 Super Premium Efficiency
Series version	Cast-iron series 1LE5534/1LE5634 Basic/Performance Line
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
250	IE4	315 L	1LE5534-3AA6-.....	61000.-	1LE5634-3AA6-.....	62700.-
315	IE4	315 L	1LE5534-3AA7-.....	76800.-	1LE5634-3AA7-.....	79200.-
355	IE4	355 L			1LE5634-3BA3-.....	89400.-
400	IE4	355 L			1LE5634-3BA4-.....	102000.-
500	IE4	355 L			1LE5634-3BA5-.....	128000.-
4-pole: 1500 rpm at 50 Hz						
250	IE4	315 L	1LE5534-3AB6-.....	57200.-	1LE5634-3AB6-.....	58900.-
315	IE4	315 L	1LE5534-3AB7-.....	72100.-	1LE5634-3AB7-.....	74300.-
355	IE4	355 L			1LE5634-3BB3-.....	83900.-
400	IE4	355 L			1LE5634-3BB4-.....	95200.-
500	IE4	355 L			1LE5634-3BB5-.....	118000.-
6-pole: 1000 rpm at 50 Hz						
200	IE4	315 L	1LE5534-3AC7-.....	67400.-	1LE5634-3AC7-.....	69400.-
250	IE4	315 L	1LE5534-3AC8-.....	84900.-	1LE5634-3AC8-.....	87400.-
315	IE4	355 L			1LE5634-3BC2-.....	112000.-
355	IE4	355 L			1LE5634-3BC3-.....	119000.-
400	IE4	355 L			1LE5634-3BC4-.....	132000.-
8-pole: 750 rpm at 50 Hz						
160	IE4	315 L	1LE5534-3AD7-.....	67400.-	1LE5634-3AD7-.....	69400.-
200	IE4	315 L	1LE5534-3AD8-.....	82900.-	1LE5634-3AD8-.....	85400.-
250	IE4	355 S			1LE5634-3BD1-.....	110000.-
315	IE4	355 M			1LE5634-3BD2-.....	136000.-

Standard delivery times in working days:

20

30

SIMOTICS SD Add Standard Motors next generation

Orientation

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

Overview

Category	Motors with IE4 Super Premium Efficiency (continued)
Series version	Cast-iron series 1LE5534
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. ▲ New	Base price EUR
2-pole: 3000 rpm at 50 Hz				
560	IE4	400	▲ 1LE5534-4AA3-....	134000.-
630	IE4	400	▲ 1LE5534-4AA5-....	150000.-
710	IE4	400	▲ 1LE5534-4AA7-....	170000.-
800	IE4	450	▲ 1LE5534-4BA3-....	125000.-
900	IE4	450	▲ 1LE5534-4BA5-....	141000.-
1000	IE4	450	▲ 1LE5534-4BA7-....	159000.-
4-pole: 1500 rpm at 50 Hz				
560	IE4	400	▲ 1LE5534-4AB3-....	138000.-
630	IE4	400	▲ 1LE5534-4AB5-....	150000.-
710	IE4	400	▲ 1LE5534-4AB7-....	171000.-
800	IE4	450	▲ 1LE5534-4BB3-....	138000.-
900	IE4	450	▲ 1LE5534-4BB5-....	150000.-
1000	IE4	450	▲ 1LE5534-4BB7-....	180000.-
6-pole: 1000 rpm at 50 Hz				
450	IE4	400	▲ 1LE5534-4AC3-....	197000.-
500	IE4	400	▲ 1LE5534-4AC5-....	217000.-
560	IE4	400	▲ 1LE5534-4AC7-....	247000.-
630	IE4	450	▲ 1LE5534-4BC3-....	180000.-
710	IE4	450	▲ 1LE5534-4BC5-....	204000.-
800	IE4	450	▲ 1LE5534-4BC7-....	229000.-
8-pole: 750 rpm at 50 Hz				
355	IE4	400	▲ 1LE5534-4AD3-....	193000.-
400	IE4	400	▲ 1LE5534-4AD5-....	214000.-
450	IE4	400	▲ 1LE5534-4AD7-....	240000.-
500	IE4	450	▲ 1LE5534-4BD3-....	203000.-
560	IE4	450	▲ 1LE5534-4BD5-....	222000.-
630	IE4	450	▲ 1LE5534-4BD7-....	256000.-

SIMOTICS SD Add Standard Motors next generation

Orientation

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

Category	Motors with IE3 Super Premium Efficiency
Series version	Cast-iron series 1LE5533/1LE5633 Basic/Performance Line
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
2-pole: 3000 rpm at 50 Hz						
250	IE3	315 L	1LE5533-3AA6-.....	54300.-	1LE5633-3AA6-.....	55900.-
315	IE3	315 L	1LE5533-3AA7-.....	68500.-	1LE5633-3AA7-.....	70500.-
355	IE3	355 L			1LE5633-3BA3-.....	79800.-
400	IE3	355 L			1LE5633-3BA4-.....	91200.-
500	IE3	355 L			1LE5633-3BA5-.....	113000.-
4-pole: 1500 rpm at 50 Hz						
250	IE3	315 L	1LE5533-3AB6-.....	50900.-	1LE5633-3AB6-.....	52400.-
315	IE3	315 L	1LE5533-3AB7-.....	64400.-	1LE5633-3AB7-.....	66300.-
355	IE3	355 L			1LE5633-3BB3-.....	74900.-
400	IE3	355 L			1LE5633-3BB4-.....	84900.-
500	IE3	355 L			1LE5633-3BB5-.....	106000.-
6-pole: 1000 rpm at 50 Hz						
200	IE3	315 L	1LE5533-3AC7-.....	60000.-	1LE5633-3AC7-.....	61900.-
250	IE3	315 L	1LE5533-3AC8-.....	75600.-	1LE5633-3AC8-.....	77900.-
315	IE3	355 L			1LE5633-3BC2-.....	100000.-
355	IE3	355 L			1LE5633-3BC3-.....	107000.-
400	IE3	355 L			1LE5633-3BC4-.....	115000.-
8-pole: 750 rpm at 50 Hz						
160	IE3	315 L	1LE5533-3AD7-.....	60000.-	1LE5633-3AD7-.....	61900.-
200	IE3	315 L	1LE5533-3AD8-.....	74100.-	1LE5633-3AD8-.....	76200.-
250	IE3	355 S			1LE5633-3BD1-.....	98700.-
315	IE3	355 M			1LE5633-3BD2-.....	122000.-

Standard delivery times in working days:

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SIMOTICS SD Add Standard Motors next generation

Orientation

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

Overview

Category	Motors with IE3 Premium Efficiency (continued)
Series version	Cast-iron series 1LE5533
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. ▲ New	Base price EUR
2-pole: 3000 rpm at 50 Hz				
560	IE3	400	▲ 1LE5533-4AA3-....	119000.-
630	IE3	400	▲ 1LE5533-4AA5-....	134000.-
710	IE3	400	▲ 1LE5533-4AA7-....	152000.-
800	IE3	450	▲ 1LE5533-4BA3-....	176000.-
900	IE3	450	▲ 1LE5533-4BA5-....	194000.-
1000	IE3	450	▲ 1LE5533-4BA7-....	220000.-
4-pole: 1500 rpm at 50 Hz				
560	IE3	400	▲ 1LE5533-4AB3-....	111000.-
630	IE3	400	▲ 1LE5533-4AB5-....	127000.-
710	IE3	400	▲ 1LE5533-4AB7-....	141000.-
800	IE3	450	▲ 1LE5533-4BB3-....	161000.-
900	IE3	450	▲ 1LE5533-4BB5-....	182000.-
1000	IE3	450	▲ 1LE5533-4BB7-....	204000.-
6-pole: 1000 rpm at 50 Hz				
450	IE3	400	▲ 1LE5533-4AC3-....	124000.-
500	IE3	400	▲ 1LE5533-4AC5-....	134000.-
560	IE3	400	▲ 1LE5533-4AC7-....	153000.-
630	IE3	450	▲ 1LE5533-4BC3-....	172000.-
710	IE3	450	▲ 1LE5533-4BC5-....	192000.-
800	IE3	450	▲ 1LE5533-4BC7-....	214000.-
8-pole: 750 rpm at 50 Hz				
355	IE3	400	▲ 1LE5533-4AD3-....	124000.-
400	IE3	400	▲ 1LE5533-4AD5-....	134000.-
450	IE3	400	▲ 1LE5533-4AD7-....	161000.-
500	IE3	450	▲ 1LE5533-4BD3-....	181000.-
560	IE3	450	▲ 1LE5533-4BD5-....	199000.-
630	IE3	450	▲ 1LE5533-4BD7-....	229000.-

SIMOTICS SD Pro Standard Motors next generation

Orientation

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

Category	Motors with IE3 Super Premium Efficiency
Series version	Cast-iron series 1LE5583/1LE5683 Basic/Performance Line
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
(for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line ▲ New	Base price EUR	Article No. Performance Line ▲ New	Base price EUR
2-pole: 3000 rpm at 50 Hz						
250	IE3	315 L	▲ 1LE5583-3AA6-.....	59700.-	▲ 1LE5683-3AA6-.....	59800.-
315	IE3	315 L	▲ 1LE5583-3AA7-.....	73100.-	▲ 1LE5683-3AA7-.....	75300.-
355	IE3	355 L			▲ 1LE5683-3BA3-.....	85200.-
400	IE3	355 L			▲ 1LE5683-3BA4-.....	97300.-
500	IE3	355 L			▲ 1LE5683-3BA5-.....	121000.-
4-pole: 1500 rpm at 50 Hz						
250	IE3	315 L	▲ 1LE5583-3AB6-.....	54400.-	▲ 1LE5683-3AB6-.....	56100.-
315	IE3	315 L	▲ 1LE5583-3AB7-.....	68700.-	▲ 1LE5683-3AB7-.....	70800.-
355	IE3	355 L			▲ 1LE5683-3BB3-.....	80000.-
400	IE3	355 L			▲ 1LE5683-3BB4-.....	90600.-
500	IE3	355 L			▲ 1LE5683-3BB5-.....	112000.-
6-pole: 1000 rpm at 50 Hz						
200	IE3	315 L	▲ 1LE5583-3AC7-.....	64200.-	▲ 1LE5683-3AC7-.....	65500.-
250	IE3	315 L	▲ 1LE5583-3AC8-.....	80800.-	▲ 1LE5683-3AC8-.....	82500.-
315	IE3	355 L			▲ 1LE5683-3BC2-.....	107000.-
355	IE3	355 L			▲ 1LE5683-3BC3-.....	114000.-
400	IE3	355 L			▲ 1LE5683-3BC4-.....	124000.-

Standard delivery times in working days:

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SIMOTICS SD Pro Standard Motors next generation

Orientation

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

Overview

Category	Motors with IE3 Premium Efficiency (continued)
Series version	Cast-iron series 1LE5583
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 3/10, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. ▲ New	Base price EUR
2-pole: 3000 rpm at 50 Hz				
560	IE3	400	▲ 1LE5583-4AA3-....	139000.-
630	IE3	400	▲ 1LE5583-4AA5-....	156000.-
710	IE3	400	▲ 1LE5583-4AA7-....	177000.-
800	IE3	450	▲ 1LE5583-4BA3-....	130000.-
900	IE3	450	▲ 1LE5583-4BA5-....	145000.-
1000	IE3	450	▲ 1LE5583-4BA7-....	164000.-
4-pole: 1500 rpm at 50 Hz				
560	IE3	400	▲ 1LE5583-4AB3-....	139000.-
630	IE3	400	▲ 1LE5583-4AB5-....	150000.-
710	IE3	400	▲ 1LE5583-4AB7-....	171000.-
800	IE3	450	▲ 1LE5583-4BB3-....	143000.-
900	IE3	450	▲ 1LE5583-4BB5-....	156000.-
1000	IE3	450	▲ 1LE5583-4BB7-....	186000.-
6-pole: 1000 rpm at 50 Hz				
450	IE3	400	▲ 1LE5583-4AC3-....	199000.-
500	IE3	400	▲ 1LE5583-4AC5-....	218000.-
560	IE3	400	▲ 1LE5583-4AC7-....	249000.-
630	IE3	450	▲ 1LE5583-4BC3-....	181000.-
710	IE3	450	▲ 1LE5583-4BC5-....	206000.-
800	IE3	450	▲ 1LE5583-4BC7-....	230000.-
8-pole: 750 rpm at 50 Hz				
355	IE3	400	▲ 1LE5583-4AD3-....	195000.-
400	IE3	400	▲ 1LE5583-4AD5-....	216000.-
450	IE3	400	▲ 1LE5583-4AD7-....	242000.-
500	IE3	450	▲ 1LE5583-4BD3-....	205000.-
560	IE3	450	▲ 1LE5583-4BD5-....	226000.-
630	IE3	450	▲ 1LE5583-4BD7-....	259000.-

SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

25**Voltages · Cast-iron series 1LE55 Basic Line, 1LE56 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	315	355	
			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		
1LE5 - - ...		Order code			
Voltage at 50 Hz or 60 Hz					
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ	3 4	–	□	□	
50 Hz 400 VΔ, 60 Hz 460 VΔ			□	□	
50 Hz 500 VΔ, 60 Hz 575 VΔ	4 0	–	O	O	
50 Hz 690 VΔ	4 7	–	206.–	206.–	
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ	3 3	–	404.–	618.–	
50 Hz 380 VΔ			404.–	618.–	
50 Hz 415 VΔ, 60 Hz 480 VΔ	3 5	–	404.–	618.–	
60 Hz 380 VΔ/660 VY	3 0	–	404.–	618.–	
60 Hz 380 VΔ			404.–	618.–	
60 Hz 400 VΔ/690 VY	3 1	–	404.–	618.–	
60 Hz 400 VΔ			404.–	618.–	
Voltage at 60 Hz and required power					
380 VΔ/660 VY; 50 Hz power	9 0	M2B	404.–	618.–	
380 VΔ; 50 Hz power			404.–	618.–	
440 VΔ; 50 Hz power	9 0	M2D	404.–	618.–	
460 VΔ; 50 Hz power	9 0	M2F	404.–	618.–	
575 VΔ; 50 Hz power	9 0	M2H	404.–	618.–	
400 VΔ/690 VY; 50 Hz power	9 0	M2J	618.–	618.–	
400 VΔ; 50 Hz power			618.–	618.–	
480 VΔ; 50 Hz power	9 0	M2L	404.–	618.–	
Non-standard voltage and/or frequencies					
Non-standard winding ¹⁾	9 0	M1Y • and customer specifications	993.–	1130.–	

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

¹⁾ 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:

25**SIMOTICS SD Add/Pro Standard Motors next generation**

Article No. supplements and special versions

Voltages · Cast-iron series 1LE55

Selection and ordering data

Voltages	Article No. supplement		Additional identification code with order code and plain text if required	Frame size	450	Motor version	
	Voltage code 12th and 13th position of the Article No.			IEC	IE4 IE3		
1LE5 ... - ...			Order code	400			
Voltage at 50 Hz or 60 Hz							
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ	3	4	–	□	□		
50 Hz 500 VΔ	4	0	–	O	O		
60 Hz 575 VΔ				O	□ ²⁾		
50 Hz 690 VΔ	4	7	–	O	O		
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ	3	3	–	876.–	979.–		
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	–	876.–	979.–		
50 Hz 600 VΔ, 60 Hz 690 VΔ	4	4	–	876.–	979.–		
50 Hz 660 VΔ	4	6	–	876.–	979.– ²⁾		
Voltage at 60 Hz and required power							
440 VΔ; 60 Hz power	9	0	M1D	876.–	979.–		
460 VΔ; 60 Hz power	9	0	M1F	876.–	979.–		
575 VΔ; 60 Hz power	9	0	M1H	876.–	979.– ²⁾		
400 VΔ/690 VY; 60 Hz power	9	0	M1J	876.–	979.–		
480 VΔ; 60 Hz power	9	0	M1L	876.–	979.–		
440 VΔ; 50 Hz power	9	0	M2D	876.–	979.–		
460 VΔ; 50 Hz power	9	0	M2F	876.–	979.–		
575 VΔ; 50 Hz power	9	0	M2H	876.–	979.– ²⁾		
400 VΔ/690 VY; 50 Hz power	9	0	M2J	876.–	979.–		
480 VΔ; 50 Hz power	9	0	M2L	876.–	979.–		
Non-standard voltage and/or frequencies							
Non-standard winding ¹⁾	9	0	M1Y • and customer specifications	4830.–	5680.– ²⁾		

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

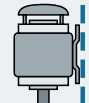
¹⁾ Plain text must be specified in the order: Voltage between 380 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

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

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****Selection and ordering data**

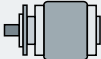
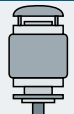
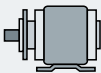
Types of construction	Article No. supplement		Frame size		Motor version	
	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	315	355	IEC	IE4
1LE5 ■ ... (-Z)		Order code	1LE5504 Basic Line			IE3
			1LE5604 Performance Line			
			1LE5534 Basic Line			
			1LE5634 Performance Line			
			1LE5503 Basic Line			
			1LE5603 Performance Line			
			1LE5533 Basic Line			
			1LE5633 Performance Line			
Without flange						
IM B3 ^{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	751.—	876.—	

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

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	315	355	IEC	IE4
			1LE5504 Basic Line			
			1LE5604 Performance Line			
			1LE5534 Basic Line			
			1LE5634 Performance Line			
			1LE5503 Basic Line			
			1LE5603 Performance Line			
1LE5533 Basic Line		IE3				
1LE5633 Performance Line						
1LE5	.. (-Z)	Order code				
With flange	EN 50347 DIN 42948		FF600 A 660	FF600 A 660		
IM B5 ^{2) 5)}		F	–	1030.–	4120.–	
IM V1 without protective cover ²⁾		G	–	1040.–	4120.–	
IM V1 with protective cover ^{2) 3) 4)}		G	H00	1791.–	4996.–	
IM V3 ⁴⁾		H	–	1030.–	4120.–	
IM B35 ³⁾		J	–	1180.–	4330.–	

- ☐ Standard version
☐ Without additional charge

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 "Standard cylindrical shaft extension (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.

SIMOTICS SD Add/Pro Standard Motors next generation

Article No. supplements and special versions

25**Types of construction · Cast-iron series 1LE55****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	
				400	450	IEC	IE4 IE3
				1LE5534 Add			
				1LE5533 Add			
1LE5583 Pro							
1LE5		.. (-Z)					
Without flange							
IM B3 ^{1) 2)}		A	–				
IM V6 ²⁾		D	–	O. R.	O. R. ⁷⁾		
IM V5 without protective cover ²⁾		C	–	O. R.	O. R. ⁷⁾		
IM V5 with protective cover ^{2) 3) 4)}		C	H00	2110.–	2520.– ⁷⁾		
With flange							
		DIN EN 50347		FF600	FF600		
		DIN 42948		A 660	A 660		
IM B5 ^{2) 5) 6)}		F	–	4220.–	5670.–		
IM V1 without protective cover ²⁾		G	–	4220.–	5670.–		
IM V1 with protective cover ^{2) 3) 4)}		G	H00	6330.–	8190.–		
IM B35 ³⁾		J	–	4430.–	5510.–		

□ Standard version
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 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 design (without additional charge).

- ⁴⁾ The "Standard cylindrical shaft extension (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⁾ For IM B5 design, additionally support the machine with a support foot on the NDE side. Support foot is not part of the scope of delivery. Support foot with appropriate rigidity must be sufficiently dimensioned. Support foot must be able to carry totally motor weight.
- ⁷⁾ Not possible for 2-pole motor 1LE55...-4BA.

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**Selection and ordering data**

Motor protection	Article No. supplement	Frame size	Motor version
	Motor protection code 15th position of the Article No.	315 355	IEC IE4
	Additional identification code with order code and plain text if required	1LE5504 Basic Line	
		1LE5604 Performance Line	
		1LE5534 Basic Line	
		1LE5634 Performance Line	
		1LE5503 Basic Line	IE3
		1LE5603 Performance Line	
		1LE5533 Basic Line	
		1LE5633 Performance Line	
1LE5...-...-...-...-...	Order code		
Motor protection			
Without (Standard) ¹⁾	A	□	Only for: 1LE5504, 1LE5503
1 or 3 PTC thermistors – for tripping (2 terminals) ^{1) 2)}	B	398.–	Only for: 1LE5504, 1LE5503
		□	Only for: 1LE5604, 1LE5603
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ²⁾	C	666.–	
1 temperature sensor KTY84-130 (2 terminals) ²⁾	F	868.–	
2 temperature sensors KTY84-130 (4 terminals) ²⁾	G	1470.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ²⁾	H	1640.–	
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) ²⁾	J	2420.–	
1 Pt1000 resistance thermometer (2 terminals) ²⁾	K	868.–	
2 Pt1000 resistance thermometers (4 terminals) ²⁾	L	1470.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) ²⁾	P	1310.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ²⁾	Q	1970.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ²⁾	R	2900.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ²⁾	Z	Q3A	411.–
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) ²⁾	Z	Q9A	670.–

□ Standard version

Note:

Options are available specifically for bearing protection –
For order codes and descriptions, see from Page 3/19.

¹⁾ 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.

²⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

SIMOTICS SD Add/Pro Standard Motors next generation

Article No. supplements and special versions

25**Motor protection · Cast-iron series 1LE55****Selection and ordering data**

Motor protection	Article No. supplement	Frame size	Motor version
	Motor protection code 15th position of the Article No.	400 450	
	Additional identification code with order code and plain text if required	1LE5534 Add	IEC IE4
		1LE5533 Add	IE3
		1LE5583 Pro	
1LE5 ... - ... - ... - ...	Order code		
Motor protection			
Without (Standard) ¹⁾	A	–	□
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	917.–
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	1020.–
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	1230.–
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	1920.–
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	H	–	1640.–
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)	J	–	2420.–
1 Pt1000 resistance thermometer (2 terminals)	K	–	1230.–
2 Pt1000 resistance thermometers (4 terminals)	L	–	1920.–
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	P	–	1310.–
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q	–	1970.–
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	R	–	2900.–
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	1230.–
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) ¹⁾	Z	Q9A	2770.–

□ Standard version

Note:

Options are available specifically for bearing protection –
For order codes and descriptions, see from Page 3/19.

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

Standard delivery times in working days:

25**SIMOTICS SD Standard Motors next generation**

Article No. supplements and special versions

Terminal box position · Cast-iron series 1LE55 Basic Line, 1LE56 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	315	355	IEC	IE4
1LE5 - - - - -			1LE5504 Basic Line		IEC	IE4
			1LE5604 Performance Line			
			1LE5534 Basic Line			
			1LE5634 Performance Line			
			1LE5503 Basic Line		IE3	
			1LE5603 Performance Line			
			1LE5533 Basic Line			
		Order code	1LE5633 Performance Line			
Terminal box position						
Terminal box base on LHS with terminal box on top	0	—	618.—	618.—		
Terminal box base on RHS with terminal box on top	1	—	618.—	618.—		
Terminal box base on LHS with tilted terminal box 45°	2	—	O	O		
Terminal box base on RHS with tilted terminal box 45°	3	—	□	□		
Terminal box on RHS ¹⁾	5	—	618.—	618.—		
Terminal box on LHS ¹⁾	6	—	618.—	618.—		
Terminal box on LHS (base at the bottom) ²⁾	9	R5L	618.—	618.—		
Terminal box on RHS (base at the bottom) ²⁾	9	R6R	618.—	618.—		
Terminal box at the bottom on LHS ²⁾	9	R7L	618.—	618.—		
Terminal box at the bottom on RHS ²⁾	9	R7R	618.—	618.—		

- ☐ Standard version
☐ Without additional charge

3

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

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

SIMOTICS SD Add/Pro Standard Motors next generation

Article No. supplements and special versions

25**Terminal box position · Cast-iron series 1LE55****Selection and ordering data**

Motor protection	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	400	450	IEC	IE4 IE3
			1LE5534 Add			
			1LE5533 Add			
1LE5 Order code		1LE5583 Pro				
Terminal box position						
Terminal box base on LHS with terminal box on top ³⁾	0	–	824.–	824.–		
Terminal box base on RHS with terminal box on top ³⁾	1	–	824.–	824.–		
Terminal box base on LHS with tilted terminal box 45°	2	–	O	O		
Terminal box base on RHS with tilted terminal box 45°	3	–	□	□		
Terminal box on RHS ¹⁾	5	–	824.–	824.–		
Terminal box on LHS ¹⁾	6	–	824.–	824.–		
Terminal box on LHS (base at the bottom) ²⁾	9	R5L	618.–	618.–		
Terminal box on RHS (base at the bottom) ²⁾	9	R6R	618.–	618.–		
Terminal box at the bottom on LHS ²⁾	9	R7L	618.–	618.–		
Terminal box at the bottom on RHS ²⁾	9	R7R	618.–	618.–		

- ☐ Standard version
☐ Without additional charge

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

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

³⁾ Not possible for motors with vertical drive shaft (IM V1, IM V5, IM V6).

Standard delivery times in working days:

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On
request

SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

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

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version		
		315	355	IEC	IE4	
		1LE5504 Basic Line				
		1LE5604 Performance Line				
		1LE5534 Basic Line				
		1LE5634 Performance Line				
		1LE5503 Basic Line				
		1LE5603 Performance Line				IE3
1LE5533 Basic Line						
1LE5 . . . - - -Z	Order code		1LE5633 Performance Line			
Motor protection						
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	Q11		398.–	398.–	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) ¹⁾	Q12		666.–	666.–	Not for:	Combination with motor protection code C (15th position of the Article No.)
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	Q23		868.–	868.–	Not for:	Combination with motor protection code F (15th position of the Article No.)
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	Q25		1470.–	1470.–	Not for:	Combination with motor protection code G (15th position of the Article No.)
3 bimetal sensors (NC contact) for tripping (2 terminals)	Q31		444.–	444.–		
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32		785.–	785.–		
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33		454.–	454.–		
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34		795.–	795.–		
1 Pt1000 resistance thermometer (2 terminals)	Q35		868.–	868.–		
2 Pt1000 resistance thermometers (4 terminals)	Q36		1470.–	1470.–		
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	Q60		1640.–	1640.–	Not for:	Combination with motor protection code H (15th position of the Article No.)
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) ²³⁾	Q61		2420.–	2420.–	Not for:	Combination with motor protection code J (15th position of the Article No.)
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62		1310.–	1310.–		
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63		1970.–	1970.–		
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64		2900.–	2900.–		
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)	Q72		1630.–	1630.–		
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78		2060.–	2060.–		
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79		2370.–	2370.–		
Motor connection and terminal box						
Terminal box on NDE ²³⁾	H08		1180.–	1240.–		
Second external grounding	H70		15.50	15.50		
Rotation of the terminal box through 90°, entry from DE	R10		122.–	122.–	Not for:	Combination with type of construction letters F, G, H, J (14th position of the Article No.)
Rotation of the terminal box through 90°, entry from NDE	R11		122.–	122.–		
Rotation of the terminal box through 180°	R12		122.–	122.–		
One EMC cable gland	R14		519.–	1240.–	Not for:	Combination with order codes R51, R53
One metal cable gland	R15		231.–	515.–	Not for:	Combination with order codes R51, R53
EMC cable gland, maximum configuration	R16		1070.–	2060.–	Not for:	Combination with order codes R51, R53

For legends and footnotes, see Page 3/25.

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**

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version		
		315	355	IEC	IE4	
		1LE5504 Basic Line				
		1LE5604 Performance Line				
		1LE5534 Basic Line				
		1LE5634 Performance Line				
		1LE5503 Basic Line				IE3
		1LE5603 Performance Line				
1LE5533 Basic Line						
1LE5...-.....-Z	Order code		1LE5633 Performance Line			
Motor connection and terminal box (continued)						
Stud terminal for cable connection, accessories pack (3 items)	R17		185.–	227.–	Not for:	Combination with order codes R51, R53
One metal cable gland, maximum configuration	R18		409.–	618.–	Not for:	Combination with order codes R51, R53
Saddle terminal for connection without cable lug, accessories pack	R19		721.–	1550.–	Not for:	Combination with order codes R21, R23, R24
3 cables protruding, 1.5 m long	R21		O. R.	O. R.	Not for:	Combination with order codes R17, R19, R50
6 cables protruding, 1.5 m long	R23		O. R.	O. R.	Not for:	Combination with order codes R17, R19, R50
6 cables protruding, 3 m long	R24		O. R.	O. R.	Not for:	Combination with order codes R17, R19, R50
Larger terminal box	R50		2190.–	–	Not for:	Combination with order codes R21, R23, R24
Terminal box without cable entry opening	R51		O	O	Not for:	Combination with order codes R14, R15, R16, R18
Drilled removable entry plate	R52		500.–	618.–		
Undrilled removable entry plate	R53		500.–	618.–	Not for:	Combination with order codes R14, R15, R16, R18
Cast-iron auxiliary terminal box (small)	R62		278.–	309.–		
Larger cast-iron terminal box	R63		618.–	618.–		
Silicon-free version	R74		350.–	350.–		
Non-standard threaded through hole (NPT or G thread) ²⁾	Y61 • and customer specifications		657.–	773.–		
Windings and insulation						
Temperature class 155 (F), utilized acc. to 155 (F), with service factor	N01		107.–	107.–		
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	N02		107.–	107.–		
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	N03		107.–	107.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	N05		107.–	107.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	N06		107.–	107.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	N07		107.–	107.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	N08		993.–	107.–		
Temperature class 180 (H)	N10		1750.–	2270.–		
Temperature class 180 (H) at rated power and max. CT 60 °C ^{3) 4)}	N11		2160.–	2680.–		
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30		1320.–	1440.–		
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N31		1780.–	1960.–		
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		1480.–	2060.–		
Temperature class 155 (F), utilized according to 155 (F) ⁴⁾ other requirements	Y52 • and spec. power, CT ... °C or IA m above sea level		107.–	107.–		
Temperature class 180 (H), utilized according to 155 (F)	Y75 • and spec. power, CT ... °C or IA m above sea level		2410.–	2880.–		

For legends and footnotes, see Page 3/25.

Standard delivery times in working days:

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On
request

SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

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

Special versions	Additional identification code -Z with order code and plain text if required	Frame size	Motor version
		315 355	
		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	
1LE5.....-Z	Order code		
Colors and paint finish			
Standard finish C2 in RAL 7030 stone gray		□	Only for: Basic Line
Unpainted (only cast-iron parts primed)	S00	O	
Unpainted, only primed	S01	81.70	
Special finish C3	S02	□	Only for: Basic Line
		299.–	Only for: Performance Line
Special finish sea air resistant C4	S03	814.–	
Special paint for use offshore C5	S04	7910.–	8340.–
Internal coating	S05	134.–	155.–
Top coat polyurethane ²⁷⁾	S06	779.–	824.–
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.–
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....	742.–	900.–
Modular technology – Basic versions ⁵⁾			
Mounting of holding brake (standard assignment) ^{6) 25) 26)}	F01	62800.–	97900.–
		–	–
Mounting of separately driven fan	F70	4190.–	5150.–
Modular technology – Additional versions			
Brake supply voltage 24 V DC	F10	69.20	69.20
		–	–
Brake supply voltage 230 V AC, 50/60 Hz	F11	O	O
		–	–
Brake supply voltage 400 V AC, 50/60 Hz	F12	69.20	69.20
		–	–
Reverse running stop, reverse movement left locked, rotating direction right	F40	9370.–	11300.–
Reverse running stop, reverse movement right locked, rotating direction left	F41	9370.–	11300.–
Special technology ⁵⁾			
Mounting of LL 861 900 220 rotary pulse encoder ⁹⁾	G04	4120.–	6080.–
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁹⁾	G05	4840.–	6490.–
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁹⁾	G06	5870.–	6080.–
Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) ¹⁰⁾	G07	6490.–	6900.–
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) ¹⁰⁾	G08	17600.–	17600.–

For legends and footnotes, see Page 3/25.

