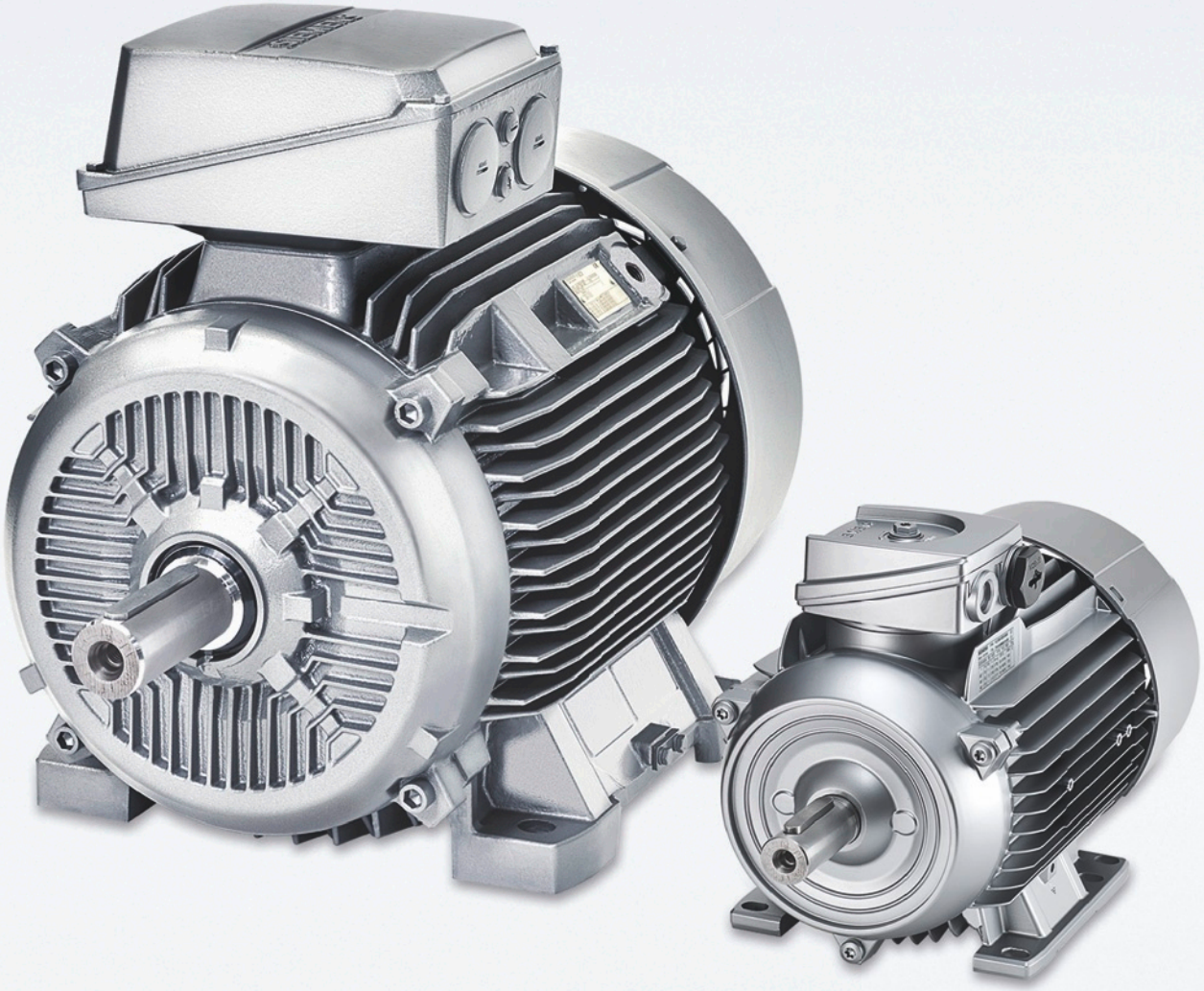
SIEMENS



SIMOTICS Motors

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

Type series 1FP1, 1LE1, 1LE5, 1MB1, 1MB5 and 1PC1

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

Catalog D 81.1

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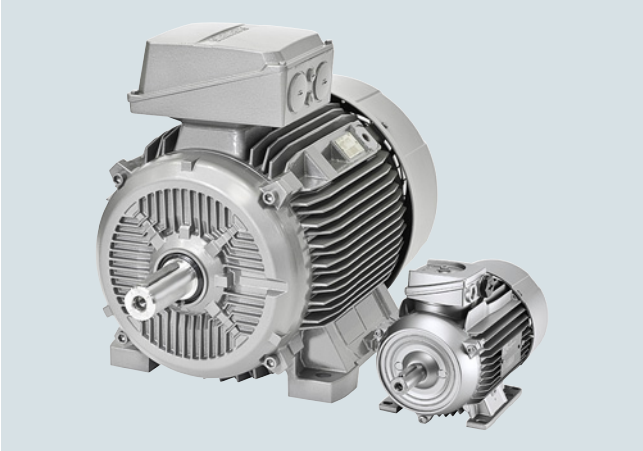
siemens.com/drives

Overview



Increasing energy costs have resulted in greater emphasis on the power consumption of drive systems. It is extremely important to utilize the full potential for minimizing energy consumption here to secure competitiveness today and in the future. The environment will also profit from reduced energy consumption.

This is the reason why we have already developed a new generation of low-voltage motors. Innovative rotors create the best requisites for motors with a high degree of efficiency. IE1 and IE2 motors with the same power have the same dimensions. The new motors for IE2, IE3 and IE4 offer considerable energy savings and protect our environment. We also consider environmental compatibility and sustainable use of resources during production. Potting compounds and coatings are, for example, solvent-free.

The modular mounting concept provides total flexibility. Each motor is based on a uniform concept for all markets worldwide. Our motors are manufactured according to the most advanced ecological standards.

The new 1LE1 motor family is therefore one of the most compact in the world, because it is manufactured using innovative technology. For an optimized design, a compound of highly conductive materials is used in the rotor (up to frame size 200). This results in minimum rotor losses and an excellent starting and switching response.

The design of the 1LE1 motors ensures maximum flexibility and minimum installation costs. Users benefit from integral lifting eyes, screw-on feet, reinforced bearing plates with optimum mechanical properties and easily accessible terminal boxes. Encoders, brakes and separately driven fans can also be added without any problems. Smaller inventories make stockkeeping easier, so motor suppliers can respond to customer requirements more quickly.

The 1LE1/1LE5/1PC1 motor family comprises two main series:

- SIMOTICS GP for general purpose applications:
  Motors with an aluminum housing

  SIMOTICS GP 1LE1/1LE5/1PC1 motors with an aluminum housing are suitable for a wide range of standard drive tasks in the industrial environment. Thanks to their particular low weight, they are predestined for applications in pumps, fans and compressors. But they also reliably fulfill their tasks in conveyor systems and lifting gear.

Brief overview	
Power and voltage range:	0.09 ... 45 kW for all commonly used voltages
Frame sizes and types of construction:	63 ... 200 in all common types of construction
Rated speed:	750 ... 3600 rpm
Number of poles:	2, 4, 6, 8
Efficiency classes:	• IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency) • IR3 (Rendimento Premium) • NEE (NEMA Energy Efficient, acc. to NEMA MG, Table 12-11) • NPE (NEMA Premium Efficient, acc. to NEMA MG, Table 12-12)

- SIMOTICS SD for severe duty applications:
  Motors with cast-iron housing

  SIMOTICS SD 1LE1/1LE5 motors with a cast-iron housing are extremely rugged and are therefore the first choice for applications under harsh environmental conditions.
  They master dust or vibration in mills and mixers as well as the corrosive atmosphere in the petrochemical industry.

Brief overview	
Power and voltage range:	0.09 ... 300 kW for all commonly used voltages
Frame sizes and types of construction:	71 ... 315 in all common types of construction
Rated speed:	750 ... 3600 rpm
Number of poles:	2, 4, 6, 8
Efficiency classes:	• IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency) • IR3 (Rendimento Premium) • NEE (NEMA Energy Efficient, acc. to NEMA MG, Table 12-11) • NPE (NEMA Premium Efficient, acc. to NEMA MG, Table 12-12)

Overview

High efficiency energy-saving motors for a positive energy balance

Depending on requirements, energy-saving motors for a positive energy balance are available that are compliant with the legal requirements applicable in the European economic area in accordance with EU Directive 640/2009 as well as for the North American market in accordance with US federal law EISA (Energy Independence Security Act).

Motors with increased power and compact construction (1LE1)

Motors with increased power and compact construction can be used to advantage in confined spaces. For a slightly longer overall length, the power is at least as high as that of the next largest frame size. These compact motors are also optimized for efficiency. They are offered in IE2 and IE3 and therefore reduce operating costs.

Motors without fan cover and without external fan (1LE1 with order code F90)

Forced-air cooled motors with surface cooling without fan cover and without external fan are mainly used for driving fans.

Motors with reduced power without fan cover and without external fan (1PC1 motors on request)

Naturally cooled motors with surface cooling without fan cover and without external fan are suitable for the following operating conditions:

- Types of duty with adequate cooling times (e.g. temporary duty for positioning drives)
- Environmental conditions that demand compact installation space (e.g. in motors with a stopping function)

Requirements that make an external fan disadvantageous, e.g. simple cleaning in the food industry, textile industry.

Benefits

There is considerable potential in the new 1LE1/1PC1 series of low-voltage motors. As a consistent further development of existing motors, the 1LE1/1PC1 motors offer numerous advantages.

Greater efficiency

Innovative rotor technology and manufacturing technology has been implemented for the IE3 and IE4 high efficiency motor variants. The energy-efficient motors are therefore considerably more compact.

The SinaSave Webtool can be used to calculate the energy saving potential and life cycle costs of all motors. SinaSave can be downloaded free of charge from the following website:
www.sinasave.siemens.com

The 1LE1 motors also impress customers with their extremely long life and their weight-optimized design has a positive effect on the stability of the equipment unit.

A wider range of applications

The motors are certified for worldwide use and satisfy high standards of quality (confirmed, for example, by CSA [1], UL [2], CQC [3]).

Improved design

The rugged housing in modern EMC design has an attractive appearance and enhances functionality. The rotatable, accessible terminal boxes, integral lifting eyes, screw-on feet and reinforced bearing plates ensure this.

Greater power

For the same frame size, the high-performance motors offer one complete rated power level more. We are also consistently implementing energy efficiency improvements here, too. The motors are offered (based on the categories of IEC 60034-30-1) in various efficiency classes.

More flexibility

The optimized design of the motors makes installation easier in general. Encoders, brakes and separately driven fans can be retrofitted easily. Terminal boxes and feet for flexible mounting can be selected. Smaller inventories make stockkeeping easier and motor suppliers can respond to customer requirements more quickly. Optimized manufacturing processes support fast availability. All motors up to 480 V can be operated either directly on the line or on a converter.

For general purpose applications: SIMOTICS GP motors with an aluminum housing

Particularly user friendly

The previously introduced, well-proven, obliquely partitioned terminal box is being implemented consistently throughout the entire motor series.

Special export line

For exporting to NAFTA, the Eagle Line is available. The motors are supplied with the electrical values stamped on the rating plate in accordance with EISA requirements.

1) Canadian Standard Association
2) Underwriters Laboratories Inc.
3) China Quality Certification

Benefits

For severe duty applications:
SIMOTICS SD motors with a cast-iron housing

The right motor for various challenges

The following lines are available for severe duty applications:

- Basic Line (1LE15): rugged, reliable motors for machine construction
- Performance Line (1LE16): Motors for the process industry with reinforced bearings and a more rugged coating – for requirements that extend beyond the Basic Line
- "Eagle Line": Motors for exporting to the NAFTA zone; they fulfill the requirements of UL and CSA and are supplied with the electrical values stamped on the rating plate in accordance with EISA requirements

Comparison: Basic Line versus Performance Line

Function	Basic Line	Performance Line
Bearing size	62 (63 from frame size 280 upwards)	63
Relubrication	Optional (standard from frame size 280 upwards)	Standard from frame size 160 upwards (optional for frame size 100 to 132)
Paint system	Standard paint finish, corrosivity category C2 [1)]	Special paint finish, corrosivity category C3 [1)]
Drainage	Drain plugs	T drains
Rating plate	Aluminum, plastic	Steel
Motor protection	Optional	PTC
Fan cover	Plastic	Steel
Warranty	Optionally 12 or 36 months for frame sizes 180 to 315	Standard 36 months for frame sizes 180 to 315

Compact design

The size of a motor is often an important aspect in the case of machines. For this reason, the 1LE1 motors in IE2 and IE3 are not any longer than their predecessors in the 1LG series in IE2.

Another highlight: some of the IE3 motors fit in the same housing as the IE2 motors. The efficiency classes naturally do not differ with regard to shaft height, so that the mechanical interface to the equipment unit remains the same. This also supports a largely problem-free efficiency upgrade to IE3 – without the need to adapt the mechanical design of a machine.

Greater power

In severe duty applications, motors with increased power can also be the right solution if sufficient space is not available for a standard motor. Because these motors offer the same power range in the next smallest frame size.

Application

As soon as the range of motors and options is complete, it will be possible to use the 1LE1/1PC1 motors from Siemens in all areas and sectors of industry due to their numerous options. They are suitable both for special environmental conditions such as those that predominate in the chemical or petrochemical industry as well as for most climatic requirements such as those of offshore applications.

Their large range of line voltages enables them to be used all over the world.

The wide field of implementation includes the following applications:

- Pumps
- Fan
- Compressors
- Conveyor systems such as cranes, belts and lifting gear
- High-bay warehouses
- Packaging machines
- Automation and drives
- Manufacturing industry
- General machine construction

Motors with a cast-iron housing are particularly suitable for the following severe duty applications:

- Petrochemical industry
- Pharmaceuticals
- Chemical industry
- Printing industry
- Process industry

[1)] See also Chapter 1, pages 1/14 and 1/15.

Technical specifications

Overview of technical specifications

This table lists the most important technical specifications. For more information and details, see Catalog Section 1 "Introduction".

Type of motor	SIMOTICS GP/SD 1LE1/1LE5/1PC1 IEC Low-Voltage Motors
Connection types	Star/delta connection The connection type to be used can be established from the Article No. supplements for the required motor.
Number of poles	2, 4, 6, 8
Frame sizes	63 M ... 315 L
Rated power	0.09 ... 300 kW (1LE1/1LE5 motor series)/0.3 ... 9 kW (1PC1 motor series)
Frequencies	50 Hz and 60 Hz
Versions	Self-ventilated 1LE1 energy-saving motors with: • IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency) • IR3 (Rendimento Premium) • NEE (NEMA Energy Efficient, acc. to NEMA MG, Table 12-11) • NPE (NEMA Premium Efficient, acc. to NEMA MG, Table 12-12) Self-ventilated 1LE1 motors with increased power with: • IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) Forced-air cooled 1LE1 motors without external fan and fan cover with: • IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency) • IR3 (Rendimento Premium) Naturally cooled 1PC1 motors without external fan and fan cover with: • IE1 (Standard Efficiency) • IE2 (High Efficiency) • IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency)
Marking	IEC 60034-30-1 IE1, IE2, IE3, IE4: 2, 4, 6 and 8-pole; NBR 17094-1: IR3 Rendimento Premium: 2, 4, 6, and 8-pole US Energy Independence Security Act EISA: 2, 4, 6 and 8-pole
Rated speed (synchronous speed)	750 … 3000 rpm
Rated torque	0.6 ... 1978 Nm (1LE1/1LE5 motor series)
Insulation of the stator winding in accordance with EN 60034-1 (IEC 60034-1)	Temperature class 155 (F), utilized acc. to temperature class 130 (B) (also for motors with increased power) DURIGNIT IR 2000 insulation system
Degree of protection according to EN 60034-5 (IEC 60034-5)	IP55 as standard
Cooling according to EN 60034-6 (IEC 60034-6)	• Self-ventilated (IC411) (1LE1/1LE5 motor series) frame size 80 M to 315 L • Forced-air cooled (IC418) (1LE1/1LE5 motor series with order code **F90**), frame size 80 M to 200 L • Naturally cooled (IC410) (1PC1 motor series) frame size 100 L to 160 L
Permissible coolant temperature and installation altitude	–20 ... +40 °C as standard, installation altitude up to 1000 m above sea level. See "Coolant temperature and installation altitude" in Catalog Section 1 "Introduction".
Standard voltages according to EN 60038 (IEC 60038)	50 Hz: 230 V, 400 V, 500 V, 690 V The voltage to be used can be found in the "Selection and ordering data" for the required motor.
Type of construction according to EN 60034-7 (IEC 60034-7)	• Without flange: IM B3, IM B6, IM B7, IM B8, IM V5 without protective cover, IM V6, IM V5 with protective cover • With flange: IM B5, IM V1, IM V3, IM B35 • With flange (next largest): IM B14, IM V19, IM V18, IM B34
Paint finish Suitability of paint finish for climate group according to IEC 60721, Part 2-1	Standard: Color RAL 7030 stone gray See "Paint finish" in Catalog Section 1 "Introduction".
Vibration severity grade according to EN 60034-14 (IEC 60034-14)	Grade A (normal – without special vibration requirements) Optionally: Grade B (with special vibration requirements) See "Balance and vibration severity" in Catalog Section 1 "Introduction".
Shaft extension according to DIN 748 (IEC 60072)	Balancing type: half-key balancing as standard See "Balance and vibration severity" in Catalog Section 1 "Introduction".
Sound pressure level according to EN ISO 1680 (tolerance +3 dB)	The corresponding sound pressure level is listed in the selection and ordering data for the required motor.
Weights	The corresponding weight is listed in the selection and ordering data for the required motor.
Modular mounting concept	Rotary pulse encoder, brake, separately driven fan or prepared for mountings
Consistent series concept	• Cast housing feet, screwed-on feet available as an option and retrofittable • Terminal box obliquely partitioned and rotatable through 4 × 90° • Bearings at DE and NDE are of identical design, reinforced bearings available as an option
Options	See "Article No. supplements and special versions"

More information

For further information, please get in touch with your local Siemens contact and use the DT Configurator.

Contacts: www.siemens.com/automation/partner
DT Configurator: www.siemens.com/dt-configurator

Wherever possible, you will find a local contact for:
- Technical support
- Spare parts/repairs
- Service
- Training
- Sales
- Technical consultation/engineering

You start by selecting a:
- country,
- product or
- sector.

By further specifying the remaining criteria you will find exactly the right contact partner with his/her respective expertise.

2

Overview

Converter operation up to 480 V +10 % line voltage

See Chapter 1, page 1/26.

During installation, the EMC guidelines must be complied with

Note:

When motors are operated on SINAMICS converters additional losses occur which, depending on the admissible winding temperature, can make it necessary to reduce the torque. The admissible torque values can be obtained from the SIZER (www.siemens.com/sizer) configuring tool. The lowest frequency specified there is 5 Hz. For stationary converter operation at lower frequencies, particularly in the case of frame sizes < 100, it is necessary to inquire at the Quotation Center.

Benefits

Motors operating with frequency converters offer the user numerous advantages.

The motors feature the future-oriented insulation system DURIGNIT IR 2000 (IR = Inverter Resistant). The DURIGNIT IR 2000 insulation system consists of high-quality enamel wires and insulating sheet materials in conjunction with temperature-resistant resin impregnation.

Application

The wide field of implementation includes the following applications:

- Conveyor systems such as cranes, belts and lifting gear
- High-bay warehouses
- Packaging machines
- Automation and drives

Their large range of line voltages enables them to be used all over the world.

Technical specifications

General note

All the data listed in the catalog is applicable for a 50 Hz line supply. With converter operation, the torque reduction factors for constant torque and drives for fans, pumps and compressors must be configured using the "SIZER for Siemens Drives" engineering tool. Higher noise levels must be expected at frequencies other than 50 Hz for motors operating with converters due to the harmonic content of the supply.

Mechanical limit speeds

When the motor is operated above its rated frequency, it is important to note that the maximum speeds are limited by the limits for the roller bearings, critical rotor speed and rigidity of the rotating parts (see page 1/54).

Motor protection

A motor protection function can be implemented using the I^2t sensing capability implemented in the converter software.

If required, more precise motor protection can be afforded by direct temperature measurement using KTY84 sensors, PTC thermistors, or Pt1000 resistance thermometers in the motor winding. Some converters from Siemens determine the motor temperature using the resistance of the temperature sensor. They can be set to a required temperature for alarm and tripping.

Insulation

The insulation of 1LE motors is designed such that converter operation is possible at voltages up to 480 V[1)].
$\hat{U}_{\text{phase-to-phase}} \leq 1500$ V, $\hat{U}_{\text{phase-to-ground}} \leq 1100$ V, voltage rise times of $t_s > 0.1$ µs.

For converter operation with the power ratings specified in the catalog, the motors are used according to temperature class 155 (F), i.e. in this case neither a service factor > 1 nor an increased coolant temperature is possible (order codes N01, N02 and N03 cannot be ordered).

1) See also IEC 60034-1 Edition 13.0

Selection and ordering data

The article number consists of a combination of digits and letters and is divided into three hyphenated blocks to provide a better overview, e.g.:
1LE1001-1DB22-2CB5-Z
H00

The first block (positions 1 to 7) identifies the motor type. The second block (positions 8 to 12) defines the motor frame size and length, the number of poles and power and in some cases the frequency/voltage. In the third block (positions 13 to 16), the frequency/voltage, type of construction and further design features are encoded.

For deviations in the second and third block from the catalog codes either **Z** or **90** should be used as appropriate.

Ordering data:

- Complete Article No. and order code(s) or plain text
- If a quotation has been requested, please specify the quotation number in addition to the Article No.
- When ordering a complete motor as a spare part, please specify the works serial No. for the previously supplied motor as well as the Article No.

Structure of the Article No.:		Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	
1st to 4th position: Digit, letter, letter, digit	• Self-ventilated by fan mounted on and driven by the rotor • Forced-air cooled by air flow from the fan to be driven with option extension **F90**		**1**	**L**	**E**	**1**															
	• ABNT Line – self-ventilated or forced-air cooled as for **1LE1**		**1**	**L**	**E**	**5**															
	• Naturally cooled without external fan and fan cover		**1**	**P**	**C**	**1**															
5th position: Digit	Aluminum housing						**0**														
	Cast-iron housing Basic Line						**5**														
	Cast-iron housing Performance Line						**6**														
	Cast-iron housing ABNT Line IR3 (IE3)						**7**														
6th to 7th position: 2 digits	Motors with IE2 High Efficiency							**0**	**1**												
	APAC Line motors with IE2 High Efficiency							**4**	**1**												
	Motors with IE1 Standard Efficiency							**0**	**2**												
	Motors with IE3 Premium Efficiency							**0**	**3**												
	Motors with IE3 Premium Efficiency (converter operation)							**8**	**3**												
	APAC Line motors with IE3 Premium Efficiency							**4**	**3**												
	Motors with IE4 Super Premium Efficiency							**0**	**4**												
	Pole-changing motors with one winding connected in Dahlander circuit							**1**	**1**												
	Pole-changing motors with two windings							**1**	**2**												
	NEMA Energy Efficient MG1 motors, Table 12-11 – Eagle Line							**2**	**1**												
	NEMA Premium Efficient MG1 motors, Table 12-12 – Eagle Line							**2**	**3**												
	ABNT Line IR3 (IE3) motors							**7**	**3**												
8th, 9th and 11th position: Digit, letter, digit	**Motor frame size** (frame size as a combination of shaft height and overall length, encoded)										**0** ... **3**	**A** ... **E**		**0** ... **6**							
10th position: Letter	**No. of poles** A: 2-pole, B: 4-pole, C: 6-pole, D: 8-pole, J: 4/2-pole const. load torque, L: 8/4-pole const. load torque, P: 4/2-pole square-law load torque, Q: 6/4-pole square-law load torque, R: 8/4-pole square-law load torque												**A** ... **R**							
12th and 13th position: 2 digits	**Voltage, circuit and frequency** (encoded with two digits, 9-0 requires order code M.. (e.g. M1Y))														**0** ... **9**		**0** ... **8**				
14th position: Letter	**Type of construction** (encoded with A ... Z; Z requires order code Q.. (e.g. H00))																	**A** ... **V**			
15th position: Letter	**Motor protection** (encoded with A ... Z; Z requires order code Q.. (e.g. Q2A))																		**A** ... **Z**		
16th position: Digit	**Terminal box position** 4: Terminal box top, 5: Terminal box right, 6: Terminal box left, 7: Terminal box bottom																			**4** ... **7**	
	Special order versions: encoded – additional order code required not encoded – additional plain text required																				- **Z**

Ordering example

Selection criteria	Requirement	Structure of the Article No.
Motor type 1LE1	Standard motor with IE3 High Efficiency, IP55 degree of protection, aluminum housing	1LE1003-■■■■■-■■■■
Motor frame size/No. of poles/Speed	160 M/4-pole/1500 rpm	1LE1003-1DB2■-■■■■
Rated power	11 kW	
Voltage and frequency	230 VΔ/400 VY, 50 Hz	1LE1003-1DB22-2■■■
Type of construction with special version	IM V5 with protective cover [1]	1LE1003-1DB22-2C■■-Z H00
Motor protection	1 or 3 PTC thermistors – for tripping (2 terminals)	1LE1003-1DB22-2CB■-Z H00
Terminal box position	Terminal box right (viewed from DE)	1LE1003-1DB22-2CB5-Z H00

[1] Standard without protective cover – the protective cover is defined with order code **H00** and must be ordered in addition to the Article No. with **-Z** and this order code.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1004 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency, service factor (SF) 1.15																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
3	**3.45**	**100 L**	2920	9.8	89.1	89.8	89.4	0.86	5.7	3.7	9	4.9	62	74	**1LE1004-1AA4■-■■■■**	27	0.0054
4	**4.55**	**112 M**	2950	13	90	90.4	89.7	0.89	7.2	2.6	8.8	4.1	68	80	**1LE1004-1BA2■-■■■■**	34	0.012
5.5	**6.3**	**132 S**	2960	18	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	**1LE1004-1CA0■-■■■■**	44	0.024
7.5	**8.6**	**132 S**	2955	24	91.7	92.4	92.3	0.91	13	2.2	8.6	4.3	67	80	**1LE1004-1CA1■-■■■■**	56	0.031
11	**12.6**	**160 M**	2955	36	92.6	92.8	92	0.9	19.1	2.8	8.6	4.2	74	87	**1LE1004-1DA2■-■■■■**	84	0.061
15	**17.3**	**160 M**	2955	48	93.3	93.5	92.9	0.9	26	3.1	9	4.5	74	87	**1LE1004-1DA3■-■■■■**	98	0.068
18.5	**21.3**	**160 L**	2955	60	93.7	94.1	93.8	0.91	31.5	3.1	8.9	4.3	74	87	**1LE1004-1DA4■-■■■■**	112	0.074
22	**24.5**	**180 M**	2950	71	94	94.4	94.1	0.89	38	2.8	8.9	4.3	71	84	**1LE1004-1EA2■-■■■■**	139	0.091
30	**33.5**	**200 L**	2955	97	94.5	94.8	94.4	0.85	54	2.8	7.9	4	69	83	**1LE1004-2AA4■-■■■■**	173	0.13
37	**41.5**	**200 L**	2955	120	94.8	95.1	94.9	0.88	64	2.9	7.8	4	69	83	**1LE1004-2AA5■-■■■■**	214	0.20
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	1465	14	89.5	89.6	88.3	0.79	4.5	3.3	8.5	4.7	59	71	**1LE1004-1AB4■-■■■■**	30	0.014
3	**3.45**	**100 L**	1460	20	90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1004-1AB5■-■■■■**	38	0.016
4	**4.55**	**112 M**	1465	26	91.1	91.6	91	0.81	7.8	3.1	8.3	4.3	63	75	**1LE1004-1BB2■-■■■■**	46	0.020
5.5	**6.3**	**132 S**	1470	36	91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1004-1CB0■-■■■■**	59	0.039
7.5	**8.6**	**132 M**	1470	49	92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1004-1CB2■-■■■■**	62	0.046
11	**12.6**	**160 M**	1475	71	93.3	93.5	92.9	0.82	21	2.9	8.1	4.1	63	76	**1LE1004-1DB2■-■■■■**	98	0.099
15	**17.3**	**160 L**	1480	97	93.9	94	93.3	0.8	29	3.7	7.8	4.3	63	76	**1LE1004-1DB4■-■■■■**	109	0.11
18.5	**21.3**	**180 M**	1470	120	94.2	94.7	94.5	0.81	35	2.7	7.9	3.6	59	72	**1LE1004-1EB2■-■■■■**	153	0.17
22	**25.3**	**180 L**	1475	142	94.5	95	94.8	0.81	41.5	2.9	7.7	3.8	59	72	**1LE1004-1EB4■-■■■■**	158	0.18
30	**34.5**	**200 L**	1475	194	94.9	95.2	94.9	0.81	56	3.2	7.3	3.6	60	73	**1LE1004-2AB5■-■■■■**	205	0.27

Voltages		Version					Order code
Frame sizes 100 L to 200 L: Use of the 4 x 90° rotatable terminal box							
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
For other voltages [1] and more information, see from page 2/93			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			**A**		–
With flange	IM B5 [2]	With additional charge			**F**		–
With flange	IM B14 [2]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Frame sizes 100 L to 200 L: Use of the 4 x 90° rotatable terminal box							
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE1004-. . . .■-■■■■-Z** **F90 +. . .+. . .+. . .**
For options, see from page 2/118							**1LE1004-. . . .■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1504 – Basic Line Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																	
3	3.45	100 L	2920	9.8	89.1	89.8	89.4	0.86	5.7	3.7	9	4.9	62	74	1LE1504-1AA4■-■■■■	38	0.0054
4	4.55	112 M	2950	13	90	90.4	89.7	0.89	7.2	2.6	8.8	4.1	68	80	1LE1504-1BA2■-■■■■	45	0.012
5.5	6.3	132 S	2960	18	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	1LE1504-1CA0■-■■■■	62	0.024
7.5	8.6	132 S	2955	24	91.7	92.4	92.3	0.91	13	2.2	8.6	4.3	67	80	1LE1504-1CA1■-■■■■	74	0.031
11	12.6	160 M	2955	36	92.6	92.8	92	0.9	19.1	2.8	8.6	4.2	74	87	1LE1504-1DA2■-■■■■	113	0.061
15	17.3	160 M	2955	48	93.3	93.5	92.9	0.9	26	3.1	9	4.5	74	87	1LE1504-1DA3■-■■■■	130	0.068
18.5	21.3	160 L	2955	60	93.7	94.1	93.8	0.91	31.5	3.1	8.9	4.3	74	87	1LE1504-1DA4■-■■■■	147	0.074
22	24.5	180 M	2950	71	94	94.4	94.1	0.89	38	2.8	8.9	4.3	71	84	1LE1504-1EA2■-■■■■	175	0.091
30	33.5	200 L	2955	97	94.5	94.8	94.4	0.85	54	2.8	7.9	4	69	83	1LE1504-2AA4■-■■■■	222	0.13
37	41.5	200 L	2955	120	94.8	95.1	94.9	0.88	64	2.9	7.8	4	69	83	1LE1504-2AA5■-■■■■	263	0.20
45	51	225 M	2970	145	95	95	94.4	0.85	80	3.1	8.8	4.1	73	86	1LE1504-2BA2■-■■■■	330	0.26
55	62	250 M	2978	176	95.3	95.2	94.5	0.88	95	2.5	7.5	3.2	73	86	1LE1504-2CA2■-■■■■	430	0.48
75	84	280 S	2980	240	95.6	95.6	95	0.89	127	2.7	8.4	3.5	73	87	1LE1504-2DA0■-■■■■	610	0.94
90	101	280 M	2978	289	95.8	95.9	95.4	0.89	152	2.7	8.4	3.5	77	91	1LE1504-2DA2■-■■■■	610	1.0
110	123	315 S	2985	352	96	96	95.3	0.89	186	2.6	8.8	3.4	77	91	1LE1504-3AA0■-■■■■	750	1.4
132	148	315 M	2988	422	96.2	96.2	95.6	0.9	220	3.1	10.5	4	77	91	1LE1504-3AA2■-■■■■	980	1.9
160	180	315 L	2988	511	96.3	96.3	95.8	0.92	260	3.2	10.3	3.9	78	91	1LE1504-3AA4■-■■■■	1060	2.1
200	224	315 L	2986	640	96.5	96.5	96.1	0.92	325	3.5	10	3.9	78	93	1LE1504-3AA5■-■■■■	1180	2.4

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
For other voltages and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B5 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				4	
For other terminal box positions and more information, see from page 2/116						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1504-. . . . ■-■■■■				-Z	F90 +. . .+. . .+. . .
For options, see from page 2/125		1LE1504-. . . . ■-■■■■				-Z	. . .+. . .+. . .+. . .