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**

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version		
		315	355			
		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						
1LE5 -Z	Order code					
Special technology ⁵⁾ (continued)						
Mounting of rotary pulse encoder Kübler Sendix 5020 HTL, 1024 I	G11		1160.–	1770.–	Not for:	Combination with order codes D02, L05
Mounting of rotary pulse encoder Kübler Sendix 5020 TTL, 1024 I	G12		1770.–	O. R.	Not for:	Combination with order codes D02, L05
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box moisture protection	G15		5820.–	6180.–	Not for:	Combination with order codes D02, L05
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box dust protection	G16		5820.–	6180.–	Not for:	Combination with order codes D02, L04, L05
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed rpm), terminal box moisture protection	Y74 • and spec. speed rpm		8840.–	11300.–	Not for:	Combination with order codes D02, L05
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed rpm), terminal box dust protection	Y76 • and spec. speed rpm		8840.–	11300.–	Not for:	Combination with order codes D02, L05
Mounting of rotary pulse encoder HOG 10 DN 1024 I + ESL 93, (integrated electronic speed switch, speed rpm), terminal box dust protection	Y79 • and spec. speed (max. 3) rpm		15500.–	18500.–	Not for:	Combination with order codes D02, L05
Mechanical design and degrees of protection						
Low-noise version for 2-pole motors with clockwise direction of rotation	F77		2420.– –	2680.– –	Only for:	2-pole motors Combination with order codes L05, F90
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	F78		2420.– –	2680.– –	Only for:	2-pole motors Combination with order codes L05, F90
Prepared for mountings with D12 shaft	G41		906.–	906.–	Not for:	Combination with order codes D02, L05
Prepared for mountings with D16 shaft	G42		906.–	906.–	Not for:	Combination with order code L05
Mechanical protection for encoders	G43		208.–	208.–	Not for:	Combination with order code L05
Protective cover ^{7) 9) 11)}	H00		751.–	876.–	Not for:	Combination with order code L05
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	H02		680.–	773.–		
Condensation drainage holes ²⁹⁾	H03		□	□		
Rust-resistant screws (externally)	H07		275.–	309.–		
IP65 degree of protection ¹³⁾	H20		663.–	680.–		
IP54 degree of protection	H21		824.–	824.–		
IP56 degree of protection ¹⁴⁾	H22		721.–	1440.–		
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar ^{12) 24)}	H23		469.–	546.–	Not for:	Combination with type of construction letters T, U, V (14th position of the Article No.)
Viton sealing ring	H25		134.–	227.–	Not for:	Combination with order codes D02, D03, D04
Grounding brush for converter operation	L52		4640.–	4640.–	Not for:	Combination with order codes F01, F10, F11, F12
Coolant temperature and installation altitude						
Coolant temperature –50 to +40 °C (IP54 degree of protection)	D02		6270.–	6700.–	Not for:	Combination with order codes F01, F10, F11, F12, G04, G05, G06, G07, G11, G12, G15, G16; H25, Y74, Y76, Y79
Coolant temperature –40 to +40 °C ¹⁵⁾	D03		2580.–	2780.–	Not for:	Combination with order code H25
Coolant temperature –30 to +40 °C ¹⁵⁾	D04		2390.–	2580.–	Not for:	Combination with order code H25

For legends and footnotes, see Page 3/25.

Standard delivery times in working days:

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On
request

SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

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

Special versions	Additional identification code -Z with order code and plain text if required	Frame size	Motor version
		315 355	
		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	
1LE5 -Z	Order code		
Designs in accordance with standards and specifications			
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
Electrical according to NEMA MG1-12 ¹⁷⁾	D30	102.–	113.–
Design according to UL with "Recognition Mark" ¹⁷⁾	D31	976.–	1240.–
China Energy Efficiency Label	D34	<i>New!</i> O	O
Canadian regulations (CSA) ⁶⁾	D40	821.–	979.–
TR CU product safety certificate EAC for Eurasian customs union	D47	721.–	1130.–
Bearings and lubrication			
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	L19	O	O
Located bearing DE	L20	1050.–	1240.–
Bearing design for increased cantilever forces ²⁸⁾	L22	618.–	1440.–
High-temperature grease	L24	O. R.	O. R.
Drain for used grease	L30	185.–	–
		□	□
Special version with higher speeds	L37	O. R.	O. R.
Bearing insulation DE	L50	2010.–	2160.–
Bearing insulation NDE	L51	2010.–	2160.–
Measuring nipple for SPM shock pulse measurement for bearing inspection	Q01	518.–	553.–
Balance and vibration quantity			
Vibration quantity level A		□	□
Vibration quantity level B ¹⁸⁾	L00	1680.–	1850.–
Half-key balancing (standard)		□	□
Balancing without key	L01	82.–	87.60
Full-key balancing	L02	205.–	205.–
Shaft and rotor			
Shaft extension with standard dimensions, without feather keyway	L04	1040.–	1080.–
Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347	L05	509.–	546.–
Standard shaft made of stainless steel (e.g. 1.4021)	L06	5770.–	6900.–
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	554.–	554.–
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	811.–	811.–
Non-standard shaft extension, DE ¹⁹⁾	Y58 • and customer specifications	1040.–	1340.–
Non-standard shaft extension, NDE ¹⁹⁾	Y59 • and customer specifications	1040.–	1340.–
Special shaft steel as requested by customer	Y60 • and customer specifications	O. R.	O. R.

For legends and footnotes, see Page 3/25.

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**

Special versions	Additional identification code -Z with order code and plain text if required	Frame size 315 355	Motor version
		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	
1LE5-Z	Order code		
Heating and ventilation			
Sheet metal fan cover		☐	☐
	F74	231.–	–
			Only for: Performance Line
Without external fan and without fan cover	F90	116.–	116.–
			Only for: Basic Line
Anti-condensation heating for 230 V (2 terminals)	Q02	929.–	1180.–
Anti-condensation heating for 115 V (2 terminals)	Q03	929.–	1180.–
Anti-condensation heating for 400 V (2 terminals)	Q06	2710.–	3280.–
Separately driven fan with non-standard voltage and/or frequency	Y81 • and customer specifications	993.–	1130.–
Rating plate and extra rating plates			
Extra rating plate for voltage tolerance ²⁰⁾	B07	107.–	107.–
Second rating plate, loose	M10	66.30	66.30
Rating plate, stainless steel	M11	68.–	68.–
Extra rating plate with deviating rating plate data	Y80 • and customer specifications	206.–	206.–
Extra rating plate with customer specifications	Y82 • and customer specifications	107.–	107.–
Additional information on rating plate and on package label (max. 20 characters)	Y84 • and customer specifications	107.–	107.–
Adhesive label, supplied loose (contents: Article No., Serial No., 2 lines of text)	Y85 • and customer specifications	66.30	66.30
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 ²¹⁾	Q80	2.3 %	2.3 %
Extension of the liability for defects by 18 months to a total of 30 months (2.5 years) from delivery ²¹⁾	Q81	3.4 %	3.4 %
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery ²¹⁾	Q82	4.4 %	☐
Extension of the liability for defects by 30 months to a total of 42 months (3.5 years) from delivery ²¹⁾	Q83	6.2 %	6.2 %
Extension of the liability for defects by 36 months to a total of 48 months (4 years) from delivery ²¹⁾	Q84	8.0 %	8.0 %
Extension of the liability for defects by 42 months to a total of 60 months (5 years) from delivery ²¹⁾	Q85	11.2 %	11.2 %
Packaging, safety notes, documentation and test certificates			
Acceptance test certificate 3.1 in accordance with EN 10204 ²¹⁾	B02	28.10	28.10
Printed German/English Operating Instructions enclosed ²²⁾	B04	67.–	67.–
Without marking "Made in country of origin"	B13	O	O
Equivalent circuit diagram	B51	1080.–	1080.–
Start-up diagram (torque-speed and current-speed)	B52	1550.–	1550.–
Document – Electrical data sheet	B60	309.–	309.–
Document – Order dimensional drawing	B61	309.–	309.–
Standard test (routine test) with acceptance	B65	3810.–	7210.–
Temperature test without acceptance	B67	16300.–	17800.–
Temperature test with acceptance	B68	19400.–	20900.–

For legends and footnotes, see Page 3/25.

Standard delivery times in working days:

10	25	30	40	50	60	On request
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SIMOTICS SD Standard Motors next generation

Article No. supplements and special versions

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

Special versions	Additional identification code -Z with order code and plain text if required	Frame size	Motor version
		315 355	
		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	
1LE5-Z	Order code		

Packaging, safety notes, documentation and test certificates (continued)

Type test with heat run for vertical motors, without acceptance	B80	19300.-	19300.-
Type test with heat run for vertical motors, with acceptance	B81	22600.-	22600.-
Type test with heat run for horizontal motors, without acceptance	B82	12500.-	12500.-
Type test with heat run for horizontal motors, with acceptance	B83	14000.-	14000.-
Documentation package "Basic"	B90	597.-	597.-
Documentation package "Advanced"	B91	906.-	906.-
Documentation package "Projects"	B92	2470.-	2470.-
Connected in star for dispatch	M01	46.-	51.50
Connected in delta for dispatch	M02	46.-	51.50

- 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) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- 2) 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.
- 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) Not possible for 1LE5 motors with increased power.
- 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 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.
- 8) 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.
- 9) 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.
- 10) 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!
- 11) Order code **H00** provides mechanical protection for encoders.
- 12) Not possible for type of construction IM V3.
- 13) Not possible in combination with HOG 9 D 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 14) Not possible in combination with brake 2LM8 (order code **F01**).
- 15) In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 16) The rated voltage is indicated on the rating plate without voltage range.
- 17) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order code D30 does not authorize importing into USA and Mexico.
- 18) On request for 2-pole motors
- 19) 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.
- 20) Can be ordered for 400 VΔ/690VY (voltage code "**34**").
- 21) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 22) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- 23) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 24) Not possible in combination with order code **Q72** and **Q78**.
- 25) Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.
- 26) When combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.
- 27) Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** on request.
- 28) 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.
- 29) 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.

SIMOTICS SD Add/Pro Standard Motors next generation**10****25****30****40****50****60****On
request**

Article No. supplements and special versions

Options · Cast-iron series 1LE55**Selection and ordering data**

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450	IEC	IE4 IE3
		1LE5534 Add			
		1LE5533 Add			
1LE5 -Z	Order code	1LE5583 Pro			
Motor protection					
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	Q11	917.–	917.–		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	Q12	1020.–	1020.–		
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	Q23	1230.–	1230.–		
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	Q25	1920.–	1920.–		
3 bimetal sensors (NC contact) for tripping (2 terminals)	Q31	1230.–	1230.–		
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32	2360.–	2360.–		
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33	1430.–	1430.–		
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34	2770.–	2770.–		
1 Pt1000 resistance thermometer (2 terminals)	Q35	1230.–	1230.–		
2 Pt1000 resistance thermometers (4 terminals)	Q36	1920.–	1920.–		
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	Q60	1640.–	1640.–		
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) ²³⁾	Q61	2420.–	2420.–		
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62	1310.–	1310.–		
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63	1970.–	1970.–		
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64	2900.–	2900.–		
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)	Q72	1630.–	1630.–		
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78	2060.–	2060.–		
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79	2890.–	2890.–		
Motor connection and terminal box					
External grounding		□	□		
Terminal box on NDE ²³⁾	H08	2660.–	2660.–		
Second external grounding	H70	15.50	15.50		
Subsequently rotatable main connection box	R09	677.–	790.–		
Rotation of the terminal box through 90°, entry from DE ³⁸⁾	R10	122.–	122.–		
Rotation of the terminal box through 90°, entry from NDE	R11	122.–	122.–		
Rotation of the terminal box through 180°	R12	122.–	122.–		
EMC cable gland, maximum configuration	R16	4520.–	4520.–		
One metal cable gland, maximum configuration	R18	3210.–	3210.–		
Saddle terminal for connection without cable lug, accessories pack	R19	1550.–	1550.–		
3 cables protruding, 1.5 m long	R21	O. R.	O. R.		
6 cables protruding, 1.5 m long	R23	O. R.	O. R.		
6 cables protruding, 3 m long	R24	O. R.	O. R.		

For legends and footnotes, see Page 3/32.

Standard delivery times in working days:

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On
request

SIMOTICS SD Add/Pro Standard Motors next generation

Article No. supplements and special versions

Options · Cast-iron series 1LE55

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450	IEC	IE4 IE3
		1LE5534 Add			
		1LE5533 Add			
		1LE5583 Pro			
1LE5 -Z	Order code				
Motor connection and terminal box (continued)					
Larger terminal box ³⁹⁾	R50	10200.-	10200.-		
Drilled removable entry plate		□	□		
Undrilled removable entry plate	R53	O	O		
Cast-iron auxiliary terminal box (small)	R62	523.-	523.-		
Larger cast-iron terminal box	R63	2030.-	2030.-		
Stainless steelauxiliary terminal box (big)	R65	2120.-	2120.-		
Silicon-free version ³⁰⁾	R74	3400.-	3400.-		
Non-standard threaded through hole (NPT or G thread) ²⁾	Y61 • und Besteller- angabe	1550.-	1550.-		
Windings and insulation					
Temperature class 155 (F), utilized acc. to 155 (F), with service factor ³³⁾	N01	325.-	325.-		
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	N02	325.-	325.-		
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature ³³⁾	N03	325.-	325.-		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % ⁴⁰⁾	N05	107.-	107.-		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % ⁴⁰⁾	N06	107.-	107.-		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % ⁴⁰⁾	N07	107.-	107.-		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 % ⁴⁰⁾	N08	993.-	107.-		
Temperature class 180 (H) ⁴¹⁾	N10	4480.-	6100.-		
Temperature class 180 (H) at rated power and max. CT 60 °C ⁴⁾	N11	O. R.	O. R.		
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30	4690.-	5200.-		
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N31	1780.-	1960.-		
Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude ³³⁾	Y50 • and spec. power, CT ... °C or IA m above sea level	2580.-	3090.-		
Temperature class 155 (F), utilized according to 155 (F) ⁴⁾ ³³⁾ other requirements	Y52 • and spec. power, CT ... °C or IA m above sea level	325.-	325.-		
Temperature class 180 (H), utilized according to 155 (F) ³³⁾	Y75 • and spec. power, CT ... °C or IA m above sea level	O. R.	O. R.		

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request**

Article No. supplements and special versions

Options · Cast-iron series 1LE55

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450		
		1LE5534 Add		IEC	IE4
		1LE5533 Add			IE3
		1LE5583 Pro			
1LE5-Z	Order code				
Colors and paint finish					
Standard finish C2 in RAL 7030 stone gray		□	□		
Unpainted (only cast-iron parts primed)	S00	O	O		
Unpainted, only primed	S01	309.–	309.–		
Special finish C3	S02	1330.–	1690.–		
Special finish sea air resistant C4	S03	2560.–	2930.–		
Special paint for use offshore C5	S04	12400.–	13900.–		
Internal coating	S05	1180.–	1390.–		
Top coat polyurethane ²⁷⁾		□	□		
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....	412.–	515.–		
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....	1800.–	2280.–		
Modular technology – Basic versions ⁵⁾					
Mounting of holding brake (standard assignment) ^{6) 25) 26) 30)}	F01	62500.–	68000.–		
Mounting of separately driven fan ³⁴⁾	F70	12100.–	13900.–		
Modular technology – Additional versions					
Brake supply voltage 230 V AC, 50/60 Hz	F11	O	O		
Brake supply voltage 400 V AC, 50/60 Hz	F12	O. R.	O. R.		
Special technology ⁵⁾					
Mounting of LL 861 900 220 rotary pulse encoder ⁹⁾	G04	6080.–	6080.–		
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁹⁾	G05	6490.–	6490.–		
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁹⁾	G06	6080.–	6080.–		
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box moisture protection	G15	9570.–	9570.–		
Mounting of rotary pulse encoder HOG 10 DN 1024 I, terminal box dust protection ⁵⁾	G16	9570.–	9570.–		
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed rpm), terminal box moisture protection	Y74 • and spec. speed rpm	13600.–	13600.–		
Mounting of rotary pulse encoder HOG 10 DN 1024 I + FSL, (integrated centrifugal switch, speed rpm), terminal box dust protection	Y76 • and spec. speed rpm	13600.–	13600.–		
Mounting of rotary pulse encoder HOG 10 DN 1024 I + ESL 93, (integrated electronic speed switch, speed rpm), terminal box dust protection	Y79 • and spec. speed (max. 3) rpm	19600.–	19600.–		

For legends and footnotes, see Page 3/32.

Standard delivery times in working days:

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On
request**SIMOTICS SD Add/Pro Standard Motors next generation**

Article No. supplements and special versions

Options · Cast-iron series 1LE55

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450		
		1LE5534 Add		IEC	IE4
		1LE5533 Add			IE3
		1LE5583 Pro			
1LE5 -Z	Order code				
Mechanical design and degrees of protection					
Low-noise version for 2-pole motors with clockwise direction of rotation		□	□		
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	F78	O	O		
Prepared for mountings, center hole only		□	□		
Prepared for mountings with D16 shaft	G42	4430.–	4430.–		
Mechanical protection for encoders	G43	2110.–	2520.–		
Protective cover ^{7) 9) 11)}	H00	2110.–	2520.–		
Condensation drainage holes		□	□		
Rust-resistant screws (externally)	H07	1340.–	1340.–		
IP65 degree of protection ¹³⁾	H20	9060.–	10900.–		
IP56 degree of protection ¹⁴⁾	H22	1980.–	2650.–		
Viton sealing ring	H25	464.–	721.–		
Extended corrosion protection of external components	H90	12400.–	13900.–		
Grounding brush for converter operation ³²⁾	L52	7210.–	7210.–		
Coolant temperature and installation altitude					
Coolant temperature –50 to +40 °C (IP54 degree of protection) ^{15) 35)}	D02	70500.–	76100.–		
Coolant temperature –40 to +40 °C ¹⁵⁾	D03	16400.–	18000.–		
Coolant temperature –30 to +40 °C ¹⁵⁾	D04	11000.–	13300.–		
Designs in accordance with standards and specifications					
Electrical according to NEMA MG1-12 ¹⁷⁾		□	□		
Design according to UL with "Recognition Mark" ¹⁷⁾		□	□		
Canadian regulations (CSA) ⁶⁾		□	□		
TR CU product safety certificate EAC for Eurasian customs union	D47	1550.–	2060.–		
Bearings and lubrication					
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	L19	O	O		
Located bearing DE		□	□		
Located bearing NDE ³⁷⁾	L21	1340.–	1440.–		
Bearing design for increased cantilever forces ^{28) 29)}	L22	O. R.	O. R.		
Regreasing device		□	□		
Drain for used grease	L30	O. R.	O. R.		
Special version with higher speeds	L37	O. R.	O. R.		
Bearing insulation DE ^{31) 32)}	L50	2580.–	2990.–		
Bearing insulation NDE ³²⁾	L51	2580.–	2990.–		
Measuring nipple for SPM shock pulse measurement for bearing inspection	Q01	553.–	553.–		
Balance and vibration quantity					
Vibration quantity level A		□	□		
Vibration quantity level B ¹⁸⁾	L00	4380.–	5200.–		
Half-key balancing (standard)		□	□		
Balancing without key	L01	206.–	206.–		
Full-key balancing	L02	585.–	839.–		

For legends and footnotes, see Page 3/32.

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request**

Article No. supplements and special versions

Options · Cast-iron series 1LE55

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450	IEC	IE4 IE3
		1LE5534 Add			
		1LE5533 Add			
1LE5 -Z	Order code	1LE5583 Pro			
Shaft and rotor					
Shaft extension with standard dimensions, without feather keyway	L04	1130.–	1180.–		
Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347	L05	1550.–	1750.–		
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	1220.–	1220.–		
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	1340.–	1340.–		
Non-standard shaft extension, DE ¹⁹⁾	Y58 • and customer specifications	5000.–	5000.–		
Non-standard shaft extension, NDE ¹⁹⁾	Y59 • and customer specifications	5000.–	5000.–		
Special shaft steel as requested by customer	Y60 • and customer specifications	O. R.	O. R.		
Heating and ventilation					
Sheet metal fan cover		□	□		
Metal external fan ^{21) 27)}	F76	6200.–	6200.–		
Without external fan and without fan cover	F90	206.–	206.–		
Anti-condensation heating for 230 V (2 terminals)	Q02	1320.–	1470.–		
Anti-condensation heating for 115 V (2 terminals)	Q03	1320.–	1470.–		
Anti-condensation heating for 400 V (2 terminals)	Q06	3940.–	4620.–		
Separately driven fan with non-standard voltage and/or frequency	Y81 • and customer specifications	6050.–	6800.–		
Rating plate and extra rating plates					
Extra rating plate for voltage tolerance ²⁰⁾	B07	200.–	200.–		
Second rating plate, loose	M10	200.–	200.–		
Rating plate, stainless steel		□	□		
Extra rating plate with deviating rating plate data	Y80 • and customer specifications	342.–	342.–		
Extra rating plate with customer specifications	Y82 • and customer specifications	200.–	200.–		
Additional information on rating plate and on package label (max. 20 characters)	Y84 • and customer specifications	200.–	200.–		
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 ²¹⁾	Q80	2.3 %	2.3 %		
Extension of the liability for defects by 18 months to a total of 30 months (2.5 years) from delivery ²¹⁾	Q81	3.4 %	3.4 %		
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery ²¹⁾	Q82	4.4 %	4.4 %		
Extension of the liability for defects by 30 months to a total of 42 months (3.5 years) from delivery ²¹⁾	Q83	6.2 %	6.2 %		
Extension of the liability for defects by 36 months to a total of 48 months (4 years) from delivery ²¹⁾	Q84	8.0 %	8.0 %		
Extension of the liability for defects by 42 months to a total of 60 months (5 years) from delivery ²¹⁾	Q85	11.2 %	11.2 %		

For legends and footnotes, see Page 3/32.

Standard delivery times in working days:

10

25

30

40

50

60

On
request**SIMOTICS SD Add/Pro Standard Motors next generation**

Article No. supplements and special versions

Options · Cast-iron series 1LE55

Special versions	Additional identification code -Z with order code and plain text if required	Frame size		Motor version	
		400	450		
		1LE5534 Add		IEC	IE4
		1LE5533 Add			IE3
		1LE5583 Pro			
1LE5-Z Order code					
Packaging, safety notes, documentation and test certificates					
Acceptance test certificate 3.1 in accordance with EN 10204 ²¹⁾	B02	28.10	28.10		
Printed German/English Operating Instructions enclosed ²²⁾	B04	67.–	67.–		
Equivalent circuit diagram	B51	1080.–	1080.–		
Start-up diagram (torque-speed and current-speed)	B52	1550.–	1550.–		
Document – Electrical data sheet	B60	1170.–	1170.–		
Document – Order dimensional drawing	B61	309.–	309.–		
Standard test (routine test) with acceptance	B65	7210.–	8030.–		
Temperature test without acceptance	B67	17800.–	21000.–		
Temperature test with acceptance	B68	20900.–	24100.–		
Type test with heat run for vertical motors, without acceptance	B80	19300.–	19300.–		
Type test with heat run for vertical motors, with acceptance	B81	22600.–	22600.–		
Type test with heat run for horizontal motors, without acceptance	B82	26600.–	26600.–		
Type test with heat run for horizontal motors, with acceptance	B83	28100.–	28100.–		
Documentation package "Basic"	B90	597.–	597.–		
Documentation package "Advanced"	B91	906.–	906.–		
Documentation package "Projects"	B92	2470.–	2470.–		

- 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 Add/Pro Standard Motors next generation

Article No. supplements and special versions

Options · Cast-iron series 1LE55

3

- ¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.
- ²⁾ 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.
- ³⁾ Footnote not used.
- ⁴⁾ Not possible for 1LE5 motors with increased power.
- 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 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⁾ Footnote not used.
- ⁹⁾ 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.
- ¹⁰⁾ 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!
- ¹¹⁾ Protective cover air inlet at vertical type of construction.
- ¹²⁾ Not possible for type of construction IM V3.
- ¹³⁾ Footnote not used.
- ¹⁴⁾ Not possible in combination with brake 2LM8 (order code **F01**).
- ¹⁵⁾ In connection with mountings, the respective technical data must be observed, please inquire before ordering.
- ¹⁶⁾ The rated voltage is indicated on the rating plate without voltage range.
- ¹⁷⁾ Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order code D30 and D31 does not authorize importing into USA and Mexico.
- ¹⁸⁾ Footnote not used.
- ¹⁹⁾ 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.
- ²⁰⁾ Can be ordered for 400 VΔ/690VY (voltage code "**34**").
- ²¹⁾ The delivery time for the factory test certificate may differ from the delivery time for the motor.
- ²²⁾ The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- ²³⁾ Footnote not used.
- ²⁴⁾ Not possible in combination with order code **Q72** and **Q78**.
- ²⁵⁾ Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.
- ²⁶⁾ When combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.
- ²⁷⁾ Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** on request.
- ²⁸⁾ 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.
- ²⁹⁾ Admissible cantilever forces with reinforced bearings for frame sizes 400 and 450 on request. Please indicate cantilever force and lever arm.
- ³⁰⁾ UL-/CSA-approval not applicable for frame sizes 400 and 450.
- ³¹⁾ For insulated bearing DE and not insulated bearing NDE motor coupling must be insulated.
- ³²⁾ Grounding brush (**L52**) is mandatory at insulated bearing DE and NDE if there is no grounding for drive train available. Otherwise it should not be used.
- ³³⁾ Only possible with motors for mains-fed operation.
- ³⁴⁾ Separately driven fan motor is carried out with voltage code 3–4 (400 V/50 Hz; 460 V/60 Hz).
- ³⁵⁾ Type of protection is changing to IP54 for shaft heights 400 and 450.
- ³⁶⁾ Not possible for 2-pole motors and shaft heights 400 and 450.
- ³⁷⁾ Not possible at vertical type of construction for shaft heights 400 and 450.
- ³⁸⁾ Only possible in combination with option **H08** for motors with flange (IM B5, IM B35, IM V1).
- ³⁹⁾ Restrictions are possible when terminal box mounted.
- ⁴⁰⁾ Only possible in combination for SIMOTICS SD Add motors (6th position of the Article No.: **3**).
- ⁴¹⁾ Increased power by 5 % compared to temperature class 155 (F).

SIMOTICS GP/SD VSD10 Line Standard Motors for Converter Operation

SIMOTICS GP/SD VSD4000 Line Standard Reluctance Motors for Converter Operation

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4/25 Cast-iron series 1FP1514

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4/26 Aluminum series 1FP1014
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SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

Orientation

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

Overview

Category	Motors with Basic Efficiency
Series version	Aluminum series 1LE1092
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

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

P_{rated} , 50 Hz kW	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz			
3	100 L	1LE1092-1AA4-.....	889.-
4	112 M	1LE1092-1BA2-.....	1130.-
5.5	132 S	1LE1092-1CA0-.....	1450.-
7.5	132 S	1LE1092-1CA1-.....	1860.-
11	160 M	1LE1092-1DA2-.....	2430.-
15	160 M	1LE1092-1DA3-.....	3160.-
18.5	160 L	1LE1092-1DA4-.....	3700.-
4-pole: 1500 rpm at 50 Hz			
2.2	100 L	1LE1092-1AB4-.....	773.-
3	100 L	1LE1092-1AB5-.....	889.-
4	112 M	1LE1092-1BB2-.....	1130.-
5.5	132 S	1LE1092-1CB0-.....	1450.-
7.5	132 M	1LE1092-1CB2-.....	1860.-
11	160 M	1LE1092-1DB2-.....	2430.-
15	160 L	1LE1092-1DB4-.....	3160.-

Standard delivery times in working days:

20

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

Orientation

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

Overview

Category	Motors with Basic Efficiency (continued)
Series version	Cast-iron series 1LE1592
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

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

P_{rated} , 50 Hz kW	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz			
3	100 L	1LE1592-1AA4-....	1090.-
4	112 M	1LE1592-1BA2-....	1400.-
5.5	132 S	1LE1592-1CA0-....	1720.-
7.5	132 S	1LE1592-1CA1-....	2200.-
11	160 M	1LE1592-1DA2-....	2870.-
15	160 M	1LE1592-1DA3-....	3710.-
18.5	160 L	1LE1592-1DA4-....	4130.-
22	180 M	1LE1592-1EA2-....	4870.-
30	200 L	1LE1592-2AA4-....	6300.-
37	200 L	1LE1592-2AA5-....	7670.-
45	225 M	1LE1592-2BA2-....	8960.-
55	250 M	1LE1592-2CA2-....	10900.-
75	280 S	1LE1592-2DA0-....	15900.-
90	280 M	1LE1592-2DA2-....	18600.-
4-pole: 1500 rpm at 50 Hz			
2.2	100 L	1LE1592-1AB4-....	952.-
3	100 L	1LE1592-1AB5-....	1090.-
4	112 M	1LE1592-1BB2-....	1400.-
5.5	132 S	1LE1592-1CB0-....	1720.-
7.5	132 M	1LE1592-1CB2-....	2200.-
11	160 M	1LE1592-1DB2-....	2870.-
15	160 L	1LE1592-1DB4-....	3710.-
18.5	180 M	1LE1592-1EB2-....	4130.-
22	180 L	1LE1592-1EB4-....	4870.-
30	200 L	1LE1592-2AB5-....	6300.-
37	225 S	1LE1592-2BB0-....	7420.-
45	225 M	1LE1592-2BB2-....	8960.-
55	250 M	1LE1592-2CB2-....	10900.-
75	280 S	1LE1592-2DB0-....	15900.-
90	280 M	1LE1592-2DB2-....	18600.-
110	315 S	1LE1592-3AB0-....	22400.-
132	315 M	1LE1592-3AB2-....	26600.-
160	315 L	1LE1592-3AB4-....	31800.-
200	315 L	1LE1592-3AB5-....	39600.-

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

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	
			1LE1092				Standard Efficiency
1LE1092-	■ - ■ ...	Order code					
Voltage at 50 Hz or 60 Hz							
Line voltage: 50 Hz, 400 V 60 Hz, 480 V	2 1	–	□	□	□	□	
Line voltage: 50 Hz, 690 V	3 3	–	309.–	412.–	556.–	1030.–	
Non-standard voltage and/or frequencies							
Non-standard winding Reinforced insulation system (Advanced)	9 0	M1Y • and customer specifications	106.–	129.–	164.–	204.–	
Non-standard winding Special insulation system (Premium)	9 0	M2Y • and customer specifications	412.–	541.–	711.–	1240.–	

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

Standard delivery times in working days:

20**SIMOTICS SD VSD10 Line Standard Motors for Converter Operation**

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	Standard Efficiency
1LE1592-	■ - ■ ...	Order code												
Voltage at 50 Hz or 60 Hz														
Line voltage: 50 Hz, 400 V 60 Hz, 480 V	2	1	–	□	□	□	□	□	□	□	□	□	□	
Line voltage: 50 Hz, 500 V 60 Hz, 600 V	2	6	–	309.–	412.–	556.–	1030.–	1240.–	1650.–	1850.–	2060.–	2580.–	2580.–	
Line voltage: 50 Hz, 690 V	3	3	–	309.–	412.–	556.–	1030.–	1240.–	1650.–	1850.–	2060.–	2580.–	2580.–	
Non-standard voltage and/or frequencies														
Non-standard winding Reinforced insulation system (Advanced)	9	0	M1Y • and customer specifications	106.–	129.–	164.–	204.–	263.–	320.–	474.–	597.–	764.–	993.–	
Non-standard winding Special insulation system (Premium)	9	0	M2Y • and customer specifications	412.–	541.–	711.–	1240.–	1490.–	1960.–	2270.–	2520.–	3090.–	5510.–	

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

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

20**Types of construction · Aluminum series 1LE1092****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
			100	112	132	160	
1LE1092-.....	...(-Z)		1LE1092				Standard Efficiency
Without flange							
IM B3 ^{1) 2)} 	A	—	□	□	□	□	
IM B6 ²⁾ 	T	—	□	□	□	□	
IM B7 ²⁾ 	U	—	□	□	□	□	
IM B8 ²⁾ 	V	H00	□	□	□	□	
IM V6 ²⁾ 	D	—	□	□	□	□	
IM V5 without protective cover ²⁾ 	C	—	□	□	□	□	
IM V5 with protective cover ^{2) 3) 4) 5)} 	C	H00	80.80	80.80	141.—	141.—	
With flange							
	acc. to EN 50347		FF215	FF215	FF265	FF300	
	acc. to DIN 42948		A 250	A 250	A 300	A 350	
IM B5 ^{2) 6)} 	F	—	79.70	99.—	129.—	167.—	
IM V1 without protective cover ²⁾ 	G	—	79.70	99.—	129.—	167.—	
IM V1 with protective cover ^{2) 3) 4) 5)} 	G	H00	160.50	179.80	270.—	308.—	
IM V3 ³⁾ 	H	—	79.70	99.—	129.—	167.—	
IM B35 	J	—	87.60	108.—	134.—	185.—	

For legends and footnotes, see Page 4/8.