Note: IE4 motors (2-pole) in frame size 315 do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also page 1/50).

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1504 – Basic Line Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
2.2	**2.55**	**100 L**	1465	14		89.5	89.6	88.3	0.79	4.5	3.3	8.5	4.7	59	71	**1LE1504-1AB4**■-■■■■	41	0.014
3	**3.45**	**100 L**	1460	20		90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1504-1AB5**■-■■■■	50	0.016
4	**4.55**	**112 M**	1465	26		91.1	91.6	91	0.81	7.8	3.1	8.3	4.3	63	75	**1LE1504-1BB2**■-■■■■	58	0.020
5.5	**6.3**	**132 S**	1470	36		91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1504-1CB0**■-■■■■	77	0.039
7.5	**8.6**	**132 M**	1470	49		92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1504-1CB2**■-■■■■	80	0.046
11	**12.6**	**160 M**	1475	71		93.3	93.5	92.9	0.82	21	2.9	8.1	4.1	63	76	**1LE1504-1DB2**■-■■■■	127	0.099
15	**17.3**	**160 L**	1480	97		93.9	94	93.3	0.8	29	3.7	7.8	4.3	63	76	**1LE1504-1DB4**■-■■■■	138	0.11
18.5	**21.3**	**180 M**	1470	120		94.2	94.7	94.5	0.81	35	2.7	7.9	3.6	59	72	**1LE1504-1EB2**■-■■■■	187	0.17
22	**25.3**	**180 L**	1475	142		94.5	95	94.8	0.81	41.5	2.9	7.7	3.8	59	72	**1LE1504-1EB4**■-■■■■	192	0.18
30	**34.5**	**200 L**	1475	194		94.9	95.2	94.9	0.81	56	3.2	7.3	3.6	60	73	**1LE1504-2AB5**■-■■■■	258	0.27
37	**42.5**	**225 S**	1485	238		95.2	95.5	95.2	0.84	67	3.2	8.4	3.2	69	83	**1LE1504-2BB0**■-■■■■	345	0.52
45	**52**	**225 M**	1485	289	IE3	95.4	95.7	95.4	0.84	81	3.4	8	3.3	69	83	**1LE1504-2BB2**■-■■■■	415	0.66
55	**63**	**250 M**	1486	353		95.7	95.8	95.4	0.86	96	3	8.2	3.3	68	82	**1LE1504-2CB2**■-■■■■	490	1.1
75	**86**	**280 S**	1490	481		96	96.1	95.6	0.85	133	3.4	9.2	3.8	69	83	**1LE1504-2DB0**■-■■■■	670	1.7
90	**104**	**280 M**	1488	578		96.1	96.3	96.1	0.86	157	3.2	9	3.4	70	84	**1LE1504-2DB2**■-■■■■	730	2.0
110	**127**	**315 M** [4]	1491	705		96.3	96.4	95.9	0.86	192	3.2	8.6	3.3	73	87	**1LE1504-3AB0**■-■■■■	910	2.7
132	**152**	**315 M**	1491	845		96.4	96.6	96.2	0.87	225	3.3	8.7	3.3	73	87	**1LE1504-3AB2**■-■■■■	990	3.1
160	**184**	**315 L**	1490	1025		96.6	96.7	96.5	0.86	280	3.6	9	3.2	76	90	**1LE1504-3AB4**■-■■■■	1180	3.7
200	**230**	**315 L**	1490	1282		96.7	96.9	96.6	0.86	345	3.8	9.2	3.4	76	90	**1LE1504-3AB5**■-■■■■	1300	4.4

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
For other voltages and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B5 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1504-**. . . . ■-■■■■					**-Z F90** +. . .+. . .+. . .
For options, see from page 2/125		**1LE1504-**. . . . ■-■■■■					**-Z** . . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

4) As 315 M version (not the same as 315 S according to EN 50347).

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1604 – Performance Line Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency, service factor (SF) 1.15																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																	
3	**3.45**	**100 L**	2920	9.8	89.1	89.8	89.4	0.86	5.7	3.7	9	4.9	62	74	**1LE1604-1AA4■-■■■■**	38	0.0054
4	**4.55**	**112 M**	2950	13	90	90.4	89.7	0.89	7.2	2.6	8.8	4.1	68	80	**1LE1604-1BA2■-■■■■**	45	0.012
5.5	**6.3**	**132 S**	2960	18	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	**1LE1604-1CA0■-■■■■**	62	0.024
7.5	**8.6**	**132 S**	2955	24	91.7	92.4	92.3	0.91	13	2.2	8.6	4.3	67	80	**1LE1604-1CA1■-■■■■**	74	0.031
11	**12.6**	**160 M**	2955	36	92.6	92.8	92	0.9	19.1	2.8	8.6	4.2	74	87	**1LE1604-1DA2■-■■■■**	113	0.061
15	**17.3**	**160 M**	2955	48	93.3	93.5	92.9	0.9	26	3.1	9	4.5	74	87	**1LE1604-1DA3■-■■■■**	130	0.068
18.5	**21.3**	**160 L**	2955	60	93.7	94.1	93.8	0.91	31.5	3.1	8.9	4.3	74	87	**1LE1604-1DA4■-■■■■**	147	0.074
22	**24.5**	**180 M**	2950	71	94	94.4	94.1	0.89	38	2.8	8.9	4.3	71	84	**1LE1604-1EA2■-■■■■**	175	0.091
30	**33.5**	**200 L**	2955	97	94.5	94.8	94.4	0.85	54	2.8	7.9	4	69	83	**1LE1604-2AA4■-■■■■**	222	0.13
37	**41.5**	**200 L**	2955	120	94.8	95.1	94.9	0.88	64	2.9	7.8	4	69	83	**1LE1604-2AA5■-■■■■**	263	0.20
45	**51**	**225 M**	2970	145	95	95	94.4	0.85	80	3.1	8.8	4.1	73	86	**1LE1604-2BA2■-■■■■**	330	0.26
55	**62**	**250 M**	2978	176	95.3	95.2	94.5	0.88	95	2.5	7.5	3.2	73	86	**1LE1604-2CA2■-■■■■**	430	0.48
75	**84**	**280 S**	2980	240	95.6	95.6	95	0.89	127	2.7	8.4	3.5	73	87	**1LE1604-2DA0■-■■■■**	610	0.94
90	**101**	**280 M**	2978	289	95.8	95.9	95.4	0.89	152	2.7	8.4	3.5	77	91	**1LE1604-2DA2■-■■■■**	610	1.0
110	**123**	**315 S**	2985	352	96	96	95.3	0.89	186	2.6	8.8	3.4	77	91	**1LE1604-3AA0■-■■■■**	750	1.4
132	**148**	**315 M**	2988	422	96.2	96.2	95.6	0.9	220	3.1	10.5	4	77	91	**1LE1604-3AA2■-■■■■**	980	1.9
160	**180**	**315 L**	2988	511	96.3	96.3	95.8	0.92	260	3.2	10.3	3.9	78	91	**1LE1604-3AA4■-■■■■**	1060	2.1
200	**224**	**315 L**	2986	640	96.5	96.5	96.1	0.92	325	3.5	10	3.9	78	93	**1LE1604-3AA5■-■■■■**	1180	2.4

Voltages [2]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
For other voltages and more information, see from page 2/96			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**			**A**	–
With flange	IM B5 [3]	With additional charge			**F**	–
With flange	IM B5 [3]	With additional charge			**K**	–
For other types of construction and more information, see from page 2/103					■	. . .
Motor protection		Version				Order code
PTC thermistor with 3 temperature sensors		**Standard**			**B**	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 2/116					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1604-. . . . ■-■■■■**			**-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125		**1LE1604-. . . . ■-■■■■**			**-Z**	**. . .+. . .+. . .+. . .**

Note: IE4 motors (2-pole) in frame size 315 do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also page 1/50).

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1604 – Performance Line Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
2.2	**2.55**	**100 L**	1465	14		89.5	89.6	88.3	0.79	4.5	3.3	8.5	4.7	59	71	**1LE1604-1AB4■-■■■■**	41	0.014
3	**3.45**	**100 L**	1460	20		90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1604-1AB5■-■■■■**	50	0.016
4	**4.55**	**112 M**	1465	26		91.1	91.6	91	0.81	7.8	3.1	8.3	4.3	63	75	**1LE1604-1BB2■-■■■■**	58	0.020
5.5	**6.3**	**132 S**	1470	36		91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1604-1CB0■-■■■■**	77	0.039
7.5	**8.6**	**132 M**	1470	49		92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1604-1CB2■-■■■■**	80	0.046
11	**12.6**	**160 M**	1475	71		93.3	93.5	92.9	0.82	21	2.9	8.1	4.1	63	76	**1LE1604-1DB2■-■■■■**	127	0.099
15	**17.3**	**160 L**	1480	97		93.9	94	93.3	0.8	29	3.7	7.8	4.3	63	76	**1LE1604-1DB4■-■■■■**	138	0.11
18.5	**21.3**	**180 M**	1470	120		94.2	94.7	94.5	0.81	35	2.7	7.9	3.6	59	72	**1LE1604-1EB2■-■■■■**	187	0.17
22	**25.3**	**180 L**	1475	142		94.5	95	94.8	0.81	41.5	2.9	7.7	3.8	59	72	**1LE1604-1EB4■-■■■■**	192	0.18
30	**34.5**	**200 L**	1475	194		94.9	95.2	94.9	0.81	56	3.2	7.3	3.6	60	73	**1LE1604-2AB5■-■■■■**	258	0.27
37	**42.5**	**225 S**	1485	238		95.2	95.5	95.2	0.84	67	3.2	8.4	3.2	69	83	**1LE1604-2BB0■-■■■■**	345	0.52
45	**52**	**225 M**	1485	289	IE3	95.4	95.7	95.4	0.84	81	3.4	8	3.3	69	83	**1LE1604-2BB2■-■■■■**	415	0.66
55	**63**	**250 M**	1486	353		95.7	95.8	95.4	0.86	96	3	8.2	3.3	68	82	**1LE1604-2CB2■-■■■■**	490	1.1
75	**86**	**280 S**	1490	481		96	96.1	95.6	0.85	133	3.4	9.2	3.8	69	83	**1LE1604-2DB0■-■■■■**	670	1.7
90	**104**	**280 M**	1488	578		96.1	96.3	96.1	0.86	157	3.2	9	3.4	70	84	**1LE1604-2DB2■-■■■■**	730	2.0
110	**127**	**315 M** [4]	1491	705		96.3	96.4	95.9	0.86	192	3.2	8.6	3.3	73	87	**1LE1604-3AB0■-■■■■**	910	2.7
132	**152**	**315 M**	1491	845		96.4	96.6	96.2	0.87	225	3.3	8.7	3.3	73	87	**1LE1604-3AB2■-■■■■**	990	3.1
160	**184**	**315 L**	1490	1025		96.6	96.7	96.5	0.86	280	3.6	9	3.2	76	90	**1LE1604-3AB4■-■■■■**	1180	3.7
200	**230**	**315 L**	1490	1282		96.7	96.9	96.6	0.86	345	3.8	9.2	3.4	76	90	**1LE1604-3AB5■-■■■■**	1300	4.4

Voltages [2]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
For other voltages and more information, see from page 2/96			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**		**A**		–
With flange	IM B5 [3]	With additional charge		**F**		–
With flange	IM B5 [3]	With additional charge		**K**		–
For other types of construction and more information, see from page 2/103				■		. . .
Motor protection		Version				Order code
PTC thermistor with 3 temperature sensors		**Standard**			**B**	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**				**4**
For other terminal box positions and more information, see from page 2/116						■
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1604-. . . . ■-■■■■-Z**				**F90** +. . .+. . .+. . .
For options, see from page 2/125		**1LE1604-. . . . ■-■■■■-Z**				. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

4) As 315 M version (not the same as 315 S according to EN 50347).

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1003 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
0.75	**0.86**	**80 M**	2850	2.5		80.7	82.2	81.9	0.86	1.56	2.6	6.2	3	60	71	**1LE1003-0DA2■-■■■■**	11	0.0011
1.1	**1.27**	**80 M**	2885	3.6		82.7	83.9	83.1	0.85	2.25	3	7.1	3.3	60	71	**1LE1003-0DA3■-■■■■**	12	0.0013
1.5	**1.75**	**90 S**	2910	4.9		84.2	84.6	83.2	0.86	3	2.7	8.1	4.2	65	77	**1LE1003-0EA0■-■■■■**	15	0.0021
2.2	**2.55**	**90 L**	2910	7.2		85.9	86.8	86.1	0.88	4.2	2.6	8.3	4	65	77	**1LE1003-0EA4■-■■■■**	19	0.0031
3	**3.45**	**100 L**	2920	9.8		87.1	87.9	87.5	0.88	5.6	3.2	8.1	4.6	71	79	**1LE1003-1AA4■-■■■■**	26	0.0054
4	**4.55**	**112 M**	2950	13		88.1	88.7	88.2	0.89	7.4	2.5	8.7	4	73	81	**1LE1003-1BA2■-■■■■**	34	0.012
5.5	**6.3**	**132 S**	2950	18		89.2	90.1	89.7	0.9	9.9	1.9	7.3	3.7	72	80	**1LE1003-1CA0■-■■■■**	43	0.024
7.5	**8.6**	**132 S**	2950	24.5		90.1	91	91	0.92	13.1	1.9	8.3	3.9	68	80	**1LE1003-1CA1■-■■■■**	57	0.031
11	**12.6**	**160 M**	2955	35.5		91.2	91	89.5	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1003-1DA2■-■■■■**	75	0.053
15	**17.3**	**160 M**	2960	48		91.9	91.9	91	0.87	27	2.8	8.8	4.3	74	82	**1LE1003-1DA3■-■■■■**	84	0.061
18.5	**21.3**	**160 L**	2955	60		92.4	92.8	92.4	0.9	32	2.8	9	4.2	70	82	**1LE1003-1DA4■-■■■■**	94	0.068
22	**24.5**	**180 M**	2950	71		92.7	93.2	92.9	0.89	38.5	2.3	7.5	3.5	67	80	**1LE1003-1EA2■-■■■■**	122	0.08
30	**33.5**	**200 L**	2955	97		93.3	93.5	92.9	0.87	53	2.5	7	3.3	67	80	**1LE1003-2AA4■-■■■■**	173	0.134
37	**41.5**	**200 L**	2955	120		93.7	94.2	94	0.88	65	2.5	7.1	3.2	67	80	**1LE1003-2AA5■-■■■■**	194	0.158

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/93			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	**A**	–
With flange	IM B5 [2]	With additional charge	**F**	–
With flange	IM B14 [2]	With additional charge	**K**	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)	With additional charge	**B**	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
For options, see from page 2/118	**1LE1003- . . . . ■-■■■■** **-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1003 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
0.55	**0.63**	**80 M**	1440	3.6		80.8	81.1	79.3	0.78	1.26	2.1	5.9	3.1	53	64	**1LE1003-0DB2■-■■■■**	11	0.0021
0.75	**0.86**	**80 M**	1450	4.9		82.5	82.3	79.9	0.75	1.75	2.7	7.1	3.9	53	64	**1LE1003-0DB3■-■■■■**	14	0.0029
1.1	**1.27**	**90 S**	1440	7.3		84.1	84.7	83.4	0.78	2.4	2.9	6.9	3.6	56	68	**1LE1003-0EB0■-■■■■**	16	0.0036
1.5	**1.75**	**90 L**	1445	9.9		85.3	86.0	85.2	0.8	3.15	2.9	7.3	3.5	60	68	**1LE1003-0EB4■-■■■■**	19	0.0049
2.2	**2.55**	**100 L**	1465	14.3	IE2	86.7	87.3	86.4	0.83	4.4	2.1	7.6	3.6	60	72	**1LE1003-1AB4■-■■■■**	30	0.014
3	**3.45**	**100 L**	1460	20		87.7	88.4	88.2	0.83	5.9	2.3	7.3	3.7	60	72	**1LE1003-1AB5■-■■■■**	30	0.014
4	**4.55**	**112 M**	1460	26		88.6	89.2	88.6	0.82	7.9	2.4	7.1	3.7	58	70	**1LE1003-1BB2■-■■■■**	34	0.017
5.5	**6.3**	**132 S**	1470	36	IE2	89.6	90.1	89.5	0.84	10.5	2.1	7.2	3.4	64	76	**1LE1003-1CB0■-■■■■**	64	0.046
7.5	**8.6**	**132 M**	1470	49	IE2	90.4	91.1	90.8	0.84	14.3	2.4	7.4	3.5	64	76	**1LE1003-1CB2■-■■■■**	64	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.9	91.4	0.84	20.5	2.2	6.8	3.2	65	77	**1LE1003-1DB2■-■■■■**	83	0.083
15	**17.3**	**160 L**	1475	97		92.1	92.3	91.5	0.82	28.5	2.5	8.5	3.8	65	77	**1LE1003-1DB4■-■■■■**	100	0.099
18.5	**21.3**	**180 L**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	68	75	**1LE1003-1EB2■-■■■■**	142	0.14
22	**25.3**	**180 L**	1470	195		93.6	94.0	93.8	0.79	59	3	8.2	3.8	67	74	**1LE1003-1EB4■-■■■■**	154	0.17
30	**34.5**	**200 L**	1470	195	IE2	93.6	94	93.7	0.84	55	2.6	7.3	3.1	65	72	**1LE1003-2AB5■-■■■■**	189	0.22

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	...

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	...

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	...

Terminal box position	Version	
Terminal box at top	**Standard**	4
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
For options, see from page 2/118	**1LE1003- . . . . ■-■■■■**	**-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1003 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
0.37	**0.43**	**80 M**	940	3.8		73.5	73.1	69.4	0.66	1.1	2.3	4.2	2.7	42	53	**1LE1003-0DC2■-■■■■**	12	0.0025
0.55	**0.63**	**80 M**	935	5.6		77.2	77	73.9	0.67	1.53	2.5	4.5	2.8	42	53	**1LE1003-0DC3■-■■■■**	14	0.0031
0.75	**0.86**	**90 S**	945	7.6		78.9	80	78.8	0.7	1.96	2.2	4.6	2.6	43	55	**1LE1003-0EC0■-■■■■**	16	0.004
1.1	**1.27**	**90 L**	950	11	IE1	81.0	81.4	79.3	0.66	2.95	2.8	5.0	3	60	68	**1LE1003-0EC4■-■■■■**	19	0.0052
1.5	**1.75**	**100 L**	970	14.8	IE2	82.5	83.1	81.5	0.73	3.6	1.9	5.2	2.8	59	71	**1LE1003-1AC4■-■■■■**	25	0.011
2.2	**2.55**	**112 M**	970	22	IE2	84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1003-1BC2■-■■■■**	34	0.017
3	**3.45**	**132 S**	975	29		85.6	86.1	84.9	0.73	6.9	2.3	6.6	3.2	56	66	**1LE1003-1CC0■-■■■■**	42	0.034
4	**4.55**	**132 M**	975	39		86.8	87.1	86.2	0.73	9.1	2.2	6.2	3	67	75	**1LE1003-1CC2■-■■■■**	46	0.039
5.5	**6.3**	**132 M**	975	54		88.0	88.3	87.2	0.72	12.5	2.7	6.8	3.4	64	72	**1LE1003-1CC3■-■■■■**	58	0.050
7.5	**8.6**	**160 M**	985	73		89.1	89.5	88.6	0.81	15	2.3	7.9	3.2	71	79	**1LE1003-1DC2■-■■■■**	95	0.132
11	**12.6**	**160 L**	980	107		90.3	90.8	90.2	0.80	22	2.9	6.8	2.8	66	74	**1LE1003-1DC4■-■■■■**	106	0.164
15	**18**	**180 L**	975	147	IE2	91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1003-1EC4■-■■■■**	130	0.19
18.5	**22**	**200 L**	978	181	IE2	91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1003-2AC4■-■■■■**	166	0.28
22	**26.5**	**200 L**	978	215	IE2	92.2	93.1	93.2	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1003-2AC5■-■■■■**	179	0.32
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
2.2	**2.55**	**132 S**	725	29		81.9	82.9	81.8	0.63	6.2	1.4	3.6	1.8	64	77	**1LE1003-1CD0■-■■■■**	56	0.038
3	**3.45**	**132 M**	725	40		83.5	84.2	82.7	0.61	8.5	1.5	3.8	2	64	77	**1LE1003-1CD2■-■■■■**	65	0.048
4	**4.55**	**160 M**	730	52		84.8	85.6	84.5	0.66	10.3	1.6	3.6	1.8	65	78	**1LE1003-1DD2■-■■■■**	72	0.065
5.5	**6.3**	**160 M**	730	72		86.2	86.9	85.7	0.66	14	1.6	3.8	1.9	65	78	**1LE1003-1DD3■-■■■■**	86	0.083
7.5	**8.6**	**160 L**	728	98		87.3	88.2	87.7	0.65	19.1	1.6	3.8	1.9	65	78	**1LE1003-1DD4■-■■■■**	110	0.116
11	**13.2**	**180 L**	725	145		88.6	89.7	89.6	0.74	24	2.1	5.1	2.4	61	74	**1LE1003-1ED4■-■■■■**	161	0.267
15	**18**	**200 L**	730	196		89.6	90.1	89.4	0.73	33.5	3	6.8	3.7	57	70	**1LE1003-2AD5■-■■■■**	212	0.420

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/115		■	

Special versions		Order code(s)
For options, see from page 2/118	**1LE1003- . . . . ■-■■■■ -Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1003 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	2955	36		91.2	91.7	91.8	0.86	20	2.5	9.4	4.1	71	80	**1LE1003-1CA6■-■■■■**	57	0.031
22	**25.3**	**160 L**	2950	71		92.7	93.4	93.3	0.91	37.5	2.8	8.7	4	70	82	**1LE1003-1DA6■-■■■■**	105	0.077
30	**33.5**	**180 L**	2950	97		93.3	93.9	93.9	0.88	53	2.6	8.6	3.9	67	80	**1LE1003-1EA6■-■■■■**	140	0.094
45	**51**	**200 L**	2950	146		94	94.3	94	0.87	79	2.5	7.1	3.2	77	84	**1LE1003-2AA6■-■■■■**	194	0.16
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	1470	71		91.4	91.9	91.5	0.8	21.5	2.6	7.7	3.6	64	76	**1LE1003-1CB6■-■■■■**	81	0.049
18.5	**21.3**	**160 L**	1470	195	IE2	93.6	94.2	94.1	0.79	59	2.8	7.8	3.7	68	75	**1LE1003-1DB6■-■■■■**	110	0.101
30	**34.5**	**180 L**	1470	195		93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1003-1EB6■-■■■■**	154	0.173
37	**42.5**	**200 L**	1475	240		93.9	94.3	94.2	0.81	70	3.1	8.1	3.5	65	72	**1LE1003-2AB6■-■■■■**	154	0.173
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
18.5	**22**	**180 L**	975	181		91.7	92.3	91.9	0.77	38	2.6	6.9	3.3	68	80	**1LE1003-1EC6■-■■■■**	150	0.247
30	**36**	**200 L**	978	293	IE2	92.9	93.7	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1003-2AC6■-■■■■**	220	0.434

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 3 temperature sensors	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/115		■	

Special versions		Order code(s)
For options, see from page 2/118	**1LE1003- . . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1083 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.0																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
3	3.45	100 L	2920	9.8		87.1	87.8	87.4	0.88	5.6	3.2	8.1	4.6	67	79	▲ 1LE1083-1AA4■-■■■■	26	0.0054
4	4.55	112 M	2920	10		88.1	88.7	88.2	0.89	7.4	2.5	8.7	4.0	69	81	▲ 1LE1083-1BA2■-■■■■	34	0.012
5.5	6.3	132 S	2950	13		89.2	89.6	88.9	0.91	9.8	2.1	9.7	3.6	72	79	▲ 1LE1083-1CA0■-■■■■	57	0.024
7.5	8.6	132 S	2960	18		90.1	90.9	90.7	0.92	13.1	2.1	8.3	4.0	68	80	▲ 1LE1083-1CA1■-■■■■	57	0.031
11	12.6	160 M	2950	24		91.2	91.5	90.7	0.90	19.3	2.5	8.5	3.4	79	86	▲ 1LE1083-1DA2■-■■■■	84	0.053
15	17.3	160 M	2955	36		91.9	91.9	91.0	0.87	27	2.8	8.8	4.3	70	82	▲ 1LE1083-1DA3■-■■■■	84	0.061
18.5	21.3	160 L	2960	48		92.4	92.9	92.6	0.92	32	2.8	9.7	3.8	78	85	▲ 1LE1083-1DA4■-■■■■	109	0.068
22	24.5	180 M	2960	60		92.7	93	92.4	0.89	39	2.3	7.5	3.5	67	80	▲ 1LE1083-1EA2■-■■■■	129	0.08
30	33.5	200 L	2950	71		93.3	93.6	93.3	0.87	53	2.5	7.0	3.3	68	81	▲ 1LE1083-2AA4■-■■■■	173	0.134
37	41.5	200 L	2955	97		93.7	93.9	93.5	0.88	65	2.5	7.1	3.2	68	81	▲ 1LE1083-2AA5■-■■■■	194	0.158
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
2.2	2.55	100 L	1465	14		86.7	87	85.9	0.83	4.4	3.2	8.4	4.4	60	72	▲ 1LE1083-1AB4■-■■■■	30	0.014
3	3.45	100 L	1460	19.6		87.7	88.4	87.8	0.84	5.9	2.4	8.5	3.4	68	75	▲ 1LE1083-1AB5■-■■■■	42	0.016
4	4.55	112 M	1460	26		88.6	89.6	89.4	0.85	7.7	2.1	7.5	3.0	67	74	▲ 1LE1083-1BB2■-■■■■	49	0.017
5.5	6.3	132 S	1470	36		89.6	90.1	89.7	0.82	10.8	2.9	8.5	3.7	64	76	▲ 1LE1083-1CB0■-■■■■	64	0.046
7.5	8.6	132 M	1465	49		90.4	91.1	90.8	0.84	14.3	2.6	8.2	3.7	64	76	▲ 1LE1083-1CB2■-■■■■	61	0.046
11	12.6	160 M	1475	71		91.4	91.8	91.2	0.84	21	2.6	7.6	3.4	65	77	▲ 1LE1083-1DB2■-■■■■	83	0.083
15	17.3	160 L	1480	97		92.1	92.4	92.0	0.85	28	2.9	8.1	3.3	67	74	▲ 1LE1083-1DB4■-■■■■	111	0.099
18.5	21.3	180 M	1470	120		92.6	93.1	93.0	0.82	35	2.5	7.2	3.3	66	73	▲ 1LE1083-1EB2■-■■■■	134	0.13
22	25.3	180 L	1470	143		93.0	93.4	93.1	0.83	41	2.3	6.8	3.3	62	75	▲ 1LE1083-1EB4■-■■■■	142	0.14
30	34.5	200 L	1470	195		93.6	94.3	94.5	0.84	55	2.6	7.3	3.1	59	72	▲ 1LE1083-2AB5■-■■■■	189	0.22
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
15	18	180 L	975	147		91.2	91.6	91.2	0.80	30	2.3	5.9	2.8	55	68	▲ 1LE1083-1EC4■-■■■■	130	0.19
18.5	22	200 L	978	181		91.7	92.1	91.9	0.79	37	2.5	5.6	2.6	58	71	▲ 1LE1083-2AC4■-■■■■	166	0.28
22	26.5	200 L	978	215		92.2	93.3	93.5	0.79	44	2.5	5.6	2.6	55	68	▲ 1LE1083-2AC5■-■■■■	179	0.32
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
11	13.2	180 L	725	145		88.6	89.5	89.2	0.74	24	2.1	5.1	2.4	62	75	▲ 1LE1083-1ED4■-■■■■	161	0.267
15	18	200 L	730	196		89.6	89.8	89.1	0.73	33	3.0	6.8	3.7	57	70	▲ 1LE1083-2AD5■-■■■■	212	0.420

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages [1] and more information, see from page 2/93			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [2]	**Standard**			A			–
With flange	IM B5 [2]	With additional charge			F			–
With flange	IM B14 [2]	With additional charge			K			–
For other types of construction and more information, see from page 2/99					■			. . .
Motor protection		Version						Order code
Without		**Standard**				A		–
PTC thermistor with 1 or 3 temperature sensors		With additional charge				B		–
For other motor protection and more information, see from page 2/112						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/115							■	
Special versions								Order code(s)
For options, see from page 2/118								1LE1083-. . . . ■-■■■■-Z . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1503 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
0.37	**0.43**	**71 M**	2850	1.2		73.8	73.3	69.7	0.76	0.95	3.5	5.8	3.5	52	63	**1LE1503-0CA2■-■■■■**	13	0.00045
0.55	**0.63**	**71 M**	2850	1.8		77.8	77.5	74.5	0.76	1.34	3.7	6.1	3.7	57	68	**1LE1503-0CA3■-■■■■**	15	0.00056
0.75	**0.86**	**80 M**	2850	2.5		80.7	82.2	81.9	0.86	1.56	2.6	6.2	3	60	71	**1LE1503-0DA2■-■■■■**	18	0.0011
1.1	**1.27**	**80 M**	2885	3.6		82.7	83.9	83.1	0.85	2.25	3	7.1	3.3	60	71	**1LE1503-0DA3■-■■■■**	21	0.0013
1.5	**1.75**	**90 S**	2910	4.9		84.2	84.6	83.2	0.86	3	2.7	8.1	4.2	65	77	**1LE1503-0EA0■-■■■■**	26	0.0021
2.2	**2.55**	**90 L**	2910	7.2		85.9	86.8	86.1	0.88	4.2	2.6	8.3	4	65	77	**1LE1503-0EA4■-■■■■**	32	0.0031
3	**3.45**	**100 L**	2920	9.8		87.1	87.9	87.5	0.88	5.6	3.2	8.1	4.6	71	79	**1LE1503-1AA4■-■■■■**	36	0.0054
4	**4.55**	**112 M**	2950	13		88.1	88.7	88.2	0.89	7.4	2.5	8.7	4	73	81	**1LE1503-1BA2■-■■■■**	45	0.012
5.5	**6.3**	**132 S**	2950	18		89.2	90.1	89.7	0.9	9.9	1.9	7.3	3.7	72	80	**1LE1503-1CA0■-■■■■**	58	0.024
7.5	**8.6**	**132 S**	2950	24.5		90.1	91	91	0.92	13.1	1.9	8.3	3.9	68	80	**1LE1503-1CA1■-■■■■**	73	0.031
11	**12.6**	**160 M**	2955	35.5		91.2	91	89.5	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1503-1DA2■-■■■■**	100	0.053
15	**17.3**	**160 M**	2960	48		91.9	91.9	91	0.87	27	2.8	8.8	4.3	74	82	**1LE1503-1DA3■-■■■■**	110	0.061
18.5	**21.3**	**160 L**	2955	60		92.4	92.8	92.4	0.9	32	2.8	9	4.2	70	82	**1LE1503-1DA4■-■■■■**	127	0.068
22	**24.5**	**180 M**	2950	71		92.7	93.2	92.9	0.89	38.5	2.3	7.5	3.5	67	80	**1LE1503-1EA2■-■■■■**	160	0.08
30	**33.5**	**200 L**	2955	97		93.3	93.5	92.9	0.87	53	2.5	7	3.3	67	80	**1LE1503-2AA4■-■■■■**	225	0.134
37	**41.5**	**200 L**	2955	120		93.7	94.2	94	0.88	65	2.5	7.1	3.2	67	80	**1LE1503-2AA5■-■■■■**	250	0.158
45	**51**	**225 M**	2960	145		94	94.5	94.4	0.89	78	2.4	6.9	3.3	73	87	**1LE1503-2BA2■-■■■■**	315	0.26
55	**62**	**250 M**	2975	177		94.3	94.5	93.9	0.89	95	2.3	6.7	3.1	73	87	**1LE1503-2CA2■-■■■■**	385	0.46
75	**84**	**280 S**	2975	241	IE2	94.7	94.8	94.1	0.89	128	2.4	6.8	3	74	88	**1LE1503-2DA0■-■■■■**	510	0.77
90	**101**	**280 M**	2975	289	IE2	95	95.1	94.6	0.9	152	2.4	7.2	3.1	74	88	**1LE1503-2DA2■-■■■■**	590	0.94
110	**123**	**315 S**	2982	352		95.2	95.4	94.9	0.91	183	2.4	7.1	3.1	75	89	**1LE1503-3AA0■-■■■■**	750	1.4
132	**148**	**315 M**	2982	423		95.4	95.5	95.2	0.91	220	2.5	7.2	3.1	75	89	**1LE1503-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	2982	512	IE2	95.6	95.7	95.2	0.92	265	2.8	7.8	3.3	77	91	**1LE1503-3AA4■-■■■■**	980	1.9
200	**224**	**315 L**	2982	640		95.8	95.9	95.5	0.92	330	2.5	7.2	3	77	91	**1LE1503-3AA5■-■■■■**	1150	2.3

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/96			**9**	**0**	. . .
Types of construction		Version			Order code
Without flange	IM B3 [3]	**Standard**		**A**	–
With flange	IM B5 [3]	With additional charge		**F**	–
For other types of construction and more information, see from page 2/103				■	. . .
Motor protection		Version			Order code
Without		**Standard**		**A**	–
PTC thermistor with 3 temperature sensors		With additional charge		**B**	–
For other motor protection and more information, see from page 2/113				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		**4**	
For other terminal box positions and more information, see from page 2/116				■	
Special versions					Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1503-. . . . ■-■■■■-Z**		**F90+. . .+. . .+. . .**
For options, see from page 2/125			**1LE1503-. . . . ■-■■■■-Z**		**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1503 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
0.25	**0.29**	**71 M**	1395	1.7		73.5	73.7	70.4	0.72	0.68	2.5	4.2	2.6	44	55	**1LE1503-0CB2■-■■■■**	13	0.00095
0.37	**0.43**	**71 M**	1410	2.5		77.3	76.8	73.2	0.7	0.99	3.1	4.8	3.1	56	67	**1LE1503-0CB3■-■■■■**	16	0.0014
0.55	**0.63**	**80 M**	1440	3.6		80.8	81.1	79.3	0.78	1.26	2.1	5.9	3.1	53	64	**1LE1503-0DB2■-■■■■**	18	0.0021
0.75	**0.86**	**80 M**	1450	4.9		82.5	82.3	79.9	0.75	1.75	2.7	7.1	3.9	53	64	**1LE1503-0DB3■-■■■■**	22	0.0029
1.1	**1.27**	**90 S**	1440	7.3		84.1	84.7	83.4	0.78	2.4	2.9	6.9	3.6	56	68	**1LE1503-0EB0■-■■■■**	25	0.0036
1.5	**1.75**	**90 L**	1445	9.9		85.3	86.0	85.2	0.80	3.15	2.9	7.3	3.5	60	68	**1LE1503-0EB4■-■■■■**	31	0.0049
2.2	**2.55**	**100 L**	1465	14.3	IE2	86.7	87.3	86.4	0.83	4.4	2.1	7.6	3.6	60	72	**1LE1503-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	20		87.7	88.4	88.2	0.83	5.9	2.3	7.3	3.7	60	72	**1LE1503-1AB5■-■■■■**	40	0.014
4	**4.55**	**112 M**	1460	26		88.6	89.2	88.6	0.82	7.9	2.4	7.1	3.7	58	70	**1LE1503-1BB2■-■■■■**	46	0.017
5.5	**6.3**	**132 S**	1470	36	IE2	89.6	90.1	89.5	0.84	10.5	2.1	7.2	3.4	64	76	**1LE1503-1CB0■-■■■■**	74	0.046
7.5	**8.6**	**132 M**	1470	49	IE2	90.4	91.1	90.8	0.84	14.3	2.4	7.4	3.5	64	76	**1LE1503-1CB2■-■■■■**	80	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.9	91.4	0.84	20.5	2.2	6.8	3.2	65	77	**1LE1503-1DB2■-■■■■**	109	0.083
15	**17.3**	**160 L**	1475	97		92.1	92.3	91.5	0.82	28.5	2.5	8.5	3.8	65	77	**1LE1503-1DB4■-■■■■**	127	0.099
18.5	**21.3**	**180 M**	1470	120		92.6	93.1	92.9	0.82	35	2.5	7.2	3.3	66	73	**1LE1503-1EB2■-■■■■**	165	0.13
22	**25.3**	**180 L**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	67	75	**1LE1503-1EB4■-■■■■**	170	0.14
30	**34.5**	**200 L**	1470	195	IE2	93.6	94	93.7	0.84	55	2.6	7.3	3.1	65	72	**1LE1503-2AB5■-■■■■**	240	0.22
37	**42.5**	**225 S**	1478	239	IE2	93.9	94.5	94.4	0.86	66	2.5	6.4	2.7	65	78	**1LE1503-2BB0■-■■■■**	285	0.42
45	**52**	**225 M**	1478	291	IE2	94.2	94.9	95	0.86	80	2.6	6.6	2.6	66	79	**1LE1503-2BB2■-■■■■**	340	0.52
55	**63**	**250 M**	1482	354	IE2	94.6	95.1	95	0.87	96	2.5	6.8	2.9	66	79	**1LE1503-2CB2■-■■■■**	420	0.85
75	**86**	**280 S**	1485	482	IE2	95	95.3	95	0.86	133	2.5	6.9	3	69	83	**1LE1503-2DB0■-■■■■**	570	1.4
90	**104**	**280 M**	1485	579	IE2	95.2	95.5	95.3	0.87	157	2.6	7.2	3	70	84	**1LE1503-2DB2■-■■■■**	670	1.7
110	**127**	**315 S**	1488	706		95.4	95.8	95.5	0.87	191	2.6	6.8	2.9	70	84	**1LE1503-3AB0■-■■■■**	760	2.2
132	**152**	**315 M**	1490	846		95.6	95.9	95.9	0.87	230	2.8	7.3	3	73	87	**1LE1503-3AB2■-■■■■**	960	2.9
160	**184**	**315 L**	1490	1025		95.8	96.1	96.1	0.87	275	2.9	7.3	3.1	73	87	**1LE1503-3AB4■-■■■■**	990	3.1
200	**230**	**315 L**	1488	1284	IE2	96	96.3	96.1	0.88	340	3.2	7.4	3	73	87	**1LE1503-3AB5■-■■■■**	1190	3.7

Voltages [2]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
50 Hz 500 VY		Without additional charge	**2**	**7**		–
50 Hz 500 VΔ		Without additional charge	**4**	**0**		–
For other voltages [1] and more information, see from page 2/96			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**			**A**	–
With flange	IM B5 [3]	With additional charge			**F**	–
For other types of construction and more information, see from page 2/103					■	. . .
Motor protection		Version				Order code
Without		**Standard**			**A**	–
PTC thermistor with 3 temperature sensors		With additional charge			**B**	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 2/116					■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1503- . . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1503- . . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1503 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
0.18	**0.21**	**71 M**	885	1.9		63.9	64.8	60.8	0.69	0.59	2.3	2.8	2.3	39	50	**1LE1503-0CC2■-■■■■**	13	0.0010
0.25	**0.29**	**71 M**	885	2.7		68.6	69.5	66.2	0.69	0.76	2.6	3.2	2.6	46	57	**1LE1503-0CC3■-■■■■**	16	0.0015
0.37	**0.43**	**80 M**	940	3.8		73.5	73.1	69.4	0.66	1.1	2.3	4.2	2.7	42	53	**1LE1503-0DC2■-■■■■**	19	0.0025
0.55	**0.63**	**80 M**	935	5.6		77.2	77	73.9	0.67	1.53	2.5	4.5	2.8	42	53	**1LE1503-0DC3■-■■■■**	22	0.0031
0.75	**0.86**	**90 S**	945	7.6		78.9	80	78.8	0.7	1.96	2.2	4.6	2.6	43	55	**1LE1503-0EC0■-■■■■**	26	0.0040
1.1	**1.27**	**90 L**	950	11	IE1	81.0	81.4	79.3	0.66	2.95	2.8	5	3	60	68	**1LE1503-0EC4■-■■■■**	32	0.0052
1.5	**1.75**	**100 L**	970	14.8	IE2	82.5	83.1	81.5	0.73	3.6	1.9	5.2	2.8	59	71	**1LE1503-1AC4■-■■■■**	36	0.011
2.2	**2.55**	**112 M**	970	22	IE2	84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1503-1BC2■-■■■■**	53	0.017
3	**3.45**	**132 S**	975	29		85.6	86.1	84.9	0.73	6.9	2.3	6.6	3.2	56	66	**1LE1503-1CC0■-■■■■**	60	0.034
4	**4.55**	**132 M**	975	39		86.8	87.1	86.2	0.73	9.1	2.2	6.2	3	67	75	**1LE1503-1CC2■-■■■■**	64	0.039
5.5	**6.3**	**132 M**	975	54		88.0	88.3	87.2	0.72	12.5	2.7	6.8	3.4	64	72	**1LE1503-1CC3■-■■■■**	76	0.050
7.5	**8.6**	**160 M**	985	73		89.1	89.5	88.6	0.81	15	2.3	7.9	3.2	71	79	**1LE1503-1DC2■-■■■■**	124	0.132
11	**12.6**	**160 L**	980	107		90.3	90.8	90.2	0.80	22	2.9	6.8	2.8	66	74	**1LE1503-1DC4■-■■■■**	138	0.164
15	**18**	**180 L**	975	147	IE2	91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1503-1EC4■-■■■■**	180	0.19
18.5	**22**	**200 L**	978	181	IE2	91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1503-2AC4■-■■■■**	215	0.28
22	**26.5**	**200 L**	978	215	IE2	92.2	93.1	93.2	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1503-2AC5■-■■■■**	230	0.32
30	**36**	**225 M**	982	292	IE2	92.9	93.6	93.5	0.83	56	2.6	6.6	3	64	77	**1LE1503-2BC2■-■■■■**	325	0.67
37	**44.5**	**250 M**	985	359	IE2	93.3	94	94	0.85	67	2.7	7	2.9	62	75	**1LE1503-2CC2■-■■■■**	405	1
45	**54**	**280 S**	988	435	IE2	93.7	94.3	94.2	0.85	82	3	6.8	2.8	60	74	**1LE1503-2DC0■-■■■■**	510	1.4
55	**66**	**280 M**	988	532	IE2	94.1	94.5	94.4	0.85	99	3.3	7.2	3	65	79	**1LE1503-2DC2■-■■■■**	560	1.64
75	**90**	**315 S**	990	723		94.6	94.9	94.4	0.84	136	2.6	7.5	3.1	63	78	**1LE1503-3AC0■-■■■■**	750	2.6
90	**108**	**315 M**	991	867	IE2	94.9	95.2	94.9	0.85	161	2.5	6.7	2.8	63	78	**1LE1503-3AC2■-■■■■**	890	3.1
110	**132**	**315 L**	991	1060		95.1	95.5	95.3	0.84	199	2.8	7.2	3	63	78	**1LE1503-3AC4■-■■■■**	990	3.9
132	**158**	**315 L**	992	1271	IE2	95.4	95.7	95.4	0.82	245	3.3	8	3.3	66	81	**1LE1503-3AC5■-■■■■**	1130	4.48
160	**192**	**315 L**	992	1540	IE2	95.6	95.8	95.5	0.82	295	3.5	8.5	3.6	66	81	**1LE1503-3AC6■-■■■■**	1260	5.41

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/96			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	A	–
With flange	IM B5 [3]	With additional charge	F	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 3 temperature sensors	With additional charge	B	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions			Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1503-. . . . ■-■■■■**	-Z	F90+. . .+. . .+. . .
For options, see from page 2/125	**1LE1503-. . . . ■-■■■■**	-Z	. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1603 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
3	**3.45**	**100 L**	2920	9.8		87.1	87.9	87.5	0.88	5.6	3.2	8.1	4.6	67	79	**1LE1603-1AA4■-■■■■**	36	0.0054
4	**4.55**	**112 M**	2950	13		88.1	88.7	88.2	0.89	7.4	2.5	8.7	4	69	81	**1LE1603-1BA2■-■■■■**	45	0.012
5.5	**6.3**	**132 S**	2950	18		89.2	90.1	89.7	0.9	9.9	1.9	7.3	3.7	68	80	**1LE1603-1CA0■-■■■■**	58	0.024
7.5	**8.6**	**132 S**	2950	24.5		90.1	91	91	0.92	13.1	1.9	8.3	3.9	68	80	**1LE1603-1CA1■-■■■■**	73	0.031
11	**12.6**	**160 M**	2955	35.5		91.2	91	89.5	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1603-1DA2■-■■■■**	100	0.053
15	**17.3**	**160 M**	2960	48		91.9	91.9	91	0.87	27	2.8	8.8	4.3	74	82	**1LE1603-1DA3■-■■■■**	110	0.061
18.5	**21.3**	**160 L**	2955	60		92.4	92.8	92.4	0.9	32	2.8	9	4.2	70	82	**1LE1603-1DA4■-■■■■**	127	0.068
22	**24.5**	**180 M**	2950	71		92.7	93.2	92.9	0.89	38.5	2.3	7.5	3.5	67	80	**1LE1603-1EA2■-■■■■**	160	0.08
30	**33.5**	**200 L**	2955	97		93.3	93.5	92.9	0.87	53	2.5	7	3.3	67	80	**1LE1603-2AA4■-■■■■**	225	0.134
37	**41.5**	**200 L**	2955	120		93.7	94.2	94	0.88	65	2.5	7.1	3.2	67	80	**1LE1603-2AA5■-■■■■**	250	0.158
45	**51**	**225 M**	2960	145		94	94.5	94.4	0.89	78	2.4	6.9	3.3	73	87	**1LE1603-2BA2■-■■■■**	315	0.26
55	**62**	**250 M**	2975	177		94.3	94.5	93.9	0.89	95	2.3	6.7	3.1	73	87	**1LE1603-2CA2■-■■■■**	385	0.46
75	**84**	**280 S**	2975	241	IE2	94.7	94.8	94.1	0.89	128	2.4	6.8	3	74	88	**1LE1603-2DA0■-■■■■**	510	0.77
90	**101**	**280 M**	2975	289	IE2	95	95.1	94.6	0.9	152	2.4	7.2	3.1	74	88	**1LE1603-2DA2■-■■■■**	590	0.94
110	**123**	**315 S**	2982	352		95.2	95.4	94.9	0.91	183	2.4	7.1	3.1	75	89	**1LE1603-3AA0■-■■■■**	750	1.4
132	**148**	**315 M**	2982	423		95.4	95.5	95.2	0.91	220	2.5	7.2	3.1	75	89	**1LE1603-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	2982	512	IE2	95.6	95.7	95.2	0.92	265	2.8	7.8	3.3	77	91	**1LE1603-3AA4■-■■■■**	980	1.9
200	**224**	**315 L**	2982	640		95.8	95.9	95.5	0.92	330	2.5	7.2	3	77	91	**1LE1603-3AA5■-■■■■**	1150	2.3

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/96			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	A	–
With flange	IM B5 [3]	With additional charge	F	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Line	Version		Order code
PTC thermistor with 3 temperature sensors		**Standard**	B	–
For other motor protection and more information, see from page 2/113			■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1603-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1603-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1603 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
2.2	**2.55**	**100 L**	1465	14.3	IE2	86.7	87.3	86.4	0.83	4.4	2.1	7.6	3.6	60	72	**1LE1603-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	20		87.7	88.4	88.2	0.83	5.9	2.3	7.3	3.7	60	72	**1LE1603-1AB5■-■■■■**	40	0.014
4	**4.55**	**112 M**	1460	26		88.6	89.2	88.6	0.82	7.9	2.4	7.1	3.7	58	70	**1LE1603-1BB2■-■■■■**	46	0.017
5.5	**6.3**	**132 S**	1470	36	IE2	89.6	90.1	89.5	0.84	10.5	2.1	7.2	3.4	64	76	**1LE1603-1CB0■-■■■■**	74	0.046
7.5	**8.6**	**132 M**	1470	49	IE2	90.4	91.1	90.8	0.84	14.3	2.4	7.4	3.5	64	76	**1LE1603-1CB2■-■■■■**	80	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.9	91.4	0.84	20.5	2.2	6.8	3.2	65	77	**1LE1603-1DB2■-■■■■**	109	0.083
15	**17.3**	**160 L**	1475	97		92.1	92.3	91.5	0.82	28.5	2.5	8.5	3.8	65	77	**1LE1603-1DB4■-■■■■**	127	0.099
18.5	**21.3**	**180 M**	1470	120		92.6	93.1	92.9	0.82	35	2.5	7.2	3.3	66	73	**1LE1603-1EB2■-■■■■**	165	0.13
22	**25.3**	**180 L**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	67	75	**1LE1603-1EB4■-■■■■**	170	0.14
30	**34.5**	**200 L**	1470	195	IE2	93.6	94	93.7	0.84	55	2.6	7.3	3.1	65	72	**1LE1603-2AB5■-■■■■**	240	0.22
37	**42.5**	**225 S**	1478	239	IE2	93.9	94.5	94.4	0.86	66	2.5	6.4	2.7	65	78	**1LE1603-2BB0■-■■■■**	285	0.42
45	**52**	**225 M**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	67	75	**1LE1603-2BB2■-■■■■**	340	0.52
55	**63**	**250 M**	1482	354	IE2	94.6	95.1	95	0.87	96	2.5	6.8	2.9	66	79	**1LE1603-2CB2■-■■■■**	420	0.85
75	**86**	**280 S**	1485	482	IE2	95	95.3	95	0.86	133	2.5	6.9	3	69	83	**1LE1603-2DB0■-■■■■**	570	1.4
90	**104**	**280 M**	1485	579	IE2	95.2	95.5	95.3	0.87	157	2.6	7.2	3	70	84	**1LE1603-2DB2■-■■■■**	670	1.7
110	**127**	**315 S**	1488	706		95.4	95.8	95.5	0.87	191	2.6	6.8	2.9	70	84	**1LE1603-3AB0■-■■■■**	760	2.2
132	**152**	**315 M**	1490	846		95.6	95.9	95.9	0.87	230	2.8	7.3	3	73	87	**1LE1603-3AB2■-■■■■**	960	2.9
160	**184**	**315 L**	1490	1025		95.8	96.1	96.1	0.87	275	2.9	7.3	3.1	73	87	**1LE1603-3AB4■-■■■■**	990	3.1
200	**230**	**315 L**	1488	1284	IE2	96	96.3	96.1	0.88	340	3.2	7.4	3	73	87	**1LE1603-3AB5■-■■■■**	1190	3.7

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/96			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	**A**	–
With flange	IM B5 [3]	With additional charge	**F**	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Line	Version		Order code
PTC thermistor with 3 temperature sensors		**Standard**	**A**	–
For other motor protection and more information, see from page 2/113			■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1603- . . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1603- . . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1603 – Performance Line Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
1.5	**1.75**	**100 L**	970	14.8	IE2	82.5	83.1	81.5	0.73	3.6	1.9	5.2	2.8	59	71	**1LE1603-1AC4■-■■■■**	36	0.011
2.2	**2.55**	**112 M**	970	22	IE2	84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1603-1BC2■-■■■■**	53	0.017
3	**3.45**	**132 S**	975	29		85.6	86.1	84.9	0.73	6.9	2.3	6.6	3.2	53	66	**1LE1603-1CC0■-■■■■**	60	0.034
4	**4.55**	**132 M**	975	39		86.8	87.1	86.2	0.73	9.1	2.2	6.2	3	62	75	**1LE1603-1CC2■-■■■■**	64	0.039
5.5	**6.3**	**132 M**	975	54		88.0	88.3	87.2	0.72	12.5	2.7	6.8	3.4	59	72	**1LE1603-1CC3■-■■■■**	76	0.050
7.5	**8.6**	**160 M**	985	73		89.1	89.5	88.6	0.81	15	2.3	7.9	3.2	66	79	**1LE1603-1DC2■-■■■■**	124	0.132
11	**12.6**	**160 L**	980	107		90.3	90.8	90.2	0.80	22	2.9	6.8	2.8	61	74	**1LE1603-1DC4■-■■■■**	138	0.164
15	**18**	**180 L**	975	147	IE2	91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1603-1EC4■-■■■■**	180	0.19
18.5	**22**	**200 L**	978	181	IE2	91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1603-2AC4■-■■■■**	215	0.28
22	**26.5**	**200 L**	978	215	IE2	92.2	93.1	93.2	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1603-2AC5■-■■■■**	230	0.32
30	**36**	**225 M**	982	292	IE2	92.9	93.6	93.5	0.83	56	2.6	6.6	3	64	77	**1LE1603-2BC2■-■■■■**	325	0.67
37	**44.5**	**250 M**	985	359	IE2	93.3	94	94	0.85	67	2.7	7	2.9	62	75	**1LE1603-2CC2■-■■■■**	405	1
45	**54**	**280 S**	988	435	IE2	93.7	94.3	94.2	0.85	82	3	6.8	2.8	60	74	**1LE1603-2DC0■-■■■■**	510	1.4
55	**66**	**280 M**	988	532	IE2	94.1	94.5	94.4	0.85	99	3.3	7.2	3	65	79	**1LE1603-2DC2■-■■■■**	560	1.64
75	**90**	**315 S**	990	723		94.6	94.9	94.4	0.84	136	2.6	7.5	3.1	63	78	**1LE1603-3AC0■-■■■■**	750	2.6
90	**108**	**315 M**	991	867	IE2	94.9	95.2	94.9	0.85	161	2.5	6.7	2.8	63	78	**1LE1603-3AC2■-■■■■**	890	3.1
110	**132**	**315 L**	991	1060		95.1	95.5	95.3	0.84	199	2.8	7.2	3	63	78	**1LE1603-3AC4■-■■■■**	990	3.9
132	**158**	**315 L**	992	1271	IE2	95.4	95.7	95.4	0.82	245	3.3	8	3.3	66	81	**1LE1603-3AC5■-■■■■**	1130	4.48
160	**192**	**315 L**	992	1540	IE2	95.6	95.8	95.5	0.82	295	3.5	8.5	3.6	66	81	**1LE1603-3AC6■-■■■■**	1260	5.41

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages [1] and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			A			–
With flange	IM B5 [3]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1603-. . . . ■-■■■■-Z**						**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1603-. . . . ■-■■■■-Z**						**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1603 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
2.2	**2.55**	**132 S**	725	29		81.9	82.9	81.8	0.63	6.2	1.4	3.6	1.8	64	77	**1LE1603-1CD0■-■■■■**	66	0.038
3	**3.45**	**132 M**	725	40		83.5	84.2	82.7	0.61	8.5	1.5	3.8	2	64	77	**1LE1603-1CD2■-■■■■**	78	0.048
4	**4.55**	**160 M**	730	52		84.8	85.6	84.5	0.66	10.3	1.6	3.6	1.8	65	78	**1LE1603-1DD2■-■■■■**	98	0.065
5.5	**6.3**	**160 M**	730	72		86.2	86.9	85.7	0.66	14	1.6	3.8	1.9	65	78	**1LE1603-1DD3■-■■■■**	110	0.083
7.5	**8.6**	**160 L**	728	98		87.3	88.2	87.7	0.65	19.1	1.6	3.8	1.9	65	78	**1LE1603-1DD4■-■■■■**	135	0.116
11	**13.2**	**180 L**	725	145		88.6	89.7	89.6	0.74	24	2.1	5.1	2.4	61	74	**1LE1603-1ED4■-■■■■**	190	0.267
15	**18**	**200 L**	730	196		89.6	90.1	89.4	0.73	33.5	3	6.8	3.7	57	70	**1LE1603-2AD5■-■■■■**	255	0.420
18.5	**22**	**225 S**	732	241		90.1	90.6	90	0.75	39.5	2.5	5.9	3	56	70	**1LE1603-2BD0■-■■■■**	270	0.50
22	**26.5**	**225 M**	732	287		90.6	91.4	91.2	0.77	45.5	2.6	5.9	2.9	56	70	**1LE1603-2BD2■-■■■■**	280	0.55
30	**36**	**250 M**	735	390		91.3	91.8	91.5	0.79	60	2.6	6.1	3	60	74	**1LE1603-2CD2■-■■■■**	370	0.86
37	**44.5**	**280 S**	736	480		91.8	92.5	92.4	0.78	75	2.3	5.4	2.4	63	77	**1LE1603-2DD0■-■■■■**	460	1.1
45	**54**	**280 M**	738	582	IE2	92.2	92.8	92.6	0.8	88	2.5	5.9	2.5	65	79	**1LE1603-2DD2■-■■■■**	550	1.6
55	**66**	**315 S**	740	710		92.5	92.9	92.6	0.81	106	2.3	6	2.7	66	81	**1LE1603-3AD0■-■■■■**	650	2.0
75	**90**	**315 M**	738	970		93.1	93.5	93.3	0.81	144	2.3	5.9	2.7	69	84	**1LE1603-3AD2■-■■■■**	720	2.5
90	**108**	**315 L**	740	1161		93.4	94.2	94.3	0.83	168	2.2	5.8	2.5	71	85	**1LE1603-3AD4■-■■■■**	860	3.1
110	**132**	**315 L**	740	1419		93.7	94.2	94.1	0.82	205	2.7	6.7	2.9	74	88	**1LE1603-3AD5■-■■■■**	980	3.9
132	**158**	**315 L**	740	1703		94	94.4	94.1	0.81	250	2.9	7.2	3.3	76	90	**1LE1603-3AD6■-■■■■**	1160	4.6