Standard delivery times in working days:

20**SIMOTICS GP VSD10 Line Standard Motors for Converter Operation**

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 -Z				
		Order code				
1LE1092-.....	... (-Z)					
With flange	acc. to EN 50347	FT130	FT130	FT165		
	acc. to DIN 42948	C 160	C 160	C 200		
IM B14 2) 7)		K	–	–	–	–
IM V19 ²⁾		L	–	–	–	–
IM V18 without protective cover ²⁾		M	–	–	–	–
IM V18 with protective cover ^{2) 3) 4) 5)}		M	H00	–	–	–
IM B34		N	–	–	–	–
With special flange next larger	acc. to EN 50347	FT165	FT165	FT215		
	acc. to DIN 42948	C 200	C 200	C 250		
IM B14 2) 7)		K	P01	–	–	–
IM V19 ²⁾		L	P01	–	–	–
IM V18 without protective cover ²⁾		M	P01	–	–	–
IM V18 with protective cover ^{2) 3) 4) 5)}		M	P01+H00	–	–	–
IM B34		N	P01	–	–	–

For legends and footnotes, see Page 4/8.

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

20**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 -Z				
		Order code				
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 2) 7)	 K	P02	O. R.	O. R.	O. R.	-
IM V19 ²⁾	 L	P02	O. R.	O. R.	O. R.	-
IM V18 without protective cover ²⁾	 M	P02	O. R.	O. R.	O. R.	-
IM V18 with protective cover ^{2) 3) 4) 5)}	 M	P02+H00	O. R.	O. R.	O. R.	-
IM B34	 N	P02	O. R.	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 delivery times in working days:

10**20****SIMOTICS SD VSD10 Line Standard Motors for Converter Operation**

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 -Z Order code	Frame size												Motor version
				100	112	132	160	180	200	225	250	280	315 S/M	315 L		
				1LE1592												Standard Efficiency
1LE1592-.....-...(-Z)																
Without flange																
IM B3 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	80.80	80.80	141.–	141.–	188.–	283.–	375.–	469.–	562.–	751.–	751.–		
With flange		acc. to EN 50347 acc. to DIN 42948		FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450	FF500 A 550	FF500 A 550	FF600 A 660	– A 660		
IM B5 2) 5)		F	–	79.70	99.–	129.–	167.–	264.–	320.–	414.–	497.–	724.–	1030.–	–		
IM V1 without protective cover 2)		G	–	79.70	99.–	129.–	167.–	263.–	318.–	416.–	507.–	727.–	1040.–	1040.–		
IM V1 with protective cover 2) 3) 4)		G	H00	160.50	179.80	270	308	451.–	601.–	791.–	976.–	1289.–	1791.–	1791.–		
IM V3 4)		H	–	79.70	99.–	129.–	167.–	264.–	320.–	414.–	497.–	724.–	1030.–	–		
IM B35		J	–	87.60	108.–	134.–	185.–	309.–	412.–	515.–	721.–	927.–	1180.–	1180.–		

For legends and footnotes, see Page 4/10.

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

10**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 -Z	1LE1592										
		Order code											
1LE1592-.....-...(-Z)													
With flange	acc. to EN 50347	FT130 FT130 FT165 FT215 –	–	–	–	–	–	–	–	–	–	–	–
	acc. to DIN 42948	C 160 C 160 C 200 C 250 –	–	–	–	–	–	–	–	–	–	–	–
IM B14 2) 6)		K	–	79.70	99.–	129.–	167.–	–	–	–	–	–	–
IM V19 2)		L	–	79.70	99.–	129.–	167.–	–	–	–	–	–	–
IM V18 without protective cover 2)		M	–	79.70	99.–	129.–	167.–	–	–	–	–	–	–
IM V18 with protective cover 2) 3) 4)		M	H00	160.50	179.80	270.–	308.–	–	–	–	–	–	–
IM B34		N	–	87.60	108.–	134.–	185.–	–	–	–	–	–	–
With special flange next larger	acc. to EN 50347	FT165 FT165 FT215 –	–	–	–	–	–	–	–	–	–	–	–
	acc. to DIN 42948	C 200 C 200 C 250 –	–	–	–	–	–	–	–	–	–	–	–
IM B14 2) 6)		K	P01	126.50	145.80	187.40	–	–	–	–	–	–	–
IM V19 2)		L	P01	126.50	145.80	187.40	–	–	–	–	–	–	–
IM V18 without protective cover 2)		M	P01	126.50	145.80	187.40	–	–	–	–	–	–	–
IM V18 with protective cover 2) 3) 4)		M	P01+H00	207.30	226.60	328.40	–	–	–	–	–	–	–
IM B34		N	P01	134.40	154.80	192.40	–	–	–	–	–	–	–

□ 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 delivery times in working days:

20

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

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.		1LE1092				Standard Efficiency
1LE1092-	■ .	Order code					
Motor protection							
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	117.–	117.–	176.–	176.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	201.–	201.–	269.–	269.–	
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	□	□	□	□	
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	236.–	236.–	352.–	352.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	H	–	1480.–	1480.–	1480.–	1480.–	
1 Pt1000 resistance thermometer (2 terminals) ^{1) 2)}	K	–	117.–	117.–	176.–	176.–	
2 Pt1000 resistance thermometers (4 terminals) ^{1) 2)}	L	–	236.–	236.–	352.–	352.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) ¹⁾	P	–	1020.–	1020.–	1020.–	1020.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ¹⁾	Q	–	1280.–	1280.–	1280.–	1280.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ¹⁾	R	–	1980.–	1980.–	1980.–	1980.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	131.–	131.–	192.–	192.–	Only for: Voltage code 2-1 (12th and 13th position of the Article No.)

□ Standard version

4

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

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

20**Motor protection · Cast-iron series 1LE1592****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) ¹⁾	B	–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	201.–	201.–	269.–	269.–	413.–	413.–	537.–	537.–	666.–	666.–			
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	□	□	□	□	□	□	□	□	□	□			
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	237.–	237.–	350.–	350.–	539.–	539.–	741.–	1000.–	1000.–	1470.–			
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	H	–	1220.–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	1640.–	1640.–	1640.–			
1 Pt1000 resistance thermometer (2 terminals) ^{1) 2)}	K	–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–			
2 Pt1000 resistance thermometers (4 terminals) ^{1) 2)}	L	–	237.–	237.–	350.–	350.–	539.–	539.–	741.–	1000.–	1000.–	1470.–			
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) ¹⁾	P	–	1020.–	1020.–	1020.–	1020.–	1310.–	1310.–	1310.–	1310.–	1310.–	1310.–			
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ¹⁾	Q	–	1280.–	1280.–	1280.–	1280.–	1970.–	1970.–	1970.–	1970.–	1970.–	1970.–			
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ¹⁾	R	–	1980.–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	2900.–	2900.–	2900.–			
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	131.–	131.–	192.–	192.–	265.–	265.–	332.–	332.–	444.–	444.–	Only for:	Voltage code 2-1 (12th and 13th position of the Article No.)	

□ Standard version

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.²⁾ Not possible in combination with UL.

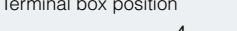
Standard delivery times in working days:

20**SIMOTICS GP VSD10 Line Standard Motors for Converter Operation**

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 16th position of the Article No.	Additional identification code with order code and plain text if required	100	112	132	160	Standard Efficiency
			1LE1092				
1LE1092-.....-...		Order code					

Terminal box position							
Terminal box top ¹⁾	4	–	□	□	□	□	
Terminal box on RHS ²⁾	5	–	102.–	111.–	121.–	129.–	
Terminal box on LHS ²⁾	6	–	102.–	111.–	121.–	129.–	
Terminal box bottom ²⁾	7	–	102.–	111.–	121.–	129.–	

□ Standard version

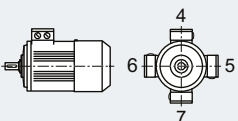
¹⁾ For types of construction with feet, cast feet are standard. Screwed-on feet are available with order code **H01**.

²⁾ For types of construction with feet, screwed-on feet are standard.

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

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 16th position of the Article No.	100 112 132 160 180 200 225 250 280 315 1LE1592	Standard Efficiency
1LE1592-	Additional identification code with order code and plain text if required Order code		
Terminal box position			
Terminal box top ¹⁾	4	–	□ □ □ □ □ □ □ □ □ □
Terminal box on RHS ²⁾	5	–	102.– 111.– 121.– 129.– 364.– 428.– 507.– 753.– 846.– 974.–
Terminal box on LHS ²⁾	6	–	102.– 111.– 121.– 129.– 364.– 428.– 507.– 753.– 846.– 974.–
Terminal box bottom ²⁾	7	–	102.– 111.– 121.– 129.– – – – – – –

□ Standard version

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

²⁾ For types of construction with feet, screwed-on feet are standard.

Standard delivery times in working days:

20On
request**SIMOTICS GP VSD10 Line Standard Motors for Converter Operation**
Article No. supplements and special versions

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					
Motor protection						
1 or 3 PTC thermistors – for tripping (2 terminals) ^{2) 3)}	Q11	117.–	117.–	176.–	176.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ³⁾	Q12	201.–	201.–	269.–	269.–	
1 temperature sensor KTY84-130 (2 terminals) ³⁾	Q23	117.–	117.–	176.–	176.–	
2 temperature sensors KTY84-130 (4 terminals) ³⁾	Q25	236.–	236.–	352.–	352.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ³⁾	Q31	192.–	192.–	265.–	265.–	
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32	345.–	345.–	468.–	468.–	
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33	O. R.	O. R.	O. R.	O. R.	
1 Pt1000 resistance thermometer (2 terminals) ²⁰⁾	Q35	117.–	117.–	176.–	176.–	
2 Pt1000 resistance thermometers (4 terminals) ²⁰⁾	Q36	236.–	236.–	352.–	352.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	Q60	1220.–	1220.–	1220.–	1220.–	
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)	Q61	1880.–	1880.–	1880.–	1880.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62	1020.–	1020.–	1020.–	1020.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63	1280.–	1280.–	1280.–	1280.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64	1980.–	1980.–	1980.–	1980.–	
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.	
Motor connection and terminal box						
External grounding	H04	28.30	28.30	28.30	28.30	
Terminal box on NDE ¹⁾	H08	117.–	144.–	186.–	253.–	
Rotation of the terminal box through 90°, entry from DE ²⁾	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	R13	O	O	O	–	
One metal cable gland	R15	110.–	110.–	110.–	140.–	
Metal cable gland, maximum configuration	R18	<i>New!</i> 156.–	156.–	156.–	205.–	
3 cables protruding, 0.5 m long	R20	67.40	80.80	98.70	116.–	
6 cables protruding, 0.5 m long	R22	104.–	125.–	155.–	182.–	
Larger terminal box	R50	210.–	210.–	269.–	307.–	
Motor connector Han-Drive 10e for 230 VΔ/400 VY	R70	380.–	380.–	435.–	–	
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY	R71	517.–	517.–	593.–	–	
Windings and insulation						
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30	134.–	134.–	134.–	206.–	

For legends and footnotes, see Page 4/18.

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

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					
Colors and paint finish						
Standard finish C2 in RAL 7030 stone gray		□	□	□	□	
Unpainted (only cast-iron parts primed)	S00	O	O	O	O	
Unpainted, only primed	S01	27.30	27.30	43.50	43.50	
Special finish C3	S02	61.80	61.80	82.40	82.40	
Special finish sea air resistant C4	S03	525.–	525.–	577.–	577.–	
Internal coating	S05	87.60	87.60	87.60	87.60	
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")	Y53 • and special finish RAL....	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 special finish RAL....	649.–	649.–	680.–	680.–	
Modular technology – Basic versions ⁴⁾						
Mounting of brake ⁵⁾	F01	644.–	783.–	1010.–	2000.–	
Mounting of brake for higher switching frequency	F02	O. R.	O. R.	O. R.	O. R.	
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	G11 <i>New!</i>	762.–	814.–	855.–	896.–	
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	G12 <i>New!</i>	1120.–	1190.–	1270.–	1340.–	
Modular technology – Additional versions						
Brake supply voltage 24 V DC	F10	51.90	51.90	51.90	51.90	
Brake supply voltage 230 V AC, 50/60 Hz	F11	O	O	O	O	
Brake supply voltage 400 V AC, 50/60 Hz	F12	51.90	51.90	51.90	51.90	
Mechanical manual brake release with lever (no locking)	F50	259.–	259.–	288.–	418.–	
Special technology ³⁾						
Mounting of LL 861 900 220 rotary pulse encoder ⁶⁾	G04	2940.–	2940.–	2940.–	2940.–	
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁶⁾	G05	3470.–	3470.–	3470.–	3470.–	
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁶⁾	G06	4480.–	4480.–	4480.–	4480.–	
Mechanical design and degrees of protection						
Prepared for mountings, center hole only ¹⁾	G40	68.70	68.70	91.20	105.–	
Prepared for mountings with D12 shaft ¹²⁾	G41	149.–	165.–	185.–	221.–	
Prepared for mountings with D16 shaft ¹²⁾	G42	149.–	165.–	185.–	221.–	
Mechanical protection for encoders	G43	79.10	79.10	138.–	138.–	
Protective cover ^{6) 8)}	H00	80.80	80.80	141.–	141.–	
Screwed-on (instead of cast) feet	H01	102.–	111.–	121.–	129.–	
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	H02	185.–	205.–	222.–	258.–	
Condensation drainage holes ⁹⁾	H03	81.10	88.50	95.90	103.–	
Rust-resistant screws (externally)	H07	81.10	81.10	95.90	95.90	
IP65 degree of protection ¹⁰⁾	H20	147.–	147.–	147.–	220.–	
IP56 degree of protection ¹¹⁾	H22	163.–	163.–	163.–	242.–	
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar ¹³⁾	H23	56.40	61.70	75.30	110.–	

For legends and footnotes, see Page 4/18.

Standard delivery times in working days:

20On
request**SIMOTICS GP VSD10 Line Standard Motors for Converter Operation**

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	
		1LE1092				Standard Efficiency
1LE1092-.....-.....-Z	Order code					
Coolant temperature and installation altitude						
Coolant temperature -40 to +40 °C ¹⁹⁾	D03	378.-	479.-	555.-	637.-	
Coolant temperature -30 to +40 °C ¹⁹⁾	D04	69.40	69.40	83.30	83.30	
Designs in accordance with standards and specifications						
Design according to UL and CSA (Canadian regulations)	D39	99.-	117.-	150.-	183.-	
TR CU product safety certificate EAC for Eurasian customs union	D47	41.20	51.50	82.40	134.-	
Bearings and lubrication						
Located bearing DE	L20	71.40	84.60	104.-	142.-	
Located bearing NDE	L21	43.30	45.60	48.30	□	
Bearing design for increased cantilever forces	L22	98.80	115.-	130.-	172.-	
Regreasing device ¹⁴⁾	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	<i>New!</i> 530.-	550.-	1230.-	1270.-	
Measuring nipple for SPM shock pulse measurement for bearing inspection ¹⁴⁾	Q01	252.-	282.-	311.-	343.-	
Balance and vibration quantity						
Vibration quantity level A		□	□	□	□	
Half-key balancing (standard)		□	□	□	□	
Balancing without key	L01	27.80	27.80	32.90	32.90	
Full-key balancing	L02	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	140.-	140.-	185.-	213.-	
Standard shaft made of stainless steel	L06	943.-	943.-	1090.-	1360.-	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	263.-	263.-	400.-	400.-	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	236.-	265.-	296.-	367.-	
Non-standard shaft extension, DE ¹⁵⁾	Y58 • and customer specifications	515.-	542.-	569.-	598.-	
Non-standard shaft extension, NDE ¹⁵⁾	Y59 • and customer specifications	515.-	542.-	569.-	598.-	
Heating and ventilation						
Mounting of separately driven fan	F70	824.-	968.-	1050.-	1220.-	
Sheet metal fan cover	F74	66.60	72.30	77.80	83.30	
Fan cover for textile industry ¹⁶⁾	F75	310.-	443.-	561.-	663.-	
Metal external fan	F76	185.-	220.-	256.-	296.-	
Without external fan and without fan cover	F90	116.-	116.-	116.-	116.-	
Anti-condensation heating for 230 V	Q02	422.-	450.-	509.-	565.-	
Anti-condensation heating for 115 V	Q03	422.-	450.-	509.-	565.-	
Rating plate and extra rating plates						
Second rating plate, loose	M10	20.70	20.70	20.70	20.70	
Rating plate, stainless steel	M11	41.40	41.40	41.40	41.40	
Extra rating plate with customer specifications	Y82 • and customer specifications	40.70	40.70	40.70	40.70	
Additional information on rating plate and on package label (max. 20 characters)	Y84 • and customer specifications	40.70	40.70	40.70	40.70	
Adhesive label, supplied loose	Y85 • and customer specifications	40.70	40.70	40.70	40.70	

For legends and footnotes, see Page 4/18.

SIMOTICS GP VSD10 Line Standard Motors for Converter Operation

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					
Packaging, safety notes, documentation and test certificates						
With a safety and commissioning instruction enclosed in each wire-lattice pallet ¹⁷⁾	B01	O	O	O	O	
Acceptance test certificate 3.1 according to EN 10204 ¹⁸⁾	B02	28.10	28.10	28.10	28.10	
Document – Electrical data sheet	B60	309.–	309.–	309.–	309.–	
Document – Order dimensional drawing	B61	309.–	309.–	309.–	309.–	
Type test with heat run for horizontal motors, with acceptance	B83	7150.–	7910.–	8670.–	9430.–	
Documentation Package "Basic"	B90	597.–	597.–	597.–	597.–	
Documentation Package "Advanced"	B91	906.–	906.–	906.–	906.–	
Documentation Package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	
Wire-lattice pallet packaging	B99	O	O	O	O	
Connected in star for dispatch	M01	28.30	28.30	28.30	28.30	
Connected in delta for dispatch	M02	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.
- O, R. Possible on request
- Not possible

- 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.

Standard delivery times in working days:

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On
request**SIMOTICS SD VSD10 Line Standard Motors for Converter Operation**

Article No. supplements and special versions

Options · Cast-iron series 1LE1592

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	180	200	225	250	280	315		
		1LE1592										Standard Efficiency	
1LE1592-.....-.....-Z	Order code												
Motor protection													
1 or 3 PTC thermistors – for tripping (2 terminals) ^{2) 3)}	Q11		117.–	117.–	176.–	176.–	234.–	234.–	319.–	319.–	398.–	398.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ³⁾	Q12		201.–	201.–	269.–	269.–	413.–	413.–	537.–	537.–	666.–	666.–	
1 temperature sensor KTY84-130 (2 terminals) ³⁾	Q23		117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–	
2 temperature sensors KTY84-130 (4 terminals) ³⁾	Q25		236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ³⁾	Q31		131.–	131.–	192.–	192.–	265.–	265.–	358.–	358.–	444.–	444.–	
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32		236.–	236.–	345.–	345.–	468.–	468.–	634.–	634.–	785.–	785.–	
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33		141.–	141.–	202.–	202.–	275.–	275.–	369.–	369.–	454.–	454.–	
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34		–	–	–	–	478.–	478.–	645.–	645.–	795.–	795.–	
1 Pt1000 resistance thermometer (2 terminals) ²¹⁾	Q35		117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–	
2 Pt1000 resistance thermometers (4 terminals) ²¹⁾	Q36		236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	Q60		1220.–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	1640.–	1640.–	1640.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62		1020.–	1020.–	1020.–	1020.–	1310.–	1310.–	1310.–	1310.–	1310.–	1310.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63		1280.–	1280.–	1280.–	1280.–	1970.–	1970.–	1970.–	1970.–	1970.–	1970.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64		1980.–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	2900.–	2900.–	2900.–	
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) ¹⁾	Q72		–	–	–	–	4220.–	4220.–	4220.–	4220.–	4220.–	4220.–	
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78		–	–	–	–	4640.–	4640.–	4640.–	4640.–	4640.–	4640.–	
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79		–	–	–	–	5560.–	5560.–	5560.–	5560.–	5560.–	5560.–	
Motor connection and terminal box													
External grounding	H04		28.30	28.30	28.30	28.30	□	□	□	□	□	□	
Terminal box on NDE ²⁾	H08		176.–	216.–	280.–	380.–	948.–	979.–	1030.–	1080.–	1130.–	1180.–	
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		22.90	22.90	22.90	22.90	44.20	57.30	70.70	84.90	101.–	122.–	
Rotation of the terminal box through 90°, entry from NDE	R11		22.90	22.90	22.90	22.90	44.20	57.30	70.70	84.90	101.–	122.–	
Rotation of the terminal box through 180 °	R12		O	O	O	O	44.20	57.30	70.70	84.90	101.–	122.–	
One EMC cable gland	R14		–	–	–	–	171.–	293.–	293.–	519.–	519.–	519.–	
One metal cable gland	R15		110.–	110.–	110.–	140.–	140.–	162.–	162.–	231.–	231.–	231.–	
EMC cable gland, maximum configuration	R16		–	–	–	–	355.–	598.–	598.–	1070.–	1070.–	1070.–	
Stud terminal for cable connection, accessories pack (3 items)	R17		–	–	–	–	–	–	–	147.–	147.–	185.–	

For legends and footnotes, see Page 4/23.

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On
request**SIMOTICS SD VSD10 Line Standard Motors for Converter Operation**

Article No. supplements and special versions

Options · Cast-iron series 1LE1592

Special versions	Additional identification code -Z 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)													
Saddle terminal for connection without cable lug, accessories pack	R19		–	–	–	–	–	–	–	721.–	721.–	721.–	
Larger terminal box	R50		210.–	210.–	269.–	307.–	466	513.–	1630.–	1860.–	1860.–	2190	
Terminal box without cable entry opening	R51		O	O	O	O	O	O	O	O	O	O	
Drilled removable entry plate	R52		–	–	–	–	268.–	288.–	288.–	479.–	479.–	500.–	
Undrilled removable entry plate	R53		–	–	–	–	268.–	288.–	288.–	479.–	479.–	500.–	
Cast-iron auxiliary terminal box (small)	R62		278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	278.–	
Silicon-free version	R74		□	□	□	□	□	□	□	350.–	350.–	350.–	
Non-standard threaded through hole (NPT or G thread)	Y61 • and customer specifications		152.–	152.–	152.–	152.–	199.–	265.–	331.–	394.–	530.–	657.–	
Windings and insulation													
Increased air humidity/temperature with 30 to 60 g water per m³ of air	N30		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		216.–	247.–	278.–	391.–	505.–	649.–	917.–	1180.–	1490.–	1780.–	
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		27.30	27.30	43.50	43.50	81.70	81.70	81.70	81.70	81.70	81.70	
Special finish C3	S02		61.80	61.80	82.40	82.40	113.–	124.–	185.–	227.–	268.–	299.–	
Special finish sea air resistant C4	S03		525.–	525.–	577.–	577.–	618.–	659.–	700.–	742.–	783.–	814.–	
Special paint for use offshore C5	S04		2110.–	2220.–	2340.–	2460.–	2590.–	2720.–	3140.–	4090.–	5120.–	7910.–	
Internal coating	S05		87.60	87.60	87.60	87.60	87.60	87.60	87.60	108.–	124.–	134.–	
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....		41.20	41.20	56.70	56.70	82.40	113.–	124.–	155.–	185.–	258.–	
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....		649.–	649.–	680.–	680.–	690.–	700.–	711.–	721.–	731.–	742.–	
Modular technology – Basic versions ⁴⁾													
Mounting of brake ⁵⁾	F01		644.–	783.–	1010.–	2000.–	4420.–	6180.–	7850.–	25100.–	31000.–	37200.–	
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	G11		762.–	814.–	855.–	896.–	937.–	979.–	1040.–	1080.–	1120.–	1160.–	
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	G12		1120.–	1190.–	1270.–	1340.–	1410.–	1480.–	1560.–	1630.–	1770.–	1770.–	
Modular technology – Additional versions													
Brake supply voltage 24 V DC	F10		51.90	51.90	51.90	51.90	69.20	69.20	69.20	69.20	69.20	69.20	
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		51.90	51.90	51.90	51.90	69.20	69.20	69.20	69.20	69.20	69.20	
Mechanical manual brake release with lever (no locking)	F50		259.–	259.–	288.–	418.–	608.–	709.–	851.–	968.–	1070.–	1360.–	

For legends and footnotes, see Page 4/23.

Standard delivery times in working days:

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On
request

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

Options · Cast-iron series 1LE1592

Special versions	Additional identification code -Z 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 ⁵⁾													
Mounting of LL 861 900 220 rotary pulse encoder ⁸⁾	G04		2940.–	2940.–	2940.–	2940.–	2940.–	2940.–	4100.–	4100.–	4100.–	4100.–	
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁸⁾	G05		3470.–	3470.–	3470.–	3470.–	4480.–	4480.–	4850.–	4850.–	4850.–	4850.–	
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁸⁾	G06		4480.–	4480.–	4480.–	4480.–	4480.–	4480.–	5880.–	5880.–	5880.–	5880.–	
Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) ⁹⁾	G07		–	–	–	–	6250.–	6280.–	6310.–	6360.–	6400.–	6460.–	
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) ⁹⁾	G08		–	–	–	–	14400.–	14600.–	17600.–	17600.–	17600.–	17600.–	
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		68.70	68.70	91.20	105.–	▣	▣	▣	▣	▣	▣	
Prepared for mountings with D12 shaft	G41		149.–	165.–	185.–	221.–	453.–	453.–	577.–	906.–	906.–	906.–	
Prepared for mountings with D16 shaft	G42		149.–	165.–	185.–	221.–	453.–	453.–	577.–	906.–	906.–	906.–	
Mechanical protection for encoders	G43		79.10	79.10	138.–	138.–	208.–	208.–	208.–	208.–	208.–	208.–	
Protective cover ^{6) 8) 10)}	H00		80.80	80.80	141.–	141.–	188.–	283.–	375.–	469.–	562.–	751.–	
Screwed-on (instead of cast) feet	H01		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	H02		185.–	205.–	222.–	258.–	309.–	371.–	433.–	515.–	▣	▣	
Condensation drainage holes			▣	▣	▣	▣	▣	▣	▣	▣	▣	▣	
Rust-resistant screws (externally)	H07		81.10	81.10	95.90	95.90	110.–	125.–	167.–	199.–	207.–	275.–	
IP65 degree of protection ¹¹⁾	H20		147.–	147.–	147.–	220.–	296.–	367.–	443.–	517.–	589.–	663.–	
IP54 degree of protection	H21		–	–	–	–	824.–	824.–	824.–	824.–	824.–	824.–	
IP56 degree of protection ¹²⁾	H22		163.–	163.–	163.–	242.–	322.–	405.–	487.–	568.–	650.–	728.–	
Drive-end seal for flange mounting motors, oil-tight to 0.1 bar ¹³⁾	H23		56.40	61.70	75.30	110.–	142.–	176.–	234.–	200.–	390.–	469.–	
Grounding brush for converter operation	L52		–	–	–	–	–	–	–	–	2580.–	2580.–	
Coolant temperature and installation altitude													
Coolant temperature –50 to +40 °C	D02		721.–	773.–	927.–	1080.–	2540.–	2720.–	3920.–	4370.–	5290.–	6270.–	
Coolant temperature –40 to +40 °C ¹⁴⁾	D03		378.–	479.–	555.–	637.–	707	820.–	1050.–	1300.–	1850.–	2390.–	
Coolant temperature –30 to +40 °C	D04		69.40	69.40	83.30	83.30	111.–	139.–	556.–	1300.–	1850.–	2390.–	
Designs in accordance with standards and specifications													
Design according to UL and CSA (Canadian regulations)	D39		99.–	117.–	150.–	183.–	294.–	403.–	507.–	598.–	741.–	967.–	
TR CU product safety certificate EAC for Eurasian customs union	D47		41.20	51.50	82.40	134.–	175.–	247.–	319.–	422.–	618.–	721.–	
Bearings and lubrication													
Located bearing DE	L20		71.40	84.60	104.–	142.–	300.–	416.–	585.–	753.–	974.–	1050.–	
Located bearing NDE	L21		43.30	45.60	48.30	▣	▣	▣	▣	▣	▣	▣	
Bearing design for increased cantilever forces	L22		98.80	115.–	130.–	172.–	273.–	316.–	356.–	412.–	461.–	515.–	
Regreasing device ¹⁵⁾	L23		311.–	319.–	329.–	356.–	375.–	422.–	469.–	562.–	▣	▣	

For legends and footnotes, see Page 4/23.

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On
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Article No. supplements and special versions

Options · Cast-iron series 1LE1592

Special versions	Additional identification code -Z 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												
Bearings and lubrication (continued)													
Reinforced bearings at both ends for DE and NDE, bearing size 63 ¹⁶⁾	L25		199.–	232.–	260.–	346.–	459.–	565.–	803.–	1110.–	□	□	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	L28		–	–	–	–	732.–	882.–	1150.–	1520.–	–	–	
Bearing insulation DE	L50		–	–	–	–	–	–	1730.–	1850.–	1920.–	2010.–	
Bearing insulation NDE	L51		530.–	550.–	1230.–	1270.–	1320.–	1340.–	1730.–	1850.–	□	□	
Measuring nipple for SPM shock pulse measurement for bearing inspection ¹⁵⁾	Q01		252.–	282.–	311.–	343.–	370.–	400.–	430.–	459.–	488.–	518.–	
Balance and vibration quantity													
Vibration quantity level A			□	□	□	□	□	□	□	□	□	□	
Half-key balancing (standard)			□	□	□	□	□	□	□	□	□	□	
Balancing without key	L01		27.80	27.80	32.90	32.90	42.80	42.80	58.10	58.10	70.70	82.–	
Full-key balancing	L02		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 accordance with EN 50347	L05		140.–	140.–	185.–	213.–	322.–	357.–	376.–	392.–	464.–	509.–	
Standard shaft made of stainless steel	L06		165.–	227.–	350.–	556.–	662.–	988.–	1360.–	1620.–	2700.–	3290.–	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07		263.–	263.–	400.–	400.–	207.–	233.–	277.–	363.–	363.–	554.–	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08		236.–	265.–	296.–	367.–	443.–	517.–	589.–	663.–	739.–	811.–	
Non-standard shaft extension, DE ¹⁷⁾	Y58 • and customer specifications		515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–	
Non-standard shaft extension, NDE ¹⁷⁾	Y59 • and customer specifications		515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–	
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		824.–	968.–	1050.–	1220.–	1340.–	2010.–	2500.–	3120.–	3720.–	4190.–	
Sheet metal fan cover	F74		66.60	72.30	77.80	83.30	83.–	101.–	114.–	161.–	210.–	231.–	
Metal external fan	F76		185.–	220.–	256.–	296.–	332.–	367.–	405.–	443.–	479.–	517.–	
Anti-condensation heating for 230 V (2 terminals)	Q02		422.–	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–	929.–	
Anti-condensation heating for 115 V (2 terminals)	Q03		422.–	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–	929.–	
Separately driven fan with non-standard voltage and/or frequency	Y81 • and customer specifications		–	–	–	–	–	–	474.–	597.–	764.–	993.–	
Rating plate and extra rating plates													
Second rating plate, loose	M10		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	50.60	50.60	68.–	68.–	68.–	68.–	
Extra rating plate with customer specifications	Y82 • and customer specifications		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	68.–	68.–	68.–	84.90	84.90	107.–	
Adhesive label, supplied loose	Y85 • and customer specifications		40.70	40.70	40.70	40.70	66.30	66.30	66.30	66.30	66.30	66.30	

For legends and footnotes, see Page 4/23.

Standard delivery times in working days:

20

40

50

On
request

SIMOTICS SD VSD10 Line Standard Motors for Converter Operation

Article No. supplements and special versions

Options · Cast-iron series 1LE1592

Special versions	Additional identification code - Z 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										
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 ¹⁸⁾	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 ¹⁸⁾	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 ¹⁹⁾	B02		27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	27.30	
Document – Electrical data sheet	B60		309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	
Document – Order dimensional drawing	B61		309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	309.–	
Standard test (routine test) with acceptance	B65		3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–	
Type test with heat run for horizontal motors, with acceptance	B83		7150	7910	8670	9430	10200.–	11000.–	11700.–	12500.–	13200.–	14000.–
Documentation package "Basic"	B90		597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–	
Documentation package "Advanced"	B91		906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–	
Documentation package "Projects"	B92		2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	
Connected in star for dispatch	M01		28.30	28.30	28.30	28.30	37.20	37.20	37.20	46.–	46.–	46.–
Connected in delta for dispatch	M02		28.30	28.30	28.30	28.30	37.20	37.20	37.20	46.–	46.–	46.–

- 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⁾ 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⁾ The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>.

²¹⁾ Not possible in combination with UL.

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**20**

Orientation

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

Category	Motors with Super Premium Efficiency
Series version	Aluminum series 1FP1014
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	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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 4/26, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	Frame size FS	Article No. ▲ New	Base price EUR
4-pole: 1500 rpm at 50 Hz			
0.55	80 M	1FP1014-0DB2-....	884.-
0.75	80 M	1FP1014-0DB3-....	961.-
1.1	90 S	▲ 1FP1014-0EB0-....	1130.-
1.5	90 L	▲ 1FP1014-0EB4-....	1330.-
2.2	112 M	▲ 1FP1014-1BB0-....	1410.-
3	112 M	▲ 1FP1014-1BB1-....	1680.-
4	112 M	1FP1014-1BB2-....	1950.-
5.5	132 S	1FP1014-1CB0-....	2250.-
7.5	132 M	1FP1014-1CB2-....	2830.-
11	160 M	1FP1014-1DB2-....	3700.-
15	160 L	1FP1014-1DB4-....	4790.-
18.5	180 M	1FP1014-1EB2-....	4910.-
22	180 L	1FP1014-1EB4-....	5680.-
30	200 L	1FP1014-2AB5-....	7330.-

Standard delivery times in working days:

20

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation

Orientation

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

Overview

Category	Motors with Super Premium Efficiency (continued)
Series version	Cast-iron series 1FP1514
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	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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top

(for article number supplements and special versions see from Page 4/26, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	Frame size FS	Article No. ▲ New	Base price EUR
4-pole: 3000 rpm at 100 Hz			
0.75	80 M	▲ 1FP1514-0DF2-....	1230.-
1.1	80 M	▲ 1FP1514-0DF3-....	1440.-
1.5	90 S	▲ 1FP1514-0EF0-....	1540.-
2.2	90 L	▲ 1FP1514-0EF4-....	1550.-
3	112 M	▲ 1FP1514-1BF1-....	1720.-
4	112 M	▲ 1FP1514-1BF2-....	2100.-
5.5	132 S	▲ 1FP1514-1CF0-....	2420.-
7.5	132 S	▲ 1FP1514-1CF1-....	3070.-
11	160 M	▲ 1FP1514-1DF2-....	4030.-
15	160 M	▲ 1FP1514-1DF3-....	5180.-
18.5	160 L	▲ 1FP1514-1DF4-....	5650.-
22	180 M	1FP1514-1EF2-....	5860.-
30	200 L	1FP1514-2AF4-....	7560.-
37	200 L	1FP1514-2AF5-....	8770.-
45	225 M	▲ 1FP1514-2BF2-....	11240.-
4-pole: 1500 rpm at 50 Hz			
0.55	80 M	1FP1514-0DB2-....	1130.-
0.75	80 M	1FP1514-0DB3-....	1230.-
1.1	90 S	▲ 1FP1514-0EB0-....	1440.-
1.5	90 L	▲ 1FP1514-0EB4-....	1540.-
2.2	112 M	▲ 1FP1514-1BB0-....	1550.-
3	112 M	▲ 1FP1514-1BB1-....	1720.-
4	112 M	1FP1514-1BB2-....	2100.-
5.5	132 S	1FP1514-1CB0-....	2420.-
7.5	132 M	1FP1514-1CB2-....	3070.-
11	160 M	1FP1514-1DB2-....	4030.-
15	160 L	1FP1514-1DB4-....	5180.-
18.5	180 M	1FP1514-1EB2-....	5070.-
22	180 L	1FP1514-1EB4-....	5860.-
30	200 L	1FP1514-2AB5-....	7560.-
37	225 S	▲ 1FP1514-2BB0-....	9550.-
45	225 M	▲ 1FP1514-2BB2-....	11240.-

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**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 12th and 13th position of the Article No.	Additional identification code with order code and plain text if required	80	90	112	132	160	180	200	
			1FP1014							Super Premium Efficiency
	1FP1014-	- - . . .								
		Order code								
Voltage at 50 Hz or 60 Hz										
Line voltage/ converter input voltage:	2	1	-	□	□	□	□	□	□	
50 Hz, 400 V										
60 Hz, 480 V										

□ Standard version

Standard delivery times in working days:

40On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

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 12th and 13th position of the Article No.	Additional identification code with order code and plain text if required	80	90	112	132	160	180	200	225	
			1FP1514								Super Premium Efficiency
1FP1514-	■ - ■ ...	Order code									
Voltage at 50 Hz or 60 Hz											
Line voltage/ converter input voltage:	2	1	–	☐	☐	☐	☐	☐	☐	☐	
50 Hz, 400 V											
60 Hz, 480 V											

☐ Standard version

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**40**On
request

Article No. supplements and special versions

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

Types of construction		Article No. supplement	For types of construction with order code(s)	Frame size							Motor version
		Type of construction letter 14th position of the Article No.	Article No. with additional identification code -Z	80	90	112	132	160	180	200	Super Premium Efficiency
				1FP1014							
1FP1014-.....-.. (-Z)			Order code								
Without flange											
IM B3 ^{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	55.60	55.60	80.80	141.–	141.–	188.–	283.–	
With flange											
		acc. to EN 50347 acc. to DIN 42948		FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	
IM B5 ^{2) 5)}		F	–	53.70	64.40	99.–	129.–	167.–	264.–	320.–	
IM V1 without protective cover ²⁾		G	–	53.70	64.40	99.–	129.–	167.–	263.–	318.–	
IM V1 with protective cover ^{2) 4)}		G	H00	109.30	120.–	179.80	270.–	308.–	451.–	601.–	
IM V3 ³⁾		H	–	53.70	64.40	99.–	129.–	167.–	264.–	320.–	
IM B35		J	–	56.70	67.–	108.–	134.–	185.–	309.–	412.–	

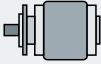
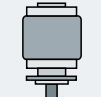
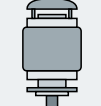
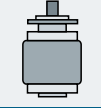
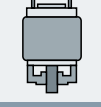
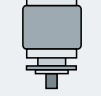
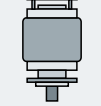
For legends and footnotes, see Page 4/31.

Standard delivery times in working days:

40On
request**SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Types of construction · Aluminum series 1FP1014

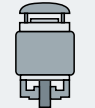
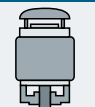
Types of construction	Article No. supplement	Frame size							Motor version
		80	90	112	132	160	180	200	
	Type of construction letter 14th position of the Article No.	1FP1014							Super Premium Efficiency
	For types of construction with order code(s) Article No. with additional identification code -Z								
1FP1014-.....-.. (-Z)	Order code								
With special flange next larger	acc. to DIN EN 50347	–	–	FF265	FF300	–	–	–	
	acc. to DIN 42948	–	–	A 300	A 350	–	–	–	
IM B5 ^{2) 5)}	 F	P01	–	–	145.80	187.40	–	–	–
IM V1 without protective cover ²⁾	 G	P01	–	–	145.80	175.80	–	–	–
IM V1 with protective cover ^{2) 4) 5) 6)}	 G	P01+H00	–	–	226.60	328.40	–	–	–
IM V3 ⁴⁾	 H	P01	–	–	145.80	187.40	–	–	–
IM V18 with protective cover ^{2) 3) 4) 5)}	 M	H00	–	–	161.70	192.40	–	–	–
With special flange next smaller	acc. to DIN EN 50347	–	–	FF165	FF215	FF265	FF265	FF300	
	acc. to DIN 42948	–	–	A 200	A 250	A 300	A 300	A 350	
IM B5 ^{2) 6)}	 F	P02	–	–	O. R.	O. R.	O. R.	O. R.	O. R.
IM V1 without protective cover ²⁾	 G	P02	–	–	O. R.	O. R.	O. R.	O. R.	O. R.
IM V1 with protective cover ^{2) 4) 5) 6)}	 G	P02+H00	–	–	O. R.	O. R.	O. R.	O. R.	O. R.
IM V3 ⁴⁾	 H	P02	–	–	O. R.	O. R.	O. R.	O. R.	O. R.
IM B35 ³⁾	 J	P02	–	–	O. R.	O. R.	O. R.	O. R.	O. R.

For legends and footnotes, see Page 4/31.

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**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	1FP1014						
1FP1014-.....-... (-Z)	.. (-Z)	Order code							
With flange	acc. to EN 50347 acc. to DIN 42948		FT100 C 120	FT115 C 140	FT130 C 160	FT165 C 200	FT215 C 250	–	–
IM B14 ^{2) 6)}		K	53.70	64.40	99.–	129.–	167.–	–	–
IM V19 ²⁾		L	53.70	64.40	99.–	129.–	167.–	–	–
IM V18 without protective cover ²⁾		M	53.70	64.40	99.–	129.–	167.–	–	–
IM V18 with protective cover ^{2) 4) 5) 6)}		M	109.30	120.–	179.80	270.–	308.–	–	–
IM B34 ³⁾		N	56.70	67.–	108.–	134.–	185.–	–	–
With special flange next larger	acc. to EN 50347 acc. to DIN 42948		FT130 C 160	FT130 C 160	FT165 C 200	FT215 C 250	–	–	–
IM B14 ^{2) 6)}		P01	100.50	111.20	145.80	187.40	–	–	–
IM V19 ²⁾		P01	100.50	111.20	145.80	187.40	–	–	–
IM V18 without protective cover ²⁾		P01	100.50	111.20	145.80	187.40	–	–	–
IM V18 with protective cover ^{2) 4) 5) 6)}		P01+H00	156.10	166.80	227.–	328.–	–	–	–
IM B34 ³⁾		P01	103.50	113.80	155.–	192.–	–	–	–

For legends and footnotes, see Page 4/31.

Standard delivery times in working days:

40On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

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.	1FP1014							Super Premium Efficiency
	For types of construction with order code(s) Article No. with additional identification code -Z								
1FP1014-.....-.. (-Z)	Order code								
With special flange next smaller	acc. to EN 50347	–	–	FT165	FT215	FT265	–	–	
	acc. to DIN 42948	–	–	C 200	C 250	C 300	–	–	
IM B14 ^{2) 7)}	 K	P02	–	–	O. R.	O. R.	O. R.	–	–
IM V19 ²⁾	 L	P02	–	–	O. R.	O. R.	O. R.	–	–
IM V18 without protective cover ²⁾	 M	P02	–	–	O. R.	O. R.	O. R.	–	–
IM V18 with protective cover ^{2) 3) 4)}	 M	P02+H00	–	–	O. R.	O. R.	O. R.	–	–
IM B34	 N	P02	–	–	O. R.	O. R.	O. R.	–	–

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

4

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⁾ 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.

⁶⁾ 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.

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**40**On
request

Article No. supplements and special versions

Types of construction · Cast-iron series 1FP1514**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
				80	90	112	132	160	180	200	225	Super Premium Efficiency
				1FP1514								
1FP1514-.....-..(-Z)												
Without flange												
IM B3 ^{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	55.60	55.60	80.80	141.–	141.–	188.–	283.–	375.–	
With flange		acc. to EN 50347 acc. to DIN 42948		FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450	
IM B5 ^{2) 5)}		F	–	53.70	64.40	99.–	129.–	167.–	264.–	320.–	414.–	
IM V1 without protective cover ²⁾		G	–	53.70	64.40	99.–	129.–	167.–	263.–	318.–	416.–	
IM V1 with protective cover ^{2) 3) 4)}		G	H00	109.30	120.–	179.80	270.–	308.–	451.–	601.–	791.–	
IM V3 ⁴⁾		H	–	53.70	64.40	99.–	129.–	167.–	264.–	320.–	414.–	
IM B35		J	–	56.70	67.–	108.–	134.–	185.–	309.–	412.–	515.–	

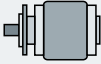
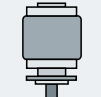
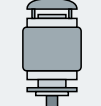
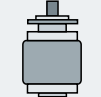
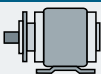
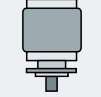
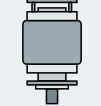
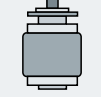
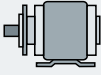
For legends and footnotes, see Page 4/34.

Standard delivery times in working days:

40On
request**SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**

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.	1FP1514								Super Premium Efficiency
	For types of construction with order code(s) Article No. with additional identification code -Z									
1FP1514-.....-.. (-Z)	Order code									
With special flange next larger	acc. to EN 50347 acc. to DIN 42948	-	-	FF265	FF300	-	-	-	-	
		-	-	A 300	A 350	-	-	-	-	
IM B5 ^{2) 6)}	 F	P01	-	-	145.80	187.40	-	-	-	
IM V1 without protective cover ²⁾	 G	P01	-	-	145.80	187.40	-	-	-	
IM V1 with protective cover ^{2) 4) 5)}	 G	P01+H00	-	-	226.60	328.40	-	-	-	
IM V3 ³⁾	 H	P01	-	-	145.80	187.40	-	-	-	
IM B35 ³⁾	 J	P01	-	-	154.80	192.40	-	-	-	
With special flange next smaller	acc. to EN 50347 acc. to DIN 42948	-	-	FF165	FF215	FF265	-	-	-	
		-	-	A 200	A 250	A 300	-	-	-	
IM B5 ^{2) 6)}	 F	P02	-	-	O. R.	O. R.	O. R.	-	-	
IM V1 without protective cover ²⁾	 G	P02	-	-	O. R.	O. R.	O. R.	-	-	
IM V1 with protective cover ^{2) 4) 5)}	 G	P02+H00	-	-	O. R.	O. R.	O. R.	-	-	
IM V3 ⁴⁾	 H	P02	-	-	O. R.	O. R.	O. R.	-	-	
IM B35 ³⁾	 J	P02	-	-	O. R.	O. R.	O. R.	-	-	

For legends and footnotes, see Page 4/34.

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**40****On
request**

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								
1FP1514-.....-.. (-Z)										
With flange	acc. to DIN EN 50347 acc. to DIN 42948	FT100 C 120	FT115 C 140	FT130 C 160	FT165 C 200	FT215 C 250	-	-	-	-
IM B14 ^{2) 6)}	 K	-	-	99.-	129.-	167.-	-	-	-	
IM V19 ²⁾	 L	-	-	99.-	129.-	167.-	-	-	-	
IM V18 without protective cover ²⁾	 M	-	-	99.-	129.-	167.-	-	-	-	
IM V18 with protective cover ^{2) 3) 4)}	 M	H00	-	-	180.-	270.-	308.-	-	-	-
IM B34	 N	-	56.70	67.-	108.-	134.-	185.-	-	-	-
With special flange next larger	acc. to DIN EN 50347 acc. to DIN 42948	-	-	FT165 C 300	FT215 C 250	-	-	-	-	-
IM B14 ^{2) 6)}	 K	P01	-	-	145.80	187.40	-	-	-	-
IM V19 ²⁾	 L	P01	-	-	145.80	187.40	-	-	-	-
IM V18 without protective cover ²⁾	 M	P01	-	-	145.80	187.40	-	-	-	-
IM V18 with protective cover ^{2) 3) 4)}	 M	P01+H00	-	-	226.60	328.40	-	-	-	-
IM B34	 N	P01	-	-	154.80	190.70	-	-	-	-

□ 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 delivery times in working days:

40On
request**SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Motor protection · Aluminum series 1FP1014

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	80	90	112	132	160	180	200	
			1FP1014							
1FP1014-		Order code								Super Premium Efficiency
Motor protection										
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	36.40	42.60	117.–	176.–	176.–	234.–	234.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	173.–	173.–	201.–	269.–	269.–	413.–	413.–	
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	□	□	□	□	□	□	□	
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	207.–	207.–	236.–	352.–	352.–	539.–	539.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	H	–	–	–	1220.–	352.–	352.–	1480.–	1480.–	
1 Pt1000 resistance thermometer (2 terminals) ^{1) 2)}	K	–	103.–	103.–	117.–	176.–	176.–	332.–	332.–	
2 Pt1000 resistance thermometers (4 terminals) ^{1) 2)}	L	–	207.–	207.–	#NV	352.–	352.–	539.–	539.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	P	–	–	–	1020.–	1020.–	1020.–	1310.–	1310.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q	–	–	–	1280.–	1280.–	1280.–	1970.–	1970.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	R	–	–	–	1980.–	1980.–	1980.–	2900.–	2900.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	115.–	115.–	131.–	192.–	192.–	265.–	265.–	

- Standard version
– Not possible

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

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

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**40**On
request

Article No. supplements and special versions

Motor protection · Cast-iron series 1FP1514**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	80	90	112	132	160	180	200	225	Super Premium Efficiency
			1FP1514								
1FP1514-	.	Order code									
Motor protection											
1 or 3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	39.70	42.60	117.–	176.–	176.–	234.–	234.–	319.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	173.–	173.–	201.–	269.–	269.–	413.–	413.–	537.–	
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	□	□	□	□	□	□	□	□	
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	206.–	206.–	237.–	352.–	352.–	539.–	539.–	741.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ¹⁾	H	–	103.–	103.–	O	O	O	O	O	454.–	
1 Pt1000 resistance thermometer (2 terminals) ^{1) 2)}	K	–	207.–	207.–	237.–	352.–	352.–	539.–	539.–	741.–	
2 Pt1000 resistance thermometers (4 terminals) ^{1) 2)}	L	–	–	–	1020.–	1020.–	1020.–	1310.–	1310.–	1310.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals) ¹⁾	P	–	–	–	1280.–	1280.–	1280.–	1970.–	1970.–	1970.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals) ¹⁾	Q	–	–	–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals) ¹⁾	R	–	–	–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	
3 NTC thermistors – for tripping (6 terminals) ²⁾	Z	Q2A	207.–	207.–	236.–	350.–	350.–	–	–	–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ¹⁾	Z	Q3A	115.–	115.–	131.–	192.–	192.–	265.–	265.–	332.–	
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals) ¹⁾	Z	Q9A	–	–	236.–	345.–	345.–	468.–	468.–	634.–	

- Standard version
– Not possible

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

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

Standard delivery times in working days:

40On
request**SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**

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.	Additional identification code with order code and plain text if required	80	90	112	132	160	180	200	
			1FP1014							Super Premium Efficiency
1FP1014-.....-...		Order code								

Terminal box position										
Terminal box top ¹⁾	4	–	□	□	□	□	□	□	□	
Terminal box on RHS ²⁾	5	–	35.20	39.80	111.–	121.–	129.–	182.–	214.–	
Terminal box on LHS ²⁾	6	–	35.20	39.80	111.–	121.–	129.–	182.–	214.–	
Terminal box bottom ²⁾	7	–	–	–	111.–	121.–	–	–	–	

- Standard version
– Not possible

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

²⁾ For types of construction with feet, screwed-on feet are standard.

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**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								
			1FP1514-.....-... ■								
		Order code									

Terminal box position											
Terminal box top ¹⁾	4	–	□	□	□	□	□	□	□	□	□
Terminal box on RHS ²⁾	5	–	51.50	72.–	111.–	121.–	129.–	364.–	428.–	507.–	
Terminal box on LHS ²⁾	6	–	51.50	72.–	111.–	121.–	129.–	364.–	428.–	507.–	
Terminal box bottom ²⁾	7	–	–	–	111.–	121.–	129.–	–	–	–	

- Standard version
– Not possible

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

²⁾ For types of construction with feet, screwed-on feet are standard.

Standard delivery times in working days:

40

On
request**SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Options · Aluminum series 1FP1014

Selection and ordering data

Special versions	Additional identification code -Z 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									
Motor protection										
1 or 3 PTC thermistors – for tripping (2 terminals) ^{2) 3)}	Q11		36.40	36.40	117.–	176.–	176.–	234.–	234.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ³⁾	Q12		173.–	173.–	201.–	269.–	269.–	413.–	413.–	
1 temperaturg sensor KTY84-130 (2 terminals) ³⁾	Q23		103.–	103.–	117.–	176.–	176.–	332.–	332.–	
2 temperaturg sensors KTY84-130 (4 terminals) ³⁾	Q25		207.–	207.–	236.–	352.–	352.–	539.–	539.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ³⁾	Q31		115.–	115.–	131.–	192.–	192.–	265.–	265.–	
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32		206.–	206.–	236.–	345.–	345.–	468.–	468.–	
3 bimetal sensors (NC contact) for tripping (6 terminals)	Q33		–	–	–	–	–	275.–	275.–	
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34		–	–	–	–	–	478.–	478.–	
1 Pt1000 resistance thermometer (2 terminals) ¹⁹⁾	Q35		103.–	103.–	117.–	176.–	176.–	332.–	332.–	
2 Pt1000 resistance thermometers (4 terminals) ¹⁹⁾	Q36		207.–	207.–	236.–	352.–	352.–	539.–	539.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	Q60		–	–	1220.–	1220.–	1220.–	1480.–	1480.–	
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)	Q61		–	–	1880.–	1880.–	1880.–	2420.–	2420.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62		–	–	1020.–	1020.–	1020.–	1310.–	1310.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63		–	–	1280.–	1280.–	1280.–	1970.–	1970.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64		–	–	1980.–	1980.–	1980.–	2900.–	2900.–	
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals)	Q72		–	–	O. R.	O. R.	O. R.	4220.–	4220.–	
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78		–	–	O. R.	O. R.	O. R.	4640.–	4640.–	
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79		–	–	O. R.	O. R.	O. R.	5560.–	5560.–	
Motor connection and terminal box										
External grounding	H04		23.50	23.50	28.30	28.30	28.30	36.40	36.40	
Terminal box on NDE ¹⁾	H08		82.40	82.40	144.–	186.–	253.–	948.–	979.–	
Rotation of the terminal box through 90°, entry from DE ²⁾	R10		O	O	O	O	O	44.20	57.30	
Rotation of the terminal box through 90°, entry from NDE	R11		O	O	O	O	O	44.20	57.30	
Rotation of the terminal box through 180°	R12		O	O	O	O	O	44.20	57.30	
Terminal box in position 0°; connection from right	R13		O	O	O	O	–	–	–	
One metal cable gland	R15		58.60	58.60	110.–	110.–	140.–	140.–	162.–	
One metal cable gland, maximum configuration	R18		84.50	84.50	156.–	156.–	205.–	205.–	236.–	
3 cables protruding, 0.5 m long	R20		56.20	56.20	80.80	98.70	116.–	–	–	
3 cables protruding, 1.5 m long	R21		68.–	68.–	97.70	119.–	141.–	O. R.	O. R.	
6 cables protruding, 0.5 m long	R22		87.10	87.10	125.–	155.–	182.–	O. R.	O. R.	
6 cables protruding, 1.5 m long	R23		111.–	111.–	161.–	195.–	232.–	O. R.	O. R.	
6 cables protruding, 3 m long	R24		177.–	177.–	252.–	316.–	378.–	O. R.	O. R.	
Larger terminal box	R50		101.–	101.–	210.–	269.–	307.–	466.–	513.–	
Motor connector Han-Drive 10e for 230 VΔ/400 VY	R70		143.–	143.–	380.–	435.–	–	–	–	
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY	R71		265.–	265.–	517.–	593.–	–	–	–	

For legends and footnotes, see Page 4/42.

SIMOTICS GP VSD4000 Line Standard Reluctance Motors for Converter Operation**40**On
request

Article No. supplements and special versions

Options · Aluminum series 1FP1014

Special versions	Additional identification code -Z 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									
Windings and insulation										
Temperature class 180 (H) at rated power and max. CT 60 °C ³⁾	N11		216.–	216.–	299.–	397.–	484.–	688.–	963.–	
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30		134.–	134.–	134.–	134.–	206.–	299.–	412.–	
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N31		216.–	216.–	247.–	278.–	391.–	505.–	649.–	
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	
Unpainted, only primed	S01		20.50	20.50	27.30	43.50	43.50	81.70	81.70	
Special finish C3	S02		36.10	36.10	61.80	82.40	82.40	113.–	124.–	
Special finish sea air resistant C4	S03		494.–	494.–	525.–	577.–	577.–	618.–	659.–	
Internal coating	S05		87.60	87.60	87.60	87.60	87.60	87.60	87.60	
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")	Y53 • and standard finish RAL.....		25.80	25.80	41.20	56.70	56.70	82.40	113.–	
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.....		608.–	608.–	649.–	680.–	680.–	690.–	700.–	
Modular technology – Basic versions ⁴⁾										
Mounting of brake ⁵⁾	F01		459.–	551.–	783.–	1010.–	2000.–	4420.–	6180.–	
Mounting of brake for higher switching frequency	F02		O. R.	O. R.	O. R.	O. R.	O. R.	–	–	
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	G11	<i>New!</i>	680.–	721.–	814.–	855.–	896.–	937.–	979.–	
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	G12	<i>New!</i>	979.–	1050.–	1190.–	1270.–	1340.–	1410.–	1480.–	
Modular technology – Additional versions										
Brake supply voltage 24 V DC	F10		34.50	34.50	51.90	51.90	51.90	69.20	69.20	
Brake supply voltage 230 V AC, 50/60 Hz	F11		34.50	34.50	O	O	O	O	O	
Brake supply voltage 400 V AC, 50/60 Hz	F12		34.50	34.50	51.90	51.90	51.90	69.20	69.20	
Mechanical manual brake release with lever (no locking)	F50		245.–	245.–	259.–	288.–	418.–	608.–	709.–	
Special technology ³⁾										
Mounting of LL 861 900 220 rotary pulse encoder ⁶⁾	G04		–	–	2940.–	2940.–	2940.–	2940.–	2940.–	
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁶⁾	G05		–	–	3470.–	3470.–	3470.–	4480.–	4480.–	
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁶⁾	G06		–	–	4480.–	4480.–	4480.–	4480.–	4480.–	
Mechanical design and degrees of protection										
Prepared for mountings, center hole only ⁷⁾	G40		68.70	68.70	68.70	91.20	105.–	□	□	
Prepared for mountings with D12 shaft ¹²⁾	G41		140.–	149.–	165.–	185.–	221.–	453.–	453.–	
Prepared for mountings with D16 shaft ¹²⁾	G42		O. R.	O. R.	165.–	185.–	221.–	453.–	453.–	
Mechanical protection for encoders	G43		70.90	70.90	79.10	138.–	138.–	208.–	208.–	
Protective cover ^{6) 8)}	H00		55.60	55.60	80.80	141.–	141.–	188.–	283.–	
Screwed-on (instead of cast) feet	H01		89.–	89.–	111.–	121.–	129.–	□	□	
Vibration-proof version	H02		145.–	165.–	205.–	222.–	258.–	309.–	371.–	
Condensation drainage holes ⁹⁾	H03		66.30	74.–	88.50	95.90	103.–	110.–	117.–	
Rust-resistant screws (externally)	H07		152.–	152.–	81.10	95.90	95.90	110.–	125.–	
Enclosure with screw down possibility	H10		48.30	48.30	–	–	–	51.50	51.50	

For legends and footnotes, see Page 4/42.