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1603-. . . . ■-■■■■**					**-Z F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1603-. . . . ■-■■■■**					**-Z** . . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1503 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	2955	36		91.2	91.7	91.8	0.86	20	2.5	9.4	4.1	72	80	**1LE1503-1CA6■-■■■■**	80	0.031
22	**25.3**	**160 L**	2950	71		92.7	93.4	93.3	0.91	37.5	2.8	8.7	4	70	82	**1LE1503-1DA6■-■■■■**	137	0.077
30	**33.5**	**180 L**	2950	97		93.3	93.9	93.9	0.88	53	2.6	8.6	3.9	67	80	**1LE1503-1EA6■-■■■■**	173	0.094
45	**51**	**200 L**	2950	146		94	94.3	94	0.87	79	2.5	7.1	3.2	77	84	**1LE1503-2AA6■-■■■■**	245	0.16
55	**62**	**225 M**	2965	177		94.3	94.6	94.4	0.88	96	2.8	8	3.7	76	89	**1LE1503-2BA6■-■■■■**	370	0.31
75	**84**	**250 M**	2970	241		94.7	94.9	94.5	0.9	127	2.2	6.8	2.9	78	92	**1LE1503-2CA6■-■■■■**	455	0.56
110	**123**	**280 M**	2975	353		95.2	95.4	95.1	0.91	183	2.5	7.7	3.2	78	92	**1LE1503-2DA6■-■■■■**	660	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	1470	71		91.4	91.9	91.5	0.8	21.5	2.6	7.7	3.6	64	76	**1LE1503-1CB6■-■■■■**	97	0.049
18.5	**21.3**	**160 L**	1475	120		92.6	92.4	91.1	0.76	38	2.8	8.3	4	65	74	**1LE1503-1DB6■-■■■■**	126	0.101
30	**34.5**	**180 L**	1470	195		93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1503-1EB6■-■■■■**	193	0.173
37	**42.5**	**200 L**	1475	240		93.9	94.3	94.2	0.81	70	3.1	8.1	3.5	65	72	**1LE1503-2AB6■-■■■■**	260	0.275
55	**63**	**225 M**	1478	355	IE2	94.6	95.3	95.5	0.86	98	2.8	6.5	2.7	70	83	**1LE1503-2BB6■-■■■■**	405	0.65
75	**86**	**250 M**	1486	482		95	95.2	94.8	0.85	134	3	7.9	3.4	70	83	**1LE1503-2CB6■-■■■■**	510	1.1
110	**127**	**280 M**	1486	707	IE2	95.4	95.5	95	0.85	196	3	8.3	3.4	73	87	**1LE1503-2DB6■-■■■■**	710	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
18.5	**22**	**180 L**	975	181		91.7	92.3	91.9	0.77	38	2.6	6.9	3.3	68	80	**1LE1503-1EC6■-■■■■**	185	0.247
30	**36**	**200 L**	978	293	IE2	92.9	93.7	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1503-2AC6■-■■■■**	264	0.434
37	**44.5**	**225 M**	982	360	IE2	93.3	93.9	93.7	0.81	71	3	7.1	3.2	65	79	**1LE1503-2BC6■-■■■■**	395	0.84
45	**54**	**250 M**	986	436	IE2	93.7	94.3	94.2	0.84	83	2.8	7	2.9	68	81	**1LE1503-2CC6■-■■■■**	480	1.3
75	**90**	**280 M**	988	725		94.6	95	94.8	0.83	138	3.7	8.6	3.3	68	81	**1LE1503-2DC6■-■■■■**	630	1.9

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/96			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	**A**	–
With flange	IM B5 [3]	With additional charge	**F**	–
With flange	IM B14 [3]	With additional charge	**K**	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 3 temperature sensors	With additional charge	**B**	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 2/116		■

Special versions	Order code(s)
For options, see from page 2/125	**1LE1503-. . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1603 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	2955	36		91.2	91.7	91.8	0.86	20	2.5	9.4	4.1	72	80	**1LE1603-1CA6■-■■■■**	80	0.031
22	**25.3**	**160 L**	2950	71		92.7	93.4	93.3	0.91	37.5	2.8	8.7	4	70	82	**1LE1603-1DA6■-■■■■**	137	0.077
30	**33.5**	**180 L**	2950	97		93.3	93.9	93.9	0.88	53	2.6	8.6	3.9	67	80	**1LE1603-1EA6■-■■■■**	173	0.094
45	**51**	**200 L**	2950	146		94	94.3	94	0.87	79	2.5	7.1	3.2	77	84	**1LE1603-2AA6■-■■■■**	245	0.16
55	**62**	**225 M**	2965	177		94.3	94.6	94.4	0.88	96	2.8	8	3.7	76	89	**1LE1603-2BA6■-■■■■**	370	0.31
75	**84**	**250 M**	2970	241		94.7	94.9	94.5	0.9	127	2.2	6.8	2.9	78	92	**1LE1603-2CA6■-■■■■**	455	0.56
110	**123**	**280 M**	2975	353		95.2	95.4	95.1	0.91	183	2.5	7.7	3.2	78	92	**1LE1603-2DA6■-■■■■**	660	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
11	**12.6**	**132 M**	1470	71		91.4	91.9	91.5	0.8	21.5	2.6	7.7	3.6	64	76	**1LE1603-1CB6■-■■■■**	97	0.049
18.5	**21.3**	**160 L**	1475	120		92.6	92.4	91.1	0.76	38	2.8	8.3	4	65	74	**1LE1603-1DB6■-■■■■**	126	0.101
30	**34.5**	**180 L**	1470	195		93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1603-1EB6■-■■■■**	193	0.173
37	**42.5**	**200 L**	1475	240		93.9	94.3	94.2	0.81	70	3.1	8.1	3.5	65	72	**1LE1603-2AB6■-■■■■**	260	0.275
55	**63**	**225 M**	1478	355	IE2	94.6	95.3	95.5	0.86	98	2.8	6.5	2.7	70	83	**1LE1603-2BB6■-■■■■**	405	0.65
75	**86**	**250 M**	1486	482		95	95.2	94.8	0.85	134	3	7.9	3.4	70	83	**1LE1603-2CB6■-■■■■**	510	1.1
110	**127**	**280 M**	1486	707	IE2	95.4	95.5	95	0.85	196	3	8.3	3.4	73	87	**1LE1603-2DB6■-■■■■**	710	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
18.5	**22**	**180 L**	975	181		91.7	92.3	91.9	0.77	38	2.6	6.9	3.3	68	80	**1LE1603-1EC6■-■■■■**	185	0.247
30	**36**	**200 L**	978	293	IE2	92.9	93.7	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1603-2AC6■-■■■■**	264	0.434
37	**44.5**	**225 M**	982	360	IE2	93.3	93.9	93.7	0.81	71	3	7.1	3.2	65	79	**1LE1603-2BC6■-■■■■**	395	0.84
45	**54**	**250 M**	986	436	IE2	93.7	94.3	94.2	0.84	83	2.8	7	2.9	68	81	**1LE1603-2CC6■-■■■■**	480	1.3
75	**90**	**280 M**	988	725		94.6	95	94.8	0.83	138	3.7	8.6	3.3	68	81	**1LE1603-2DC6■-■■■■**	630	1.9

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/96			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	A	–
With flange	IM B5 [3]	With additional charge	F	–
With flange	IM B14 [3]	With additional charge	K	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
PTC thermistor with 3 temperature sensors	**Standard**	B	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
For options, see from page 2/125	**1LE1603- . . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1583 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.0																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
3	3.45	100 L	2920	9.8		87.1	87.8	87.4	0.88	5.6	3.2	8.1	4.6	67	79	▲ 1LE1583-1AA4■-■■■■	37	0.0054
4	4.55	112 M	2920	10		88.1	88.7	88.2	0.89	7.4	2.5	8.7	4.0	69	81	▲ 1LE1583-1BA2■-■■■■	43	0.012
5.5	6.3	132 S	2950	13		89.2	89.6	88.9	0.91	9.8	2.1	9.7	3.6	72	79	▲ 1LE1583-1CA0■-■■■■	75	0.024
7.5	8.6	132 S	2960	18		90.1	90.9	90.7	0.92	13.1	2.1	8.3	4.0	68	80	▲ 1LE1583-1CA1■-■■■■	75	0.031
11	12.6	160 M	2950	24		91.2	91.5	90.7	0.90	19.3	2.5	8.5	3.4	79	86	▲ 1LE1583-1DA2■-■■■■	111	0.053
15	17.3	160 M	2955	36		91.9	91.9	91.0	0.87	27	2.8	8.8	4.3	70	82	▲ 1LE1583-1DA3■-■■■■	111	0.061
18.5	21.3	160 L	2960	48		92.4	92.9	92.6	0.92	32	2.8	9.7	3.8	78	85	▲ 1LE1583-1DA4■-■■■■	131	0.068
22	24.5	180 M	2960	60		92.7	93	92.4	0.89	39	2.3	7.5	3.5	67	80	▲ 1LE1583-1EA2■-■■■■	160	0.08
30	33.5	200 L	2950	71		93.3	93.6	93.3	0.87	53	2.5	7.0	3.3	68	81	▲ 1LE1583-2AA4■-■■■■	225	0.134
37	41.5	200 L	2955	97		93.7	93.9	93.5	0.88	65	2.5	7.1	3.2	68	81	▲ 1LE1583-2AA5■-■■■■	250	0.158
45	51	225 M	2960	145		94.0	94.5	94.4	0.89	78	2.4	6.9	3.3	73	87	▲ 1LE1583-2BA2■-■■■■	315	0.26
55	62	250 M	2975	177		94.3	94.5	94	0.89	95	2.1	7.0	3.0	73	87	▲ 1LE1583-2CA2■-■■■■	385	0.46
75	84	280 S	2980	241		94.7	94.8	94.1	0.89	128	2.6	8.7	3.5	73	87	▲ 1LE1583-2DA0■-■■■■	610	0.94
90	101	280 M	2980	289		95.0	95.2	94.8	0.90	152	2.7	8.4	3.2	77	91	▲ 1LE1583-2DA2■-■■■■	620	1.0
110	123	315 S	2982	352		95.2	95.4	95	0.91	183	2.2	7.5	2.9	75	89	▲ 1LE1583-3AA0■-■■■■	750	1.4
132	148	315 M	2984	423		95.4	95.6	95.3	0.9	220	2.7	8.4	3.3	77	91	▲ 1LE1583-3AA2■-■■■■	980	1.9
160	180	315 L	2982	512		95.6	95.7	95.1	0.91	265	2.6	8.5	3.3	77	91	▲ 1LE1583-3AA4■-■■■■	980	1.9
200	225	315 L	2986	640		95.8	95.9	95.5	0.92	330	3.9	10.1	3.6	78	93	▲ 1LE1583-3AA5■-■■■■	1180	2.4

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages [1] and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			A			–
With flange	IM B5 [3]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						
Without		**Standard**				A		–
PTC thermistor with 3 temperature sensors		With additional charge				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1583- . . . . ■-■■■■-Z	F90+. . .+. . .+. . .
For options, see from page 2/125	1LE1583- . . . . ■-■■■■-Z	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1583 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.0																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
2.2	**2.55**	**100 L**	1465	14		86.7	87	85.9	0.83	4.4	3.2	8.4	4.4	60	72	▲ **1LE1583-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	19.6		87.7	88.4	87.8	0.84	5.9	2.4	8.5	3.4	68	75	▲ **1LE1583-1AB5■-■■■■**	52	0.016
4	**4.55**	**112 M**	1460	26		88.6	89.6	89.4	0.85	7.7	2.1	7.5	3.0	67	74	▲ **1LE1583-1BB2■-■■■■**	60	0.017
5.5	**6.3**	**132 S**	1470	36		89.6	90.1	89.7	0.82	10.8	2.9	8.5	3.7	64	76	▲ **1LE1583-1CB0■-■■■■**	67	0.046
7.5	**8.6**	**132 M**	1465	49		90.4	91.1	90.8	0.84	14.3	2.6	8.2	3.7	64	76	▲ **1LE1583-1CB2■-■■■■**	82	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.8	91.2	0.84	21	2.6	7.6	3.4	65	77	▲ **1LE1583-1DB2■-■■■■**	110	0.083
15	**17.3**	**160 L**	1480	97		92.1	92.4	92.0	0.85	28	2.9	8.1	3.3	67	74	▲ **1LE1583-1DB4■-■■■■**	137	0.099
18.5	**21.3**	**180 M**	1470	120		92.6	93.1	93.0	0.82	35	2.5	7.2	3.3	66	73	▲ **1LE1583-1EB2■-■■■■**	165	0.13
22	**25.3**	**180 L**	1470	143		93.0	93.4	93.1	0.83	41	2.3	6.8	3.3	62	75	▲ **1LE1583-1EB4■-■■■■**	170	0.14
30	**34.5**	**200 L**	1470	195		93.6	94.3	94.5	0.84	55	2.6	7.3	3.1	59	72	▲ **1LE1583-2AB5■-■■■■**	240	0.22
37	**42.5**	**225 S**	1482	238		93.9	94.3	94	0.84	68	3.2	8.3	3.1	69	83	▲ **1LE1583-2BB0■-■■■■**	380	0.52
45	**52**	**225 M**	1484	290		94.2	94.6	94.4	0.84	82	3.4	8.3	3.2	69	83	▲ **1LE1583-2BB2■-■■■■**	450	0.65
55	**63**	**250 M**	1486	353		94.6	94.9	94.4	0.86	98	3.0	8.3	3.3	68	82	▲ **1LE1583-2CB2■-■■■■**	525	1.1
75	**86**	**280 S**	1488	481		95.0	95.1	94.5	0.85	134	3.4	9.6	3.7	69	83	▲ **1LE1583-2DB0■-■■■■**	670	1.7
90	**104**	**280 M**	1486	578		95.2	95.5	95.3	0.86	159	2.5	7.5	3.0	70	84	▲ **1LE1583-2DB2■-■■■■**	705	1.7
110	**127**	**315 M [4]**	1491	705		95.4	95.6	95.3	0.86	194	3.3	9.0	3.2	73	87	▲ **1LE1583-3AB0■-■■■■**	950	2.7
132	**152**	**315 M**	1491	845		95.6	95.9	95.8	0.86	230	3.3	8.6	3.3	73	87	▲ **1LE1583-3AB2■-■■■■**	990	3.1
160	**184**	**315 L**	1490	1025		95.8	96.2	96.1	0.86	280	3.3	8.3	3.0	73	87	▲ **1LE1583-3AB4■-■■■■**	990	3.1
200	**230**	**315 L**	1490	1282		96.0	96.2	96	0.87	345	3.8	9.0	3.5	76	90	▲ **1LE1583-3AB5■-■■■■**	1300	4.4

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1583-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1583-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

[4] Version as 315 M (different from 315 S according to DIN EN 50347).

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1583 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency, service factor (SF) 1.0																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
15	**18**	**180 L**	975	147		91.2	91.6	91.2	0.80	30	2.3	5.9	2.8	55	68	▲ **1LE1583-1EC4■-■■■■**	180	0.19
18.5	**22**	**200 L**	978	181		91.7	92.1	91.9	0.79	37	2.5	5.6	2.6	58	71	▲ **1LE1583-2AC4■-■■■■**	215	0.28
22	**26.5**	**200 L**	978	215		92.2	93.3	93.5	0.79	44	2.5	5.6	2.6	55	68	▲ **1LE1583-2AC5■-■■■■**	230	0.32
30	**36**	**225 M**	982	292		92.9	93.7	93.7	0.81	58	2.6	7.0	2.9	65	79	▲ **1LE1583-2BC2■-■■■■**	435	0.82
37	**44.5**	**250 M**	986	358		93.3	94	94	0.84	68	2.8	7.5	2.9	68	81	▲ **1LE1583-2CC2■-■■■■**	520	1.3
45	**54**	**280 S**	990	434		93.7	94.2	94.1	0.84	83	3.1	8.0	3.0	60	74	▲ **1LE1583-2DC0■-■■■■**	600	1.6
55	**66**	**280 M**	988	532		94.1	94.8	94.9	0.84	100	3.2	8.6	3.0	68	81	▲ **1LE1583-2DC2■-■■■■**	670	1.9
75	**90**	**315 S**	992	722		94.6	95.0	94.7	0.84	136	2.4	7.5	2.8	63	78	▲ **1LE1583-3AC0■-■■■■**	930	3.1
90	**108**	**315 M**	992	866		94.9	95.3	95.1	0.84	163	2.8	7.9	3.0	63	78	▲ **1LE1583-3AC2■-■■■■**	990	3.9
110	**132**	**315 L**	993	1058		95.1	95.4	95.2	0.84	199	2.8	8.3	3.2	67	82	▲ **1LE1583-3AC4■-■■■■**	1160	4.3
132	**158**	**315 L**	993	1269		95.4	95.6	95.3	0.80	250	3.2	8.8	3.6	67	82	▲ **1LE1583-3AC5■-■■■■**	1160	4.6
160	**192**	**315 L**	992	1540		95.6	95.9	95.7	0.82	295	3.5	9.0	3.6	67	82	▲ **1LE1583-3AC6■-■■■■**	1270	5.4
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
11	**13.2**	**180 L**	725	145		88.6	89.5	89.2	0.74	24	2.1	5.1	2.4	62	75	▲ **1LE1583-1ED4■-■■■■**	190	0.19
15	**18**	**200 L**	730	196		89.6	89.8	89.1	0.73	33	3.0	6.8	3.7	57	70	▲ **1LE1583-2AD ■-■■■■**	255	0.28
18.5	**22**	**225 S**	732	241		90.1	91.3	91.3	0.74	40	2.4	5.9	2.9	56	70	▲ **1LE1583-2BD0■-■■■■**	270	0.50
22	**26.5**	**225 M**	732	287		90.6	91.8	92	0.77	45.5	2.4	6.0	2.8	56	70	▲ **1LE1583-2BD2■-■■■■**	280	0.55
30	**36**	**250 M**	734	390		91.3	92	91.8	0.78	61	2.5	6.4	2.9	60	74	▲ **1LE1583-2CD2■-■■■■**	370	0.86
37	**44.5**	**280 S**	736	480		91.8	93	93.3	0.78	75	2.2	5.6	2.3	63	77	▲ **1LE1583-2DD0■-■■■■**	460	1.1
45	**54**	**280 M**	738	582		92.2	93.2	93.5	0.81	87	2.4	6.2	2.4	65	79	▲ **1LE1583-2DD2■-■■■■**	550	1.6
55	**66**	**315 S**	740	710		92.5	93.5	93.7	0.80	107	2.2	6.2	2.6	66	81	▲ **1LE1583-3AD0■-■■■■**	650	2.0
75	**90**	**315 M**	738	971		93.1	94.1	94.4	0.80	145	2.2	6.0	2.6	69	84	▲ **1LE1583-3AD2■-■■■■**	720	2.5
90	**108**	**315 L**	738	1161		93.4	94.4	94.9	0.83	168	2.1	6.0	2.5	71	85	▲ **1LE1583-3AD4■-■■■■**	860	3.1
110	**132**	**315 L**	740	1419		93.7	94.5	94.9	0.80	210	2.5	6.7	2.9	74	88	▲ **1LE1583-3AD5■-■■■■**	960	3.9
132	**158**	**315 L**	741	1701		94.0	94.6	94.8	0.79	255	3.0	8.0	3.3	76	90	▲ **1LE1583-3AD6■-■■■■**	1250	5.5

Voltages [2]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
50 Hz 500 VY		Without additional charge	**2**	**7**		–
50 Hz 500 VΔ		Without additional charge	**4**	**0**		–
For other voltages [1] and more information, see from page 2/96			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**			**A**	–
With flange	IM B5 [3]	With additional charge			**F**	–
For other types of construction and more information, see from page 2/103					■	. . .
Motor protection		Version				Order code
Without		**Standard**			**A**	–
PTC thermistor with 3 temperature sensors		With additional charge			**B**	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 2/116					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1583- . . . . ■-■■■■-Z**				**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1583- . . . . ■-■■■■-Z**				**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1001 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
0.18	**0.21**	**63 M**	2850	0.6		60.4	59.4	53.7	0.78	0.55	2.2	4.5	2.7	57	64	**1LE1001-0BA2■-■■■■**	4	0.00022
0.25	**0.29**	**63 M**	2835	0.84		64.8	63.5	57.3	0.81	0.69	1.9	4.1	2.5	57	64	**1LE1001-0BA3■-■■■■**	5	0.00026
0.37	**0.43**	**71 M**	2770	1.3		69.5	70.5	67.9	0.81	0.95	2.5	4.1	2.5	58	69	**1LE1001-0CA2■-■■■■**	6	0.00035
0.55	**0.63**	**71 M**	2780	1.9		74.1	75.2	72.9	0.80	1.34	2.6	4.6	2.6	58	69	**1LE1001-0CA3■-■■■■**	7	0.00045
0.75	**0.86**	**80 M**	2805	2.6		77.4	80	80.1	0.84	1.67	1.9	4.9	2.3	60	71	**1LE1001-0DA2■-■■■■**	9	0.0008
1.1	**1.27**	**80 M**	2835	3.7		79.6	81.3	80.9	0.83	2.4	2.7	6	3.1	60	71	**1LE1001-0DA3■-■■■■**	11	0.0011
1.5	**1.75**	**90 S**	2885	4.9		81.3	81.7	79.8	0.84	3.15	2.7	6.9	3.6	65	77	**1LE1001-0EA0■-■■■■**	13	0.0017
2.2	**2.55**	**90 L**	2890	7.3		83.2	83.7	82	0.85	4.5	2.5	7.1	3.7	65	77	**1LE1001-0EA4■-■■■■**	15	0.0021
3	**3.45**	**100 L**	2905	9.9		84.6	85.5	84.6	0.84	6.1	2.3	7	3.3	67	79	**1LE1001-1AA4■-■■■■**	21	0.0044
4	**4.55**	**112 M**	2945	13		85.8	86.2	85.1	0.85	7.9	2.1	8	3.6	69	81	**1LE1001-1BA2■-■■■■**	27	0.0092
5.5	**6.3**	**132 S**	2950	18		87	88	87.6	0.87	10.5	1.8	6.6	2.9	68	80	**1LE1001-1CA0■-■■■■**	39	0.02
7.5	**8.6**	**132 S**	2950	24		88.1	88.5	87.6	0.87	14.1	2.2	7.5	3.1	68	80	**1LE1001-1CA1■-■■■■**	43	0.024
11	**12.6**	**160 M**	2955	36		89.4	89.3	88	0.87	20.5	2.1	7.4	3.2	70	82	**1LE1001-1DA2■-■■■■**	67	0.045
15	**17.3**	**160 M**	2955	48		90.3	90.7	90	0.88	27	2.4	7.6	3.4	70	82	**1LE1001-1DA3■-■■■■**	75	0.053
18.5	**21.3**	**160 L**	2955	60		90.9	91.3	90.6	0.88	33.5	2.9	7.9	3.6	70	82	**1LE1001-1DA4■-■■■■**	84	0.061
22	**24.5**	**180 M**	2940	71		91.3	91.8	91.3	0.87	40	2.7	7.4	3.6	77	84	**1LE1001-1EA2■-■■■■**	123	0.069
30	**33.5**	**200 L**	2960	97		92	92.3	91.8	0.87	54	2.5	6.9	3.3	78	85	**1LE1001-2AA4■-■■■■**	158	0.13
37	**41.5**	**200 L**	2960	119		92.5	93	92.7	0.88	66	2.7	7.4	3.5	78	85	**1LE1001-2AA5■-■■■■**	178	0.15

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	A	–
With flange	IM B5 [3]	With additional charge	F	–
With flange	IM B14 [3]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/115		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1001-. . . . ■-■■■■-Z**	**F90** +. . .+. . .+. . .
For options, see from page 2/118	**1LE1001-. . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) For converter operation of shaft heights 63 and 90, ordering with PTC thermistors and their connection to the converter is recommended.

3) Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1001 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
0.12	**0.14**	**63 M**	1390	0.82		59.1	56.4	49.0	0.66	0.44	2.4	3.1	2.5	50	58	**1LE1001-0BB2■-■■■■**	5	0.00037
0.18	**0.21**	**63 M**	1385	1.2		64.7	62.4	55.7	0.65	0.62	2.6	3.3	2.6	57	64	**1LE1001-0BB3■-■■■■**	5	0.00045
0.25	**0.29**	**71 M**	1395	1.7		68.5	68.4	64.2	0.69	0.76	2.4	3.7	2.5	50	61	**1LE1001-0CB2■-■■■■**	6	0.00076
0.37	**0.43**	**71 M**	1380	2.6		72.7	73.2	69.9	0.72	1.02	2.3	3.8	2.4	50	61	**1LE1001-0CB3■-■■■■**	7	0.00095
0.55	**0.63**	**80 M**	1440	3.6		77.1	76.8	73.7	0.74	1.39	2.2	5.3	3.1	53	64	**1LE1001-0DB2■-■■■■**	10	0.0017
0.75	**0.86**	**80 M**	1440	5		79.6	79.9	77.5	0.76	1.79	2.2	5.6	3.1	53	64	**1LE1001-0DB3■-■■■■**	11	0.0021
1.1	**1.27**	**90 S**	1425	7.4		81.4	81.8	80	0.78	2.5	2.3	5.6	2.9	56	68	**1LE1001-0EB0■-■■■■**	13	0.0028
1.5	**1.75**	**90 L**	1435	10		82.8	83.5	82.2	0.79	3.3	2.6	6.4	3.4	56	68	**1LE1001-0EB4■-■■■■**	16	0.0036
2.2	**2.55**	**100 L**	1455	14		84.3	85.1	84.2	0.81	4.65	2.1	6.9	3.3	60	72	**1LE1001-1AB4■-■■■■**	21	0.0086
3	**3.45**	**100 L**	1455	20		85.5	86.4	85.6	0.82	6.2	2	6.9	3.1	60	72	**1LE1001-1AB5■-■■■■**	25	0.011
4	**4.55**	**112 M**	1460	26		86.6	87.3	86.4	0.81	8.2	2.5	7.1	3.2	58	70	**1LE1001-1BB2■-■■■■**	29	0.014
5.5	**6.3**	**132 S**	1465	36		87.7	88.4	87.6	0.8	11.3	2.3	6.9	2.9	64	76	**1LE1001-1CB0■-■■■■**	42	0.027
7.5	**8.6**	**132 M**	1465	49		88.7	89.8	89.8	0.83	14.7	2.3	6.9	2.9	64	76	**1LE1001-1CB2■-■■■■**	49	0.034
11	**12.6**	**160 M**	1470	71		89.8	91	90.9	0.85	21	2.1	6.7	2.8	65	77	**1LE1001-1DB2■-■■■■**	71	0.065
15	**17.3**	**160 L**	1475	97		90.6	91.2	90.8	0.85	28	2.3	7.3	3	65	77	**1LE1001-1DB4■-■■■■**	83	0.083
18.5	**21.3**	**180 M**	1465	121		91.2	92	91.9	0.84	35	2.5	7.2	3.4	61	74	**1LE1001-1EB2■-■■■■**	128	0.12
22	**25.3**	**180 L**	1465	143		91.6	92.2	91.9	0.84	41.5	2.6	7.3	3.5	69	76	**1LE1001-1EB4■-■■■■**	132	0.13
30	**34.5**	**200 L**	1470	195		92.3	92.9	92.6	0.84	56	2.5	6.7	3.3	70	77	**1LE1001-2AB5■-■■■■**	173	0.2

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	A	–
With flange	IM B5 [3]	With additional charge	F	–
With flange	IM B14 [3]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/115		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1001-. . . . ■-■■■■-Z	F90 +. . .+. . .+. . .
For options, see from page 2/118	1LE1001-. . . . ■-■■■■-Z	. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) For converter operation of shaft heights 63 and 90, ordering with PTC thermistors and their connection to the converter is recommended.

3) Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

			Operating values at rated power												Aluminum series 1LE1001		
P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
0.37	**0.43**	**80 M**	925	3.8		67.6	67.9	64.4	0.69	1.14	2.1	4	2.4	42	53	**1LE1001-0DC2■-■■■■**	9	0.0017
0.55	**0.63**	**80 M**	935	5.6		73.1	73.8	70.8	0.66	1.65	2.5	4.4	2.9	42	53	**1LE1001-0DC3■-■■■■**	12	0.0025
0.75	**0.86**	**90 S**	935	7.7		75.9	76.8	74.5	0.7	2.05	2	4.1	2.5	43	55	**1LE1001-0EC0■-■■■■**	13	0.003
1.1	**1.27**	**90 L**	935	11	IE1	78.1	79.3	77.7	0.7	2.9	2.2	4.4	2.6	43	55	**1LE1001-0EC4■-■■■■**	16	0.004
1.5	**1.75**	**100 L**	970	15		79.8	80.5	79	0.73	3.7	2	5.4	2.8	59	71	**1LE1001-1AC4■-■■■■**	25	0.011
2.2	**2.55**	**112 M**	965	22		81.8	82.7	81.7	0.75	5.2	2	5	2.8	62	74	**1LE1001-1BC2■-■■■■**	29	0.014
3	**3.45**	**132 S**	970	30		83.3	83.4	81	0.72	7.2	1.6	5	2.5	63	75	**1LE1001-1CC0■-■■■■**	38	0.024
4	**4.55**	**132 M**	970	39		84.6	85.5	84.3	0.75	9.1	1.6	5	2.3	63	75	**1LE1001-1CC2■-■■■■**	43	0.029
5.5	**6.3**	**132 M**	970	54		86	87.1	86.4	0.76	12.1	1.9	5.6	2.6	63	75	**1LE1001-1CC3■-■■■■**	52	0.037
7.5	**8.6**	**160 M**	975	73		87.2	87.9	87.2	0.74	16.8	1.9	4.7	2.2	67	79	**1LE1001-1DC2■-■■■■**	77	0.075
11	**12.6**	**160 L**	975	108		88.7	89.7	89.3	0.76	23.5	1.9	4.8	2.2	67	79	**1LE1001-1DC4■-■■■■**	93	0.098
15	**18**	**180 L**	975	147		89.7	90.1	89.5	0.78	31	2.5	6	3.1	57	70	**1LE1001-1EC4■-■■■■**	121	0.17
18.5	**22**	**200 L**	978	181	IE1	90.4	91.4	91.3	0.82	36	2.4	5.8	2.6	63	76	**1LE1001-2AC4■-■■■■**	151	0.25
22	**26.5**	**200 L**	978	215	IE1	90.9	91.7	91.4	0.82	42.5	2.5	6.2	2.6	63	76	**1LE1001-2AC5■-■■■■**	173	0.3

Voltages		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
50 Hz 500 VY		Without additional charge	**2**	**7**		–
50 Hz 500 VΔ		Without additional charge	**4**	**0**		–
For other voltages [1] and more information, see from page 2/93			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**			**A**	–
With flange	IM B5 [3]	With additional charge			**F**	–
With flange	IM B14 [3]	With additional charge			**K**	–
For other types of construction and more information, see from page 2/99					■	. . .
Motor protection		Version				Order code
Without		**Standard**			**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)		With additional charge			**B**	–
For other motor protection and more information, see from page 2/112					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 2/115					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1001-. . . . ■-■■■■-Z**				**F90 +. . .+. . .+. . .**
For options, see from page 2/118		**1LE1001-. . . . ■-■■■■-Z**				**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) For converter operation of shaft heights 63 and 90, ordering with PTC thermistors and their connection to the converter is recommended.

3) Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1001 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
0.75	**0.86**	**100 L**	705	10		66.2	65.7	61.6	0.61	2.7	1.5	3.2	2.1	60	72	**1LE1001-1AD4■-■■■■**	21	0.0086
1.1	**1.27**	**100 L**	695	15		70.8	72.3	69.6	0.65	3.45	1.4	3.2	1.9	60	72	**1LE1001-1AD5■-■■■■**	25	0.011
1.5	**1.75**	**112 M**	725	20		74.1	73.9	71.2	0.63	4.65	1.6	4	2.4	63	75	**1LE1001-1BD2■-■■■■**	34	0.017
2.2	**2.55**	**132 S**	725	29		77.6	78.2	76.6	0.62	6.6	1.4	3.5	2	63	75	**1LE1001-1CD0■-■■■■**	46	0.034
3	**3.45**	**132 M**	720	40	IE1	80	80.7	79.2	0.62	8.7	1.4	3.7	2	63	75	**1LE1001-1CD2■-■■■■**	52	0.037
4	**4.55**	**160 M**	730	52		81.9	82.6	81.4	0.67	10.5	1.6	3.7	1.9	63	75	**1LE1001-1DD2■-■■■■**	69	0.065
5.5	**6.3**	**160 M**	730	72		83.8	84.2	83	0.67	14.1	1.7	3.9	2	63	75	**1LE1001-1DD3■-■■■■**	82	0.083
7.5	**8.6**	**160 L**	725	99		85.3	86.4	86	0.7	18.1	1.6	3.8	1.9	63	75	**1LE1001-1DD4■-■■■■**	94	0.098
11	**13.2**	**180 L**	720	146	IE1	86.9	88	87.6	0.7	26	2.3	4.9	2.6	72	80	**1LE1001-1ED4■-■■■■**	122	0.195
15	**18**	**200 L**	718	199		88	89.5	89.9	0.76	32.5	2.4	5.4	2.8	58	65	**1LE1001-2AD5■-■■■■**	172	0.344

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/93			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			**A**		–
With flange	IM B5 [2]	With additional charge			**F**		–
With flange	IM B14 [2]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1001-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/118	**1LE1001-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1001 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
1.5	**1.75**	**80 M**	2830	5.1		81.3	83.4	83.6	0.85	3.15	2.6	6.1	2.8	60	71	**1LE1001-0DA6■-■■■■**	11	0.0013
3	**3.45**	**90 L**	2895	9.9		84.6	85.5	84.5	0.86	6	3.4	7.9	3.6	65	77	**1LE1001-0EA6■-■■■■**	15	0.0031
4	**4.55**	**100 L**	2905	13		85.8	86.9	86.5	0.86	7.8	2.5	7.6	3.5	67	79	**1LE1001-1AA6■-■■■■**	26	0.0054
5.5	**6.3**	**112 M**	2945	18		87	87.8	87.4	0.88	10.4	2.3	8.5	3.8	69	81	**1LE1001-1BA6■-■■■■**	34	0.012
11	**12.6**	**132 M**	2950	36		89.4	90.1	89.9	0.89	20	2.3	7.9	3.2	68	80	**1LE1001-1CA6■-■■■■**	57	0.031
22	**25.3**	**160 L**	2955	71		91.3	91.8	91.4	0.89	39	3.1	8.4	3.7	70	82	**1LE1001-1DA6■-■■■■**	94	0.068
30	**33.5**	**180 L**	2940	97		92	92.6	92.3	0.89	53	2.3	7.8	3.4	76	83	**1LE1001-1EA6■-■■■■**	139	0.094
45	**51**	**200 L**	2950	146		92.9	93.2	92.9	0.87	81	2.5	7.1	3.2	77	84	**1LE1001-2AA6■-■■■■**	194	0.176
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
1.1	**1.27**	**80 M**	1440	7.3		81.4	82.1	80.7	0.78	2.5	2.4	6.1	3	53	64	**1LE1001-0DB6■-■■■■**	11	0.0029
2.2	**2.55**	**90 L**	1425	15	IE1	84.3	85.6	85	0.81	4.65	2.8	6.1	3.1	56	68	**1LE1001-0EB6■-■■■■**	16	0.0049
4	**4.55**	**100 L**	1460	26		86.6	88	87.5	0.8	8.3	2.2	7.5	3.5	60	72	**1LE1001-1AB6■-■■■■**	30	0.014
5.5	**6.3**	**112 M**	1460	36		87.7	88.2	87.2	0.81	11.2	2.5	7.1	3.2	58	70	**1LE1001-1BB6■-■■■■**	34	0.017
11	**12.6**	**132 M**	1465	72		89.8	90.9	90.9	0.84	21	2.6	7.7	3.1	64	76	**1LE1001-1CB6■-■■■■**	64	0.046
18.5	**21.3**	**160 L**	1475	120		91.2	91.8	91.3	0.85	34.5	2.5	7.7	3.3	65	77	**1LE1001-1DB6■-■■■■**	100	0.099
30	**34.5**	**180 L**	1465	196		92.3	93	92.9	0.81	58	2.5	7.3	3.3	70	77	**1LE1001-1EB6■-■■■■**	148	0.159
37	**42.5**	**200 L**	1470	240		92.7	93.5	93.6	0.84	69	2.4	7	3	68	75	**1LE1001-2AB6■-■■■■**	189	0.246

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/93			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	**A**	–
With flange	IM B5 [2]	With additional charge	**F**	–
With flange	IM B14 [2]	With additional charge	**K**	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)	With additional charge	**B**	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
For options, see from page 2/118	**1LE1001-. . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1001 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
2.2	**2.55**	**100 L**	965	22	IE1	81.8	83.3	82.7	0.76	5.1	1.7	4.9	2.5	59	71	**1LE1001-1AC6■-■■■■**	30	0.014
3	**3.45**	**112 M**	965	30		83.3	84	82.7	0.74	7	2.1	5.4	2.7	62	74	**1LE1001-1BC6■-■■■■**	34	0.017
7.5	**8.6**	**132 M**	970	74		87.2	88.1	87.1	0.75	16.6	2	5.6	2.6	63	75	**1LE1001-1CC6■-■■■■**	64	0.046
15	**17.3**	**160 L**	975	147	IE1	89.7	90.4	89.7	0.75	32	2	5.2	2.4	67	79	**1LE1001-1DC6■-■■■■**	115	0.12
18.5	**22**	**180 L**	975	181		90.4	90.9	90.5	0.77	38.5	2.3	6	2.9	67	80	**1LE1001-1EC6■-■■■■**	130	0.206
30	**34.5**	**200 L**	975	294		91.7	92.5	92.4	0.77	61	2.6	6.3	2.7	68	75	**1LE1001-2AC6■-■■■■**	192	0.381
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
15	**18**	**180 L**	720	199	IE1	88	89.2	89	0.73	33.5	2.2	4.9	2.5	67	75	**1LE1001-1ED6■-■■■■**	151	0.263
18.5	**22**	**200 L**	720	245	IE1	88.6	89.9	90.2	0.78	38.5	2.6	5.8	3	65	72	**1LE1001-2AD6■-■■■■**	198	0.416

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/93			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			**A**		–
With flange	IM B5 [2]	With additional charge			**F**		–
With flange	IM B14 [2]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
For options, see from page 2/118		**1LE1001-. . . . ■-■■■■-Z**					. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
0.37	**0.43**	**71 M**	2770	1.3	69.5	70.5	67.9	0.81	0.95	2.5	4.1	2.5	58	69	**1LE1501-0CA2■-■■■■**	11	0.00035
0.55	**0.63**	**71 M**	2780	1.9	74.1	75.2	72.9	0.8	1.34	2.6	4.6	2.6	58	69	**1LE1501-0CA3■-■■■■**	13	0.00045
0.75	**0.86**	**80 M**	2805	2.6	77.4	80	80.1	0.84	1.67	1.9	4.9	2.3	60	71	**1LE1501-0DA2■-■■■■**	16	0.0008
1.1	**1.27**	**80 M**	2835	3.7	79.6	81.3	80.9	0.83	2.4	2.7	6	3.1	60	71	**1LE1501-0DA3■-■■■■**	18	0.0011
1.5	**1.75**	**90 S**	2885	4.9	81.3	81.7	79.8	0.84	3.15	2.7	6.9	3.6	65	77	**1LE1501-0EA0■-■■■■**	23	0.0017
2.2	**2.55**	**90 L**	2890	7.3	83.2	83.7	82	0.85	4.5	2.5	7.1	3.7	65	77	**1LE1501-0EA4■-■■■■**	25	0.0021
3	**3.45**	**100 L**	2905	9.9	84.6	85.5	84.6	0.84	6.1	2.3	7	3.3	67	79	**1LE1501-1AA4■-■■■■**	32	0.0044
4	**4.55**	**112 M**	2945	13	85.8	86.2	85.1	0.85	7.9	2.1	8	3.6	69	81	**1LE1501-1BA2■-■■■■**	39	0.0092
5.5	**6.3**	**132 S**	2950	18	87	88	87.6	0.87	10.5	1.8	6.6	2.9	68	80	**1LE1501-1CA0■-■■■■**	57	0.02
7.5	**8.6**	**132 S**	2950	24	88.1	88.5	87.6	0.87	14.1	2.2	7.5	3.1	68	80	**1LE1501-1CA1■-■■■■**	61	0.024
11	**12.6**	**160 M**	2955	36	89.4	89.3	88	0.87	20.5	2.1	7.4	3.2	70	82	**1LE1501-1DA2■-■■■■**	96	0.045
15	**17.3**	**160 M**	2955	48	90.3	90.7	90	0.88	27	2.4	7.6	3.4	70	82	**1LE1501-1DA3■-■■■■**	104	0.053
18.5	**21.3**	**160 L**	2955	60	90.9	91.3	90.6	0.88	33.5	2.9	7.9	3.6	70	82	**1LE1501-1DA4■-■■■■**	113	0.061
22	**24.5**	**180 M**	2940	71	91.3	91.8	91.3	0.87	40	2.7	7.4	3.6	77	84	**1LE1501-1EA2■-■■■■**	145	0.069
30	**33.5**	**200 L**	2960	97	92	92.3	91.8	0.87	54	2.5	6.9	3.3	78	85	**1LE1501-2AA4■-■■■■**	200	0.13
37	**41.5**	**200 L**	2960	119	92.5	93	92.7	0.88	66	2.7	7.4	3.5	78	85	**1LE1501-2AA5■-■■■■**	225	0.15
45	**51**	**225 M**	2965	145	92.9	93.1	92.5	0.88	79	2.7	7.8	3.7	76	89	**1LE1501-2BA2■-■■■■**	295	0.23
55	**62**	**250 M**	2970	177	93.2	93.3	92.4	0.88	97	2.3	6.8	3.1	76	89	**1LE1501-2CA2■-■■■■**	360	0.4
75	**84**	**280 S**	2978	240	93.8	93.6	92.4	0.86	134	2.5	7.2	3.2	76	89	**1LE1501-2DA0■-■■■■**	490	0.71
90	**101**	**280 M**	2975	289	94.1	94.2	93.5	0.88	157	2.5	7.1	3.1	76	89	**1LE1501-2DA2■-■■■■**	530	0.83
110	**123**	**315 S**	2982	352	94.3	94.2	93.3	0.9	187	2.4	7.3	3	77	91	**1LE1501-3AA0■-■■■■**	720	1.3
132	**148**	**315 M**	2982	423	94.6	94.7	94.1	0.91	220	2.4	7.2	3.1	77	91	**1LE1501-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	2982	512	94.8	94.9	94.3	0.92	265	2.3	7	3.1	80	95	**1LE1501-3AA4■-■■■■**	930	1.8
200	**224**	**315 L**	2982	640	95	95.2	94.8	0.92	330	2.5	7.3	3	80	95	**1LE1501-3AA5■-■■■■**	1130	2.2

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/96			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [3]	**Standard**	**A**	–
With flange	IM B5 [3]	With additional charge	**F**	–
With flange	IM B14 [3]	With additional charge	**K**	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 3 temperature sensors	With additional charge	**B**	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1501-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1501-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
0.25	**0.29**	**71 M**	1395	1.7	68.5	68.4	64.2	0.69	0.76	2.4	3.7	2.5	50	61	**1LE1501-0CB2■-■■■■**	12	0.00076
0.37	**0.43**	**71 M**	1380	2.6	72.7	73.2	69.9	0.72	1.02	2.3	3.8	2.4	50	61	**1LE1501-0CB3■-■■■■**	13	0.00095
0.55	**0.63**	**80 M**	1440	3.6	77.1	76.8	73.7	0.74	1.39	2.2	5.3	3.1	53	64	**1LE1501-0DB2■-■■■■**	17	0.0017
0.75	**0.86**	**80 M**	1440	5	79.6	79.9	77.5	0.76	1.79	2.2	5.6	3.1	53	64	**1LE1501-0DB3■-■■■■**	18	0.0021
1.1	**1.27**	**90 S**	1425	7.4	81.4	81.8	80	0.78	2.5	2.3	5.6	2.9	56	68	**1LE1501-0EB0■-■■■■**	23	0.0028
1.5	**1.75**	**90 L**	1435	10	82.8	83.5	82.2	0.79	3.3	2.6	6.4	3.4	56	68	**1LE1501-0EB4■-■■■■**	25	0.0036
2.2	**2.55**	**100 L**	1455	14	84.3	85.1	84.2	0.81	4.65	2.1	6.9	3.3	60	72	**1LE1501-1AB4■-■■■■**	32	0.0086
3	**3.45**	**100 L**	1455	20	85.5	86.4	85.6	0.82	6.2	2	6.9	3.1	60	72	**1LE1501-1AB5■-■■■■**	37	0.011
4	**4.55**	**112 M**	1460	26	86.6	87.3	86.4	0.81	8.2	2.5	7.1	3.2	58	70	**1LE1501-1BB2■-■■■■**	46	0.014
5.5	**6.3**	**132 S**	1465	36	87.7	88.4	87.6	0.8	11.3	2.3	6.9	2.9	64	76	**1LE1501-1CB0■-■■■■**	61	0.027
7.5	**8.6**	**132 M**	1465	49	88.7	89.8	89.8	0.83	14.7	2.3	6.9	2.9	64	76	**1LE1501-1CB2■-■■■■**	75	0.034
11	**12.6**	**160 M**	1470	71	89.8	91	90.9	0.85	21	2.1	6.7	2.8	65	77	**1LE1501-1DB2■-■■■■**	96	0.065
15	**17.3**	**160 L**	1475	97	90.6	91.2	90.8	0.85	28	2.3	7.3	3	65	77	**1LE1501-1DB4■-■■■■**	104	0.083
18.5	**21.3**	**180 M**	1465	121	91.2	92	91.9	0.84	35	2.5	7.2	3.4	61	74	**1LE1501-1EB2■-■■■■**	160	0.12
22	**25.3**	**180 L**	1465	143	91.6	92.2	91.9	0.84	41.5	2.6	7.3	3.5	69	76	**1LE1501-1EB4■-■■■■**	170	0.13
30	**34.5**	**200 L**	1470	195	92.3	92.9	92.6	0.84	56	2.5	6.7	3.3	70	77	**1LE1501-2AB5■-■■■■**	230	0.2
37	**42.5**	**225 S**	1470	240	92.7	93.5	93.5	0.88	65	2.3	6.6	2.9	66	79	**1LE1501-2BB0■-■■■■**	280	0.42
45	**52**	**225 M**	1475	291	93.1	93.8	93.7	0.87	80	2.5	6.9	3.1	66	79	**1LE1501-2BB2■-■■■■**	305	0.46
55	**63**	**250 M**	1480	355	93.5	93.9	93.5	0.85	100	2.7	6.8	3	66	79	**1LE1501-2CB2■-■■■■**	385	0.75
75	**86**	**280 S**	1485	482	94	94.2	93.8	0.87	132	2.5	6.8	3	71	85	**1LE1501-2DB0■-■■■■**	550	1.3
90	**104**	**280 M**	1486	578	94.2	94.3	93.6	0.87	159	2.6	7.3	3.1	71	85	**1LE1501-2DB2■-■■■■**	570	1.4
110	**127**	**315 S**	1490	705	94.5	94.6	94	0.86	195	2.7	7.4	3	72	86	**1LE1501-3AB0■-■■■■**	740	2
132	**152**	**315 M**	1490	846	94.7	94.9	94.6	0.87	230	2.7	7.1	2.9	75	89	**1LE1501-3AB2■-■■■■**	870	2.3
160	**184**	**315 L**	1490	1025	94.9	95	94.5	0.87	280	2.8	7.2	3.1	76	91	**1LE1501-3AB4■-■■■■**	940	2.8
200	**230**	**315 L**	1490	1282	95.1	95.3	94.7	0.87	350	3.1	7.5	3.2	77	92	**1LE1501-3AB5■-■■■■**	1140	3.5

Voltages [2]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**		–
50 Hz 500 VY		Without additional charge	**2**	**7**		–
50 Hz 500 VΔ		Without additional charge	**4**	**0**		–
For other voltages [1] and more information, see from page 2/96			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [3]	**Standard**			**A**	–
With flange	IM B5 [3]	With additional charge			**F**	–
With flange	IM B14 [3]	With additional charge			**K**	–
For other types of construction and more information, see from page 2/103					■	. . .
Motor protection		Version				Order code
Without		**Standard**			**A**	–
PTC thermistor with 3 temperature sensors		With additional charge			**B**	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 2/116					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1501-. . . . ■-■■■■-Z**			**F90+. . .+. . .+. . .**
For options, see from page 2/125			**1LE1501-. . . . ■-■■■■-Z**			**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

IE2

Please note minimum legal efficiencies in the European Economic Area!

Cast-iron series SIMOTICS SD 1LE1501 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
0.18	**0.21**	**71 M**	875	2		56.6	56.9	52.7	0.68	0.68	2.2	2.5	2.3	46	57	**1LE1501-0CC2■-■■■■**	12	0.0008
0.25	**0.29**	**71 M**	870	2.7		61.6	62.7	59.2	0.7	0.84	2.3	2.6	2.3	46	57	**1LE1501-0CC3■-■■■■**	13	0.001
0.37	**0.43**	**80 M**	925	3.8		67.6	67.9	64.4	0.69	1.14	2.1	4	2.4	42	53	**1LE1501-0DC2■-■■■■**	17	0.0017
0.55	**0.63**	**80 M**	935	5.6		73.1	73.8	70.8	0.66	1.65	2.5	4.4	2.9	42	53	**1LE1501-0DC3■-■■■■**	19	0.0025
0.75	**0.86**	**90 S**	935	7.7		75.9	76.8	74.5	0.7	2.05	2	4.1	2.5	43	55	**1LE1501-0EC0■-■■■■**	23	0.003
1.1	**1.27**	**90 L**	935	11	IE1	78.1	79.3	77.7	0.7	2.9	2.2	4.4	2.6	43	55	**1LE1501-0EC4■-■■■■**	26	0.004
1.5	**1.75**	**100 L**	970	15		79.8	80.5	79	0.73	3.7	2	5.4	2.8	59	71	**1LE1501-1AC4■-■■■■**	36	0.011
2.2	**2.55**	**112 M**	965	22		81.8	82.7	81.7	0.75	5.2	2	5	2.8	62	74	**1LE1501-1BC2■-■■■■**	41	0.014
3	**3.45**	**132 S**	970	30		83.3	83.4	81	0.72	7.2	1.6	5	2.5	63	75	**1LE1501-1CC0■-■■■■**	56	0.024
4	**4.55**	**132 M**	970	39		84.6	85.5	84.3	0.75	9.1	1.6	5	2.3	63	75	**1LE1501-1CC2■-■■■■**	61	0.029
5.5	**6.3**	**132 M**	970	54		86	87.1	86.4	0.76	12.1	1.9	5.6	2.6	63	75	**1LE1501-1CC3■-■■■■**	70	0.037
7.5	**8.6**	**160 M**	975	73		87.2	87.9	87.2	0.74	16.8	1.9	4.7	2.2	67	79	**1LE1501-1DC2■-■■■■**	106	0.075
11	**12.6**	**160 L**	975	108		88.7	89.7	89.3	0.76	23.5	1.9	4.8	2.2	67	79	**1LE1501-1DC4■-■■■■**	122	0.098
15	**18**	**180 L**	975	147		89.7	90.1	89.5	0.78	31	2.5	6	3.1	57	70	**1LE1501-1EC4■-■■■■**	155	0.17
18.5	**22**	**200 L**	978	181	IE1	90.4	91.4	91.3	0.82	36	2.4	5.8	2.6	63	76	**1LE1501-2AC4■-■■■■**	200	0.25
22	**26.5**	**200 L**	978	215	IE1	90.9	91.7	91.4	0.82	42.5	2.5	6.2	2.6	63	76	**1LE1501-2AC5■-■■■■**	220	0.3
30	**36**	**225 M**	980	292	IE1	91.7	92.5	92.3	0.83	57	2.5	5.6	2.7	65	78	**1LE1501-2BC2■-■■■■**	300	0.58
37	**44.5**	**250 M**	982	360	IE1	92.2	93.1	93.1	0.83	70	2.8	6	2.5	62	77	**1LE1501-2CC2■-■■■■**	370	0.86
45	**54**	**280 S**	985	436	IE1	92.7	93.4	93.2	0.84	83	2.7	6.3	2.6	65	79	**1LE1501-2DC0■-■■■■**	460	1.1
55	**66**	**280 M**	985	533	IE1	93.1	93.9	94	0.86	99	2.5	6.4	2.6	65	79	**1LE1501-2DC2■-■■■■**	510	1.4
75	**90**	**315 S**	988	725	IE1	93.7	94	93.6	0.84	138	2.5	6.7	2.8	65	79	**1LE1501-3AC0■-■■■■**	660	2.1
90	**108**	**315 M**	988	870	IE1	94	94.3	93.6	0.84	165	2.6	6.9	2.8	65	79	**1LE1501-3AC2■-■■■■**	730	2.5
110	**132**	**315 L**	988	1063	IE1	94.3	94.6	94.5	0.86	196	2.7	7	2.8	68	82	**1LE1501-3AC4■-■■■■**	940	3.6
132	**158**	**315 L**	988	1276		94.6	94.9	94.7	0.86	235	3	7.5	2.9	69	84	**1LE1501-3AC5■-■■■■**	990	4
160	**192**	**315 L**	988	1546		94.8	94.7	94.4	0.86	285	3.1	7.7	3.3	69	84	**1LE1501-3AC6■-■■■■**	1160	4.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				4	
For other terminal box positions and more information, see from page 2/116						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1501-. . . . ■-■■■■-Z**				**F90+. . .+. . .+. . .**
For options, see from page 2/125			**1LE1501-. . . . ■-■■■■-Z**				**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
0.09	0.11	71 M	630	1.4	[4]	40.1	40.6	35.8	0.67	0.5	1.7	1.6	1.7	59	63	1LE1501-0CD2■-■■■■	12	0.00077
0.12	0.14	71 M	640	1.8		40.1	39.6	34.7	0.66	0.65	1.8	1.8	1.8	48	59	1LE1501-0CD3■-■■■■	13	0.00100
0.18	0.21	80 M	690	2.5		45.9	43.6	37.8	0.6	0.93	1.7	2.2	2.1	51	62	1LE1501-0DD2■-■■■■	17	0.00175
0.25	0.29	80 M	705	3.4		50.6	48.1	41.9	0.55	1.3	2	2.5	2.5	51	62	1LE1501-0DD3■-■■■■	19	0.00246
0.37	0.43	90 S	675	5.2		56.1	55.6	49.6	0.71	1.34	1.4	2.6	1.7	53	65	1LE1501-0ED0■-■■■■	23	0.00225
0.55	0.63	90 L	665	7.9		61.7	63.4	59.8	0.74	1.74	1.5	2.7	1.7	53	65	1LE1501-0ED4■-■■■■	26	0.00305
0.75	0.86	100 L	705	10		66.2	65.7	61.6	0.61	2.7	1.5	3.2	2.1	60	72	1LE1501-1AD4■-■■■■	32	0.0086
1.1	1.27	100 L	695	15		70.8	72.3	69.6	0.65	3.45	1.4	3.2	1.9	60	72	1LE1501-1AD5■-■■■■	36	0.011
1.5	1.75	112 M	725	20		74.1	73.9	71.2	0.63	4.65	1.6	4	2.4	63	75	1LE1501-1BD2■-■■■■	53	0.017
2.2	2.55	132 S	725	29		77.6	78.2	76.6	0.62	6.6	1.4	3.5	2	63	75	1LE1501-1CD0■-■■■■	64	0.034
3	3.45	132 M	720	40	IE1	80	80.7	79.2	0.62	8.7	1.4	3.7	2	63	75	1LE1501-1CD2■-■■■■	67	0.037
4	4.55	160 M	730	52		81.9	82.6	81.4	0.67	10.5	1.6	3.7	1.9	63	75	1LE1501-1DD2■-■■■■	98	0.065
5.5	6.3	160 M	730	72		83.8	84.2	83	0.67	14.1	1.7	3.9	2	63	75	1LE1501-1DD3■-■■■■	111	0.083
7.5	8.6	160 L	725	99		85.3	86.4	86	0.7	18.1	1.6	3.8	1.9	63	75	1LE1501-1DD4■-■■■■	123	0.098
11	13.2	180 L	720	146	IE1	86.9	88	87.6	0.7	26	2.3	4.9	2.6	72	80	1LE1501-1ED4■-■■■■	155	0.195
15	18	200 L	718	199		88	89.5	89.9	0.76	32.5	2.4	5.4	2.8	58	65	1LE1501-2AD5■-■■■■	220	0.344
18.5	22	225 S	730	242	IE1	89	89.9	89.5	0.78	38.5	2.2	5.4	2.7	59	72	1LE1501-2BD0■-■■■■	250	0.43
22	26.5	225 M	730	288		90.3	91.3	91.1	0.8	44	2.3	5.5	2.7	58	71	1LE1501-2BD2■-■■■■	270	0.5
30	36	250 M	732	391		91.3	92.2	92	0.8	59	2.4	5.6	2.7	60	73	1LE1501-2CD2■-■■■■	370	0.86
37	44.5	280 S	736	480		91.9	92.5	92.1	0.78	75	2.3	5.4	2.4	63	77	1LE1501-2DD0■-■■■■	460	1.1
45	54	280 M	738	582		92.4	92.8	92.4	0.79	89	2.5	5.7	2.5	66	80	1LE1501-2DD2■-■■■■	510	1.4
55	66	315 S	740	710		92.9	93.3	92.9	0.8	107	2.2	5.8	2.6	69	83	1LE1501-3AD0■-■■■■	640	2
75	90	315 M	738	970		93.5	94.4	94.5	0.81	143	2.3	5.9	2.7	69	84	1LE1501-3AD2■-■■■■	720	2.5
90	108	315 L	740	1161		93.5	94.3	94.4	0.83	167	2.2	5.8	2.5	69	84	1LE1501-3AD4■-■■■■	860	3.1
110	132	315 L	740	1419		92.3	95	95.1	0.82	205	2.7	6.7	2.9	74	88	1LE1501-3AD5■-■■■■	980	3.9