Standard delivery times in working days:

40

On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Options · Aluminum series 1FP1014

Special versions	Additional identification code -Z 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)										
IP65 degree of protection ¹⁰⁾	H20		147.–	147.–	147.–	147.–	220.–	296.–	367.–	
IP56 degree of protection ¹¹⁾	H22		163.–	163.–	163.–	163.–	242.–	322.–	405.–	
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar ⁸⁾	H23		47.40	50.70	61.70	75.30	110.–	142.–	176.–	
Coolant temperature and installation altitude										
Coolant temperature –40 to +40 °C ¹³⁾	D03		252.–	316.–	479.–	555.–	637.–	707.–	820.–	
Coolant temperature –30 to +40 °C ¹³⁾	D04		55.60	55.60	69.40	83.30	83.30	111.–	139.–	
Designs in accordance with standards and specifications										
Design according to UL and CSA (Canadian regulations)	D39		80.–	89.40	117.–	150.–	183.–	294.–	403.–	
Bearings and lubrication										
Located bearing DE	L20		39.–	41.40	84.60	104.–	142.–	300.–	416.–	
Located bearing NDE	L21		39.–	41.40	45.60	48.30	□	□	□	
Bearing design for increased cantilever forces	L22		79.30	87.60	115.–	130.–	172.–	273.–	316.–	
Regreasing device ¹⁴⁾	L23		–	–	319.–	329.–	356.–	375.–	422.–	
Reinforced bearings at both ends for DE and NDE, bearing size 63	L25		165.–	199.–	232.–	260.–	346.–	459.–	565.–	
Bearing insulation NDE	L51		–	–	550.–	1230.–	1270.–	1320.–	1340.–	
Measuring nipple for SPM shock pulse measurement for bearing inspection ¹⁴⁾	Q01		–	–	282.–	311.–	343.–	370.–	400.–	
Balance and vibration quantity										
Half-key balancing (standard)			□	□	□	□	□	□	□	
Balancing without key	L01		21.40	21.40	27.800	32.90	32.90	42.80	42.80	
Full-key balancing	L02		94.20	109.–	109.–	126.–	126.–	159.–	159.–	
Shaft and rotor										
Shaft extension with standard dimensions, without feather keyway	L04		–	–	542.–	569.–	598.–	694.–	764.–	
Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347	L05		95.90	95.90	140.–	185.–	213.–	322.–	357.–	
Standard shaft made of stainless steel	L06		822.–	822.–	–	1090.–	1360.–	2420.–	2800.–	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07		239.–	239.–	263.–	400.–	400.–	207.–	233.–	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08		176.–	207.–	265.–	296.–	367.–	443.–	517.–	
Non-standard cylindrical shaft extension, DE ¹⁵⁾	Y58 • and customer specifications		459.–	486.–	542.–	569.–	598.–	694.–	764.–	
Non-standard cylindrical shaft extension, NDE ¹⁵⁾	Y59 • and customer specifications		459.–	486.–	542.–	569.–	598.–	694.–	764.–	
Heating and ventilation										
Mounting of separately driven fan	F70		824.–	824.–	968.–	1050.–	1220.–	1340.–	2010.–	
Sheet metal fan cover	F74		55.60	61.20	72.30	77.80	83.30	83.30	102	
Fan cover for textile industry ¹⁶⁾	F75		117.–	192.–	443.–	561.–	663.–	663.–	925.–	
Metal external fan	F76		147.–	147.–	220.–	256.–	296.–	332.–	367.–	
Without external fan and without fan cover	F90		116.–	116.–	116.–	116.–	116.–	116.–	116.–	
Anti-condensation heating for 230 V (2 terminals)	Q02		406.–	406.–	450.–	509.–	565.–	626.–	720.–	
Anti-condensation heating for 115 V (2 terminals)	Q03		406.–	406.–	450.–	509.–	565.–	626.–	720.–	
Rating plate and extra rating plates										
Second rating plate, loose	M10		20.70	20.70	20.70	20.70	20.70	66.30	66.30	
Rating plate, stainless steel	M11		41.40	41.40	41.40	41.40	41.40	50.60	50.60	
Extra rating plate with customer specifications	Y82 • and customer specifications		40.70	40.70	40.70	40.70	40.70	68.–	68.–	
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	68.–	68.–	

For legends and footnotes, see Page 4/42.

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation

Article No. supplements and special versions

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

Special versions	Additional identification code -Z 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								
Rating plate and extra rating plates (continued)									
Adhesive label, supplied loose	Y85 • and customer specifications	–	–	40.70	40.70	40.70	66.30	66.30	
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 ²⁰⁾			□	□	□	□	□	□	
Packaging, safety notes, documentation and test certificates									
With a safety and commissioning instruction enclosed in each wire-lattice pallet ¹⁷⁾	B01		O	O	O	O	O	O	
Acceptance test certificate 3.1 according to EN 10204 ¹⁸⁾	B02		28.10	28.10	28.10	28.10	28.10	28.10	
Document – Electrical data sheet	B60		309.–	309.–	309.–	309.–	309.–	309.–	
Document – Order dimensional drawing	B61		309.–	309.–	309.–	309.–	309.–	309.–	
Type test with heat run for horizontal motors, with acceptance	B83		5620.–	6390.–	7910.–	8670.–	9430.–	10200.–	11000.–
Documentation package “Basic”	B90		597.–	597.–	597.–	597.–	597.–	597.–	
Documentation package “Advanced”	B91		906.–	906.–	906.–	906.–	906.–	906.–	
Documentation package “Projects”	B92		2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	
Wire-lattice pallet packaging	B99		O	O	O	O	O	O	
Connected in star for dispatch	M01		–	–	28.30	28.30	28.30	37.20	37.20
Connected in delta for dispatch	M02		–	–	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.
- O, R. Possible on request
- Not possible

- 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**. 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.
- 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**. Not possible in combination with order code **L00** vibration quantity level B.
- 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) Not UL-certified. Not possible in combination with the option **D31**.

Standard delivery times in working days:

40

On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

Selection and ordering data

Special versions	Additional identification code -Z 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) ^{2) 3)}	Q11	–	–	117.–	176.–	176.–	234.–	234.–	319.–	
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) ³⁾	Q12	–	–	201.–	269.–	269.–	413.–	413.–	537.–	
1 temperature sensor KTY84-130 (2 terminals) ³⁾	Q23	–	–	117.–	176.–	176.–	332.–	332.–	454.–	
2 temperature sensors KTY84-130 (4 terminals) ³⁾	Q25	–	–	236.–	352.–	352.–	539.–	539.–	741.–	
3 bimetal sensors (NC contact) for tripping (2 terminals) ³⁾	Q31	–	–	131.–	192.–	192.–	265.–	265.–	358.–	
6 bimetal sensors (NC contact) for alarm and tripping (4 terminals)	Q32	–	–	236.–	345.–	345.–	468.–	468.–	634.–	
6 bimetal sensors (NC contact) for tripping (6 terminals)	Q33	–	–	141.–	202.–	202.–	275.–	275.–	369.–	
6 bimetal sensors (NC contact) for alarm and tripping (12 terminals)	Q34	–	–	246.–	355.–	355.–	478.–	478.–	645.–	
1 Pt1000 resistance thermometer (2 terminals) ²⁰⁾	Q35	–	–	117.–	176.–	176.–	332.–	332.–	454.–	
2 Pt1000 resistance thermometers (4 terminals) ²⁰⁾	Q36	–	–	236.–	352.–	352.–	539.–	539.–	741.–	
Installation of 3 Pt100 resistance thermometers in stator winding, 2-wire circuit	Q60	–	–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	
1 Pt100 resistance thermometer – 2-wire circuit (2 terminals)	Q62	–	–	1020.–	1020.–	1020.–	1310.–	1310.–	1310.–	
3 Pt100 resistance thermometers – 3-wire circuit (9 terminals)	Q63	–	–	1280.–	1280.–	1280.–	1970.–	1970.–	1970.–	
6 Pt100 resistance thermometers – 3-wire circuit (18 terminals)	Q64	–	–	1980.–	1980.–	1980.–	2900.–	2900.–	2900.–	
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) ¹⁾	Q72	–	–	–	–	–	4220.–	4220.–	4220.–	
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals)	Q78	–	–	–	–	–	4640.–	4640.–	4640.–	
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals)	Q79	–	–	–	–	–	5560.–	5560.–	5560.–	
Motor connection and terminal box										
External grounding	H04		23.50	23.50	28.30	28.30	28.30	□	□	□
Terminal box on NDE ²⁾	H08		124.–	142.–	216.–	280.–	380.–	948.–	979.–	1030.–
Second external grounding	H70		–	–	15.50	15.50	15.50	15.50	15.50	15.50
Rotation of the terminal box through 90°, entry from DE	R10		O	O	O	O	O	44.20	57.30	70.70
Rotation of the terminal box through 90°, entry from NDE	R11		O	O	O	O	O	44.20	57.30	70.70
Rotation of the terminal box through 180°	R12		O	O	O	O	O	44.20	57.30	70.70
One EMC cable gland	R14		67.–	67.–	123.–	123.–	171.–	171.–	293.–	293.–
One metal cable gland	R15		58.70	58.70	110.–	110.–	140.–	140.–	162.–	162.–
EMC cable gland, maximum configuration	R16		134.–	134.–	245.–	245.–	355.–	355.–	598.–	598.–
Larger terminal box	R50		101.–	101.–	210.–	269.–	307.–	466.–	513.–	1630.–
Terminal box without cable entry opening	R51		–	–	O	O	O	O	O	O
Drilled removable entry plate	R52		–	–	–	–	–	268.–	288.–	288.–
Undrilled removable entry plate	R53		–	–	–	–	–	268.–	288.–	288.–
Cast-iron auxiliary terminal box (small)	R62		–	–	278.–	278.–	278.–	278.–	278.–	278.–
Silicon-free version			–	–	□	□	□	□	□	□
Non-standard threaded through hole (NPT or G thread)	Y61 • and customer specifications		–	–	152.–	152.–	152.–	199.–	265.–	331.–

For legends, see Page 4/46, for footnotes, see Page 4/47.

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**40**On
request

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

Special versions	Additional identification code -Z 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										
Windings and insulation											
Temperature class 180 (H) at rated power and max. CT 60 °C ³⁾	N11		216.–	216.–	299.–	397.–	484.–	688.–	963.–	1180.–	
Increased air humidity/temperature with 30 to 60 g water per m³ of air	N30		134.–	134.–	134.–	134.–	206.–	299.–	412.–	639.–	
Increased air humidity/temperature with 60 to 100 g water per m³ of air	N31		216.–	216.–	247.–	278.–	391.–	505.–	649.–	917.–	
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	
Unpainted, only primed	S01		20.50	27.30	27.30	43.50	43.50	81.70	81.70	81.70	
Special finish C3	S02		36.10	36.10	61.80	82.40	82.40	113.–	124.–	185.–	
Special finish sea air resistant C4	S03		494.–	494.–	525.–	577.–	577.–	618.–	659.–	700.–	
Special paint for use offshore C5	S04		2010.–	2010.–	2220.–	2340.–	2460.–	2590.–	2720.–	3140.–	
Internal coating	S05		–	–	87.60	87.60	87.60	87.60	87.60	87.60	
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")	Y53 • and standard finish RAL....		25.80	25.80	41.20	56.70	56.70	82.40	113.–	124.–	
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....		608.–	608.–	649.–	680.–	680.–	690.–	700.–	711.–	
Modular technology – Basic versions ⁴⁾											
Mounting of brake ⁵⁾	F01		–	–	783.–	1010.–	2000.–	4420.–	6180.–	7850.–	
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	G11	New!	680.–	721.–	814.–	855.–	896.–	937.–	979.–	1040.–	
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	G12	New!	979.–	1050.–	1190.–	1270.–	1340.–	1410.–	1480.–	1560.–	
Modular technology – Additional versions											
Brake supply voltage 24 V DC	F10		–	–	51.90	51.90	51.90	69.20	69.20	69.20	
Brake supply voltage 230 V AC, 50/60 Hz	F11		–	–	O	O	O	O	O	O	
Brake supply voltage 400 V AC, 50/60 Hz	F12		–	–	51.90	51.90	51.90	69.20	69.20	69.20	
Reverse running stop, reverse movement left locked, rotating direction right	F40		–	–	–	5360.–	5670.–	5960.–	5960.–	6180.–	
Reverse running stop, reverse movement right locked, rotating direction left	F41		–	–	–	5360.–	5670.–	5960.–	5960.–	6180.–	
Mechanical manual brake release with lever (no locking)	F50		–	–	259.–	288.–	418.–	608.–	709.–	851.–	
Special technology ⁵⁾											
Mounting of LL 861 900 220 rotary pulse encoder ⁸⁾	G04		–	–	2940.–	2940.–	2940.–	2940.–	2940.–	4100.–	
Mounting of HOG 9 DN 1024 I rotary pulse encoder ⁸⁾	G05		–	–	3470.–	3470.–	3470.–	4480.–	4480.–	4850.–	
Mounting of HOG 10 D 1024 I rotary pulse encoder ⁸⁾	G06		–	–	4480.–	4480.–	4480.–	4480.–	4480.–	5880.–	
Mounting of POG 10 D rotary pulse encoder (only in combination with separately driven fan or brake) ¹⁹⁾	G07		–	–	–	–	–	6250.–	6280.–	6310.–	
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) ¹⁹⁾	G08		–	–	–	–	–	14400.–	14600.–	17600.–	
Mounting a special type of rotary pulse encoder	Y70 • and customer specifications		–	–	–	–	–	O. R.	O. R.	O. R.	

For legends, see Page 4/46, for footnotes, see Page 4/47.

Standard delivery times in working days:

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On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

Special versions	Additional identification code -Z 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									
Mechanical design and degrees of protection											
Prepared for mountings, center hole only	G40		68.70	68.70	68.70	91.20	105.–	□	□	□	
Prepared for mountings with D12 shaft	G41		140.–	149.–	165.–	185.–	221.–	453.–	453.–	577.–	
Prepared for mountings with D16 shaft	G42		140.–	140.–	165.–	185.–	221.–	453.–	453.–	577.–	
Mechanical protection for encoders	G43		70.90	70.90	79.10	138.–	138.–	208.–	208.–	208.–	
Protective cover ^{6) 8) 9)}	H00		55.60	55.60	80.80	141.–	141.–	188.–	283.–	375.–	
Screwed-on (instead of cast) feet	H01		–	–	111.–	121.–	129.–	364.–	428.–	507.–	
Vibration-proof version (continuous vibration resistance to Class 3M4 according to IEC721-3-3:1994)	H02		145.–	165.–	205.–	222.–	258.–	309.–	371.–	433.–	
Condensation drainage holes			66.30	74.–	□	□	□	□	□	□	
Rust-resistant screws (externally)	H07		67.–	67.–	81.10	95.90	95.90	110.–	125.–	167.–	
Enclosure with screw down possibility	H10		67.–	67.–	81.10	95.90	95.90	110.–	125.–	167.–	
IP65 degree of protection ¹⁰⁾	H20		147.–	147.–	147.–	147.–	220.–	296.–	367.–	443.–	
IP54 degree of protection	H21		–	–	–	–	–	824.–	824.–	824.–	
IP56 degree of protection ¹¹⁾	H22		163.–	163.–	163.–	163.–	242.–	322.–	405.–	487.–	
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar ¹²⁾	H23		47.40	50.70	61.70	75.30	110.–	142.–	176.–	234.–	
Coolant temperature and installation altitude											
Coolant temperature –50 to +40 °C	D02		–	–	773.–	927.–	1080.–	2540.–	2720.–	3920.–	
Coolant temperature –40 to +40 °C ¹³⁾	D03		252.–	316.–	479.–	555.–	637.–	707.–	820.–	1050.–	
Coolant temperature –30 to +40 °C	D04		55.60	55.60	69.40	83.30	83.30	111.–	139.–	556.–	
Designs in accordance with standards and specifications											
Design according to UL and CSA (Canadian regulations)	D39		80.–	89.20	117.–	150.–	183.–	294.–	403.–	507.–	
Bearings and lubrication											
Located bearing DE	L20		39.–	41.40	84.60	104.–	142.–	300.–	416.–	585.–	
Located bearing NDE	L21		39.–	41.40	45.60	48.30	□	□	□	□	
Bearing design for increased cantilever forces	L22		79.30	87.60	115.–	130.–	172.–	273.–	316.–	356.–	
Regreasing device ¹⁴⁾	L23		–	–	319.–	329.–	356.–	375.–	422.–	469.–	
Reinforced bearings at both ends for DE and NDE, bearing size 63	L25		165.–	199.–	232.–	260.–	346.–	459.–	565.–	803.–	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	L28		–	–	–	–	–	732.–	882.–	1150.–	
Bearing insulation NDE	L51		–	–	550.–	1230.–	1270.–	1320.–	1340.–	1730.–	
Measuring nipple for SPM shock pulse measurement for bearing inspection ¹⁴⁾	Q01		–	–	282.–	311.–	343.–	370.–	400.–	430.–	
Balance and vibration quantity											
Half-key balancing (standard)			□	□	□	□	□	□	□	□	
Balancing without key	L01		21.40	21.40	27.80	32.90	32.90	42.80	42.80	58.10	
Full-key balancing	L02		94.20	109.–	109.–	126.–	126.–	159.–	159.–	205.–	
Shaft and rotor											
Shaft extension with standard dimensions, without feather keyway	L04		–	–	542.–	569.–	598.–	694.–	764.–	833.–	
Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347	L05		95.90	95.90	140.–	185.–	213.–	322.–	357.–	376.–	
Standard shaft made of stainless steel	L06		124.–	144.–	227.–	350.–	556.–	662.–	988.–	1360.–	
Concentricity of shaft extension in acc. with DIN 42955 Tolerance R	L07		239.–	239.–	263.–	400.–	400.–	207.–	233.–	277.–	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08		176.–	207.–	265.–	296.–	367.–	443.–	517.–	589.–	
Non-standard cylindrical shaft extension, DE ¹⁵⁾	Y58 • and customer specifications		459.–	486.–	542.–	569.–	598.–	694.–	764.–	833.–	
Non-standard cylindrical shaft extension, NDE ¹⁵⁾	Y59 • and customer specifications		459.–	486.–	542.–	569.–	598.–	694.–	764.–	833.–	
Special shaft steel	Y60 • and customer specifications		–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	

For legends, see Page 4/46, for footnotes, see Page 4/47.

SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**40****On
request**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

Special versions	Additional identification code -Z 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	–	–	–	1050.–	1220.–	1340.–	2010.–	2500.–		
Sheet metal fan cover	F74	□	□	72.30	77.80	83.30	83.30	102.–	114.–		
Metal external fan	F76	147.–	147.–	220.–	256.–	296.–	332.–	367.–	405.–		
Anti-condensation heating for 230 V	Q02	406.–	406.–	450.–	509.–	565.–	626.–	720.–	864.–		
Anti-condensation heating for 115 V	Q03	406.–	406.–	450.–	509.–	565.–	626.–	720.–	864.–		
Rating plate and extra rating plates											
Second rating plate, loose	M10	20.70	20.70	20.70	20.70	20.70	66.30	66.30	66.30		
Rating plate, stainless steel	M11	41.40	41.40	41.40	41.40	41.40	50.60	50.60	68.–		
Extra rating plate with customer specifications	Y82 • and customer specifications	40.70	40.70	40.70	40.70	40.70	68.–	68.–	68.–		
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	68.–	68.–	68.–		
Adhesive label, supplied loose	Y85 • and customer specifications	–	–	40.70	40.70	40.70	66.30	66.30	66.30		
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 ¹⁸⁾		□	□	□	□	□	□	□	□		
Packaging, safety notes, documentation and test certificates											
Acceptance test certificate 3.1 according to EN 10204 ¹⁷⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10		
Document – Electrical data sheet	B60	–	–	309.–	309.–	309.–	309.–	309.–	309.–		
Document – Order dimensional drawing	B61	–	–	309.–	309.–	309.–	309.–	309.–	309.–		
Standard test (routine test) with acceptance	B65	–	–	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–		
Type test with heat run for horizontal motors, with acceptance	B83	5620.–	6390.–	7910.–	8670.–	9430.–	10200.–	11000.–	11700.–		
Documentation package “Basic”	B90	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–		
Documentation package “Advanced”	B91	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–		
Documentation package “Projects”	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–		
Connected in star for dispatch	M01	23.50	23.50	28.30	28.30	28.30	37.20	37.20	37.20		
Connected in delta for dispatch	M02	23.50	23.50	28.30	28.30	28.30	37.20	37.20	37.20		

- 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:

40On
request**SIMOTICS SD VSD4000 Line Standard Reluctance Motors for Converter Operation**

Article No. supplements and special versions

Options · Cast-iron series 1FP1514

- 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) The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>
- 19) 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!
- 20) Not UL-certified. Not possible in combination with the option **D31**.

SIMOTICS GP/SD VSD4000 Line Standard Reluctance Motors for Converter Operation

Notes

SIMOTICS XP 1MB

Explosion-Proof Motors

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Note:

Please refer to catalog D 83.1 for further explosion-proof motor series with the types of protection Ex de, Ex e and Ex ec.

5/2	Motors for zone 21, 22 and 2 in type of protection Ex tb, Ex tc and Ex ec	5/17	Article No. supplements and special versions
5/2	Self-ventilated motors with IE1 Standard Efficiency – Aluminum series 1MB10	5/17	<u>Voltages</u>
5/3	Self-ventilated motors with IE2 High Efficiency – Aluminum series 1MB10	5/17	Aluminum series 1MB10
5/4	Self-ventilated motors with IE3 Premium Efficiency – Aluminum series 1MB10	5/18	Cast-iron series 1MB15, 1MB16 Basic/Performance Line
5/5	Motors for zone 21 in type of protection Ex tb	5/19	<u>Types of construction</u>
5/5	Cast-iron series 1MB1511, 1MB1611 Basic/Performance Line with IE2 High Efficiency	5/19	Aluminum series 1MB10
5/7	Motors for zone 22 in type of protection Ex tc	5/21	Cast-iron series 1MB15, 1MB16 Basic/Performance Line
5/7	Cast-iron series 1MB1521, 1MB1621 Basic/Performance Line with IE2 High Efficiency	5/23	<u>Motor protection</u>
5/9	Motors for zone 2 in type of protection Ex ec	5/23	Aluminum series 1MB10
5/9	Cast-iron series 1MB1531, 1MB1631 Basic/Performance Line with IE2 High Efficiency	5/24	Cast-iron series 1MB15, 1MB16 Basic/Performance Line
5/11	Motors for zone 21 in type of protection Ex tb	5/25	<u>Terminal box position</u>
5/11	Cast-iron series 1MB1513, 1MB1613 Basic/Performance Line with IE3 Premium Efficiency	5/25	Aluminum series 1MB10
5/13	Motors for zone 22 in type of protection Ex tc	5/26	Cast-iron series 1MB15, 1MB16 Basic/Performance Line
5/13	Cast-iron series 1MB1523, 1MB1623 Basic/Performance Line with IE3 Premium Efficiency	5/27	<u>Options</u>
5/15	Motors for zone 2 in type of protection Ex ec	5/27	Aluminum series 1MB10
5/15	Cast-iron series 1MB1533, 1MB1633 Basic/Performance Line with IE3 Premium Efficiency	5/31	Cast-iron series 1MB15, 1MB16 Basic/Performance Line

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Orientation

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

Category	Motors for zone 21, 22 and 2 in type of protection Ex tb, Ex tc and Ex ec
Series version	Aluminum series 1MB10 with IE1 Standard Efficiency
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
Efficiency	IE1 Standard Efficiency
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3

(for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Ex tb (zone 21)	Base price EUR	Article No. Ex tc (zone 22)	Base price EUR	Article No. Ex ec (zone 2)	Base price EUR
2-pole: 3000 rpm at 50 Hz								
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.-
4-pole: 1500 rpm at 50 Hz								
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.-
6-pole: 1000 rpm at 50 Hz								
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.-
8-pole: 750 rpm at 50 Hz								
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:

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**
Orientation

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

Overview (continued)

Category	Motors for zone 21, 22 and 2 in type of protection Ex tb, Ex tc and Ex ec (continued)
Series version	Aluminum series 1MB10 with IE2 High Efficiency
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
Efficiency	IE2 High Efficiency
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3

(for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Ex tb (zone 21)	Base price EUR	Article No. Ex tc (zone 22)	Base price EUR	Article No. Ex ec (zone 2)	Base price EUR
2-pole: 3000 rpm at 50 Hz								
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.-
4-pole: 1500 rpm at 50 Hz								
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.-
6-pole: 1000 rpm at 50 Hz								
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.-
8-pole: 750 rpm at 50 Hz								
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.-

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Orientation

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

Category	Motors for zone 21, 22 and 2 in type of protection Ex tb, Ex tc and Ex ec (continued)
Series version	Aluminum series 1MB10 with IE3 Premium Efficiency
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
Efficiency	IE3 Premium Efficiency
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3

(for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Ex tb (zone 21)	Base price EUR	Article No. Ex tc (zone 22)	Base price EUR	Article No. Ex ec (zone 2)	Base price EUR
2-pole: 3000 rpm at 50 Hz								
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.-
4-pole: 1500 rpm at 50 Hz								
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.-
6-pole: 1000 rpm at 50 Hz								
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:

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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						
Series version	Cast-iron series 1MB1511 Basic Line, 1MB1611 Performance Line with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price 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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SIMOTICS XP 1MB Explosion-Proof Motors

Orientation

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

Overview (continued)

Category	Motors for zone 21 in type of protection Ex tb (continued)						
Series version	Cast-iron series 1MB1511 Basic Line, 1MB1611 Performance Line (continued)						
	with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3							
(for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
6-pole: 1000 rpm at 50 Hz							
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.-	
8-pole: 750 rpm at 50 Hz							
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:

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requestSIMOTICS XP 1MB Explosion-Proof Motors
Orientation

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

Overview (continued)

Category	Motors for zone 22 in type of protection Ex tc						
Series version	Cast-iron series 1MB1521 Basic Line, 1MB1621 Performance Line with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
2-pole: 3000 rpm at 50 Hz							
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.-	
4-pole: 1500 rpm at 50 Hz							
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.-	

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Orientation

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

Category	Motors for zone 22 in type of protection Ex tc (continued)						
Series version	Cast-iron series 1MB1521 Basic Line, 1MB1621 Performance Line (continued) with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
6-pole: 1000 rpm at 50 Hz							
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.-	
8-pole: 750 rpm at 50 Hz							
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:

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Orientation

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

Overview (continued)

Category	Motors for zone 2 in type of protection Ex ec						
Series version	Cast-iron series 1MB1531 Basic Line, 1MB1631 Performance Line with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
2-pole: 3000 rpm at 50 Hz							
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.-	
4-pole: 1500 rpm at 50 Hz							
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.-	

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Orientation

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

Overview (continued)

Category	Motors for zone 2 in type of protection Ex ec (continued)						
Series version	Cast-iron series 1MB1531 Basic Line, 1MB1631 Performance Line (continued) with IE2 High Efficiency						
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						
Efficiency	IE2 High Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
6-pole: 1000 rpm at 50 Hz							
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.-	
8-pole: 750 rpm at 50 Hz							
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:

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**
Orientation

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

Overview (continued)

Category	Motors for zone 21 in type of protection Ex tb						
Series version	Cast-iron series 1MB1513 Basic Line, 1MB1613 Performance Line with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price 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.-	

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Orientation

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

Category	Motors for zone 21 in type of protection Ex tb (continued)						
Series version	Cast-iron series 1MB1513 Basic Line, 1MB1613 Performance Line (continued)						
	with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3							
(for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
6-pole: 1000 rpm at 50 Hz							
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:

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**
Orientation

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

Overview (continued)

Category	Motors for zone 22 in type of protection Ex tc						
Series version	Cast-iron series 1MB1523 Basic Line, 1MB1623 Performance Line with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price 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.-	

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Orientation

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

Category	Motors for zone 22 in type of protection Ex tc (continued)						
Series version	Cast-iron series 1MB1523 Basic Line, 1MB1623 Performance Line (continued) with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17; for delivery times refer to colored background following the respective price)							
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
	6-pole: 1000 rpm at 50 Hz						
	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:

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**
Orientation

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

Overview (continued)

Category	Motors for zone 2 in type of protection Ex ec						
Series version	Cast-iron series 1MB1533 Basic Line, 1MB1633 Performance Line with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR	
2-pole: 3000 rpm at 50 Hz							
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.-	
4-pole: 1500 rpm at 50 Hz							
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.-	

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Orientation

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

Category	Motors for zone 2 in type of protection Ex ec (continued)						
Series version	Cast-iron series 1MB1533 Basic Line, 1MB1633 Performance Line (continued) with IE3 Premium Efficiency						
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						
Efficiency	IE3 Premium Efficiency						
Metal factor for metal surcharges (MS)	N - W - - - -						
Price group (PG)	3Z1						
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 (for article number supplements and special versions see from Page 5/17, for delivery times refer to colored background following the respective price)							
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No. Basic Line	Base price EUR	Article No. Performance Line	Base price EUR
6-pole: 1000 rpm at 50 Hz							
	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.–

Selection and ordering data

Voltages	Article No.		supplement Additional identification code with order code and plain text if required Order code	Frame size						Motor version		
	Voltage code 12th and 13th position of the Article No.			80	90	100	112	132	160			
				1MB10.3						IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
				1MB10.1								
1MB10...-...■-■...												
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	—	—	—	○	○	○	○			
50 Hz 220 VΔ/380 VY, 60 Hz 440 VY	2	1	—	36.40	42.60	52.90	64.—	82.10	101.—			
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ	3	3	—	36.40	42.60	52.90	64.—	82.10	101.—			
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	2	3	—	36.40	42.60	52.90	64.—	82.10	101.—			
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	—	36.40	42.60	52.90	64.—	82.10	101.—			
50 Hz 400 VY, 60 Hz 460 VY ¹⁾	0	2	—	○	○	○	○	○	○			
50 Hz 400 VΔ, 60 Hz 460 VΔ ²⁾	0	4	—	○	○	○	○	○	○			
60 Hz 220 VΔ/380 VY	1	7	—	36.40	42.60	52.90	64.—	82.10	101.—	Not for:	1MB10.2	
60 Hz 230 VΔ/400 VY	1	8	—	36.40	42.60	52.90	64.—	82.10	101.—	Not for:	1MB10.2	
60 Hz 380 VΔ/660 VY	3	0	—	36.40	42.60	52.90	64.—	82.10	101.—	Not for:	1MB10.2	
60 Hz 400 VΔ/690 VY	3	1	—	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 ³⁾	9	0	M2A	36.40	42.60	52.90	64.—	82.10	101.—			
220 VΔ/380 VY; 60 Hz power	9	0	M1A	36.40	42.60	52.90	64.—	82.10	101.—			
380 VΔ/660 VY; 50 Hz power ³⁾	9	0	M2B	36.40	42.60	52.90	64.—	82.10	101.—			
380 VΔ/660 VY; 60 Hz power	9	0	M1B	36.40	42.60	52.90	64.—	82.10	101.—			
440 VY; 50 Hz power ³⁾	9	0	M2C	36.40	42.60	52.90	64.—	82.10	101.—			
440 VY; 60 Hz power	9	0	M1C	36.40	42.60	52.90	64.—	82.10	101.—			
440 VΔ; 50 Hz power ³⁾	9	0	M2D	36.40	42.60	52.90	64.—	82.10	101.—			
440 VΔ; 60 Hz power	9	0	M1D	36.40	42.60	52.90	64.—	82.10	101.—			
460 VY; 50 Hz power ³⁾	9	0	M2E	36.40	42.60	52.90	64.—	82.10	101.—			
460 VY; 60 Hz power	9	0	M1E	○	○	○	○	○	○			
460 VΔ; 50 Hz power ³⁾	9	0	M2F	36.40	42.60	52.90	64.—	82.10	101.—			
460 VΔ; 60 Hz power	9	0	M1F	○	○	○	○	○	○			
575 VY; 50 Hz power ³⁾	9	0	M2G	36.40	42.60	52.90	64.—	82.10	101.—			
575 VY; 60 Hz power	9	0	M1G	36.40	42.60	52.90	64.—	82.10	101.—			
575 VΔ; 50 Hz power ³⁾	9	0	M2H	36.40	42.60	52.90	64.—	82.10	101.—			
575 VΔ; 60 Hz power	9	0	M1H	36.40	42.60	52.90	64.—	82.10	101.—			
400 VΔ/690 VY; 50 Hz power	9	0	M2J	36.40	42.60	52.90	64.—	82.10	101.—			
400 VΔ/690 VY; 60 Hz power	9	0	M1J	36.40	42.60	52.90	64.—	82.10	101.—			
480 VY; 50 Hz power	9	0	M2K	36.40	42.60	52.90	64.—	82.10	101.—			
480 VY; 60 Hz power	9	0	M1K	36.40	42.60	52.90	64.—	82.10	101.—			
480 VΔ; 50 Hz power	9	0	M2L	36.40	42.60	52.90	64.—	82.10	101.—			
480 VΔ; 60 Hz power	9	0	M1L	36.40	42.60	52.90	64.—	82.10	101.—			
230 VΔ/400 VY; 50 Hz power	9	0	M2M	36.40	42.60	52.90	64.—	82.10	101.—			
230 VΔ/400 VY; 60 Hz power	9	0	M1M	36.40	42.60	52.90	64.—	82.10	101.—			
Voltage at 87 Hz (87 Hz power)												
400 VΔ ⁵⁾	9	0	M3A	36.40	42.60	52.90	64.—	82.10	101.—			
Non-standard voltage and/or frequencies												
Non-standard winding ⁴⁾	9	0	M1Y • and customer specifications	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 VA winding.

SIMOTICS XP 1MB Explosion-Proof 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 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	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2		
				1MB15.3 Basic Line																	
				1MB16.3 Performance Line																	
				1MB15.1 Basic Line																	
1MB16.1 Performance Line																					
1MB15																					
1MB16																					
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 ¹⁾	0	2	–	○	○	○	○	○	○	○	○	○	○	○	○	○					
50 Hz 400 VΔ, 60 Hz 460 VΔ ²⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ³⁾	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 ⁵⁾	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 ⁴⁾	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 VΔ winding.

Standard delivery times in working days:

20**SIMOTICS XP 1MB Explosion-Proof Motors**

Article No. supplements and special versions

Types of construction · Aluminum series 1MB10

Selection and ordering data

Types of construction		Article No. supplement	Frame size						Motor version		
			80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
			1MB10.3								
			1MB10.1								
			1MB10.2								
1MB10 -Z											
Without flange											
IM B3		A	—	□	□	□	□	□	□		
IM B6 ¹⁾		T	—	□	□	□	□	□	□		
IM B7 ¹⁾		U	—	□	□	□	□	□	□		
IM B8 ¹⁾		V	—	□	□	□	□	□	□		
IM V6 ¹⁾		D	—	□	□	□	□	□	□		
IM V5 with protective cover ^{1) 2)}		C	H00	55.60	55.60	80.80	80.80	141.—	141.—		
With flange		EN 50347 DIN 42948		FF165 A 200	FF165 A 200	FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350		
IM B5		F	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM V1 with protective cover ^{1) 2)}		G	H00	109.30	109.30	145.20	160.50	240.—	270.—		
IM V3 ¹⁾		H	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM B35		J	—	56.70	67.—	87.60	108.—	134.—	185.—		

5

For legends and footnotes, see Page 5/20.

SIMOTICS XP 1MB Explosion-Proof Motors

Article No. supplements and special versions

Types of construction · Aluminum series 1MB10

Types of construction		Article No.	No. supplement	Frame size						Motor version		
				80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
				1MB10.3								
				1MB10.1								
1MB10.2												
1MB10.3												
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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 "Standard cylindrical shaft extension (second shaft extension)" option (order code **L05**) is not possible.

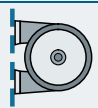
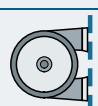
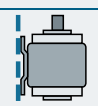
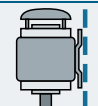
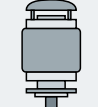
Standard delivery times in working days:

20**30****SIMOTICS XP 1MB Explosion-Proof 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. 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	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2		
			1MB15.3 Basic Line																		
			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 1)		T	–	□	□	□	□	□	□	□	□	□	□	□	□	□	□				
IM B7 1)		U	–	□	□	□	□	□	□	□	□	□	□	□	□	□	□				
IM B8 1)		V	–	□	□	□	□	□	□	□	□	□	□	□	□	□	□				
IM V6 1)		D	–	□	□	□	□	□	□	□	□	□	□	□	□	□	□				
IM V5 with protec- tive cover 1) 2)		C	H00	56.–	56.–	56.–	80.80	80.80	141.–	141.–	188.–	283.–	375.–	469.–	562.–	751.–	751.–				
With flange		EN 50347 DIN 42948		FF130 A 160	FF165 A 200	FF165 A 200	FF215 A 250	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450	FF500 A 550	FF500 A 550	FF600 A 660	FF600 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 protec- tive cover 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 1)		H	–	47.30	53.70	64.40	79.70	99.–	129.–	167.–	264.–	320.–	414.–	497.–	724.–	1030.–	–				
IM B35 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 5/22.

SIMOTICS XP 1MB Explosion-Proof 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		
			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), Ex tc (zone 22), Ex ec (zone 2)	IE3
			1MB16.3 Performance Line																
			1MB15.1 Basic Line																
1MB16.1 Performance Line																			
1MB15	■ .. (-Z)	Order code																	
1MB16	■ .. (-Z)																		
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	–	–	–	–	–	–	–			
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 protec- tive 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.–	–	–	–	–	–	–			
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 1)		K	P01	94.10	100.50	111.20	126.50	145.80	187.40	–	–	–	–	–	–	–			
IM V19 1)		L	P01	100.50	100.50	111.20	126.50	145.80	187.40	–	–	–	–	–	–	–			
IM V18 with protec- tive cover 1) 2)		M	P01+ H00	156.50	156.50	167.20	287.60	307.60	469.40	–	–	–	–	–	–	–			
IM B34		N	P01	98.30	103.50	113.80	134.40	154.80	192.40	–	–	–	–	–	–	–			

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

Standard delivery times in working days:

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SIMOTICS XP 1MB Explosion-Proof 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
	Motor protection code	Additional identification code with order code and plain text if required	80	90	100	112	132	160	
			1MB10.3						IEC Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)
			1MB10.1						IE3 IE2 IE1
					1MB10.2				
1MB10	■ .	Order code							
Motor protection									
Without (Standard)	A	–	□	□	□	□	□	□	
3 PTC thermistors – for tripping (2 terminals) ¹⁾	B	–	39.70	42.60	117.–	117.–	176.–	176.–	
6 PTC thermistors – for alarm and tripping (4 terminals) ¹⁾	C	–	173.–	173.–	201.–	201.–	269.–	269.–	
1 temperature sensor KTY84-130 (2 terminals) ¹⁾	F	–	103.–	103.–	117.–	117.–	176.–	176.–	
2 temperature sensors KTY84-130 (4 terminals) ¹⁾	G	–	207.–	207.–	236.–	236.–	352.–	352.–	
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) ^{1) 2)}	H	–	–	–	1480.–	1480.–	1480.–	1480.–	
1 Pt1000 resistance thermometer (2 terminals) ¹⁾	K	–	103.–	103.–	117.–	117.–	176.–	176.–	
2 Pt1000 resistance thermometers (4 terminals) ¹⁾	L	–	207.–	207.–	236.–	236.–	352.–	352.–	

- Standard version
– Not possible

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

²⁾ 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).

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On
request**SIMOTICS XP 1MB Explosion-Proof 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. Motor protection code 15th position of the Article No.	supplement Additional identification code 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), Ex tc (zone 22), Ex ec (zone 2)	IE3 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.. Basic Line	
3 PTC thermistors – for tripping (2 terminals) 1) 2)	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) 2)	C	–	173.–	173.–	173.–	201.–	201.–	269.–	269.–	413.–	413.–	537.–	537.–	666.–	666.–			Only for: 1MB15.. Basic Line	
			–	–	–	□	□	□	□	□	□	□	□	□	□	□	Only for: 1MB16.. Performance Line		
1 temperature sensor KTY84-130 (2 terminals) 2)	F	–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–				
2 temperature sensors KTY84-130 (4 terminals) 2)	G	–	206.–	206.–	206.–	236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–				
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals) 2) 3)	H	–	1020.–	1020.–	1020.–	1220.–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	1640.–	1640.–	1640.–				
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals) 2)	J	–	–	–	–	–	–	–	–	2420.–	2420.–	2420.–	2420.–	2420.–	2420.–				
1 Pt1000 resistance thermometer (2 terminals) 2)	K	–	103.–	103.–	103.–	117.–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–	868.–				
2 Pt1000 resistance thermometers (4 terminals) 2)	L	–	206.–	206.–	206.–	236.–	236.–	352.–	352.–	539.–	539.–	741.–	1000.–	1000.–	1470.–				

- Standard version
– Not possible

¹⁾ 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.

²⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

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).

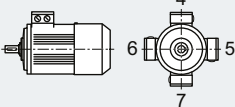
Standard delivery times in working days:

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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	80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
			1MB10.3								
			1MB10.1								
			1MB10.2								
1MB10											
Terminal box position											
Terminal box top ¹⁾	4	–	□	□	□	□	□	□			
Terminal box on RHS ²⁾	5	–	35.20	39.80	102.–	111.–	121.–	129.–			
Terminal box on LHS ²⁾	6	–	35.20	39.80	102.–	111.–	121.–	129.–			
Terminal box bottom ^{2) 3)}	7	–	–	–	102.–	111.–	121.–	129.–			

- Standard version
– Not possible

¹⁾ For types of construction with feet, cast feet are standard.

²⁾ For types of construction with feet, screwed-on feet are standard.

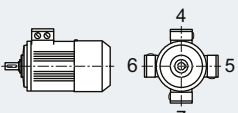
³⁾ Not generally possible for motors with feet.

SIMOTICS XP 1MB Explosion-Proof 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), Ex tc (zone 22), Ex ec (zone 2)	IE3	
			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 ¹⁾	4	–	□	□	□	□	□	□	□	□	□	□	□	□	□				
Terminal box on RHS ²⁾	5	–	–	51.50	72.10	102.–	111.–	121.–	129.–	364.–	428.–	507.–	753.–	846.–	974.–				
Terminal box on LHS ²⁾	6	–	–	51.50	72.10	102.–	111.–	121.–	129.–	364.–	428.–	507.–	753.–	846.–	974.–				
Terminal box bottom ³⁾	7	–	–	–	–	102.–	111.–	121.–	129.–	–	–	–	–	–	–				

- Standard version
– Not possible

¹⁾ For types of construction with feet, cast feet are standard.

²⁾ For types of construction with feet, screwed-on feet are standard.

³⁾ Not generally possible for motors with feet.

Standard delivery times in working days:

20On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Article No. supplements and special versions

Options · Aluminum series 1MB10

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Frame size						Motor version		
		80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
		1MB10.3								
		1MB10.1								
		1MB10.2								
1MB10-.....-Z	Order code									
Explosion-proof version										
Design additional for dust Ex tc – zone 22 ^{1) 14)}	B30		78.80	94.30	107.–	126.–	188.–	274.–	Only for:	1MB103. – Ex ec (zone 2)
Design IIC with marking IIB ²⁰⁾	B31		O	O	O	O	O	O	Only for:	1MB103. – Ex ec (zone 2)
VIK version	C02		82.40	84.50	86.50	88.60	105.–	105.–	Only for:	1MB1033 – Ex ec IE3 (zone 2) 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. ¹⁵⁾	B40		103.–	113.–	134.–	155.–	175.–	206.–		
Design for converter operation in basic version with operating data SINAMICS S150. ¹⁵⁾	B41		103.–	113.–	134.–	155.–	175.–	206.–		
Operating data as order code B40 with alternative SINAMICS converter on the rating plate • G120 with PM230 • G120 with PM240 • G120C • G120P with PM230 • G120P with PM240-2 • G120P with PM330 • G130, G150, G180 • S120 (BLM/SLM) • V20 Operating data as order code B41 with alternative SINAMICS converter on the rating plate • S120 (ALM)	Y68 • and converter type		O	O	O	O	O	O		
Motor protection										
1 Pt1000 resistance thermometer (2 terminals)	Q35		103.–	103.–	210.–	210.–	289.–	289.–		
2 Pt1000 resistance thermometers (4 terminals)	Q36		207.–	207.–	329.–	329.–	466.–	466.–		
Motor connection and terminal box										
External grounding			□	□	□	□	□	□		
Rotation of the terminal box through 90°, entry from DE	R10		O	O	O	O	O	O		
Rotation of the terminal box through 90°, entry from NDE	R11		O	O	O	O	O	O		
Rotation of the terminal box through 180°	R12		O	O	O	O	O	O		
Metal cable gland, max. configuration	R18		123.–	123.–	231.–	231.–	231.–	284.–		
Larger terminal box	R50		□	□	–	–	–	–		
Windings and insulation										
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % ²⁾	N05		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 % ²⁾	N06		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 % ²⁾	N07		72.90	85.80	106.–	129.–	164.–	204.–		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	N08		72.90	85.80	106.–	129.–	164.–	204.–		
Increased air humidity/temperature with 30 to 60 g water per m³ of air	N30		134.–	134.–	134.–	134.–	134.–	206.–		

For legends and footnotes, see Page 5/30.

SIMOTICS XP 1MB Explosion-Proof 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		
		80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3
										IE2
										IE1
1MB10...-.....-Z	Order code									
Windings and insulation (continued)										
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N31		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		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		20.50	27.30	27.30	27.30	43.50	43.50		
Special finish C3	S02		36.10	36.10	61.80	61.80	82.40	82.40		
Special finish sea air resistant C4	S03		494.–	494.–	525.–	525.–	577.–	577.–		
Top coat polyurethane ¹²⁾	S06		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	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.–	649.–	649.–	680.–	680.–		
Modular technology – Basic version										
Mounting of separately driven fan ¹⁷⁾	F70		–	–	–	–	–	–	Only for: 1MB101. – Ex tb (zone 21)	
			–	–	1030.–	1240.–	1440.–	1750.–	Only for: 1MB102. – Ex tc (zone 22) 1MB103. – Ex ec (zone 2)	
Special technology										
Mounting of explosion-proof rotary pulse encoder LL 841 (HTL); 1024 I ¹⁶⁾	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	80.80	80.80	141.–	141.–		
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	H02		145.–	165.–	185.–	205.–	222.–	258.–		
Condensation drainage holes ⁶⁾	H03		66.30	74.–	81.10	88.50	95.90	103.–		
Rust-resistant screws (externally)	H07		66.30	66.30	81.10	81.10	95.90	95.90		
IP65 degree of protection ⁴⁾	H20		147.–	147.–	147.–	147.–	147.–	220.–	Only for: 1MB103. – Ex ec (zone 2)	
IP56 degree of protection ⁵⁾	H22		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 ³⁾	H23		47.40	50.70	56.40	61.70	75.30	110.–		
Coolant temperature and installation altitude										
Coolant temperature –40 °C to +40 °C	D03		390.–	456.–	585.–	715.–	909.–	1300.–		

For legends and footnotes, see Page 5/30.

Standard delivery times in working days:

20On
request**SIMOTICS XP 1MB Explosion-Proof 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		
		80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3
										IE2
										IE1
1MB10...-Z	Order code									
Designs in accordance with standards and specifications										
Ex certificate EAC for the Eurasian customs union ¹⁸⁾	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) 1MB103. – Ex ec (zone 2)		
Bearings and lubrication										
Located bearing DE	L20		39.–	41.40	71.40	84.60	104.–	142.–		
Located bearing NDE	L21		39.–	41.40	43.30	45.60	48.30	□		
Bearing design for increased cantilever forces ¹³⁾	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	<i>New!</i>	–	–	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 ¹⁹⁾	L00		250.–	265.–	278.–	321.–	411.–	509.–		
Half-key balancing			□	□	□	□	□	□		
Balancing without key	L01		21.40	21.40	27.80	27.80	32.90	32.90		
Full-key balancing	L02		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 ²¹⁾	L05		95.90	95.90	140.–	140.–	185.–	213.–		
Standard shaft made of stainless steel (e.g. 1.4021)	L06		822.–	822.–	943.–	943.–	1090.–	1360.–		
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07		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		176.–	207.–	236.–	265.–	296.–	367.–		
Non-standard cylindrical shaft extension DE ⁷⁾	Y58 • and customer specifications		459.–	486.–	515.–	542.–	569.–	598.–		
Non-standard cylindrical shaft extension NDE ⁷⁾	Y59 • and customer specifications		459.–	486.–	515.–	542.–	569.–	598.–		
Heating and ventilation										
Metal external fan ⁸⁾	F76		□	□	–	–	–	–	Only for: 1MB103. – Ex ec (zone 2)	
			□	□	185.–	220.–	256.–	296.–	Only for: 1MB101. – Ex tb (zone 21), 1MB102. – Ex tc (zone 22)	
Anti-condensation heating for 230 V ⁹⁾	Q02		1020.–	1020.–	1020.–	1030.–	1080.–	1130.–		
Anti-condensation heating for 115 V ⁹⁾	Q03		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		
Rating plate, stainless steel	M11		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	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		

For legends and footnotes, see Page 5/30.

SIMOTICS XP 1MB Explosion-Proof 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		
		80	90	100	112	132	160	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2 IE1
		1MB10.3								
		1MB10.1								
				1MB10.2						
1MB10...-.....-Z	Order code									
Packaging, safety notes, documentation and test certificates										
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			
Printed Operating Instructions (compact) for explosion-proof motors enclosed in English and German ¹¹⁾		□	□	□	□	□	□			
Acceptance test certificate 3.1 according to EN 10204 ¹⁰⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10			
Type test with heat run for horizontal motors, with acceptance	B83	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–			
Documentation package "Basic"	B90	597.–	597.–	597.–	597.–	597.–	597.–			
Documentation package "Advanced"	B91	906.–	906.–	906.–	906.–	906.–	906.–			
Documentation package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–			
Wire-lattice pallet packaging	B99	O	O	O	O	O	O			
Connected in star for dispatch	M01	–	–	28.30	28.30	28.30	28.30			
Connected in delta for dispatch	M02	–	–	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

- 1) Please inquire regarding combination with order codes **D03** and **C02**. Not possible in combination with order codes **H20** and **H22**.
- 2) There is no derating in combination with the order codes **M2A, M2B, M2C, M2D, M2E, M2F, M2G, M2H**.
- 3) Not possible for type of construction IM V3.
- 4) For zone 21, IP65 degree of protection is standard. Not possible for zone 22, because only IP55 degree of protection is required.
- 5) Not admissible for zone 21 (IP65 degree of protection) and zone 22 (IP55 degree of protection).
- 6) 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.
- 7) 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 Section 1 "Introduction".
- 8) The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.
- 9) 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).
- 10) The delivery time for the acceptance 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** and **S01**. It can be combined with **Y53** and **Y56** on request.
- 13) 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.
- 14) 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.
- 15) 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).
- 16) 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.
- 17) 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.
- 18) Not possible in combination with converter operation.
- 19) Vibration quantity level B is not admitted in combination with converter operation (order code **B40/B41**).
- 20) Maximum permissible painting thickness up to 2 mm.
- 21) Not possible in vertical version with shaft extension DE downwards.

Standard delivery times in working days:

20

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On
request

SIMOTICS XP 1MB Explosion-Proof 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 -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	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2	
		1MB15.3 Basic Line																
		1MB16.3 Performance Line																
		1MB15.1 Basic Line																
1MB16.1 Performance Line																		
1MB15-Z 1MB16-Z	Order code																	
Explosion-proof version																		
Design additional for dust Ex tc – zone 22 ^{1) 16)}	B30		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 ²³⁾	B31		○	○	○	○	○	○	○	○	○	○	○	○	○	Only for: 1MB1.3. – Ex ec (zone 2)		
VIK version	C02 (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. ^{17) 20) 21) 22)}	B40		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. ^{17) 20) 21) 22)}	B41		92.70	103.–	113.–	134.–	155.–	175.–	206.–	237.–	268.–	309.–	361.–	2330.–	2470.–			
Operating data as order code B40 with alternative SINAMICS converter on the rating plate ²⁰⁾ • G120 with PM230 • G120 with PM240 • G120C • G120P with PM230 • G120P with PM240-2 • G120P with PM330 • G130, G150, G180 • S120 (BLM/SLM) • V20 Operating data as order code B41 with alternative SINAMICS converter on the rating plate ²⁰⁾ • S120 (ALM)	Y68 • and converter type		○	○	○	○	○	○	○	○	○	○	○	○	○			
Motor protection																		
1 Pt1000 resistance thermometer (2 terminals)	Q35		–	–	–	210.–	210.–	289.–	289.–	466.–	466.–	609.–	744.–	744.–	868.–			
2 Pt1000 resistance thermometers (4 terminals)	Q36		–	–	–	329.–	329.–	466.–	466.–	673.–	673.–	895.–	1150.–	1150.–	1470.–			
2 Pt100 screw-in thermometers in basic circuit for bearings (2 terminals) ^{2) 3)}	Q72		–	–	–	–	–	–	–	4220.–	4220.–	4220.–	4220.–	4220.–	4220.–			
2 Pt100 screw-in thermometers in 3-wire circuit for bearings (6 terminals) ^{2) 3)}	Q78		–	–	–	–	–	–	–	4640.–	4640.–	4640.–	4640.–	4640.–	4640.–			
2 double Pt100 screw-in thermometers in 3-wire circuit for bearings (12 terminals) ^{2) 3)}	Q79		–	–	–	–	–	–	–	–	–	–	–	5560.–	5560.–			
Motor connection and terminal box																		
External grounding			□	□	□	□	□	□	□	□	□	□	□	□	□			
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.–			
Stud terminals for cable connection, accessories pack (3 items)	R17		–	–	–	–	–	–	–	–	–	–	147.–	147.–	185.–	Only for: 1MB1.1. – Ex tb (zone 21), 1MB1.2. – Ex tc (zone 22)		

For legends and footnotes, see Page 5/35.

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Article No. supplements and special versions

Options · Cast-iron series 1MB15 Basic Line, 1MB16 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	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 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. – Ex tb (zone 21), 1MB1.2. – Ex tc (zone 22)		
			□	□	□	□	□	□	□	□	□	□	□	□	□	Only for: 1MB1.3. – Ex ec (zone 2)		
Larger terminal box ¹⁵⁾	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 % ⁴⁾	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 % ⁴⁾	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 % ⁴⁾	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 ¹²⁾	S06		30.90	30.90	50.50	72.10	98.90	147.–	206.–	247.–	303.–	389.–	485.–	613.–	779.–	Only for: 1MB1.3. – 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 5/35.

Standard delivery times in working days:

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On
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SIMOTICS XP 1MB Explosion-Proof Motors

Article No. supplements and special versions

Options · Cast-iron series 1MB15 Basic Line, 1MB16 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				
		1MB15.3 Basic Line														IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2
		1MB16.3 Performance Line																
		1MB15.1 Basic Line																
1MB16.1 Performance Line																		
1MB15-Z 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 ¹⁹⁾	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 ¹⁸⁾	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.–			
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.–			
Condensation drainage holes ⁷⁾	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.–			
IP65 degree of protection ⁵⁾	H20		147.–	147.–	147.–	147.–	147.–	147.–	220.–	296.–	367.–	443.–	517.–	589.–	663.–	Only for: 1MB1.3. – Ex ec (zone 2)		
IP56 degree of protection ⁶⁾	H22		163.–	163.–	163.–	163.–	163.–	163.–	242.–	322.–	405.–	487.–	568.–	650.–	728.–	Only for: 1MB1.3. – Ex ec (zone 2)		
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar 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	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 ¹³⁾	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.–			
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 ¹⁴⁾	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 5/35.

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On
request**SIMOTICS XP 1MB Explosion-Proof Motors**

Article No. supplements and special versions

Options · Cast-iron series 1MB15 Basic Line, 1MB16 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			
		1MB15.3 Basic Line													IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2
		1MB16.3 Performance Line															
		1MB15.1 Basic Line															
1MB16.1 Performance Line																	
1MB15.....-Z 1MB16.....-Z	Order code																
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 ²⁰⁾	L51	–	–	–	530.–	550.–	1230.–	1270.–	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 ²¹⁾		□	□	□	□	□	□	□	□	□	□	□	□	□			
Vibration quantity level B ^{21) 22)}	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 ²⁴⁾	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 ⁸⁾	Y58 • and customer specifications	430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–			
Non-standard cylindrical shaft extension NDE ⁸⁾	Y59 • and customer specifications	430.–	459.–	486.–	515.–	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–	1040.–			
Heating and ventilation																	
Metal external fan ⁹⁾	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 ³⁾	Q02	1020.–	1020.–	1020.–	1020.–	1030.–	1080.–	1130.–	1180.–	1240.–	1290.–	1340.–	1340.–	1390.–			
Anti-condensation heating for 115 V ³⁾	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 ¹¹⁾		□	□	□	□	□	□	□	□	□	□	□	□	□			
Acceptance test certificate 3.1 in accordance with EN 10204 ¹⁰⁾	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 5/35.

Standard delivery times in working days:

20

30

On
request

SIMOTICS XP 1MB Explosion-Proof Motors

Article No. supplements and special versions

Options · Cast-iron series 1MB15 Basic Line, 1MB16 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	IEC	Ex tb (zone 21), Ex tc (zone 22), Ex ec (zone 2)	IE3 IE2
		1MB15.3 Basic Line															
		1MB16.3 Performance Line															
		1MB15.1 Basic Line															
1MB16.1 Performance Line																	
1MB15 -Z	Order code																
1MB16 -Z																	
Packaging, safety notes, documentation and test certificates (continued)																	
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		O	O	O	O	O	O	O	–	–	–	–	–	–		
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 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) In preparation: Type of protection Ex tb (zone 21) for 1MB15 in frame sizes 71 to 90 and for 1MB15/6 in frame sizes 225 to 315; design for converter operation for 1MB15/6 in frame sizes 71 to 315.
- 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) Frame sizes 280 and 315 in combination with order code B40 or B41 have "bearing insulation NDE" (order code L51 is included in B40/B41) by default.
- 21) Not permissible for frame size 315, 2-pole. Except for flexible installation (please inquire).
- 22) Not permissible in combination with converter operation (order code B40, B41).
- 23) Maximum permissible painting thickness up to 2 mm.
- 24) Not possible in vertical version with shaft extension DE downwards.