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				4	
For other terminal box positions and more information, see from page 2/116						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			1LE1501-. . . . ■-■■■■-Z				F90+. . .+. . .+. . .
For options, see from page 2/125			1LE1501-. . . . ■-■■■■-Z				. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

4) No IE class for 50 and 60 Hz because the motor is outside the validity for the efficiency classes according to IEC 60034-30-1:2014.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
3	**3.45**	**100 L**	2905	9.9	84.6	85.5	84.6	0.84	6.1	2.3	7	3.3	67	79	**1LE1601-1AA4■-■■■■**	32	0.0044
4	**4.55**	**112 M**	2945	13	85.8	86.2	85.1	0.85	7.9	2.1	8	3.6	69	81	**1LE1601-1BA2■-■■■■**	39	0.0092
5.5	**6.3**	**132 S**	2950	18	87	88	87.6	0.87	10.5	1.8	6.6	2.9	68	80	**1LE1601-1CA0■-■■■■**	57	0.02
7.5	**8.6**	**132 S**	2950	24	88.1	88.5	87.6	0.87	14.1	2.2	7.5	3.1	68	80	**1LE1601-1CA1■-■■■■**	61	0.024
11	**12.6**	**160 M**	2955	36	89.4	89.3	88	0.87	20.5	2.1	7.4	3.2	70	82	**1LE1601-1DA2■-■■■■**	96	0.045
15	**17.3**	**160 M**	2955	48	90.3	90.7	90	0.88	27	2.4	7.6	3.4	70	82	**1LE1601-1DA3■-■■■■**	104	0.053
18.5	**21.3**	**160 L**	2955	60	90.9	91.3	90.6	0.88	33.5	2.9	7.9	3.6	70	82	**1LE1601-1DA4■-■■■■**	113	0.061
22	**24.5**	**180 M**	2940	71	91.3	91.8	91.3	0.87	40	2.7	7.4	3.6	77	84	**1LE1601-1EA2■-■■■■**	145	0.069
30	**33.5**	**200 L**	2960	97	92	92.3	91.8	0.87	54	2.5	6.9	3.3	78	85	**1LE1601-2AA4■-■■■■**	200	0.13
37	**41.5**	**200 L**	2960	119	92.5	93	92.7	0.88	66	2.7	7.4	3.5	78	85	**1LE1601-2AA5■-■■■■**	225	0.15
45	**51**	**225 M**	2965	145	92.9	93.1	92.5	0.88	79	2.7	7.8	3.7	76	89	**1LE1601-2BA2■-■■■■**	295	0.23
55	**62**	**250 M**	2970	177	93.2	93.3	92.4	0.88	97	2.3	6.8	3.1	76	89	**1LE1601-2CA2■-■■■■**	360	0.4
75	**84**	**280 S**	2978	240	93.8	93.6	92.4	0.86	134	2.5	7.2	3.2	76	89	**1LE1601-2DA0■-■■■■**	490	0.71
90	**101**	**280 M**	2975	289	94.1	94.2	93.5	0.88	157	2.5	7.1	3.1	76	89	**1LE1601-2DA2■-■■■■**	530	0.83
110	**123**	**315 S**	2982	352	94.3	94.2	93.3	0.9	187	2.4	7.3	3	77	91	**1LE1601-3AA0■-■■■■**	720	1.3
132	**148**	**315 M**	2982	423	94.6	94.7	94.1	0.91	220	2.4	7.2	3.1	77	91	**1LE1601-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	2982	512	94.8	94.9	94.3	0.92	265	2.3	7	3.1	80	95	**1LE1601-3AA4■-■■■■**	930	1.8
200	**224**	**315 L**	2982	640	95	95.2	94.8	0.92	330	2.5	7.3	3	80	95	**1LE1601-3AA5■-■■■■**	1130	2.2

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages [1] and more information, see from page 2/96			**9**	**0**				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			**A**			–
With flange	IM B5 [3]	With additional charge			**F**			–
With flange	IM B14 [3]	With additional charge			**K**			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1601-. . . . ■-■■■■**					**-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1601-. . . . ■-■■■■**					**-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Cast-iron series SIMOTICS SD 1LE1601 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	1455	14	84.3	85.1	84.2	0.81	4.65	2.1	6.9	3.3	60	72	**1LE1601-1AB4■-■■■■**	32	0.0086
3	**3.45**	**100 L**	1455	20	85.5	86.4	85.6	0.82	6.2	2	6.9	3.1	60	72	**1LE1601-1AB5■-■■■■**	37	0.011
4	**4.55**	**112 M**	1460	26	86.6	87.3	86.4	0.81	8.2	2.5	7.1	3.2	58	70	**1LE1601-1BB2■-■■■■**	46	0.014
5.5	**6.3**	**132 S**	1465	36	87.7	88.4	87.6	0.8	11.3	2.3	6.9	2.9	64	76	**1LE1601-1CB0■-■■■■**	61	0.027
7.5	**8.6**	**132 M**	1465	49	88.7	89.8	89.8	0.83	14.7	2.3	6.9	2.9	64	76	**1LE1601-1CB2■-■■■■**	75	0.034
11	**12.6**	**160 M**	1470	71	89.8	91	90.9	0.85	21	2.1	6.7	2.8	65	77	**1LE1601-1DB2■-■■■■**	96	0.065
15	**17.3**	**160 L**	1475	97	90.6	91.2	90.8	0.85	28	2.3	7.3	3	65	77	**1LE1601-1DB4■-■■■■**	104	0.083
18.5	**21.3**	**180 M**	1465	121	91.2	92	91.9	0.84	35	2.5	7.2	3.4	61	74	**1LE1601-1EB2■-■■■■**	160	0.12
22	**25.3**	**180 L**	1465	143	91.6	92.2	91.9	0.84	41.5	2.6	7.3	3.5	69	76	**1LE1601-1EB4■-■■■■**	170	0.13
30	**34.5**	**200 L**	1470	195	92.3	92.9	92.6	0.84	56	2.5	6.7	3.3	70	77	**1LE1601-2AB5■-■■■■**	230	0.2
37	**42.5**	**225 S**	1470	240	92.7	93.5	93.5	0.88	65	2.3	6.6	2.9	66	79	**1LE1601-2BB0■-■■■■**	280	0.42
45	**52**	**225 M**	1475	291	93.1	93.8	93.7	0.87	80	2.5	6.9	3.1	66	79	**1LE1601-2BB2■-■■■■**	305	0.46
55	**63**	**250 M**	1480	355	93.5	93.9	93.5	0.85	100	2.7	6.8	3	66	79	**1LE1601-2CB2■-■■■■**	385	0.75
75	**86**	**280 S**	1485	482	94	94.2	93.8	0.87	132	2.5	6.8	3	71	85	**1LE1601-2DB0■-■■■■**	550	1.3
90	**104**	**280 M**	1486	578	94.2	94.3	93.6	0.87	159	2.6	7.3	3.1	71	85	**1LE1601-2DB2■-■■■■**	570	1.4
110	**127**	**315 S**	1490	705	94.5	94.6	94	0.86	195	2.7	7.4	3	72	86	**1LE1601-3AB0■-■■■■**	740	2
132	**152**	**315 M**	1490	846	94.7	94.9	94.6	0.87	230	2.7	7.1	2.9	75	89	**1LE1601-3AB2■-■■■■**	870	2.3
160	**184**	**315 L**	1490	1025	94.9	95	94.5	0.87	280	2.8	7.2	3.1	76	91	**1LE1601-3AB4■-■■■■**	940	2.8
200	**230**	**315 L**	1490	1282	95.1	95.3	94.7	0.87	350	3.1	7.5	3.2	77	92	**1LE1601-3AB5■-■■■■**	1140	3.5

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1601-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1601-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
1.5	1.75	100 L	970	15		79.8	80.5	79	0.73	3.7	2	5.4	2.8	59	71	1LE1601-1AC4■-■■■■	36	0.011
2.2	2.55	112 M	965	22		81.8	82.7	81.7	0.75	5.2	2	5	2.8	62	74	1LE1601-1BC2■-■■■■	41	0.014
3	3.45	132 S	970	30		83.3	83.4	81	0.72	7.2	1.6	5	2.5	63	75	1LE1601-1CC0■-■■■■	56	0.024
4	4.55	132 M	970	39		84.6	85.5	84.3	0.75	9.1	1.6	5	2.3	63	75	1LE1601-1CC2■-■■■■	61	0.029
5.5	6.3	132 M	970	54		86	87.1	86.4	0.76	12.1	1.9	5.6	2.6	63	75	1LE1601-1CC3■-■■■■	70	0.037
7.5	8.6	160 M	975	73		87.2	87.9	87.2	0.74	16.8	1.9	4.7	2.2	67	79	1LE1601-1DC2■-■■■■	106	0.075
11	12.6	160 L	975	108		88.7	89.7	89.3	0.76	23.5	1.9	4.8	2.2	67	79	1LE1601-1DC4■-■■■■	122	0.098
15	18	180 L	975	147		89.7	90.1	89.5	0.78	31	2.5	6	3.1	57	70	1LE1601-1EC4■-■■■■	155	0.17
18.5	22	200 L	978	181	IE1	90.4	91.4	91.3	0.82	36	2.4	5.8	2.6	63	76	1LE1601-2AC4■-■■■■	200	0.25
22	26.5	200 L	978	215	IE1	90.9	91.7	91.4	0.82	42.5	2.5	6.2	2.6	63	76	1LE1601-2AC5■-■■■■	220	0.3
30	36	225 M	980	292	IE1	91.7	92.5	92.3	0.83	57	2.5	5.6	2.7	65	78	1LE1601-2BC2■-■■■■	300	0.58
37	44.5	250 M	982	360	IE1	92.2	93.1	93.1	0.83	70	2.8	6	2.5	62	77	1LE1601-2CC2■-■■■■	370	0.86
45	54	280 S	985	436	IE1	92.7	93.4	93.2	0.84	83	2.7	6.3	2.6	65	79	1LE1601-2DC0■-■■■■	460	1.1
55	66	280 M	985	533	IE1	93.1	93.9	94	0.86	99	2.5	6.4	2.6	65	79	1LE1601-2DC2■-■■■■	510	1.4
75	90	315 S	988	725	IE1	93.7	94	93.6	0.84	138	2.5	6.7	2.8	65	79	1LE1601-3AC0■-■■■■	660	2.1
90	108	315 M	988	870	IE1	94	94.3	93.6	0.84	165	2.6	6.9	2.8	65	79	1LE1601-3AC2■-■■■■	730	2.5
110	132	315 L	988	1063	IE1	94.3	94.6	94.5	0.86	196	2.7	7	2.8	68	82	1LE1601-3AC4■-■■■■	940	3.6
132	158	315 L	988	1276		94.6	94.9	94.7	0.86	235	3	7.5	2.9	69	84	1LE1601-3AC5■-■■■■	990	4
160	192	315 L	988	1546		94.8	94.7	94.4	0.86	285	3.1	7.7	3.3	69	84	1LE1601-3AC6■-■■■■	1160	4.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1601-. . . . ■-■■■■-Z					F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1601-. . . . ■-■■■■-Z					. . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
0.75	0.86	100 L	705	10		66.2	65.7	61.6	0.61	2.7	1.5	3.2	2.1	60	72	1LE1601-1AD4■-■■■■	32	0.0086
1.1	1.27	100 L	695	15		70.8	72.3	69.6	0.65	3.45	1.4	3.2	1.9	60	72	1LE1601-1AD5■-■■■■	36	0.011
1.5	1.75	112 M	725	20		74.1	73.9	71.2	0.63	4.65	1.6	4	2.4	63	75	1LE1601-1BD2■-■■■■	53	0.017
2.2	2.55	132 S	725	29		77.6	78.2	76.6	0.62	6.6	1.4	3.5	2	63	75	1LE1601-1CD0■-■■■■	64	0.034
3	3.45	132 M	720	40	IE1	80	80.7	79.2	0.62	8.7	1.4	3.7	2	63	75	1LE1601-1CD2■-■■■■	67	0.037
4	4.55	160 M	730	52		81.9	82.6	81.4	0.67	10.5	1.6	3.7	1.9	63	75	1LE1601-1DD2■-■■■■	98	0.065
5.5	6.3	160 M	730	72		83.8	84.2	83	0.67	14.1	1.7	3.9	2	63	75	1LE1601-1DD3■-■■■■	111	0.083
7.5	8.6	160 L	725	99		85.3	86.4	86	0.7	18.1	1.6	3.8	1.9	63	75	1LE1601-1DD4■-■■■■	123	0.098
11	13.2	180 L	720	146	IE1	86.9	88	87.6	0.7	26	2.3	4.9	2.6	72	80	1LE1601-1ED4■-■■■■	155	0.195
15	18	200 L	718	199		88	89.5	89.9	0.76	32.5	2.4	5.4	2.8	58	65	1LE1601-2AD5■-■■■■	220	0.344
18.5	22	225 S	730	242	IE1	89	89.9	89.5	0.78	38.5	2.2	5.4	2.7	59	72	1LE1601-2BD0■-■■■■	250	0.43
22	26.5	225 M	730	288		90.3	91.3	91.1	0.8	44	2.3	5.5	2.7	58	71	1LE1601-2BD2■-■■■■	270	0.5
30	36	250 M	732	391		91.3	92.2	92	0.8	59	2.4	5.6	2.7	60	73	1LE1601-2CD2■-■■■■	370	0.86
37	44.5	280 S	736	480		91.9	92.5	92.1	0.78	75	2.3	5.4	2.4	63	77	1LE1601-2DD0■-■■■■	460	1.1
45	54	280 M	738	582		92.4	92.8	92.4	0.79	89	2.5	5.7	2.5	66	80	1LE1601-2DD2■-■■■■	510	1.4
55	66	315 S	740	710		92.9	93.3	92.9	0.8	107	2.2	5.8	2.6	69	83	1LE1601-3AD0■-■■■■	640	2
75	90	315 M	738	970		93.5	94.4	94.5	0.81	143	2.3	5.9	2.7	69	84	1LE1601-3AD2■-■■■■	720	2.5
90	108	315 L	740	1161		93.5	94.3	94.4	0.83	167	2.2	5.8	2.5	69	84	1LE1601-3AD4■-■■■■	860	3.1
110	132	315 L	740	1419		94.2	95	95.1	0.82	205	2.7	6.7	2.9	74	88	1LE1601-3AD5■-■■■■	980	3.9

Voltages [2]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/96			9	0	. . .
Types of construction		Version			Order code
Without flange	IM B3 [3]	**Standard**		A	–
With flange	IM B5 [3]	With additional charge		F	–
With flange	IM B14 [3]	With additional charge		K	–
For other types of construction and more information, see from page 2/103				■	. . .
Motor protection		Version			Order code
PTC thermistor with 3 temperature sensors		**Standard**		B	–
For other motor protection and more information, see from page 2/113				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**			4
For other terminal box positions and more information, see from page 2/116					■

Special versions	Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1601-. . . . ■-■■■■-Z F90+. . .+. . .+. . .
For options, see from page 2/125	1LE1601-. . . . ■-■■■■-Z . . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

4) No IE class for 50 and 60 Hz because the motor is outside the validity for the efficiency classes according to IEC 60034-30-1:2014.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
4	**4.55**	**100 L**	2905	13		85.8	86.9	86.5	0.86	7.8	2.5	7.6	3.5	67	79	**1LE1501-1AA6■-■■■■**	45	0.0054
5.5	**6.3**	**112 M**	2945	18		87	87.8	87.4	0.88	10.4	2.3	8.5	3.8	69	81	**1LE1501-1BA6■-■■■■**	53	0.012
11	**12.6**	**132 M**	2950	36		89.4	90.1	89.9	0.89	20	2.3	7.9	3.2	68	80	**1LE1501-1CA6■-■■■■**	80	0.031
22	**25.3**	**160 L**	2955	71		91.3	91.8	91.4	0.89	39	3.1	8.4	3.7	70	82	**1LE1501-1DA6■-■■■■**	126	0.068
30	**33.5**	**180 L**	2940	97		92	92.6	92.3	0.89	53	2.3	7.8	3.4	76	83	**1LE1501-1EA6■-■■■■**	180	0.094
45	**51**	**200 L**	2950	146		92.9	93.2	92.9	0.87	81	2.5	7.1	3.2	77	84	**1LE1501-2AA6■-■■■■**	245	0.176
55	**62**	**225 M**	2960	177		93.2	93.6	93.2	0.88	97	2.5	7	3.3	76	89	**1LE1501-2BA6■-■■■■**	320	0.26
75	**84**	**250 M**	2970	241		93.8	93.6	92.6	0.84	137	2.2	7	3.3	75	89	**1LE1501-2CA6■-■■■■**	390	0.46
110	**123**	**280 M**	2978	353		94.3	94.5	94.1	0.9	187	2.9	8.5	3.6	80	91	**1LE1501-2DA6■-■■■■**	650	1.2
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
4	**4.55**	**100 L**	1460	26		86.6	88	87.5	0.8	8.3	2.2	7.5	3.5	60	72	**1LE1501-1AB6■-■■■■**	46	0.014
5.5	**6.3**	**112 M**	1460	36		87.7	88.2	87.2	0.81	11.2	2.5	7.1	3.2	58	70	**1LE1501-1BB6■-■■■■**	58	0.017
11	**12.6**	**132 M**	1465	72		89.8	90.9	90.9	0.84	21	2.6	7.7	3.1	64	76	**1LE1501-1CB6■-■■■■**	80	0.046
18.5	**21.3**	**160 L**	1475	120		91.2	91.8	91.3	0.85	34.5	2.5	7.7	3.3	65	77	**1LE1501-1DB6■-■■■■**	116	0.099
30	**34.5**	**180 L**	1465	196		92.3	93	92.9	0.81	58	2.5	7.3	3.3	70	77	**1LE1501-1EB6■-■■■■**	185	0.159
37	**42.5**	**200 L**	1470	240		92.7	93.5	93.6	0.84	69	2.4	7	3	68	75	**1LE1501-2AB6■-■■■■**	240	0.246
55	**63**	**225 M**	1475	356		93.5	94.2	94.1	0.84	101	2.5	5.8	2.7	69	82	**1LE1501-2BB6■-■■■■**	320	0.47
75	**86**	**250 M**	1480	484		94	94.5	94.3	0.86	134	2.3	6.2	2.8	74	87	**1LE1501-2CB6■-■■■■**	440	0.85
110	**127**	**280 M**	1485	707		94.5	94.9	94.8	0.87	193	2.5	6.9	3	73	87	**1LE1501-2DB6■-■■■■**	680	1.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
For options, see from page 2/125							**1LE1501-. . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1501 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
2.2	**2.55**	**100 L**	965	22	IE1	81.8	83.3	82.7	0.76	5.1	1.7	4.9	2.5	59	71	**1LE1501-1AC6■-■■■■**	49	0.014
3	**3.45**	**112 M**	965	30		83.3	84	82.7	0.74	7	2.1	5.4	2.7	62	74	**1LE1501-1BC6■-■■■■**	53	0.017
7.5	**8.6**	**132 M**	970	74		87.2	88.1	87.1	0.75	16.6	2	5.6	2.6	63	75	**1LE1501-1CC6■-■■■■**	83	0.046
15	**17.3**	**160 L**	975	147	IE1	89.7	90.4	89.7	0.75	32	2	5.2	2.4	67	79	**1LE1501-1DC6■-■■■■**	147	0.12
18.5	**22**	**180 L**	975	181		90.4	90.9	90.5	0.77	38.5	2.3	6	2.9	67	80	**1LE1501-1EC6■-■■■■**	165	0.206
30	**34.5**	**200 L**	975	294		91.7	92.5	92.4	0.77	61	2.6	6.3	2.7	68	75	**1LE1501-2AC6■-■■■■**	240	0.381
37	**44.5**	**225 M**	978	361	IE1	92.2	93	92.9	0.83	70	2.5	6.3	2.9	64	77	**1LE1501-2BC6■-■■■■**	325	0.67
45	**54**	**250 M**	985	436	IE1	92.7	93.4	93.4	0.84	83	2.4	6.6	2.7	67	81	**1LE1501-2CC6■-■■■■**	410	1
75	**90**	**280 M**	986	726		93.7	94.3	94.4	0.85	136	3.2	7	2.9	66	80	**1LE1501-2DC6■-■■■■**	570	1.8
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
15	**18**	**180 L**	720	199	IE1	88	89.2	89	0.73	33.5	2.2	4.9	2.5	67	75	**1LE1501-1ED6■-■■■■**	190	0.263
18.5	**22**	**200 L**	720	245	IE1	88.6	89.9	90.2	0.78	38.5	2.6	5.8	3	65	72	**1LE1501-2AD6■-■■■■**	250	0.416
30	**36**	**225 M**	732	391		90.8	92	92.1	0.76	63	2.8	6.1	3.2	62	76	**1LE1501-2BD6■-■■■■**	325	0.67
37	**44.5**	**250 M**	730	484		91.6	92.6	92.7	0.83	70	2.3	5.5	2.6	63	77	**1LE1501-2CD6■-■■■■**	405	1
55	**66**	**280 M**	736	714		92.9	93.4	93	0.8	107	2.5	5.9	2.5	70	81	**1LE1501-2DD6■-■■■■**	550	1.6

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages [1] and more information, see from page 2/96			**9**	**0**				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			**A**			–
With flange	IM B5 [3]	With additional charge			**F**			–
With flange	IM B14 [3]	With additional charge			**K**			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				**A**		–
PTC thermistor with 1 or 3 temperature sensors		With additional charge				**B**		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
For options, see from page 2/125			**1LE1501-. . . . ■-■■■■**					**-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																		
4	**4.55**	**100 L**	2905	13		85.8	86.9	86.5	0.86	7.8	2.5	7.6	3.5	67	79	**1LE1601-1AA6■-■■■■**	45	0.0054
5.5	**6.3**	**112 M**	2945	18		87	87.8	87.4	0.88	10.4	2.3	8.5	3.8	69	81	**1LE1601-1BA6■-■■■■**	53	0.012
11	**12.6**	**132 M**	2950	36		89.4	90.1	89.9	0.89	20	2.3	7.9	3.2	68	80	**1LE1601-1CA6■-■■■■**	80	0.031
22	**25.3**	**160 L**	2955	71		91.3	91.8	91.4	0.89	39	3.1	8.4	3.7	70	82	**1LE1601-1DA6■-■■■■**	126	0.068
30	**33.5**	**180 L**	2940	97		92	92.6	92.3	0.89	53	2.3	7.8	3.4	76	83	**1LE1601-1EA6■-■■■■**	180	0.094
45	**51**	**200 L**	2950	146		92.9	93.2	92.9	0.87	81	2.5	7.1	3.2	77	84	**1LE1601-2AA6■-■■■■**	245	0.176
55	**62**	**225 M**	2960	177		93.2	93.6	93.2	0.88	97	2.5	7	3.3	76	89	**1LE1601-2BA6■-■■■■**	320	0.26
75	**84**	**250 M**	2970	241		93.8	93.6	92.6	0.84	137	2.2	7	3.3	75	89	**1LE1601-2CA6■-■■■■**	390	0.46
110	**123**	**280 M**	2978	353		94.3	94.5	94.1	0.9	187	2.9	8.5	3.6	80	91	**1LE1601-2DA6■-■■■■**	650	1.2
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
4	**4.55**	**100 L**	1460	26		86.6	88	87.5	0.8	8.3	2.2	7.5	3.5	60	72	**1LE1601-1AB6■-■■■■**	46	0.014
5.5	**6.3**	**112 M**	1460	36		87.7	88.2	87.2	0.81	11.2	2.5	7.1	3.2	58	70	**1LE1601-1BB6■-■■■■**	58	0.017
11	**12.6**	**132 M**	1465	72		89.8	90.9	90.9	0.84	21	2.6	7.7	3.1	64	76	**1LE1601-1CB6■-■■■■**	80	0.046
18.5	**21.3**	**160 L**	1475	120		91.2	91.8	91.3	0.85	34.5	2.5	7.7	3.3	65	77	**1LE1601-1DB6■-■■■■**	116	0.099
30	**34.5**	**180 L**	1465	196		92.3	93	92.9	0.81	58	2.5	7.3	3.3	70	77	**1LE1601-1EB6■-■■■■**	185	0.159
37	**42.5**	**200 L**	1470	240		92.7	93.5	93.6	0.84	69	2.4	7	3	68	75	**1LE1601-2AB6■-■■■■**	240	0.246
55	**63**	**225 M**	1475	356		93.5	94.2	94.1	0.84	101	2.5	5.8	2.7	69	82	**1LE1601-2BB6■-■■■■**	320	0.47
75	**86**	**250 M**	1480	484		94	94.5	94.3	0.86	134	2.3	6.2	2.8	74	87	**1LE1601-2CB6■-■■■■**	440	0.85
110	**127**	**280 M**	1485	707		94.5	94.9	94.8	0.87	193	2.5	6.9	3	73	87	**1LE1601-2DB6■-■■■■**	680	1.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
For options, see from page 2/125							**1LE1601-. . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE2

Cast-iron series SIMOTICS SD 1LE1601 Performance Line with increased power – self-ventilated

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	Different IE class 60 Hz/P60	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1601 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency, service factor (SF) 1.15																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
2.2	**2.55**	**100 L**	965	22	IE1	81.8	83.3	82.7	0.76	5.1	1.7	4.9	2.5	59	71	**1LE1601-1AC6■-■■■■**	49	0.014
3	**3.45**	**112 M**	965	30		83.3	84	82.7	0.74	7	2.1	5.4	2.7	62	74	**1LE1601-1BC6■-■■■■**	53	0.017
7.5	**8.6**	**132 M**	970	74		87.2	88.1	87.1	0.75	16.6	2	5.6	2.6	63	75	**1LE1601-1CC6■-■■■■**	83	0.046
15	**17.3**	**160 L**	975	147	IE1	89.7	90.4	89.7	0.75	32	2	5.2	2.4	67	79	**1LE1601-1DC6■-■■■■**	147	0.12
18.5	**22**	**180 L**	975	181		90.4	90.9	90.5	0.77	38.5	2.3	6	2.9	67	80	**1LE1601-1EC6■-■■■■**	165	0.206
30	**34.5**	**200 L**	975	294		91.7	92.5	92.4	0.77	61	2.6	6.3	2.7	68	75	**1LE1601-2AC6■-■■■■**	240	0.381
37	**44.5**	**225 M**	978	361	IE1	92.2	93	92.9	0.83	70	2.5	6.3	2.9	64	77	**1LE1601-2BC6■-■■■■**	325	0.67
45	**54**	**250 M**	985	436	IE1	92.7	93.4	93.4	0.84	83	2.4	6.6	2.7	67	81	**1LE1601-2CC6■-■■■■**	410	1
75	**90**	**280 M**	986	726		93.7	94.3	94.4	0.85	136	3.2	7	2.9	66	80	**1LE1601-2DC6■-■■■■**	570	1.8
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
15	**18**	**180 L**	720	199	IE1	88	89.2	89	0.73	33.5	2.2	4.9	2.5	67	75	**1LE1601-1ED6■-■■■■**	190	0.263
18.5	**22**	**200 L**	720	245	IE1	88.6	89.9	90.2	0.78	38.5	2.6	5.8	3	65	72	**1LE1601-2AD6■-■■■■**	250	0.416
30	**36**	**225 M**	732	391		90.8	92	92.1	0.76	63	2.8	6.1	3.2	62	76	**1LE1601-2BD6■-■■■■**	325	0.67
37	**44.5**	**250 M**	730	484		91.6	92.6	92.7	0.83	70	2.3	5.5	2.6	63	77	**1LE1601-2CD6■-■■■■**	405	1
55	**66**	**280 M**	736	714		92.9	93.4	93	0.8	107	2.5	5.9	2.5	70	81	**1LE1601-2DD6■-■■■■**	550	1.6

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages [1] and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			A			–
With flange	IM B5 [3]	With additional charge			F			–
With flange	IM B14 [3]	With additional charge			K			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 1 or 3 temperature sensors		**Standard**				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
For options, see from page 2/125		**1LE1601-. . . . ■-■■■■-Z**						. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Aluminum series SIMOTICS GP 1LE1002 – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1002 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
0.18	**0.21**	**63 M**	2805	0.61	52.8	50.1	44.2	0.79	1.08	1.7	3.4	2.2	55	62	**1LE1002-0BA2■-■■■■**	4	0.00018
0.25	**0.29**	**63 M**	2835	0.84	58.2	55.5	48.6	0.75	1.44	1.9	3.6	2.6	56	63	**1LE1002-0BA3■-■■■■**	4	0.00022
0.37	**0.43**	**71 M**	2755	1.3	63.9	64.5	61.1	0.79	1.06	2.2	3.4	2.2	62	73	**1LE1002-0CA2■-■■■■**	5	0.00029
0.55	**0.63**	**71 M**	2750	1.9	69.0	69.9	66.5	0.79	1.46	2.2	3.7	2.2	62	73	**1LE1002-0CA3■-■■■■**	6	0.00041
0.75	**0.86**	**80 M**	2835	2.5	72.1	72.6	69.9	0.86	1.75	2.1	5.2	2.3	64	71	**1LE1002-0DA2■-■■■■**	9	0.00079
1.1	**1.27**	**80 M**	2840	3.7	75.0	75.7	73.4	0.86	2.45	2.5	5.7	2.5	64	71	**1LE1002-0DA3■-■■■■**	12	0.0010
1.5	**1.75**	**90 S**	2835	5.1	77.2	78.2	76.8	0.85	3.3	2.6	5.5	2.9	71	78	**1LE1002-0EA0■-■■■■**	13	0.0014
2.2	**2.55**	**90 L**	2855	7.4	79.7	80.9	81.3	0.85	4.7	2.8	6.5	3.2	71	78	**1LE1002-0EA4■-■■■■**	14	0.0018
3	**3.45**	**100 L**	2835	10	81.5	83.2	82.8	0.87	6.1	3.2	6.4	3.5	67	79	**1LE1002-1AA4■-■■■■**	20	0.0034
4	**4.55**	**112 M**	2935	13	83.1	83.0	80.8	0.85	8.2	3.3	8.3	4.2	69	81	**1LE1002-1BA2■-■■■■**	25	0.0067
5.5	**6.3**	**132 S**	2910	18	84.7	85.9	85.7	0.88	10.7	1.8	5.7	2.6	68	80	**1LE1002-1CA0■-■■■■**	35	0.013
7.5	**8.6**	**132 S**	2925	24	86.0	86.7	86.1	0.88	14.3	2.2	6.8	3.1	68	80	**1LE1002-1CA1■-■■■■**	40	0.016
11	**12.6**	**160 M**	2925	36	87.6	88.0	87.1	0.86	21.0	2.0	5.7	2.7	70	82	**1LE1002-1DA2■-■■■■**	60	0.030
15	**17.3**	**160 M**	2935	49	88.7	88.9	87.7	0.85	28.5	2.4	6.8	3.2	70	82	**1LE1002-1DA3■-■■■■**	68	0.036
18.5	**21.3**	**160 L**	2935	60	89.3	89.7	89.3	0.87	34.5	2.7	7.6	3.4	70	82	**1LE1002-1DA4■-■■■■**	78	0.044
22	**24.5**	**180 M**	2945	71	89.9	90.6	90.4	0.87	40.5	2.5	7.7	3.5	72	85	**1LE1002-1EA2■-■■■■**	112	0.069
30	**33.5**	**200 L**	2960	97	90.7	90.9	90.2	0.79	60	2.5	7.3	3.6	72	85	**1LE1002-2AA4■-■■■■**	149	0.124
37	**41.5**	**200 L**	2955	120	91.2	91.6	91.2	0.88	67	2.7	8.2	3.5	72	85	**1LE1002-2AA5■-■■■■**	169	0.15

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages [1] and more information, see from page 2/93			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	4
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1002-. . . . ■-■■■■-Z	F90 +. . .+. . .+. . .
For options, see from page 2/118	1LE1002-. . . . ■-■■■■-Z	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Please note minimum legal efficiencies in the European Economic Area!