SIMOTICS XP Explosion-Proof Motors

Notes

SIMOTICS DP Application-Specific Motors



6/2

Smoke-extraction motors**Temperature time classes F200, F300**6/2 Motors with IE2 High Efficiency6/2 SIMOTICS DP Self-ventilated motors –
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Cast-iron series 1PC13016/4 Motors with IE3 Premium Efficiency6/4 SIMOTICS DP Self-ventilated motors –
Aluminum series 1PC13036/5 SIMOTICS DP Self-ventilated motors –
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6/6 Voltages

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6/10 Motor protection

6/10 • Aluminum series 1PC1300, 1PC1303

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6/11 Terminal box position

6/11 • Aluminum series 1PC1300, 1PC1303

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6/12 Options

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6/23 • Cast iron series 1PC1433, 1PC1443,
1PC1463

6/24 Types of construction

6/24 • Cast iron series 1PC1433, 1PC1443,
1PC1463

6/25 Motor protection

6/25 • Cast iron series 1PC1433, 1PC1443,
1PC1463

6/26 Terminal box position

6/26 • Cast iron series 1PC1433, 1PC1443,
1PC1463

6/27 Options

6/27 • Cast iron series 1PC1433, 1PC1443,
1PC1463

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

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

Category	Motors with IE2 High Efficiency
Series version	Aluminum series 1PC1300
Cooling	Self-ventilated (IC 411)
Degree of protection	IP55, optionally IP56 or IP65
Insulation	Thermal class H (180)
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	2.6 ... 108 Nm
Efficiency	IE2 High Efficiency
Metal factor for metal surcharges (MS)	N - W - - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 6/6, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz				
0.75	IE2	80 M	1PC1300-0DA2-....	1300.-
1.1	IE2	80 M	1PC1300-0DA3-....	1380.-
1.5	IE2	90 S	1PC1300-0EA0-....	1510.-
2.2	IE2	90 L	1PC1300-0EA4-....	1760.-
3	IE2	100 L	1PC1300-1AA4-....	1910.-
4	IE2	112 M	1PC1300-1BA2-....	2220.-
5.5	IE2	132 S	1PC1300-1CA0-....	2760.-
7.5	IE2	132 S	1PC1300-1CA1-....	3250.-
11	IE2	160 M	1PC1300-1DA2-....	4500.-
15	IE2	160 M	1PC1300-1DA3-....	5520.-
18.5	IE2	160 L	1PC1300-1DA4-....	6310.-
4-pole: 1500 rpm at 50 Hz				
0.55	IE2	80 M	1PC1300-0DB2-....	1280.-
0.75	IE2	80 M	1PC1300-0DB3-....	1330.-
1.1	IE2	90 S	1PC1300-0EB0-....	1430.-
1.5	IE2	90 L	1PC1300-0EB4-....	1580.-
2.2	IE2	100 L	1PC1300-1AB4-....	1760.-
3	IE2	100 L	1PC1300-1AB5-....	1960.-
4	IE2	112 M	1PC1300-1BB2-....	2310.-
5.5	IE2	132 S	1PC1300-1CB0-....	2800.-
7.5	IE2	132 M	1PC1300-1CB2-....	3340.-
11	IE2	160 M	1PC1300-1DB2-....	4530.-
15	IE2	160 L	1PC1300-1DB4-....	5630.-
6-pole: 1000 rpm at 50 Hz				
0.37	IE2	80 M	1PC1300-0DC2-....	1300.-
0.55	IE2	80 M	1PC1300-0DC3-....	1390.-
0.75	IE2	90 S	1PC1300-0EC0-....	1510.-
1.1	IE2	90 L	1PC1300-0EC4-....	1680.-
1.5	IE2	100 L	1PC1300-1AC4-....	1840.-
2.2	IE2	112 M	1PC1300-1BC2-....	2140.-
3	IE2	132 S	1PC1300-1CC0-....	2620.-
4	IE2	132 M	1PC1300-1CC2-....	3100.-
5.5	IE2	132 M	1PC1300-1CC3-....	3710.-
7.5	IE2	160 M	1PC1300-1DC2-....	4780.-
11	IE2	160 L	1PC1300-1DC4-....	6060.-

Standard delivery times in working days:

30

40

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

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

Overview (continued)

Category	Motors with IE2 High Efficiency (continued)				
Series version	Cast-iron series 1PC1301				
Cooling	Self-ventilated (IC 411)				
Degree of protection	IP55, optionally IP56 or IP65				
Insulation	Thermal class H (200)				
Number of poles	2, 4, 6				
Frame sizes (FS)	180 M ... 315 L				
Rated power at 50 Hz	15 ... 200 kW				
Synchronous speed at 50 Hz	1000 ... 3000 rpm				
Rated torque at 50 Hz	71 ... 1282 Nm				
Efficiency	IE2 High Efficiency				
Metal factor for metal surcharges (MS)	N - W - - - -				
Price group (PG)	3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 6/6, for delivery times refer to colored background following the respective price)					
	<i>P_{rated}, 50 Hz kW</i>	<i>IE class</i>	<i>Frame size FS</i>	<i>Article No.</i>	<i>Base price EUR</i>
2-pole: 3000 rpm at 50 Hz					
22	IE2	180 M	1PC1301-1EA2-....	7460.-	
30	IE2	200 L	1PC1301-2AA4-....	9640.-	
37	IE2	200 L	1PC1301-2AA5-....	11900.-	
45	IE2	225 M	1PC1301-2BA2-....	13100.-	
55	IE2	250 M	1PC1301-2CA2-....	16900.-	
75	IE2	280 S	1PC1301-2DA0-....	21600.-	
90	IE2	280 M	1PC1301-2DA2-....	25900.-	
110	IE2	315 S	1PC1301-3AA0-....	30700.-	
132	IE2	315 M	1PC1301-3AA2-....	35500.-	
160	IE2	315 L	1PC1301-3AA4-....	43200.-	
200	IE2	315 L	1PC1301-3AA5-....	55400.-	
4-pole: 1500 rpm at 50 Hz					
18.5	IE2	180 M	1PC1301-1EB2-....	6680.-	
22	IE2	180 L	1PC1301-1EB4-....	7570.-	
30	IE2	200 L	1PC1301-2AB5-....	9880.-	
37	IE2	225 S	1PC1301-2BB0-....	10900.-	
45	IE2	225 M	1PC1301-2BB2-....	12900.-	
55	IE2	250 M	1PC1301-2CB2-....	16900.-	
75	IE2	280 S	1PC1301-2DB0-....	20500.-	
90	IE2	280 M	1PC1301-2DB2-....	24400.-	
110	IE2	315 S	1PC1301-3AB0-....	28300.-	
132	IE2	315 M	1PC1301-3AB2-....	35300.-	
160	IE2	315 L	1PC1301-3AB4-....	43300.-	
200	IE2	315 L	1PC1301-3AB5-....	54000.-	
6-pole: 1000 rpm at 50 Hz					
15	IE2	180 L	1PC1301-1EC4-....	7820.-	
18.5	IE2	200 L	1PC1301-2AC4-....	9470.-	
22	IE2	200 L	1PC1301-2AC5-....	10900.-	
30	IE2	225 M	1PC1301-2BC2-....	13200.-	
37	IE2	250 M	1PC1301-2CC2-....	17000.-	
45	IE2	280 S	1PC1301-2DC0-....	21100.-	
55	IE2	280 M	1PC1301-2DC2-....	24800.-	
75	IE2	315 S	1PC1301-3AC0-....	30300.-	
90	IE2	315 M	1PC1301-3AC2-....	34500.-	
110	IE2	315 L	1PC1301-3AC4-....	41200.-	
132	IE2	315 L	1PC1301-3AC5-....	47300.-	
160	IE2	315 L	1PC1301-3AC6-....	58400.-	

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

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

Category	Motors with IE3 Premium Efficiency
Series version	Aluminum series 1PC1303
Cooling	Self-ventilated (IC 411)
Degree of protection	IP55, optionally IP56 or IP65
Insulation	Thermal class 155 (F)
Number of poles	2, 4
Frame sizes (FS)	80 M ... 160 L
Rated power at 50 Hz	0.55 ... 18.5 kW
Synchronous speed at 50 Hz	1500 ... 3000 rpm
Rated torque at 50 Hz	2.5 ... 97 Nm
Efficiency	IE3 High Efficiency
Metal factor for metal surcharges (MS)	N - W - - -
Price group (PG)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 6/6, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz				
0.75	IE3	80 M	1PC1303-0DA2-....	1560.-
1.1	IE3	80 M	1PC1303-0DA3-....	1660.-
1.5	IE3	90 S	1PC1303-0EA0-....	1810.-
2.2	IE3	90 L	1PC1303-0EA4-....	2110.-
3	IE3	100 L	1PC1303-1AA4-....	2150.-
4	IE3	112 M	1PC1303-1BA2-....	2510.-
5.5	IE3	132 S	1PC1303-1CA0-....	3120.-
7.5	IE3	132 S	1PC1303-1CA1-....	3690.-
11	IE3	160 M	1PC1303-1DA2-....	5090.-
15	IE3	160 M	1PC1303-1DA3-....	6240.-
18.5	IE3	160 L	1PC1303-1DA4-....	7140.-
4-pole: 1500 rpm at 50 Hz				
0.55	IE3	80 M	1PC1303-0DB2-....	1530.-
0.75	IE3	80 M	1PC1303-0DB3-....	1600.-
1.1	IE3	90 S	1PC1303-0EB0-....	1710.-
1.5	IE3	90 L	1PC1303-0EB4-....	1880.-
2.2	IE3	100 L	1PC1303-1AB4-....	1980.-
3	IE3	100 L	1PC1303-1AB5-....	2210.-
4	IE3	112 M	1PC1303-1BB2-....	2610.-
5.5	IE3	132 S	1PC1303-1CB0-....	3170.-
7.5	IE3	132 M	1PC1303-1CB2-....	3770.-
11	IE3	160 M	1PC1303-1DB2-....	5120.-
15	IE3	160 L	1PC1303-1DB4-....	6370.-

Standard delivery times in working days:

30

40

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

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

Overview (continued)

Category	Motors with IE3 Premium Efficiency (continued)				
Series version	Cast-iron series 1PC1304				
Cooling	Self-ventilated (IC 411)				
Degree of protection	IP55, optionally IP56 or IP65				
Insulation	Thermal class 155 (F)				
Number of poles	2, 4				
Frame sizes (FS)	180 M ... 315 L				
Rated power at 50 Hz	18.5 ... 200 kW				
Synchronous speed at 50 Hz	1500 ... 3000 rpm				
Rated torque at 50 Hz	71 ... 1284 Nm				
Efficiency	IE3 High Efficiency				
Metal factor for metal surcharges (MS)	N - W - -				
Price group (PG)	3Z1				
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 6/6, for delivery times refer to colored background following the respective price)					
	P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
2-pole: 3000 rpm at 50 Hz					
22	IE3	180 M	1PC1304-1EA2-....	8420.-	
30	IE3	200 L	1PC1304-2AA4-....	10900.-	
37	IE3	200 L	1PC1304-2AA5-....	13500.-	
45	IE3	225 M	1PC1304-2BA2-....	14300.-	
55	IE3	250 M	1PC1304-2CA2-....	18600.-	
75	IE3	280 S	1PC1304-2DA0-....	23800.-	
90	IE3	280 M	1PC1304-2DA2-....	28400.-	
110	IE3	315 S	1PC1304-3AA0-....	33900.-	
132	IE3	315 M	1PC1304-3AA2-....	39100.-	
160	IE3	315 L	1PC1304-3AA4-....	47500.-	
200	IE3	315 L	1PC1304-3AA5-....	61000.-	
4-pole: 1500 rpm at 50 Hz					
18.5	IE3	180 M	1PC1304-1EB2-....	7550.-	
22	IE3	180 L	1PC1304-1EB4-....	8560.-	
30	IE3	200 L	1PC1304-2AB5-....	11200.-	
37	IE3	225 S	1PC1304-2BB0-....	11900.-	
45	IE3	225 M	1PC1304-2BB2-....	14100.-	
55	IE3	250 M	1PC1304-2CB2-....	18600.-	
75	IE3	280 S	1PC1304-2DB0-....	22500.-	
90	IE3	280 M	1PC1304-2DB2-....	26900.-	
110	IE3	315 S	1PC1304-3AB0-....	31100.-	
132	IE3	315 M	1PC1304-3AB2-....	38900.-	
160	IE3	315 L	1PC1304-3AB4-....	47600.-	
200	IE3	315 L	1PC1304-3AB5-....	59300.-	

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Voltages · Aluminum series 1PC1300, 1PC1303

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	IEC	IE3
			1PC1303							IE2
			1PC1300							
1PC1303 -	■ - ■ . . .									
1PC1300 -	■ - ■ . . .	Order code								
Voltage at 50 Hz or 60 Hz										
50 Hz 230 VΔ/400 VY	2 2	–	□	□	□	□	□	□		
50 Hz 400 VΔ/690 VY	3 4	–	□	□	□	□	□	□		
50 Hz 500 VY	2 7	–	○	○	○	○	○	○		
50 Hz 500 VΔ	4 0	–	–	–	○	○	○	○		
Non-standard voltage and/or frequencies										
Non-standard winding ¹⁾	9 0	M1Y • and customer specifications	O. R.	O. R.	O. R.	O. R.	O. R.	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

Article No. supplements and special versions · Voltages · Cast-iron series 1PC1301, 1PC1304

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	180	200	225	250	280	315	IEC	IE3
			1PC1304							IE2
			1PC1301							
1PC1304 -	■ - ■ . . .									
1PC1301 -	■ - ■ . . .	Order code								
Voltage at 50 Hz or 60 Hz										
50 Hz 230 VΔ/400 VY	2 2	–	□	□	□	□	□	□		
50 Hz 400 VΔ/690 VY	3 4	–	□	□	□	□	□	□		
50 Hz 500 VY	2 7	–	○	○	○	○	○	○		
50 Hz 500 VΔ	4 0	–	○	○	○	○	○	○		
Non-standard voltage and/or frequencies										
Non-standard winding ¹⁾	9 0	M1Y • and customer specifications	O. R.	O. R.	O. R.	O. R.	O. R.	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

¹⁾ Special voltages or 60 Hz on request.

Standard delivery times in working days:

20On
request**SIMOTICS DP Application-Specific Motors**

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Types of construction · Aluminum series 1PC1300, 1PC1303

Selection and ordering data

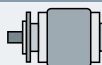
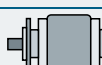
Types of construction	Article No. supplement Type of construction letter 14th position of the Article No.	Additional identification code with order code and plain text if required	Frame size						Motor version	
			80	90	100	112	132	160	IEC	IE3
			1PC1303							IE2
			1PC1300							
1PC1303 -	A . .									
1PC1300 -	T . .	Order code								
Without flange										
IM B3 	A	–	□	□	□	□	□	□		
IM B6 	T	–	□	□	□	□	□	□		
IM B7 	U	–	□	□	□	□	□	□		
IM B8 	V	–	□	□	□	□	□	□		
IM V6 	D	–	□	□	□	□	□	□		
IM V5 without protective cover 	C	–	□	□	□	□	□	□		
IM B30 	Z	P3A	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
IM V30 	Z	P3C	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
IM V31 	Z	P3D	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		

For legends, see Page 6/8.

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Types of construction · Aluminum series 1PC1300, 1PC1303

Types of construction	Article No. supplement		Frame size						Motor version	
	Type of construction letter 14th position of the Article No.	Additional identification code with order code and plain text if required	80	90	100	112	132	160	IEC	IE3
			1PC1303							IE2
			1PC1300							
1PC1303 - ■ . .										
1PC1300 - ■ . .		Order code								
With flange	acc. to EN 50347 acc. to DIN 42948		FF165 A 200	FF165 A 200	FF215 A 250	FT215 A 250	FF265 A 300	FF300 A 350		
IM B5 	F	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM V1 without protective cover 	G	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM V3 	H	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM B35 	J	—	56.70	67.—	87.60	108.—	134.—	185.—		
With flange	acc. to EN 50347 acc. to DIN 42948		FT100 C 120	FT115 C 140	FT130 C 160	FT130 C 160	FT165 C 200	FT165 C 200		
IM B14 	K	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM V19 	L	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM V18 without protective cover 	M	—	53.70	64.40	79.70	99.—	129.—	167.—		
IM B34 	N	—	56.70	67.—	87.60	108.—	134.—	185.—		

□ Standard version
O. R. Possible on request

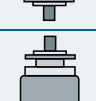
Standard delivery times in working days:

20On
request**SIMOTICS DP Application-Specific Motors**

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Types of construction · Cast-iron series 1PC1301, 1PC1304

Selection and ordering data

Types of construction	Article No. supplement Type of construction letter 14th position of the Article No.	Additional identification code with order code and plain text if required Order code	Frame size										Motor version	
			180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4-, 6-pole				
			1PC1304										IEC	IE3
			1PC1301											IE2
1PC1304 -	■ ..													
1PC1301 -	■ ..													
Without flange														
IM B3		A	–	□	□	□	□	□	□	□	□			
IM B6		T	–	□	□	□	□	□	□	□	□			
IM B7		U	–	□	□	□	□	□	□	□	□			
IM B8		V	–	□	□	□	□	□	□	□	□			
IM V6		D	–	□	□	□	□	□	□	450.–	□			
IM V5 without protective cover		C	–	□	□	□	□	□	□	450.–	□			
IM B30		Z	P3A	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
IM V30		Z	P3C	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
IM V31		Z	P3D	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
With flange		acc. to EN 50347 acc. to DIN 42948		FF300 A 350	FF350 A 400	FF400 A 450	FF500 A 550	FF500 A 550	FF600 A 660	FF600 A 660	FF600 A 660			
IM B5		F	–	264.–	320.–	414.–	497.–	724.–	1030.–	–	–			
IM V1 without protective cover		G	–	263.–	318.–	416.–	507.–	727.–	1040.–	1470.–	1040.–			
IM V3		H	–	264.–	320.–	414.–	497.–	724.–	1030.–	–	–			
IM B35		J	–	309.–	412.–	515.–	721.–	927.–	1180.–	1180.–	1180.–			

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

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

10 20

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	80	90	100	112	132	160	IEC	IE3
			1PC1303							IE2
			1PC1300							
1PC1303 - ■ . 1PC1300 - ■ .		Order code								
Motor protection										
Without (Standard)	A	—	□	□	□	□	□	□		
1 or 3 PTC thermistors – for tripping (2 terminals)	B	—	155.–	155.–	155.–	155.–	232.–	232.–		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	C	—	305.–	305.–	305.–	305.–	411.–	411.–		
1 temperature sensor KTY84-130 (2 terminals)	F	—	238.–	238.–	238.–	238.–	316.–	316.–		

- Standard version

Article No. supplements and special versions · Motor protection · Cast-iron series 1PC1301, 1PC1304

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	180	200	225	250	280	315	IEC	IE3
			1PC1304							IE2
			1PC1301							
1PC1304 - ■ .		Order code								
1PC1301 - ■ .										
Motor protection										
Without (Standard)	A	—	□	□	□	□	□	□		
1 or 3 PTC thermistors – for tripping (2 terminals)	B	—	334.–	334.–	372.–	436.–	436.–	436.–		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	C	—	609.–	609.–	645.–	771.–	771.–	771.–		
1 temperature sensor KTY84-130 (2 terminals)	F	—	515.–	515.–	677.–	677.–	677.–	1100.–		

- Standard version

Standard delivery times in working days:

10

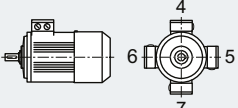
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On
request**SIMOTICS DP Application-Specific Motors**

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Terminal box position · Aluminum series 1PC1300, 1PC1303

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	IEC	IE3
				1PC1303							IE2
				1PC1300							
1PC1303 -			Order code								
1PC1300 -											
Terminal box position ¹⁾											
Terminal box top	4	–		□	□	□	□	□	□		
Terminal box on RHS	5	–		35.20	39.80	102.–	111.–	121.–	129.–		
Terminal box on LHS	6	–		35.20	39.80	102.–	111.–	121.–	129.–		
Terminal box at bottom ²⁾	7	–		–	–	102.–	111.–	121.–	129.–		

□

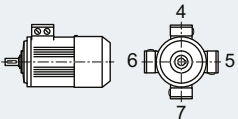
Standard version

–

Not possible

Article No. supplements and special versions · Terminal box position · Cast-iron series 1PC1301, 1PC1304

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	180	200	225	250	280	315	IEC	IE3 IE2
				1PC1304							
				1PC1301							
1PC1304 -			Order code								
1PC1301 -											
Terminal box position ¹⁾											
Terminal box top	4	—		□	□	□	□	□	□		
Terminal box on RHS	5	—		364.—	428.—	507.—	753.—	846.—	974.—		
Terminal box on LHS	6	—		364.—	428.—	507.—	753.—	846.—	974.—		
Terminal box at bottom ²⁾	7	—		O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		

□

 Standard version

O. R.

 Possible on request

¹⁾ This refers to the position of the terminal box base on the enclosure.

²⁾ For motors without feet.

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Options · Aluminum series 1PC1300, 1PC1303

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Frame size						Motor version	
		80	90	100	112	132	160	IEC	IE3
		1PC1303							
		1PC1300							IE2
1PC1303 --Z									
1PC1300 --Z	Order code								
Motor connection and terminal box									
External grounding	H04		23.50	23.50	28.30	28.30	28.30		
Terminal box on NDE ¹⁾	H08		82.40	94.80	117.–	144.–	186.–		253.–
Terminal box in position 180°; connection from left	R12		○	○	○	○	○		○
Terminal box in position 0°; connection from right	R13		○	○	○	○	○		○
One metal cable gland			□	□	□	□	□		□
Windings and insulation									
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30		–	–	134.–	134.–	134.–		206.–
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	27.30	27.30	27.30	43.50		43.50
Special finish sea air resistant C4	S03		494.–	494.–	525.–	525.–	577.–		577.–
Top coat polyurethane ²⁾	S06		30.90	50.50	72.10	98.90	147.–		206.–
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	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.–	649.–	649.–	680.–		680.–
Mechanical design and degrees of protection									
Protective cover ³⁾	H00		55.60	55.60	80.80	80.80	141.–		141.–
Screwed-on (instead of cast) feet	H01		89.–	89.–	102.–	111.–	121.–		129.–
Condensation drainage holes			□	□	□	□	□		□
Rust-resistant screws (externally)	H07		–	–	81.10	81.10	95.90		95.90
IP65 degree of protection	H20		147.–	147.–	147.–	147.–	147.–		220.–
IP56 degree of protection	H22		163.–	163.–	163.–	163.–	163.–		242.–
Coolant temperature and installation altitude									
Coolant temperature –30 to +40 °C	D04		55.60	55.60	69.40	69.40	83.30		83.30
Designs in accordance with standards and specifications									
China Compulsory Certification	D01		43.–	43.–	–	–	–		–
Bearings and lubrication									
Bearing design for increased cantilever forces ⁸⁾	L22		–	–	–	–	130.–		172.–
Regreasing device	L23		–	–	311.–	319.–	329.–		356.–
Bearing insulation NDE	L51	New!	O. R.	O. R.	O. R.	O. R.	O. R.		O. R.
Measuring nipple for SPM shock pulse measurement for bearing inspection	Q01		–	–	252.–	282.–	311.–		343.–
Bearing insulation DE			O. R.	O. R.	O. R.	O. R.	O. R.		O. R.
Balance and vibration quantity									
Vibration quantity level A			□	□	□	□	□		□
Vibration quantity level B	L00		250.–	265.–	278.–	321.–	411.–		509.–
Half-key balancing (standard)			□	□	□	□	□		□
Balancing without key	L01		21.40	21.40	27.80	27.80	32.90		32.90
Full-key balancing	L02		94.20	109.–	109.–	109.–	126.–		126.–

For legends and footnotes, see Page 6/13.

Standard delivery times in working days:

30On
request**SIMOTICS DP Application-Specific Motors**

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Options · Aluminum series 1PC1300, 1PC1303

Special versions	Additional identification code -Z with order code and plain text if required	Frame size						Motor version	
		80	90	100	112	132	160	IEC	IE3
		1PC1303							IE2
1PC1303 - -Z									
1PC1300 - -Z	Order code								
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	95.90	95.90	140.–	140.–	185.–	213.–		
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	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	176.–	207.–	236.–	265.–	296.–	367.–		
Non-standard shaft extension, DE ⁴⁾	Y58 • and customer specifications	459.–	486.–	515.–	542.–	569.–	598.–		
Non-standard shaft extension, NDE ⁴⁾	Y59 • and customer specifications	459.–	486.–	515.–	542.–	569.–	598.–		
Special shaft steel		O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
Heating and ventilation									
Without external fan and without fan cover	F90	O	O	O	O	O	O		
Rating plate and extra rating plates									
Extra rating plate for voltage tolerance ⁵⁾	B07	39.50	39.50	39.50	39.50	39.50	39.50		
Second rating plate, loose	M10	20.10	20.10	20.10	20.10	20.10	20.10		
Extra rating plate with deviating rating plate data	Y80 • and customer specifications	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		
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		
Packaging, safety notes, documentation and test certificates									
Acceptance test certificate 3.1 according to EN 10204 ⁶⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10		
Standard test (routine test) with acceptance	B65	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–		
Type test with heat run for horizontal motors, with acceptance	B83	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–		
Documentation package "Basic"	B90	597.–	597.–	597.–	597.–	597.–	597.–		
Documentation package "Advanced"	B91	906.–	906.–	906.–	906.–	906.–	906.–		
Documentation package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–		

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

¹⁾ Important: Dimensions "C" and "CA" deviate from the EN 50347 standard. Note dimensions according to dimensions sheet generator!

²⁾ Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.

³⁾ Order code **H00** provides mechanical protection.

⁴⁾ 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. 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".

⁵⁾ Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "22" or "34").

⁶⁾ The delivery time for the factory test certificate may differ from the delivery time for the motor.

⁷⁾ The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>.

⁸⁾ 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.

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

40On
request

Article No. supplements and special versions · Options · Cast-iron series 1PC1301, 1PC1304

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Frame size						Motor version	
		180	200	225	250	280	315	IEC	IE3
		1PC1304							
		1PC1301							IE2
1PC1304 - -Z									
1PC1301 - -Z	Order code								
Motor connection and terminal box									
External grounding		□	□	□	□	□	□		
Terminal box on NDE ¹⁾	H08	948.-	979.-	1030.-	1080.-	1130.-	1180.-		
Terminal box in position 180°; connection from left	R12	○	○	○	○	○	○		
Terminal box in position 0°; connection from right	R13	○	○	○	○	○	○		
One metal cable gland		□	□	□	□	□	□		
Windings and insulation									
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N30	299.-	412.-	639.-	855.-	1080.-	1320.-		
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	81.70	81.70	81.70	81.70		
Special finish C3	S02	113.-	124.-	185.-	227.-	268.-	299.-		
Special finish sea air resistant C4	S03	618.-	659.-	700.-	742.-	783.-	814.-		
Internal coating	S05	88.-	88.-	87.60	108.-	124.-	134.-		
Top coat polyurethane ²⁾	S06	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")	Y53 • and finish RAL.....	82.40	113.-	124.-	155.-	185.-	258.-		
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.....	690.-	700.-	711.-	721.-	731.-	742.-		
Mechanical design and degrees of protection									
Screwed-on (instead of cast) feet	H01	364.-	428.-	507.-	753.-	846.-	974.-		
Condensation drainage holes		□	□	□	□	□	□		
Rust-resistant screws (externally)	H07	110.-	125.-	167.-	199.-	207.-	275.-		
IP65 degree of protection	H20	296.-	367.-	443.-	517.-	589.-	663.-		
IP56 degree of protection	H22	322.-	405.-	487.-	568.-	650.-	728.-		
Coolant temperature and installation altitude									
Coolant temperature -30 to +40 °C	D04	111.-	139.-	556.-	1300.-	1850.-	2390.-		
Bearings and lubrication									
Regreasing device with M10 x 1 grease nipple according to DIN 71412-A	L19	375.-	422.-	469.-	562.-	○	○		
Bearing design for increased cantilever forces ⁸⁾	L22	273.-	316.-	356.-	4112.-	-	-		
Regreasing device	L23	375.-	422.-	469.-	562.-	-	-		
Bearing insulation NDE	L51	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
Measuring nipple for SPM shock pulse measurement for bearing inspection	Q01	400.-	433.-	465.-	497.-	528.-	560.-		
Bearing insulation DE		-	-	O. R.	O. R.	O. R.	O. R.		
Balance and vibration quantity									
Vibration quantity level A		□	□	□	□	□	□		
Vibration quantity level B ³⁾	L00	798.-	803.-	882.-	1120.-	1310.-	1680.-		
Half-key balancing (standard)		□	□	□	□	□	□		
Balancing without key	L01	42.80	42.80	58.10	58.10	70.70	82.-		
Full-key balancing	L02	159.-	159.-	205.-	205.-	205.-	205.-		
Shaft and rotor									
Shaft extension with standard dimensions, without feather keyway	L04	694.-	764.-	833.-	903.-	972.-	1040.-		

For legends and footnotes, see Page 6/15.

Standard delivery times in working days:

40

On
request

SIMOTICS DP Application-Specific Motors

Smoke-extraction motors Temperature/time classes F200, F300

Article No. supplements and special versions · Options · Cast-iron series 1PC1301, 1PC1304

Special versions	Additional identification code -Z with order code and plain text if required	Frame size						Motor version	
		180	200	225	250	280	315	IEC	IE3
		1PC1304							
		1PC1301							IE2
1PC1304 - -Z									
1PC1301 - -Z	Order code								
Shaft and rotor (continued)									
Standard cylindrical shaft extension (second shaft extension) NDE in accordance with EN 50347	L05	322.–	357.–	376.–	392.–	464.–	509.–		
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	207.–	233.–	277.–	363.–	363.–	554.–		
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors	L08	443.–	517.–	589.–	663.–	739.–	811.–		
Non-standard cylindrical shaft extension DE ⁴⁾	Y58 • and customer specifications	694.–	764.–	833.–	903.–	972.–	1040.–		
Non-standard cylindrical shaft extension NDE ⁴⁾	Y59 • and customer specifications	694.–	764.–	833.–	903.–	972.–	1040.–		
Special shaft steel		O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
Heating and ventilation									
Without external fan and without fan cover	F90	O	O	O	O	O	O		
Rating plate and extra rating plates									
Extra rating plate for voltage tolerance ⁵⁾	B07	68.–	68.–	68.–	84.90	84.90	107.–		
Second rating plate, loose	M10	66.30	66.30	66.30	66.30	66.30	66.30		
Extra rating plate with deviating rating plate data	Y80 • and customer specifications	155.–	155.–	206.–	206.–	206.–	206.–		
Extra rating plate with identification codes	Y82 • and customer specifications	68.–	68.–	68.–	84.60	84.60	107.–		
Additional information on rating plate and on package label (max. 20 characters)	Y84 • and customer specifications	68.–	68.–	68.–	84.90	84.90	107.–		
Packaging, safety notes, documentation and test certificates									
Acceptance test certificate 3.1 according to EN 10204 ⁶⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10		
Standard test (routine test) with acceptance	B65	3810.–	3810.–	3810.–	3810.–	3810.–	3810.–		
Type test with heat run for horizontal motors, with acceptance	B83	10200.–	11000.–	11700.–	12500.–	13200.–	14000.–		
Documentation package "Basic"	B90	597.–	597.–	597.–	597.–	597.–	597.–		
Documentation package "Advanced"	B91	906.–	906.–	906.–	906.–	906.–	906.–		
Documentation package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–		

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

¹⁾ Important: Dimensions "C" and "CA" deviate from the EN 50347 standard. Note dimensions according to dimensions sheet generator!

²⁾ Order code **S06** can be ordered only in combination with **S03**, cannot be combined with order code **S00**, **S01** and **S02**. It can be combined with **Y53** and **Y56** on request.

³⁾ On request for 2-pole motors (concerns frame sizes 225 to 315).

⁴⁾ 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. 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".

⁵⁾ Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code **"22"** or **"34"**).

⁶⁾ The delivery time for the factory test certificate may differ from the delivery time for the motor.

⁷⁾ The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>.

⁸⁾ 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.

⁹⁾ Not possible for 2-pole motors of frame size 315.

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 -Z with order code and plain text if required	Frame size								Motor version	
		71	80	90	100	112	132	160	180	200	
					1LE1004						IEC IE4
			1LE1003								IE3
		1LE1001									IE2
		1LE1002									IE1
			1LE1023								Eagle Line NPE (NEMA)
			1LE1021								NEE (NEMA)
					1LE1011						Pole-changing
					1LE1012						
1LE10 ... - ... -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	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	
With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E31	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	
With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E41	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	161.–	
With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E46	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	
With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E51	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	
With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F)	E52	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	161.–	
With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E54	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	161.–	
Marine version – Acceptance/certification											
Individual acceptance by marine classification society	B10	–	7140.–	7140.–	7140.–	7140.–	7140.–	7140.–	8040.–	8040.–	
Type test with heat run for horizontal motors, with acceptance	B83	–	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–	10200.–	11000.–	

Standard delivery times in working days:

10On
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 -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	IEC	IE4	①																		
					1LE1504 Basic Line													IE3	②																
					1LE1604 Performance Line															③															
					1LE1503 Basic Line																④														
					1LE1603 Performance Line																	IE2	⑤												
					1LE1501 Basic Line																			⑥											
					1LE1601 Performance Line																				IE1	⑦									
					1LE1502 Basic Line																						APAC Line	IE3	⑧						
					1LE1543 Basic Line																									⑨					
					1LE1643 Performance Line																										⑩				
					1LE1541 Basic Line																											Eagle Line	NPE (NEMA)	⑪	
					1LE1523 Basic Line																														⑫
					1LE1623 Performance Line																														
			1LE1521 Basic Line																																
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		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E31		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E41		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E46		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E51		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F)	E52		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E54		111.–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–																				
Marine version – Acceptance/certification																																			
Individual acceptance by marine classification society	B10		7140.–	7140.–	7140.–	7140.–	7140.–	7140.–	7140.–	8040.–	8040.–	8040.–	9080.–	9080.–	9080.–																				
Type test with heat run for horizontal motors, with acceptance	B83		4860.–	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–	10200.–	11000.–	11700.–	12500.–	13200.–	14000.–																				

SIMOTICS DP Application-Specific Motors

Marine motors

30On
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 -Z with order code and plain text if required	Frame size	Motor version
		315 355	
		1LE5504 Basic Line	IEC IE4
		1LE5604 Performance Line	
		1LE5534 Basic Line	
		1LE5634 Performance Line	
		1LE5503 Basic Line	IE3
		1LE5603 Performance Line	
		1LE5533 Basic Line	
1LE5-Z	Order code	1LE5633 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	764.–	1080.–
With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E41	764.–	1080.–
With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E46	764.–	1080.–
With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E51	764.–	1080.–
With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F)	E52	764.–	1080.–
Marine version – Acceptance/certification			
Individual acceptance by marine classification society	B10	9080.–	9080.–
Type test with heat run for vertical motors, with acceptance	B81	22600.–	22600.–
Type test with heat run for horizontal motors, with acceptance	B83	14000.–	14000.–

Standard delivery times in working days:

10On
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 -Z 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 (zone 21/22) Ex n (zone 2)	IE3 IE2 IE1 IE3 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	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to Bureau Veritas (BV), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E31	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to Registro Italiano Navale (RINA), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E41	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to Russian Maritime Register (RS), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E46	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to DNV GL Maritime, CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E51	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to American Bureau of Shipping (ABS), CT 50 °C, temperature class 155 (F) utilized according to 155 (F)	E52	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
With type test certificate according to Korean Register of shipping (KR), CT 45 °C, temperature class 155 (F) utilized according to 155 (F)	E54	–	111.–	111.–	150.–	150.–	150.–	161.–	161.–	230.–	230.–	290.–	427.–	764.–			
Marine version – Acceptance/certification																	
Individual acceptance by marine classification society	B10	–	7140.–	7140.–	7140.–	7140.–	7140.–	7140.–	8040.–	8040.–	8040.–	9080.–	9080.–	9080.–			
Type test with heat run for horizontal motors, with acceptance	B83	–	5620.–	6390.–	7150.–	7910.–	8670.–	9430.–	10200.–	11000.–	11700.–	12500.–	13200.–	14000.–			

SIMOTICS DP Application-Specific Motors

Steel plant motors

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

Category	Motors with IE3 Premium Efficiency
Series version	Cast-iron series 1PC1433
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)	3Z1

Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top
 (for article number supplements and special versions see from Page 6/23, for delivery times refer to colored background following the respective price)

P_{rated} , 50 Hz kW	IE class	Frame size FS	Article No.	Base price EUR
4-pole: 1500 rpm at 50 Hz				
4	IE3	112 M	1PC1433-1BB2-.....	4860.-
5.5	IE3	132 S	1PC1433-1CB0-.....	6630.-
7.5	IE3	132 M	1PC1433-1CB2-.....	7750.-
11	IE3	160 M	1PC1433-1DB2-.....	9730.-
15	IE3	160 L	1PC1433-1DB4-.....	10900.-
18.5	IE3	180 M	1PC1433-1EB2-.....	13100.-
22	IE3	180 L	1PC1433-1EB4-.....	14300.-
30	IE3	200 L	1PC1433-2AB5-.....	18100.-
37	IE3	225 S	1PC1433-2BB0-.....	21600.-
45	IE3	225 M	1PC1433-2BB2-.....	23400.-
55	IE3	250 M	1PC1433-2CB2-.....	27800.-
75	IE3	280 S	1PC1433-2DB0-.....	34400.-
90	IE3	280 M	1PC1433-2DB2-.....	42000.-
6-pole: 1000 rpm at 50 Hz				
2.2	IE3	112 M	1PC1433-1BC2-.....	4700.-
3	IE3	132 S	1PC1433-1CC0-.....	6220.-
4	IE3	132 M	1PC1433-1CC2-.....	7060.-
5.5	IE3	132 M	1PC1433-1CC3-.....	9190.-
5.5	IE3	160 M	1PC1433-1DC2-.....	10400.-
7.5	IE3	160 L	1PC1433-1DC4-.....	13500.-
15	IE3	180 L	1PC1433-1EC4-.....	16300.-
18.5	IE3	200 L	1PC1433-2AC4-.....	17000.-
18.5	IE3	200 L	1PC1433-2AC5-.....	21000.-
30	IE3	225 M	1PC1433-2BC2-.....	22100.-
37	IE3	250 M	1PC1433-2CC2-.....	27400.-
45	IE3	280 S	1PC1433-2DC0-.....	33100.-
55	IE3	280 M	1PC1433-2DC2-.....	41300.-

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)	3Z1			
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 6/23, for delivery times refer to colored background following the respective price)				
	<i>P</i> _{rated} , 50 Hz kW	Frame size FS	Article No.	Base price EUR
4-pole: 1500 rpm at 50 Hz				
4	112 M	1PC1443-1BB2-.....	4860.–	
5.5	132 S	1PC1443-1CB0-.....	6630.–	
7.5	132 M	1PC1443-1CB2-.....	7750.–	
11	160 M	1PC1443-1DB2-.....	9730.–	
15	160 L	1PC1443-1DB4-.....	10900.–	
18.5	180 M	1PC1443-1EB2-.....	13100.–	
22	180 L	1PC1443-1EB4-.....	14300.–	
30	200 L	1PC1443-2AB5-.....	18100.–	
37	225 S	1PC1443-2BB0-.....	21600.–	
45	225 M	1PC1443-2BB2-.....	23400.–	
55	250 M	1PC1443-2CB2-.....	27800.–	
75	280 S	1PC1443-2DB0-.....	34400.–	
90	280 M	1PC1443-2DB2-.....	42000.–	
6-pole: 1000 rpm at 50 Hz				
2.2	112 M	1PC1443-1BC2-.....	4660.–	
3	132 S	1PC1443-1CC0-.....	6210.–	
4	132 M	1PC1443-1CC2-.....	7310.–	
5.5	132 M	1PC1443-1CC3-.....	9200.–	
7.5	160 M	1PC1443-1DC2-.....	10400.–	
11	160 L	1PC1443-1DC4-.....	13500.–	
15	180 L	1PC1443-1EC4-.....	16300.–	
18.5	200 L	1PC1443-2AC4-.....	17100.–	
22	200 L	1PC1443-2AC5-.....	21200.–	
30	225 M	1PC1443-2BC2-.....	22100.–	
37	250 M	1PC1443-2CC2-.....	27800.–	
45	280 S	1PC1443-2DC0-.....	33100.–	
55	280 M	1PC1443-2DC2-.....	41300.–	

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)	3Z1			
Range of motors with Article No., delivery time and base price plus MS for type of construction IM B3 and terminal box on top (for article number supplements and special versions see from Page 6/23, for delivery times refer to colored background following the respective price)				
	P_{rated} , 50 Hz kW	Frame size FS	Article No.	Base price EUR
4-pole: 1500 rpm at 50 Hz				
3.1	112 M	1PC1463-1BB2.-....	4330.-	
4.8	132 S	1PC1463-1CB0.-....	5880.-	
6.1	132 M	1PC1463-1CB2.-....	6870.-	
8	160 M	1PC1463-1DB4.-....	9420.-	
9.3	160 L	1PC1463-1DB6.-....	10400.-	
11	180 M	1PC1463-1EB2.-....	12400.-	
13	180 L	1PC1463-1EB4.-....	13600.-	
6-pole: 1000 rpm at 50 Hz				
8.5	180 L	1PC1463-1EC4.-....	15600.-	
14.5	200 L	1PC1463-2AC5.-....	19500.-	
21	225 M	1PC1463-2BC2.-....	21200.-	
25	250 M	1PC1463-2CC2.-....	23200.-	
30	280 S	1PC1463-2DC0.-....	30300.-	
36	280 M	1PC1463-2DC2.-....	39400.-	

Standard delivery times in working days:

30On
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
1PC14■-■...			1PC1433									Line (DOL)	TEFC (IC411) IE3
			1PC1443									Converter (VSD)	–
			1PC1463										TENV (IC410)
		Order code											
Voltage at 50 Hz or 60 Hz													
50 Hz 400 VY, 60 Hz 460 VY	0 2	–	■	■	■	–	–	–	–	–	–	Only for:	1PC1443 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 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	–	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ	3 3	–	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
50 Hz 380 VΔ			52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	2 3	–	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
50 Hz 415 VΔ, 60 Hz 480 VΔ	3 5	–	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
Voltage at 60 Hz and required power													
220 VΔ/380 VY; 50 Hz power	9 0	M2A	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
220 VΔ/380 VY; 60 Hz power	9 0	M1A	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
380 VΔ/660 VY; 50 Hz power	9 0	M2B	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
380 VΔ; 50 Hz power			52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
380 VΔ/660 VY; 60 Hz power	9 0	M1B	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
440 VY; 50 Hz power	9 0	M2C	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
440 VY; 60 Hz power	9 0	M1C	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
440 VΔ; 50 Hz power	9 0	M2D	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
440 VΔ; 60 Hz power	9 0	M1D	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
460 VY; 50 Hz power	9 0	M2E	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
460 VY; 60 Hz power	9 0	M1E	○	○	○	○	○	○	○	○	○	Only for:	1PC1433
460 VΔ; 50 Hz power	9 0	M2F	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
460 VΔ; 60 Hz power	9 0	M1F	○	○	○	○	○	○	○	○	○	Only for:	1PC1433
575 VY; 50 Hz power	9 0	M2G	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
575 VY; 60 Hz power	9 0	M1G	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
575 VΔ; 50 Hz power	9 0	M2H	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
575 VΔ; 60 Hz power	9 0	M1H	52.90	64.–	82.10	101.–	136.–	156.–	211.–	241.–		Only for:	1PC1433
Non-standard voltage and/or frequencies													
Non-standard winding ¹⁾	9 0	M1Y • and customer specifications	106.–	129.–	164.–	204.–	263.–	320.–	474.–	597.–			

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

¹⁾ 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**

Article No. supplements and special versions · Types of construction · Cast-iron series 1PC1433, 1PC1443, 1PC1463

Selection and ordering data

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 Order code	112	132	160	180	200	225	250	280	Operation	Cooling method	
											Line (DOL)	TEFC (IC411)	IE3
											Converter (VSD)		–
												TENV (IC410)	
1PC14 - Z													
Without flange													
IM B3		A	–	□	□	□	□	□	□	□	□		
With flange		acc. to EN 50347 acc. to DIN 42948	FF215 A 250	FF265 A 300	FF300 A 350	FF300 A 350	FF350 A 400	FF400 A 450	FF500 A 550	FF500 A 550			
IM B5		F	99.–	129.–	167.–	264.–	320.–	414.–	497.–	724.–			
IM V1 without protective cover		G	99.–	129.–	167.–	263.–	318.–	416.–	507.–	727.–			
IM V1 with protective cover		G	H00	179.80	269.–	308.–	451.–	601.–	791.–	976.–	1289.–		
IM V3		H	99.–	129.–	167.–	264.–	320.–	414.–	497.–	724.–			
IM B35		J	–	108.–	134.–	185.–	309.–	412.–	515.–	721.–	927.–		

□ Standard version

Standard delivery times in working days:

30On
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 1PC1463		
3 PTC thermistors – for tripping (2 terminals)	B	–	117.–	176.–	176.–	234.–	234.–	319.–	319.–	398.–				
6 PTC thermistors – for alarm and tripping (4 terminals)	C	–	□	□	□	□	□	□	□	□	Only for:	1PC1443 1PC1463		
			201.–	269.–	269.–	413.–	413.–	537.–	537.–	666.–	Only for:	1PC1433		
1 temperature sensor KTY84-130 (2 terminals)	F	–	117.–	176.–	176.–	332.–	332.–	454.–	589.–	589.–				
2 temperature sensors KTY84-130 (4 terminals)	G	–	237.–	350.–	350.–	539.–	539.–	741.–	1000.–	1000.–				
3 Pt100 resistance thermometers – 2-wire circuit (6 terminals)	H	–	1220.–	1220.–	1220.–	1480.–	1480.–	1480.–	1640.–	1640.–				
6 Pt100 resistance thermometers – 2-wire circuit (12 terminals)	J	–	–	–	–	2420.–	2420.–	2420.–	2420.–	2420.–				

- Standard version
– Not possible

Note:

Options are available specifically for bearing protection –
For order codes and descriptions, see from Page 6/27.

¹⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended.

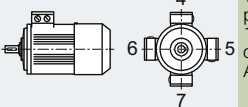
²⁾ Not UL-certified. Not possible in combination with the option **D31**.

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	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												
Terminal box position ¹⁾														
Terminal box top	4	–	□	□	□	□	□	□	□	□				
Terminal box on RHS	5	–	111.–	111.–	111.–	111.–	111.–	111.–	111.–	111.–				
Terminal box on LHS	6	–	111.–	111.–	111.–	111.–	111.–	111.–	111.–	111.–				

☐ Standard version

¹⁾ For types of construction with feet, cast feet are standard.

Standard delivery times in working days:

30On
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 Operation	Cooling method
		112	132	160	180	200	225	250	280		
		1PC1433									
		1PC1443									
		1PC1463									
1PC14.....-Z	Order code										
Motor protection											
Prepared for mounting a SIPLUS CMS 1000 vibration sensor	Q05	312.-	325.-	340.-	370.-	400.-	430.-	459.-	488.-		
Motor connection and terminal box											
External grounding		□	□	□	□	□	□	□	□		
Terminal box on NDE	H08	-	-	-	948.-	979.-	1030.-	1080.-	1130.-		
Second external grounding	H70	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	22.90	22.90	22.90	44.20	57.30	70.70	84.90	101		
Rotation of the terminal box through 90°, entry from NDE	R11	22.90	22.90	22.90	44.20	57.30	70.70	84.90	101		
Rotation of the terminal box through 180°	R12	○	○	○	44.20	57.30	70.70	84.90	101		
One metal cable gland	R15	110.-	110.-	140.-	140	162.-	162.-	231.-	231.-		
EMC cable gland, maximum configuration	R16	-	-	-	355.-	598.-	598.-	1070.-	1070.-		
Metal cable gland, maximum configuration	R18	156.-	156.-	205.-	205.-	236.-	236.-	409.-	409.-		
Larger terminal box	R50	210.-	269.-	307.-	466.-	513.-	1630.-	1860.-	1860.-		
Terminal box without cable entry opening	R51	-	-	-	○	○	○	○	○		
Silicon-free version	R74	□	□	□	□	□	□	350.-	350.-		
Windings and insulation											
Temperature class 180 (H) at rated power and max. CT 60 °C ¹⁾	N11	299.-	397.-	484.-	688.-	963.-	1180.-	1440.-	1750.-		
Colors and paint finish											
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....	41.20	56.70	56.70	82.40	113.-	124.-	155.-	185.-		
Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog Section 1 "Introduction")	Y56 • and finish RAL....	649.-	680.-	680.-	690.-	700.-	350.-	371.-	391.-		
Special technology											
Mounting of LL 861 900 220 rotary pulse encoder ³⁾	G04	2940.-	2940.-	2940.-	2940.-	2940.-	4100.-	4100.-	4100.-		
Mounting of HOG 9 D 1024 I rotary pulse encoder ³⁾	G05	3470.-	3470.-	3470.-	4480.-	4480.-	4850.-	4850.-	4850.-		
Mounting of HOG 10 D 1024 I rotary pulse encoder ³⁾	G06	4480.-	4480.-	4480.-	4480.-	4480.-	5880.-	5880.-	5880.-		
Designs in accordance with standards and specifications											
Design according to UL with "Recognition Mark" ⁹⁾	D31	117.-	150.-	183.-	294.-	403.-	507.-	598.-	741.-		
Canadian regulations (CSA) ¹⁰⁾	D40	117.-	150.-	183.-	248.-	331.-	414.-	497.-	662.-		
Mechanical design and degrees of protection											
Prepared for mountings with D16 shaft ^{2) 3) 4)}	G42	165.-	185.-	221.-	453.-	453.-	577.-	906.-	906.-		
Protective cover ^{2) 3) 4)}	H00	80.80	141.-	141.-	188.-	283.-	375.-	469.-	562.-	Only for:	1PC1433 1PC1443
Condensation drainage holes		□	□	□	□	□	□	□	□		
Rust-resistant screws (externally)	H07	○	○	○	○	○	167.-	199.-	207.-		
IP65 degree of protection ⁵⁾	H20	147.-	147.-	220.-	296.-	367.-	443.-	517.-	589.-		
Bearings and lubrication											
Regreasing device	L23	319.-	329.-	356.-	375.-	422.-	□	□	□		
Bearing insulation NDE	L51	550.-	1230.-	1270.-	1320.-	1340.-	1730.-	1850.-	1920.-		

For legends and footnotes, see Page 6/28.

SIMOTICS DP Application-Specific Motors

Steel plant motors

30On
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										
Balance and vibration quantity											
Vibration quantity level A		□	□	□	□	□	□	□	□		
Vibration quantity level B	L00	321.–	411.–	509.–	798.–	803.–	882.–	1120.–	1310.–		
Balancing without key	L01	27.80	32.90	32.90	42.80	42.80	58.10	58.10	70.70		
Full-key balancing	L02	109.–	126.–	126.–	159.–	159.–	205.–	205.–	205.–		
Shaft and rotor											
Shaft extension with standard dimensions, without feather keyway	L04	542.–	569.–	598.–	694.–	764.–	833.–	903.–	972.–		
Standard shaft made of stainless steel (e.g. 1.4021)	L06	–	–	–	○	○	1360.–	1620.–	2700.–		
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	263.–	400.–	400.–	207.–	233.–	277.–	363.–	363.–		
Concentricity of shaft extension, coaxiality and linear movement in acc. with DIN 42955 Tolerance R for flange-mounting motors	L08	265.–	296.–	367.–	443.–	517.–	589.–	663.–	739.–		
Non-standard cylindrical shaft extension DE ⁶⁾	Y58 • and customer specifications	542.–	569.–	598.–	694.–	764.–	598.–	694.–	764.–		
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.		
Heating and ventilation											
Metal external fan	F76	220.–	256.–	296.–	332.–	367.–	405.–	443.–	479.–		
Anti-condensation heating for 230 V	Q02	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–		
Anti-condensation heating for 115 V	Q03	450.–	509.–	565.–	626.–	720.–	864.–	892.–	892.–		
Rating plate and extra rating plates											
Second rating plate, loose	M10	20.70	20.70	20.70	66.30	66.30	66.30	66.30	66.30		
Extra rating plate with deviating rating plate data	Y80 • and customer specifications	103.–	103.–	103.–	155.–	155.–	206.–	206.–	206.–		
Extra rating plate with customer specifications	Y82 • and customer specifications	40.70	40.70	40.70	68.–	68.–	68.–	84.90	84.90		
Packaging, safety notes, documentation and test certificates											
Acceptance test certificate 3.1 according to EN 10204 ⁷⁾	B02	28.10	28.10	28.10	28.10	28.10	28.10	28.10	28.10		
Documentation package "Basic"	B90	597.–	597.–	597.–	597.–	597.–	597.–	597.–	597.–		
Documentation package "Advanced"	B91	906.–	906.–	906.–	906.–	906.–	906.–	906.–	906.–		
Documentation package "Projects"	B92	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–	2470.–		

- 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⁾ 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.

²⁾ 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.

³⁾ 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.

⁴⁾ Order code **H00** provides mechanical protection for encoders.

⁵⁾ Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).

⁶⁾ 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.

⁷⁾ The delivery time for the factory test certificate may differ from the delivery time for the motor.

⁸⁾ The Operating Instructions are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WW/view/en/10803948/133300>.

⁹⁾ Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range.

¹⁰⁾ The rated voltage is indicated on the rating plate without voltage range.

Appendix

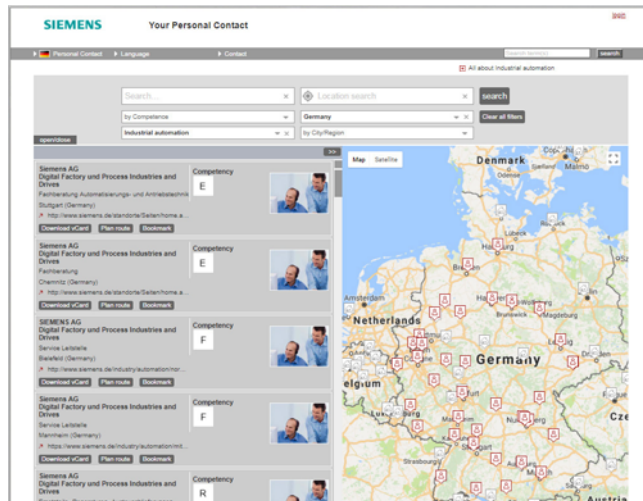


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7/8	<u>Explanation of the raw material/metal surcharges</u>
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7/8	Metal factor examples
7/9	<u>Explanation of the raw material/metal surcharges for dysprosium and neodymium (rare earths)</u>
7/9	Surcharge calculation
7/9	Three-month average price
7/9	Structure of the metal factor
7/9	Weight method
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7/11	Conditions of sale and delivery
7/11	General Provisions
7/11	Prices
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7/12	Export regulations

Appendix

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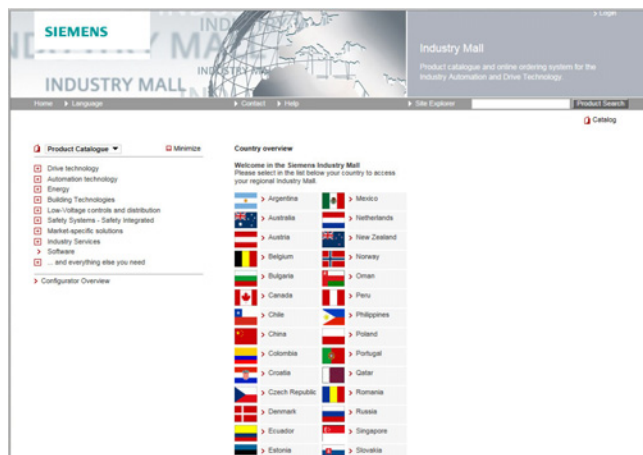
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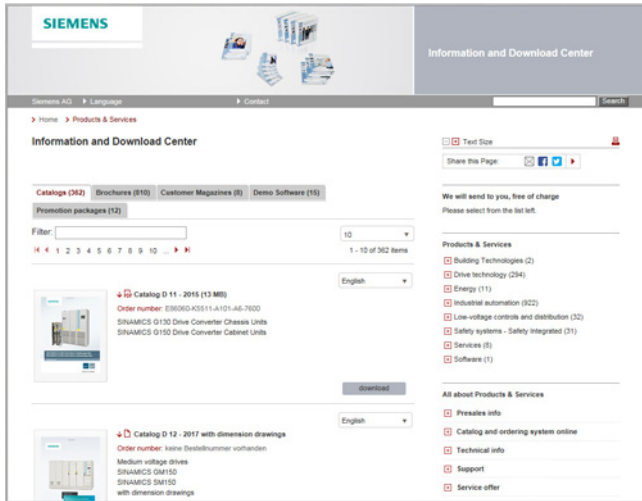
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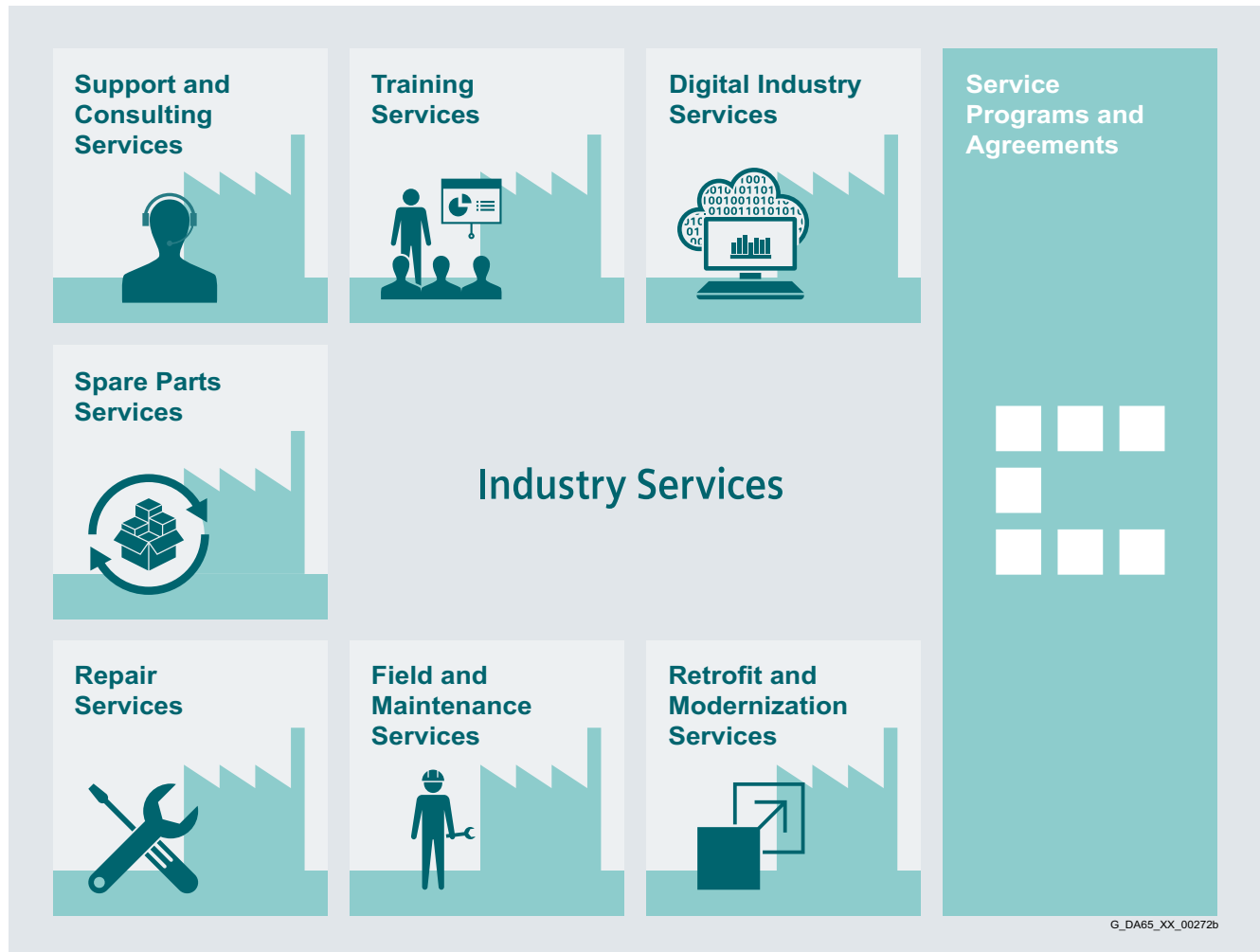
In the Information and Download Center you can download catalogs and brochures in PDF format without having to register. The filter dialog makes it possible to carry out targeted searches.

www.siemens.com/industry/infocenter

Appendix

Industry Services

Overview



Keep your business running and shaping your digital future – with Industry Services

Optimizing the productivity of your equipment and operations can be a challenge, especially with constantly changing market conditions. Working with our service experts makes it easier. We understand your industry's unique processes and provide the services needed so that you can better achieve your business goals.

You can count on us to maximize your uptime and minimize your downtime, increasing your operations' productivity and reliability. When your operations have to be changed quickly to meet a new demand or business opportunity, our services give you the flexibility to adapt. Of course, we take care that your production is protected against cyber threats. We assist in keeping your operations as energy and resource efficient as possible and reducing your total cost of ownership. As a trendsetter, we ensure that you can capitalize on the opportunities of digitalization and by applying data analytics to enhance decision making: You can be sure that your plant reaches its full potential and retains this over the longer lifespan.

You can rely on our highly dedicated team of engineers, technicians and specialists to deliver the services you need – safely, professionally and in compliance with all regulations. We are there for you, where you need us, when you need us.

www.siemens.com/industrieservices

Übersicht

Digital Industry Services



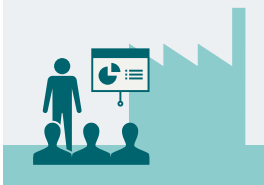
Digital Services make your industrial processes transparent to gain improvements in productivity, asset availability, and energy efficiency.

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>

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>

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>

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>

Appendix

Industry Services

Industry Services – Portfolio overview

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

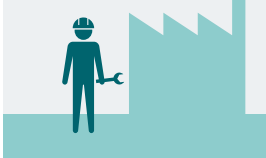


Provide a cost-effective solution for the expansion of entire plants, optimization of systems or upgrading existing products to the latest technology and software, e.g. migration services for automation systems.

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>

Overview

Online Support – fast, intuitive, whenever you want, wherever you need



Web
support.industry.siemens.com

App
 SIEMENS





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 Products for Industry

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.

Appendix

Metal surcharges

Explanation of the raw material/metal surcharges¹⁾

Surcharge calculation

To compensate for variations in the price of the raw materials silver, copper, aluminum, lead, gold, dysprosium²⁾ and/or neodym²⁾, 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) for³⁾
 - Silver (sales price, processed)
 - Gold (sales price, processed)
- and for⁴⁾
 - 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) ²⁾
8th digit	for neodym (Nd) ²⁾

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

L E A - - - -	Basis for % surcharge: List price Silver Basis 150 €, Step 50 €, 0.5 % Copper Basis 150 €, Step 50 €, 0.1 % No surcharge for aluminum No surcharge for lead No surcharge for gold No surcharge for dysprosium No surcharge for neodym
N - A 6 - - - -	Basis for % surcharge: Customer net price No surcharge for silver Copper Basis 150 €, Step 50 €, 0.1 % Aluminum acc. to weight, basic offic. price 225 € No surcharge for lead No surcharge for gold No surcharge for dysprosium No surcharge for neodym
- - 3 - - - -	No basis necessary No surcharge for silver Copper acc. to weight, basic official price 150 € No surcharge for aluminum No surcharge for lead No surcharge for gold No surcharge for dysprosium No surcharge for neodym

¹⁾ Refer to the separate explanation on the next page regarding the raw materials dysprosium and neodym (= rare earths).

²⁾ For a different method of calculation, refer to the separate explanation for these raw materials on the next page.

³⁾ Source: Umicore, Hanau (www.metalsmanagement.umicore.com).

⁴⁾ Source: Schutzvereinigung DEL-Notiz e.V. (www.del-notiz.org).

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 silver¹⁾, copper¹⁾, aluminum¹⁾, lead¹⁾, gold¹⁾, 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 material²⁾
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) ¹⁾
3rd digit	for copper (CU) ¹⁾
4th digit	for aluminum (AL) ¹⁾
5th digit	for lead (PB) ¹⁾
6th digit	for gold (AU) ¹⁾
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 €

¹⁾ For a different method of calculation, refer to the separate explanation for these raw materials on the previous page.

²⁾ Source: Asian Metal Ltd (www.asianmetal.com)

Appendix

Metal surcharges

Values of the metal factor

Percentage method	Basic official price in €	Step range in €	% surcharge 1st step	% surcharge 2nd step	% surcharge 3rd step	% surcharge 4th step	% sur-charge per addi-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 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-neous							
-	No metal surcharge						

1. General Provisions

By using this catalog you can acquire hardware and software products described therein from Siemens AG 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 Germany

For customers with a seat or registered office in Germany, the following applies subordinate to the T&C:

- for installation work the "General Conditions for Erection Works – Germany"¹⁾ ("Allgemeine Montagebedingungen – Deutschland" (only available in German at the moment)) and/or
- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services – for Customer in Germany"¹⁾ ("Allgemeine Geschäftsbedingungen für das Plant Analytics Services – für Kunden in Deutschland" (only available in German at the moment)) and/or
- 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"¹⁾ and/or
- for other supplies and/or services the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾.
In case such supplies and/or services 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"¹⁾. 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 Germany

For customers with a seat or registered office outside Germany, the following applies subordinate to the T&C:

- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services"¹⁾ and/or
- for services the "International Terms & Conditions for Services"¹⁾ supplemented by "Software Licensing Conditions"¹⁾ and/or
- for other supplies of hard- and/or software the "International Terms & Conditions for Products"¹⁾ supplemented by "Software Licensing Conditions"¹⁾

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.

¹⁾ The text of the Terms and Conditions of Siemens AG can be downloaded at
www.siemens.com/automation/salesmaterial-as/catalog/de/terms_of_trade_en.pdf

Appendix

Conditions of sale and delivery

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.

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 labeled with "AL" unequal "N" are subject to European / national export authorization. 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 must comply with all applicable national and international (re-)export control regulations.

If required for the purpose of conducting export control checks, you (upon request by us) shall promptly provide us with all information pertaining to the particular end customer, final disposition and intended use of goods delivered by us respectively works and services provided by us, as well as to any export control restrictions existing in this relation.

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.

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Further information can be obtained from our branch offices listed at www.siemens.com/automation-contact

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