IE1

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1002 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
0.12	0.14	63 M	1360	0.84	50.0	47.3	39.1	0.71	0.85	1.6	2.5	1.8	48	55	1LE1002-0BB2■-■■■■	4	0.00029
0.18	0.21	63 M	1360	1.3	57.0	55.1	47.8	0.71	1.12	1.9	2.8	2.1	55	62	1LE1002-0BB3■-■■■■	4	0.00037
0.25	0.29	71 M	1365	1.8	61.5	61.4	56.1	0.73	0.80	1.8	3.0	2.0	54	65	1LE1002-0CB2■-■■■■	5	0.00052
0.37	0.43	71 M	1350	2.7	66.0	67.7	65.0	0.75	1.08	2.0	3.2	2.0	54	65	1LE1002-0CB3■-■■■■	6	0.00077
0.55	0.63	80 M	1385	3.8	70.0	70.7	67.7	0.79	1.44	2.1	3.7	2.2	59	66	1LE1002-0DB2■-■■■■	9	0.0014
0.75	0.86	80 M	1385	5.2	72.1	72.0	67.0	0.76	1.85	2.1	3.6	2.3	59	66	1LE1002-0DB3■-■■■■	11	0.0017
1.1	1.27	90 S	1405	7.5	75.0	75.9	73.6	0.81	2.5	2.1	4.5	2.3	61	68	1LE1002-0EB0■-■■■■	12	0.0024
1.5	1.75	90 L	1410	10	77.2	77.8	75.1	0.80	3.35	2.4	4.7	2.6	61	68	1LE1002-0EB4■-■■■■	15	0.0033
2.2	2.55	100 L	1425	15	79.7	80.5	78.5	0.81	4.9	2.2	5.1	2.3	60	72	1LE1002-1AB4■-■■■■	18	0.0059
3	3.45	100 L	1425	20	81.5	83.0	82.3	0.85	6.3	2.4	5.4	2.6	60	72	1LE1002-1AB5■-■■■■	22	0.0078
4	4.55	112 M	1435	27	83.1	84.3	83.7	0.83	8.4	2.5	6.1	2.9	58	70	1LE1002-1BB2■-■■■■	27	0.010
5.5	6.3	132 S	1450	36	84.7	85.7	84.9	0.82	11.2	2.3	5.7	2.7	64	76	1LE1002-1CB0■-■■■■	38	0.019
7.5	8.6	132 M	1450	49	86.0	86.9	86.3	0.82	15.2	2.6	6.6	3.1	64	76	1LE1002-1CB2■-■■■■	44	0.024
11	12.6	160 M	1460	72	87.6	87.9	86.7	0.81	22.5	2.7	6.9	3.3	65	77	1LE1002-1DB2■-■■■■	62	0.044
15	17.3	160 L	1460	98	88.7	89.1	88.0	0.82	30.0	3.0	7.5	3.6	65	77	1LE1002-1DB4■-■■■■	73	0.056
18.5	21.3	180 M	1468	120	89.3	90.2	90.2	0.85	35	2.2	7.3	3.1	63	76	1LE1002-1EB2■-■■■■	131	0.13
22	25.3	180 L	1465	143	89.9	90.8	90.7	0.83	42.5	2.7	8	3.6	63	76	1LE1002-1EB4■-■■■■	132	0.13
30	34.5	200 L	1472	195	90.7	91.5	91.4	0.83	58	2.3	6.9	3.1	64	78	1LE1002-2AB5■-■■■■	169	0.2

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/93			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1002-. . . . ■-■■■■-Z					F90 +. . .+. . .+. . .
For options, see from page 2/118		1LE1002-. . . . ■-■■■■-Z					. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

IE1

Please note minimum legal efficiencies in the European Economic Area!

Aluminum series SIMOTICS GP 1LE1002 – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1002 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																	
0.09	0.11	63 M	895	1.3	42.7	38.5	30.4	0.63	0.84	1.8	2.0	1.9	56	62	1LE1002-0BC2■-■■■■	4	0.00037
0.18	0.21	71 M	800	2.2	45.5	44.4	38.3	0.67	0.84	1.9	2.0	2.0	51	62	1LE1002-0CC2■-■■■■	5	0.00055
0.25	0.29	71 M	860	2.8	52.1	52.8	48.4	0.71	0.98	2.0	2.2	2.0	51	62	1LE1002-0CC3■-■■■■	6	0.00080
0.37	0.43	80 M	915	3.9	57.9	56.9	51.1	0.70	1.23	1.6	2.7	1.8	56	64	1LE1002-0DC2■-■■■■	9	0.0014
0.55	0.63	80 M	900	5.8	65.8	66.6	62.6	0.72	1.68	1.7	2.7	1.9	56	64	1LE1002-0DC3■-■■■■	12	0.0017
0.75	0.86	90 S	940	7.6	70.0	70.0	66.0	0.67	2.30	2.0	3.8	2.2	59	70	1LE1002-0EC0■-■■■■	13	0.0033
1.1	1.27	90 L	925	11	72.9	73.8	71.2	0.69	3.15	2.2	3.8	2.4	59	70	1LE1002-0EC4■-■■■■	15	0.004
1.5	1.75	100 L	940	15	75.2	76.0	72.4	0.74	3.9	2.0	4.0	2.2	59	71	1LE1002-1AC4■-■■■■	19	0.0065
2.2	2.55	112 M	940	22	77.7	78.5	76.3	0.72	5.7	2.6	4.6	2.7	57	69	1LE1002-1BC2■-■■■■	25	0.0092
3	3.45	132 S	955	30	79.7	80.2	77.7	0.74	7.3	2.0	4.6	2.6	63	75	1LE1002-1CC0■-■■■■	34	0.017
4	4.55	132 M	955	40	81.4	82.6	81.9	0.76	9.3	2.3	5.2	2.6	63	75	1LE1002-1CC2■-■■■■	39	0.021
5.5	6.3	132 M	955	55	83.1	84.0	83.0	0.75	12.7	2.7	5.7	3.0	63	75	1LE1002-1CC3■-■■■■	48	0.027
7.5	8.6	160 M	970	74	84.7	85.4	85.0	0.73	17.5	2.1	5.5	2.9	67	79	1LE1002-1DC2■-■■■■	72	0.056
11	12.6	160 L	965	109	86.4	86.4	85.4	0.77	24	1.9	5.9	2.7	67	79	1LE1002-1DC4■-■■■■	92	0.078
15	18	180 L	975	147	87.7	88.5	87.9	0.77	32	2.3	6.1	3	56	69	1LE1002-1EC4■-■■■■	119	0.17
18.5	22	200 L	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	1LE1002-2AC4■-■■■■	149	0.25
22	26.5	200 L	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	1LE1002-2AC5■-■■■■	166	0.3
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																	
0.09	0.11	71 M	635	1.4	39	35.7	28.6	0.63	0.53	1.8	1.8	2	49	56	1LE1002-0CD2■-■■■■	6	0.00080
0.12	0.14	71 M	625	1.8	31	30.5	27.1	0.68	0.82	1.7	2	1.7	49	56	1LE1002-0CD3■-■■■■	6	0.00080
0.75	0.86	100 L	705	10	61.2	58.1	50.5	0.62	2.85	1.9	3	2.2	60	72	1LE1002-1AD4■-■■■■	17	0.0056
1.1	1.27	100 L	690	15	66.5	66.0	61.8	0.61	3.90	2.0	3.2	2.3	60	72	1LE1002-1AD5■-■■■■	22	0.0078
1.5	1.75	112 M	700	20	70.2	71.1	68.7	0.66	4.65	1.9	3.5	2.1	63	75	1LE1002-1BD2■-■■■■	29	0.0094
2.2	2.55	132 S	715	29	74.2	74.1	71.4	0.66	6.5	1.7	3.9	2.4	63	75	1LE1002-1CD0■-■■■■	37	0.019
3	3.45	132 M	715	40	77.0	77.4	75.2	0.68	8.3	1.8	3.9	2.2	63	75	1LE1002-1CD2■-■■■■	44	0.024
4	4.55	160 M	720	53	79.2	79.3	76.3	0.67	10.9	1.6	4.1	2.3	63	75	1LE1002-1DD2■-■■■■	60	0.044
5.5	6.3	160 M	720	73	81.4	81.9	80.3	0.68	14.3	1.6	4	2.2	63	75	1LE1002-1DD3■-■■■■	72	0.056
7.5	8.6	160 L	715	100	83.1	83.7	82.4	0.69	18.9	1.7	3.8	2.2	63	75	1LE1002-1DD4■-■■■■	91	0.077
11	13.2	180 L	720	146	85	86.2	86	0.7	26.5	1.9	5	2.5	65	78	1LE1002-1ED4■-■■■■	122	0.2
15	18	200 L	718	199	86.2	87.9	88.4	0.75	33.5	2.5	5.5	2.9	55	69	1LE1002-2AD5■-■■■■	170	0.3

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/93			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				4	
For other terminal box positions and more information, see from page 2/115						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			1LE1002-. . . . ■-■■■■				-Z F90 +. . .+. . .+. . .
For options, see from page 2/118			1LE1002-. . . . ■-■■■■				-Z . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Please note minimum legal efficiencies in the European Economic Area!

IE1

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Aluminum series 1LE1002 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
0.37	**0.43**	**63 M**	2795	1.3	63.9	60.3	51.9	0.71	1.18	2.4	3.5	2.6	58	65	**1LE1002-0BA6■-■■■■**	5	0.00018
0.75	**0.86**	**71 M**	2780	2.6	72.1	72.5	70.2	0.83	1.81	2.2	4.5	2.2	65	72	**1LE1002-0CA6■-■■■■**	5	0.00029
4	**4.55**	**100 L**	2850	13	83.1	83.9	83	0.85	8.2	4.5	7	4.1	67	79	**1LE1002-1AA6■-■■■■**	25	0.0044
5.5	**6.3**	**112 L**	2935	18	84.7	84.7	82.7	0.86	10.9	2.9	7.5	3.8	69	81	**1LE1002-1BA6■-■■■■**	31	0.0085
11	**12.6**	**132 M**	2920	36	87.6	88.3	87.8	0.9	20	2.8	7.5	3.7	68	80	**1LE1002-1CA6■-■■■■**	53	0.022
22	**24.5**	**160 L**	2935	72	89.9	90.2	89.5	0.9	39	2.6	7.5	3.4	70	82	**1LE1002-1DA6■-■■■■**	85	0.049
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
0.25	**0.29**	**63 M**	1365	1.7	61.5	59.6	53.5	0.68	0.86	2.3	2.9	2.3	52	59	**1LE1002-0BB6■-■■■■**	5	0.00029
0.55	**0.63**	**71 M**	1365	3.8	70	70.5	67.4	0.7	1.62	2.5	3.6	2.5	59	66	**1LE1002-0CB6■-■■■■**	7	0.00077
4	**4.55**	**100 L**	1435	27	83.1	83.8	82.3	0.81	8.6	2.9	5.8	3.1	60	72	**1LE1002-1AB6■-■■■■**	27	0.010
5.5	**6.3**	**112 M**	1420	37	84.7	85.9	85.3	0.81	11.6	3	5.8	3.1	58	70	**1LE1002-1BB6■-■■■■**	33	0.012
11	**12.6**	**132 M**	1450	72	87.6	88.2	87.6	0.84	21.5	2.5	7.2	3	64	76	**1LE1002-1CB6■-■■■■**	58	0.033
18.5	**21.3**	**160M**	1460	121	89.3	89.8	89.2	0.85	35	2.7	7.2	3.2	65	77	**1LE1002-1DB6■-■■■■**	85	0.068
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	930	23	77.7	79.5	78.1	0.78	5.2	2	4	2.2	59	71	**1LE1002-1AC6■-■■■■**	24	0.0084
3	**3.45**	**112 M**	945	30	79.7	79.5	76.3	0.72	7.5	2.9	4.6	3	57	69	**1LE1002-1BC6■-■■■■**	32	0.013
7.5	**8.6**	**132 M**	950	75	84.7	85.3	84.1	0.74	17.3	2.4	5.3	3	63	75	**1LE1002-1CC6■-■■■■**	54	0.032
15	**17.3**	**160 M**	965	148	87.7	87.9	86.5	0.75	33	2.9	6	3.4	67	79	**1LE1002-1DC6■-■■■■**	109	0.094

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages [1] and more information, see from page 2/93			**9**	**0**	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	**A**	–
With flange	IM B5 [2]	With additional charge	**F**	–
With flange	IM B14 [2]	With additional charge	**K**	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200)	With additional charge	**B**	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
For options, see from page 2/118	**1LE1002-. . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
3	**3.45**	**100 L**	2835	10	81.5	83.2	82.8	0.87	6.1	3.2	6.4	3.5	66	80	**1LE1502-1AA4■-■■■■**	31	0.0034
4	**4.55**	**112 M**	2935	13	83.1	83.0	80.8	0.85	8.2	3.3	8.3	4.2	70	83	**1LE1502-1BA2■-■■■■**	36	0.0067
5.5	**6.3**	**132 S**	2910	18	84.7	85.9	85.7	0.88	10.7	1.8	5.7	2.6	68	82	**1LE1502-1CA0■-■■■■**	53	0.013
7.5	**8.6**	**132 S**	2925	24	86.0	86.7	86.1	0.88	14.3	2.2	6.8	3.1	68	82	**1LE1502-1CA1■-■■■■**	58	0.016
11	**12.6**	**160 M**	2925	36	87.6	88.0	87.1	0.86	21.0	2.0	5.7	2.7	73	86	**1LE1502-1DA2■-■■■■**	87	0.030
15	**18**	**160 M**	2935	49	88.7	88.9	87.7	0.85	28.5	2.4	6.8	3.2	73	86	**1LE1502-1DA3■-■■■■**	95	0.036
18.5	**22**	**160 L**	2935	60	89.3	89.7	89.3	0.87	34.5	2.7	7.6	3.4	73	86	**1LE1502-1DA4■-■■■■**	105	0.044
22	**24.5**	**180 M**	2945	71	89.9	90.6	90.4	0.87	40.5	2.5	7.7	3.5	72	85	**1LE1502-1EA2■-■■■■**	150	0.069
30	**33.5**	**200 L**	2960	97	90.7	90.9	90.2	0.79	60	2.5	7.3	3.6	72	85	**1LE1502-2AA4■-■■■■**	195	0.124
37	**41.5**	**200 L**	2955	120	91.2	91.6	91.2	0.88	67	2.7	8.2	3.5	72	85	**1LE1502-2AA5■-■■■■**	230	0.15
45	**51**	**225 M**	2960	145	91.7	92	91.6	0.88	80	2.3	6.7	3	73	86	**1LE1502-2BA2■-■■■■**	280	0.22
55	**62**	**250 M**	2970	177	92.1	92.3	91.4	0.88	98	2	6.7	2.9	77	91	**1LE1502-2CA2■-■■■■**	360	0.4
75	**84**	**280 S**	2975	241	92.7	92.5	91.3	0.86	136	2.2	6.8	3	78	92	**1LE1502-2DA0■-■■■■**	470	0.72
90	**101**	**280 M**	2975	289	93	93.1	92.4	0.88	159	2.5	7.1	3.1	76	89	**1LE1502-2DA2■-■■■■**	530	0.83
110	**123**	**315 S**	2982	352	93.3	92.9	91.5	0.86	198	2.3	7.5	3.3	80	94	**1LE1502-3AA0■-■■■■**	680	1.2
132	**148**	**315 M**	2982	423	93.5	93.2	92.5	0.89	230	2.3	7.6	3	80	94	**1LE1502-3AA2■-■■■■**	740	1.4
160	**180**	**315 L**	2982	512	93.8	93.6	93.1	0.91	270	2.3	7.4	2.9	80	94	**1LE1502-3AA4■-■■■■**	880	1.6
200	**224**	**315 L**	2982	640	94	93.9	93.5	0.92	335	2.2	7.1	2.8	80	94	**1LE1502-3AA5■-■■■■**	1000	2.1

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1502-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125	**1LE1502-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE1

Cast-iron series SIMOTICS SD 1LE1502 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	1425	15	79.7	80.3	78.1	0.81	4.9	2.3	5.1	2.7	60	72	**1LE1502-1AB4■-■■■■**	29	0.0059
3	**3.45**	**100 L**	1425	20	81.5	82.6	81.5	0.85	6.3	2.4	5.4	2.6	60	72	**1LE1502-1AB5■-■■■■**	33	0.0078
4	**4.55**	**112 M**	1435	27	83.1	84.3	83.7	0.83	8.4	2.5	6.1	2.9	57	70	**1LE1502-1BB2■-■■■■**	38	0.010
5.5	**56.3**	**132 S**	1450	36	84.7	85.3	84.2	0.82	11.4	2.3	5.7	2.7	64	76	**1LE1502-1CB0■-■■■■**	56	0.019
7.5	**8.6**	**132 M**	1450	49	86.0	86.5	85.4	0.82	15.4	2.6	6.6	3.1	64	76	**1LE1502-1CB2■-■■■■**	59	0.024
11	**12.6**	**160 M**	1460	72	87.6	87.9	86.7	0.81	22.5	2.7	6.9	3.3	70	82	**1LE1502-1DB2■-■■■■**	89	0.044
15	**17.3**	**160 L**	1460	98	88.7	89.1	88.0	0.82	30.0	3.0	7.5	3.6	70	82	**1LE1502-1DB4■-■■■■**	105	0.056
18.5	**21.3**	**180 M**	1468	120	89.3	90.2	90.2	0.85	35	2.2	7.3	3.1	63	76	**1LE1502-1EB2■-■■■■**	170	0.13
22	**25.3**	**180 L**	1465	143	89.9	90.8	90.7	0.83	42.5	2.7	8	3.6	63	76	**1LE1502-1EB4■-■■■■**	170	0.13
30	**34.5**	**200 L**	1472	195	90.7	91.5	91.4	0.83	58	2.3	6.9	3.1	64	78	**1LE1502-2AB5■-■■■■**	220	0.2
37	**42.5**	**225 S**	1475	240	91.2	91.6	91.1	0.85	69	2.3	7	3.2	69	83	**1LE1502-2BB0■-■■■■**	260	0.37
45	**52**	**225 M**	1475	291	91.7	92.1	91.7	0.86	82	2.6	7.2	3.2	69	82	**1LE1502-2BB2■-■■■■**	290	0.45
55	**63**	**250 M**	1475	356	92.1	92.5	92.1	0.85	101	2.4	6.1	2.6	69	83	**1LE1502-2CB2■-■■■■**	370	0.69
75	**86**	**280 S**	1485	482	92.7	92.9	92.2	0.85	137	2.3	7	2.8	75	89	**1LE1502-2DB0■-■■■■**	500	1.2
90	**104**	**280 M**	1482	580	93	93.4	93.1	0.87	161	2.2	6.5	2.8	73	87	**1LE1502-2DB2■-■■■■**	560	1.4
110	**127**	**315 S**	1488	706	93.3	93.4	92.8	0.84	205	2.3	6.5	2.7	76	90	**1LE1502-3AB0■-■■■■**	690	1.9
132	**152**	**315 M**	1488	847	93.5	93.7	93.3	0.85	240	2.5	6.8	2.7	76	91	**1LE1502-3AB2■-■■■■**	760	2.2
160	**184**	**315 L**	1486	1028	93.8	93.9	93.5	0.86	285	2.7	7.2	2.7	76	90	**1LE1502-3AB4■-■■■■**	940	2.9
200	**230**	**315 L**	1486	1285	94	94.2	94	0.87	355	2.5	6.9	2.7	76	91	**1LE1502-3AB5■-■■■■**	1140	3.5

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages [1] and more information, see from page 2/96			**9**	**0**				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			**A**			–
With flange	IM B5 [3]	With additional charge			**F**			–
With flange	IM B14 [3]	With additional charge			**K**			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				**A**		–
PTC thermistor with 3 temperature sensors		With additional charge				**B**		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1502-. . . .**	■	■	■	■	**-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125			**1LE1502-. . . .**	■	■	■	■	**-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																	
1.5	**1.75**	**100 L**	940	15	75.2	75.6	72.3	0.74	3.9	2	4	2.2	59	71	**1LE1502-1AC4■-■■■■**	30	0.0065
2.2	**2.55**	**112 M**	940	22	77.7	78.5	76.3	0.72	5.7	2.6	4.6	2.7	59	71	**1LE1502-1BC2■-■■■■**	37	0.0092
3	**3.45**	**132 S**	955	30	79.7	79.9	77.1	0.74	7.3	2	4.6	2.6	65	78	**1LE1502-1CC0■-■■■■**	52	0.017
4	**4.55**	**132 M**	955	40	81.4	82.6	81.9	0.76	9.3	2.3	5.2	2.6	65	78	**1LE1502-1CC2■-■■■■**	57	0.021
5.5	**6.3**	**132 M**	955	55	83.1	84.0	83.0	0.75	12.7	2.7	5.7	3.0	65	78	**1LE1502-1CC3■-■■■■**	66	0.027
7.5	**8.6**	**160 M**	970	74	84.7	85.4	85.0	0.73	17.5	2.1	5.5	2.9	67	79	**1LE1502-1DC2■-■■■■**	100	0.056
11	**12.6**	**160 L**	965	109	86.4	86.8	85.9	0.77	24	1.9	5.9	2.7	67	79	**1LE1502-1DC4■-■■■■**	120	0.078
15	**18**	**180 L**	975	147	87.7	88.5	87.9	0.77	32	2.3	6.1	3	56	69	**1LE1502-1EC4■-■■■■**	155	0.17
18.5	**22**	**200 L**	978	181	88.6	89.8	89.8	0.79	38	2.5	6.3	2.6	59	72	**1LE1502-2AC4■-■■■■**	200	0.25
22	**26.5**	**200 L**	980	214	89.2	90	89.6	0.79	45	2.8	6.8	2.9	59	72	**1LE1502-2AC5■-■■■■**	220	0.3
30	**36**	**225 M**	978	293	90.2	91	90.7	0.82	59	2.7	6	2.5	65	77	**1LE1502-2BC2■-■■■■**	270	0.49
37	**44.5**	**250 M**	980	361	90.8	91.5	91.3	0.82	72	2.7	6	2.4	63	77	**1LE1502-2CC2■-■■■■**	330	0.76
45	**54**	**280 S**	986	436	91.4	92	91.6	0.84	85	2.6	7	2.6	63	77	**1LE1502-2DC0■-■■■■**	440	1.1
55	**66**	**280 M**	986	533	91.9	92.5	92.6	0.85	102	2.6	6.7	2.6	63	77	**1LE1502-2DC2■-■■■■**	500	1.3
75	**90**	**315 S**	988	725	92.6	92.8	92.1	0.83	141	2.5	7.1	2.7	62	77	**1LE1502-3AC0■-■■■■**	660	2.1
90	**108**	**315 M**	988	870	92.9	93.2	92.8	0.83	168	2.6	7.3	2.6	61	77	**1LE1502-3AC2■-■■■■**	740	2.5
110	**132**	**315 L**	988	1063	93.3	93.6	93.4	0.86	198	2.6	6.8	2.8	61	78	**1LE1502-3AC4■-■■■■**	880	3.2
132	**158**	**315 L**	988	1276	93.5	93.7	93.4	0.86	235	3	7.5	2.9	61	78	**1LE1502-3AC5■-■■■■**	1030	4
160	**192**	**315 L**	988	1546	93.8	93.9	93.6	0.86	285	3.1	7.7	3	64	79	**1LE1502-3AC6■-■■■■**	1160	4.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1502-. . . . ■-■■■■-Z**					**F90 +. . .+. . .+. . .**
For options, see from page 2/125		**1LE1502-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE1

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																	
0.75	**0.86**	**100 L**	705	10	61.2	58.1	50.5	0.62	2.85	1.9	3	2.2	64	72 [4]	**1LE1502-1AD4■-■■■■**	28	0.0056
1.1	**1.27**	**100 L**	690	15	66.5	66.0	61.8	0.61	3.90	2.0	3.2	2.3	64	72 [4]	**1LE1502-1AD5■-■■■■**	33	0.0078
1.5	**1.75**	**112 M**	700	20	70.2	71.1	68.7	0.66	4.65	1.9	3.5	2.1	67	78 [4]	**1LE1502-1BD2■-■■■■**	42	0.0094
2.2	**2.55**	**132 S**	715	29	74.2	74.1	71.4	0.66	6.5	1.7	3.9	2.4	63	75	**1LE1502-1CD0■-■■■■**	60	0.019
3	**3.45**	**132 M**	715	40	77	77.4	75.2	0.68	8.3	1.8	3.9	2.2	63	75	**1LE1502-1CD2■-■■■■**	62	0.024
4	**4.55**	**160 M**	720	53	79.2	79.3	76.3	0.67	10.9	1.6	4.1	2.3	63	75	**1LE1502-1DD2■-■■■■**	89	0.044
5.5	**6.3**	**160 M**	720	73	81.4	81.9	80.3	0.68	14.3	1.6	4	2.2	63	75	**1LE1502-1DD3■-■■■■**	96	0.056
7.5	**8.6**	**160 L**	715	100	83.1	83.7	82.4	0.69	18.9	1.7	3.8	2.2	63	75	**1LE1502-1DD4■-■■■■**	120	0.077
11	**13.2**	**180 L**	720	146	85	86.2	86	0.7	26.5	1.9	5	2.5	65	78	**1LE1502-1ED4■-■■■■**	160	0.20
15	**18**	**200 L**	718	199	86.2	87.9	88.4	0.75	33.5	2.5	5.5	2.9	55	69	**1LE1502-2AD5■-■■■■**	220	0.3
18.5	**22**	**225 S**	730	242	86.9	87.8	87.4	0.78	39.5	2.2	5.5	2.7	59	72	**1LE1502-2BD0■-■■■■**	250	0.43
22	**26.5**	**225 M**	730	288	87.4	88.3	88.1	0.79	46	2.3	5.5	2.7	60	73	**1LE1502-2BD2■-■■■■**	270	0.5
30	**36**	**250 M**	732	391	88.3	89.2	89.2	0.81	61	2.3	5.5	2.6	54	68	**1LE1502-2CD2■-■■■■**	370	0.84
37	**44.5**	**280 S**	735	481	88.8	89.7	89.7	0.81	74	2.1	5	2.1	54	68	**1LE1502-2DD0■-■■■■**	460	1.22
45	**54**	**280 M**	735	585	89.2	90.3	90.4	0.81	90	2.1	5.3	2.1	58	71	**1LE1502-2DD2■-■■■■**	500	1.42
55	**66**	**315 S**	740	710	89.7	90.1	89.7	0.8	111	2.1	5.7	2.6	69	83	**1LE1502-3AD0■-■■■■**	640	2
75	**90**	**315 M**	738	970	90.3	90.7	90.5	0.81	148	2.3	5.9	2.7	69	84	**1LE1502-3AD2■-■■■■**	720	2.5
90	**108**	**315 L**	738	1165	90.7	91.2	91.2	0.84	171	2.2	5.9	2.6	68	83	**1LE1502-3AD4■-■■■■**	840	3.1
110	**132**	**315 L**	740	1419	91.1	91.6	91.5	0.82	215	2.7	6.7	2.9	73	87	**1LE1502-3AD5■-■■■■**	1000	3.9
132	**158**	**315 L**	740	1703	91.5	91.9	91.6	0.81	255	2.9	7.2	3.3	75	89	**1LE1502-3AD6■-■■■■**	1080	4.5

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages [1] and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE1502-. . . . ■-■■■■-Z** **F90 +. . .+. . .+. . .**
For options, see from page 2/125							**1LE1502-. . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

[2] Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[3] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

[4] The noise limit values specified as permissible in IEC 60034-9 under load can be exceeded.

IE1

Please note minimum legal efficiencies in the European Economic Area!

Cast-iron series SIMOTICS SD 1LE1502 Basic Line with increased power – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz [1]																	
4	**4.6**	**100 L**	2850	13	83.1	83.9	83	0.85	8.2	4.5	7	4.1	67	79	**1LE1502-1AA6■-■■■■**	33	0.0044
5.5	**6.3**	**112 M**	2935	18	84.7	84.7	82.7	0.86	10.9	2.9	7.5	3.8	69	81	**1LE1502-1BA6■-■■■■**	40	0.0085
11	**12.6**	**132 M**	2920	36	87.6	88.3	87.8	0.9	20	2.8	7.5	3.7	68	80	**1LE1502-1CA6■-■■■■**	76	0.022
22	**24.5**	**160 L**	2935	72	89.9	90.2	89.5	0.9	39	2.6	7.5	3.4	70	82	**1LE1502-1DA6■-■■■■**	125	0.049
30	**33.5**	**180 L**	2940	97	90.7	91.5	91.5	0.89	54	2.4	8.1	3.5	72	85	**1LE1502-1EA6■-■■■■**	180	0.094
45	**51**	**200 L**	2955	145	91.7	92.3	92.4	0.85	83	2.5	8.1	3.6	71	85	**1LE1502-2AA6■-■■■■**	245	0.176
55	**62**	**225 M**	2960	177	92.1	92.4	92	0.88	98	2.5	7.3	3.2	76	89	**1LE1502-2BA6■-■■■■**	330	0.27
75	**84**	**250 M**	2970	241	92.7	92.8	92.1	0.87	134	2.4	7.3	3.1	76	89	**1LE1502-2CA6■-■■■■**	420	0.48
110	**123**	**280 M**	2975	353	93.3	93.5	93.1	0.9	189	2.4	7.3	3.1	77	90	**1LE1502-2DA6■-■■■■**	620	1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
4	**4.6**	**100 L**	1435	27	83.1	83.8	82.3	0.81	8.6	2.9	5.8	3.1	60	72	**1LE1502-1AB6■-■■■■**	36	0.01
5.5	**6.3**	**112 M**	1420	37	84.7	85.9	85.3	0.81	11.6	3	5.8	3.1	58	70	**1LE1502-1BB6■-■■■■**	43	0.012
11	**12.6**	**132 M**	1450	72	87.6	88.2	87.6	0.84	21.5	2.5	7.2	3	64	76	**1LE1502-1CB6■-■■■■**	76	0.033
18.5	**21.3**	**160 L**	1460	121	89.3	89.8	89.2	0.85	35	2.7	7.2	3.2	65	77	**1LE1502-1DB6■-■■■■**	125	0.068
30	**34.5**	**180 L**	1465	196	90.7	91.7	91.9	0.79	60	2.6	7.2	3.4	64	77	**1LE1502-1EB6■-■■■■**	185	0.159
37	**42.5**	**200 L**	1470	240	91.2	92	92.1	0.82	71	2.4	6.8	2.9	64	78	**1LE1502-2AB6■-■■■■**	240	0.246
55	**63**	**225 M**	1475	356	92.1	92.8	92.6	0.86	100	2.5	6.7	2.6	70	83	**1LE1502-2BB6■-■■■■**	320	0.49
75	**86**	**250 M**	1482	483	92.7	93.1	92.6	0.84	139	2.5	7.4	3	73	87	**1LE1502-2CB6■-■■■■**	440	0.86
110	**127**	**280 M**	1486	707	93.3	93.5	93	0.85	200	2.6	8	3.3	75	89	**1LE1502-2DB6■-■■■■**	670	1.7

Voltages [2]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages [1] and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [3]	**Standard**			A		–
With flange	IM B5 [3]	With additional charge			F		–
With flange	IM B14 [3]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1502-. . . . ■-■■■■**	**-Z F90 +. . .+. . .+. . .**
For options, see from page 2/125	**1LE1502-. . . . ■-■■■■**	**-Z** . . .+. . .+. . .+. . .

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Please note minimum legal efficiencies in the European Economic Area!

IE1

Cast-iron series SIMOTICS SD 1LE1502 Basic Line with increased power – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	P_{rated}, 60 Hz/ P60 [1]	Frame size	Operating values at rated power: n_{rated}, 50 Hz	T_{rated}, 50 Hz	η_{rated}, 50 Hz, 4/4	η_{rated}, 50 Hz, 3/4	η_{rated}, 50 Hz, 2/4	$\cos\varphi_{rated}$, 50 Hz, 4/4	I_{rated}, 50 Hz, 400 V	T_{LR}/T_{rated}, 50 Hz	I_{LR}/I_{rated}, 50 Hz	T_B/T_{rated}, 50 Hz	L_{pfA}, 50 Hz	L_{WA}, 50 Hz	Cast-iron series 1LE1502 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																	
• Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1																	
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	930	23	77.7	79.5	78.1	0.78	5.2	2	4	2.2	59	71	**1LE1502-1AC6■-■■■■**	35	0.0084
3	**3.45**	**112 M**	945	30	79.7	79.5	76.3	0.72	7.5	2.9	4.6	3	57	69	**1LE1502-1BC6■-■■■■**	45	0.013
7.5	**8.6**	**132 M**	950	75	84.7	85.3	84.1	0.74	17.3	2.4	5.3	3	63	75	**1LE1502-1CC6■-■■■■**	78	0.032
15	**17.3**	**160 L**	965	148	87.7	87.9	86.5	0.75	33	2.9	6	3.4	67	79	**1LE1502-1DC6■-■■■■**	140	0.094
18.5	**22**	**180 L**	970	182	88.6	89.4	89.1	0.77	39	2.2	5.9	2.9	56	69	**1LE1502-1EC6■-■■■■**	165	0.206
30	**34.5**	**200 L**	975	294	90.2	91.4	91.7	0.78	62	2.6	6	2.7	61	75	**1LE1502-2AC6■-■■■■**	245	0.381
37	**44.5**	**225 M**	978	361	90.8	91.5	91.5	0.82	72	2.5	6.1	2.8	76	93	**1LE1502-2BC6■-■■■■**	310	0.62
45	**54**	**250 M**	982	438	91.4	92.2	92.1	0.83	86	2.7	6.6	2.3	76	95	**1LE1502-2CC6■-■■■■**	390	0.93
75	**90**	**280 M**	985	727	92.6	93.3	93.2	0.84	139	2.9	7	2.7	61	75	**1LE1502-2DC6■-■■■■**	560	1.7
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																	
15	**18**	**180 L**	718	199	86.2	87.5	87.2	0.74	34	2.1	4.7	2.3	64	78	**1LE1502-1ED6■-■■■■**	190	0.263
18.5	**22**	**200 L**	720	245	86.9	88.2	88.4	0.76	40	2.7	6.1	3.2	59	72	**1LE1502-2AD6■-■■■■**	250	0.416
30	**36**	**225 M**	730	392	88.3	89.1	89.1	0.79	62	2.6	5.6	2.8	57	70	**1LE1502-2BD6■-■■■■**	320	0.73
37	**44.5**	**250 M**	730	484	88.8	89.8	89.9	0.83	72	2.3	5.7	2.6	63	77	**1LE1502-2CD6■-■■■■**	405	1
55	**66**	**280 M**	736	714	89.7	90.4	90.5	0.8	111	2.5	5.7	2.5	70	81	**1LE1502-2DD6■-■■■■**	550	1.6

Voltages [2]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz [1] 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages [1] and more information, see from page 2/96			**9**	**0**				. . .
Types of construction		Version						Order code
Without flange	IM B3 [3]	**Standard**			**A**			–
With flange	IM B5 [3]	With additional charge			**F**			–
With flange	IM B14 [3]	With additional charge			**K**			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				**A**		–
PTC thermistor with 3 temperature sensors		With additional charge				**B**		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1502-. . . . ■-■■■■**					**-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125		**1LE1502-. . . . ■-■■■■**					**-Z**	**. . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

2) Parallel supply lines are required in the case of connection to ≤ 240 V. For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

3) Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power													Aluminum series 1LE1043 Article No.		
P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\eta_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz		$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.75	0.86	80 M	3480	2.1		77	77.2	75.7	0.84	1.45	3	7.1	3.6	64	75	1LE1043-0DA2■-■■■■	11	0.0011
1.1	1.27	80 M	3500	3		84	84	82	0.83	1.98	3.3	8.4	4	64	75	1LE1043-0DA3■-■■■■	12	0.0013
1.5	1.75	90 S	3525	4.1		85.5	84.8	82.3	0.84	2.6	3.1	9.8	4.9	69	81	1LE1043-0EA0■-■■■■	15	0.0021
2.2	2.55	90 L	3530	6		86.5	86.4	84.5	0.87	3.65	3	9.6	4.9	69	81	1LE1043-0EA4■-■■■■	19	0.0031
3	3.45	100 L	3525	8.1		88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	1LE1043-1AA4■-■■■■	26	0.0054
4	4.55	112 M	3560	10		88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	1LE1043-1BA2■-■■■■	34	0.012
5.5	6.3	132 S	3555	15		89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	1LE1043-1CA0■-■■■■	43	0.024
7.5	8.6	132 S	3555	20		90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	1LE1043-1CA1■-■■■■	57	0.031
11	12.6	160 M	3560	30		91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	1LE1043-1DA2■-■■■■	75	0.053
15	17.3	160 M	3565	40		91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	1LE1043-1DA3■-■■■■	84	0.061
18.5	21.3	160 L	3560	50		91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1043-1DA4■-■■■■	94	0.068
22	24.5	180 M	3560	59		91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	1LE1043-1EA2■-■■■■	129	0.08
30	33.5	200 L	3560	80		92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	1LE1043-2AA4■-■■■■	173	0.134
37	41.5	200 L	3560	99		93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	1LE1043-2AA5■-■■■■	194	0.158
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.75	0.86	80 M	1760	4.1		83.5	82.6	79.3	0.71	1.59	3.1	8.3	4.7	55	66	1LE1043-0DB3■-■■■■	14	0.0021
1.1	1.27	90 S	1750	6		86.5	86.4	84.2	0.75	2.15	3.4	8.2	4.4	58	70	1LE1043-0EB0■-■■■■	16	0.0029
1.5	1.75	90 L	1755	8.2		86.5	86.2	84.5	0.77	2.85	3.4	8.6	4.3	62	70	1LE1043-0EB4■-■■■■	19	0.0049
2.2	2.55	100 L	1770	11.9		89.5	89.2	87.2	0.81	3.8	3.5	9.6	5.1	62	74	1LE1043-1AB4■-■■■■	30	0.014
3	3.45	100 L	1760	16.3		89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	1LE1043-1AB5■-■■■■	30	0.014
4	4.55	112 M	1770	19		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	1LE1043-1BB2■-■■■■	34	0.017
5.5	6.3	132 S	1775	30		91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	1LE1043-1CB0■-■■■■	64	0.046
7.5	8.6	132 M	1770	40		91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	1LE1043-1CB2■-■■■■	64	0.046
11	12.6	160 M	1775	59		92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	1LE1043-1DB2■-■■■■	83	0.083
15	17.3	160 L	1780	80		93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	1LE1043-1DB4■-■■■■	100	0.099
18.5	21.3	180 M	1775	100		93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	1LE1043-1EB2■-■■■■	134	0.13
22	25.3	180 L	1775	118		93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	1LE1043-1EB4■-■■■■	142	0.14
30	34.5	200 L	1778	161	IE2	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	1LE1043-2AB5■-■■■■	189	0.22

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages and more information, see from page 2/93			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [1]	**Standard**			A		–
With flange	IM B5 [1]	With additional charge			F		–
With flange	IM B14 [1]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC416)		1LE1043-. . . . ■–■■■■ -Z					F90 +. . .+. . .+. . .
For options and information, see from page 2/118		1LE1043-. . . . ■–■■■■ -Z					. . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power													Aluminum series 1LE1043		
P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\eta_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.75	**0.86**	**90 S**	1155	6.2		82.5	82.4	79.9	0.65	1.76	2.4	5.3	3.1	46	58	**1LE1043-0EC0■-■■■■**	16	0.004
1.1	**1.27**	**100 L**	1180	8.9		87.5	87.2	84.8	0.69	2.3	2.4	6.7	3.3	62	74	**1LE1043-1AC3■-■■■■**	30	0.014
1.5	**1.75**	**112 S**	1170	14		88.5	88.7	87.3	0.76	3.25	2	6.2	2.8	65	77	**1LE1043-1BC1■-■■■■**	34	0.017
2.2	**2.55**	**132 S**	1180	21		89.5	89.2	87.7	0.72	4.3	2.4	7.3	3.5	63	71	**1LE1043-1CC1■-■■■■**	42	0.033
3	**3.45**	**132 S**	1180	24		89.5	89.5	87.9	0.70	6	2.6	7.6	3.8	61	69	**1LE1043-1CC0■-■■■■**	42	0.034
4	**4.55**	**132 M**	1180	30		89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	62	70	**1LE1043-1CC2■-■■■■**	46	0.039
5.5	**6.3**	**132 M**	1180	45		91.0	90.8	89.2	0.69	11	3	7.8	4	67	75	**1LE1043-1CC3■-■■■■**	58	0.050
7.5	**8.6**	**160 M**	1185	60		91.0	90.8	89.3	0.80	12	2.7	9.3	3.7	73	81	**1LE1043-1DC2■-■■■■**	95	0.132
11	**12.6**	**160 L**	1185	89		91.7	91.7	90.5	0.78	19	3.4	8	3.2	72	80	**1LE1043-1DC4■-■■■■**	106	0.164
15	**18**	**180 L**	1178	122	IE2	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	**1LE1043-1EC4■-■■■■**	130	0.19
18.5	**22**	**200 L**	1180	150	IE2	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	**1LE1043-2AC4■-■■■■**	166	0.28
22	**26.5**	**200 L**	1180	178	IE2	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	**1LE1043-2AC5■-■■■■**	179	0.32

Voltages		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**		–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	**3**	**4**		–
50 Hz 500 VY		Without additional charge	**2**	**7**		–
50 Hz 500 VΔ		Without additional charge	**4**	**0**		–
For other voltages and more information, see from page 2/93			**9**	**0**		. . .
Types of construction		Version				Order code
Without flange	IM B3 [1]	**Standard**			**A**	–
With flange	IM B5 [1]	With additional charge			**F**	–
With flange	IM B14 [1]	With additional charge			**K**	–
For other types of construction and more information, see from page 2/99					■	. . .
Motor protection		Version				Order code
Without		**Standard**			**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 90 or 100 to 200)		With additional charge			**B**	–
For other motor protection and more information, see from page 2/112					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**				**4**
For other terminal box positions and more information, see from page 2/115						■
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC416)		**1LE1043-. . . . ■–■■■■**				**-Z F90** +. . .+. . .+. . .
For options and information, see from page 2/118		**1LE1043-. . . . ■–■■■■**				**-Z** . . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power													Aluminum series 1LE1043 Article No.		
P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz		$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
4	4.55	100 L	3500	12		88.5	89.6	89.5	0.89	7.3	3	8.4	4	75	83	1LE1043-1AA6■-■■■■	26	0.0054
11	12.6	132 M	3565	29		91	91.1	90.3	0.86	17.6	2.5	9.6	5.2	72	84	1LE1043-1CA6■-■■■■	57	0.031
15	17.3	132 L	3555	46		91.7	92.1	91.7	0.89	26.5	2.4	8.7	4.8	72	84	1LE1043-1CA7■-■■■■	65	0.035
22	25.3	160 L	3560	59		91.7	91.8	90.9	0.9	33.5	3.1	9.7	4.5	77	89	1LE1043-1DA6■-■■■■	105	0.073
30	33.5	180 L	3560	80		92.4	92.6	92.1	0.87	47	2.9	8.8	4.5	77	89	1LE1043-1EA6■-■■■■	140	0.094
45	51	200 L	3560	121		93.6	93.7	93	0.86	70	3	8.4	3.7	77	84	1LE1043-2AA6■-■■■■	194	0.170
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
11	12.6	132 M	1775	59		92.4	92.6	91.8	0.79	19	3.1	8.7	4.1	68	80	1LE1043-1CB6■-■■■■	62	0.046
18.5	21.3	160 L	1780	99		93.6	93.3	91.9	0.75	33	3.9	9.6	4.5	69	81	1LE1043-1DB6■-■■■■	110	0.099
30	34.5	180 L	1775	160		94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	79	86	1LE1043-1EB6■-■■■■	154	0.173
37	42.5	200 L	1780	198		94.5	94.7	94.2	0.8	61	3.3	9	4	70	77	1LE1043-2AB6■-■■■■	205	0.275

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages and more information, see from page 2/93			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [1]	**Standard**			A		–
With flange	IM B5 [1]	With additional charge			F		–
With flange	IM B14 [1]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC416)	1LE1043-. . . . ■–■■■■	-Z F90 +. . .+. . .+. . .
For options and information, see from page 2/118	1LE1043-. . . . ■–■■■■	-Z . . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1543 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.75	**0.86**	**80 M**	3480	2.1		77	77.2	75.7	0.84	1.45	3	7.1	3.6	64	75	**1LE1543-0DA2■-■■■■**	18	0.0011
1.1	**1.27**	**80 M**	3500	3		84	84	82	0.83	1.98	3.3	8.4	4	64	75	**1LE1543-0DA3■-■■■■**	21	0.0013
1.5	**1.75**	**90 S**	3525	4.1		85.5	84.8	82.3	0.84	2.6	3.1	9.8	4.9	69	81	**1LE1543-0EA0■-■■■■**	26	0.0021
2.2	**2.55**	**90 L**	3530	6		86.5	86.4	84.5	0.87	3.65	3	9.6	4.9	69	81	**1LE1543-0EA4■-■■■■**	32	0.0031
3	**3.45**	**100 L**	3525	8.1		88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	**1LE1543-1AA4■-■■■■**	36	0.0054
3.7	**4.55**	**112 M**	3560	10		88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	**1LE1543-1BA2■-■■■■**	45	0.012
5.5	**6.3**	**132 S**	3555	15		89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	**1LE1543-1CA0■-■■■■**	58	0.024
7.5	**8.6**	**132 S**	3555	20		90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	**1LE1543-1CA1■-■■■■**	73	0.031
11	**12.6**	**160 M**	3560	30		91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	**1LE1543-1DA2■-■■■■**	100	0.053
15	**17.3**	**160 M**	3565	40		91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	**1LE1543-1DA3■-■■■■**	110	0.061
18.5	**21.3**	**160 L**	3560	50		91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	**1LE1543-1DA4■-■■■■**	127	0.068
22	**24.5**	**180 M**	3560	59		91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	**1LE1543-1EA2■-■■■■**	160	0.08
30	**33.5**	**200 L**	3560	80		92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	**1LE1543-2AA4■-■■■■**	225	0.134
37	**41.5**	**200 L**	3560	99		93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	**1LE1543-2AA5■-■■■■**	250	0.158
45	**51**	**225 M**	3570	120		93.6	93.7	93.1	0.88	69	2.7	7.6	3.5	75	89	**1LE1543-2BA2■-■■■■**	315	0.26
55	**62**	**250 M**	3578	147		93.6	93.4	92.3	0.89	83	2.5	7.3	3.3	76	90	**1LE1543-2CA2■-■■■■**	385	0.46
75	**84**	**280 S**	3578	200	IE2	94.1	93.9	92.7	0.89	112	2.7	7.6	3.2	78	92	**1LE1543-2DA0■-■■■■**	510	0.77
90	**101**	**280 M**	3578	240	IE2	95	94.8	93.8	0.9	132	2.7	8.1	3.3	78	92	**1LE1543-2DA2■-■■■■**	590	0.94
110	**123**	**315 S**	3585	293		95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	**1LE1543-3AA0■-■■■■**	750	1.4
132	**148**	**315 M**	3585	352		95.4	95.1	94	0.91	191	2.8	8	3.4	79	93	**1LE1543-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	3588	426	IE2	95.4	95.1	93.9	0.91	230	3.2	8.8	3.5	82	96	**1LE1543-3AA4■-■■■■**	980	1.9
200	**224**	**315 L**	3586	533		95.8	95.7	94.8	0.92	285	3.2	8.3	3.3	82	96	**1LE1543-3AA5■-■■■■**	1150	2.3

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [1]	**Standard**			A			–
With flange	IM B5 [1]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				A		–
PTC thermistor with 3 temperature sensors		With additional charge				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1543-. . . . ■-■■■■**						**-Z F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1543-. . . . ■-■■■■**						**-Z . . .+. . .+. . .+. . .**

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1543 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.75	**0.86**	**80 M**	1760	4.1		83.5	82.6	79.3	0.71	1.59	3.1	8.3	4.7	55	66	**1LE1543-0DB3■-■■■■**	22	0.0029
1.1	**1.27**	**90 S**	1750	6		86.5	86.4	84.2	0.75	2.15	3.4	8.2	4.4	58	70	**1LE1543-0EB0■-■■■■**	25	0.0036
1.5	**1.75**	**90 L**	1755	8.2		86.5	86.2	84.5	0.77	2.85	3.4	8.6	4.3	62	70	**1LE1543-0EB4■-■■■■**	31	0.0049
2.2	**2.55**	**100 L**	1770	11.9		89.5	89.2	87.2	0.81	3.8	3.5	9.6	5.1	62	74	**1LE1543-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1760	16.3		89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	**1LE1543-1AB5■-■■■■**	40	0.014
4	**4.55**	**112 M**	1770	19		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	**1LE1543-1BB2■-■■■■**	46	0.017
5.5	**6.3**	**132 S**	1775	30		91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	**1LE1543-1CB0■-■■■■**	74	0.046
7.5	**8.6**	**132 M**	1770	40		91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	**1LE1543-1CB2■-■■■■**	80	0.046
11	**12.6**	**160 M**	1775	59		92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	**1LE1543-1DB2■-■■■■**	109	0.083
15	**17.3**	**160 L**	1780	80		93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	**1LE1543-1DB4■-■■■■**	127	0.099
18.5	**21.3**	**180 M**	1775	100		93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	**1LE1543-1EB2■-■■■■**	165	0.13
22	**25.3**	**180 L**	1775	118		93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	**1LE1543-1EB4■-■■■■**	170	0.14
30	**34.5**	**200 L**	1778	161	IE2	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	**1LE1543-2AB5■-■■■■**	240	0.22
37	**42.5**	**225 S**	1782	198	IE2	94.5	94.7	94.2	0.85	58	2.8	7.5	3	66	80	**1LE1543-2BB0■-■■■■**	285	0.42
45	**52**	**225 M**	1782	241	IE2	95.0	95.3	95.1	0.85	70	3	7.7	3.3	66	80	**1LE1543-2BB2■-■■■■**	340	0.52
55	**63**	**250 M**	1786	294	IE2	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	67	81	**1LE1543-2CB2■-■■■■**	420	0.85
75	**86**	**280 S**	1785	460	IE2	94.5	94.7	94.2	0.87	131	2.5	6.8	2.9	77	91	**1LE1543-2DB0■-■■■■**	570	1.39
90	**104**	**280 M**	1788	481	IE2	95.4	95.5	94.9	0.87	136	2.9	8	3.3	79	93	**1LE1543-2DB2■-■■■■**	670	1.7
110	**127**	**315 S**	1790	587		95.8	95.9	95.4	0.86	168	3	7.5	3.1	73	87	**1LE1543-3AB0■-■■■■**	760	2.2
132	**152**	**315 M**	1790	704		96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	76	90	**1LE1543-3AB2■-■■■■**	960	2.9
160	**184**	**315 L**	1791	853		96.2	96.2	95.7	0.87	240	3.3	8.4	3.3	76	90	**1LE1543-3AB4■-■■■■**	990	3.1
200	**230**	**315 L**	1791	1066	IE2	96.2	96.2	95.5	0.87	300	3.5	8.7	3.2	78	93	**1LE1543-3AB5■-■■■■**	1190	3.7

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [1]	**Standard**			**A**		–
With flange	IM B5 [1]	With additional charge			**F**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				**4**	
For other terminal box positions and more information, see from page 2/116						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1543- . . . . ■-■■■■**					**-Z F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1543- . . . . ■-■■■■**					**-Z . . .+. . .+. . .+. . .**

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1543 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.75	0.86	90 S	1155	6.2		82.5	82.4	79.9	0.65	3.05	2.4	5.3	3.1	46	58	1LE1543-0EC0■-■■■■	27	0.004
1.1	1.27	100 L	1180	8.9		87.5	87.2	84.8	0.69	2.3	2.4	6.7	3.3	62	74	1LE1543-1AC3■-■■■■	25	0.011
1.5	1.75	112 M	1175	12		88.5	88.3	86.2	0.73	2.9	2.2	6.9	3.2	65	77	1LE1543-1BC1■-■■■■	53	0.017
2.2	2.55	132 S	1180	21		89.5	89.2	87.7	0.72	4.3	2.4	7.3	3.5	63	71	1LE1543-1CC1■-■■■■	60	0.033
3	3.45	132 S	1180	24		89.5	89.5	87.9	0.70	6.	2.6	7.6	3.8	61	69	1LE1543-1CC0■-■■■■	60	0.034
4	4.55	132 M	1180	30		89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	62	70	1LE1543-1CC2■-■■■■	64	0.039
5.5	6.3	132 M	1180	45		91.0	90.8	89.2	0.69	11	3	7.8	4	67	75	1LE1543-1CC3■-■■■■	76	0.050
7.5	8.6	160 M	1185	60		91.0	90.8	89.3	0.80	12.9	2.7	9.3	3.7	73	81	1LE1543-1DC2■-■■■■	124	0.132
11	12.6	160 L	1185	89		91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	72	80	1LE1543-1DC4■-■■■■	138	0.164
15	18	180 L	1178	122	IE2	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	1LE1543-1EC4■-■■■■	180	0.19
18.5	22	200 L	1180	150	IE2	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	1LE1543-2AC4■-■■■■	215	0.28
22	26.5	200 L	1180	178	IE2	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	1LE1543-2AC5■-■■■■	230	0.32
37	44.5	250 M	1188	297	IE2	94.1	94.4	93.9	0.83	59	3.1	8	3.1	63	76	1LE1543-2CC2■-■■■■	405	1
45	54	280 S	1190	361	IE2	94.5	94.6	94.1	0.83	72	3.3	7.7	3.1	66	80	1LE1543-2DC0■-■■■■	510	1.4
55	66	280 M	1190	441	IE2	94.5	94.6	93.9	0.84	87	3.6	9.2	3.3	66	80	1LE1543-2DC2■-■■■■	560	1.64
75	90	315 S	1192	601		95	94.9	94.1	0.82	121	3.1	8.4	3.3	64	79	1LE1543-3AC0■-■■■■	750	2.6
90	108	315 M	1192	721	IE2	95	95	94.4	0.84	142	2.7	7.7	3	64	79	1LE1543-3AC2■-■■■■	890	3.1
110	132	315 L	1192	881	IE2	95.8	95.9	95.5	0.83	174	3.2	8.2	3.4	64	79	1LE1543-3AC4■-■■■■	990	3.9
132	158	315 L	1193	1057	IE2	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80	1LE1543-3AC5■-■■■■	1130	4.48

Voltages		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [1]	**Standard**			A		–
With flange	IM B5 [1]	With additional charge			F		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1543-. . . . ■-■■■■-Z					F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1543-. . . . ■-■■■■-Z					. . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1643 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.75	0.86	80 M	3480	2.1		77	77.2	75.7	0.84	1.45	3	7.1	3.6	64	75	1LE1643-0DA2■-■■■■	18	0.0011
1.1	1.27	80 M	3500	3		84	84	82	0.83	1.98	3.3	8.4	4	64	75	1LE1643-0DA3■-■■■■	21	0.0013
1.5	1.75	90 S	3525	4.1		85.5	84.8	82.3	0.84	2.6	3.1	9.8	4.9	69	81	1LE1643-0EA0■-■■■■	26	0.0021
2.2	2.55	90 L	3530	6		86.5	86.4	84.5	0.87	3.65	3	9.6	4.9	69	81	1LE1643-0EA4■-■■■■	32	0.0031
3	3.45	100 L	3525	8.1		88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	1LE1643-1AA4■-■■■■	36	0.0054
3.7	4.55	112 M	3560	10		88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	1LE1643-1BA2■-■■■■	45	0.012
5.5	6.3	132 S	3555	15		89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	1LE1643-1CA0■-■■■■	58	0.024
7.5	8.6	132 S	3555	20		90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	1LE1643-1CA1■-■■■■	73	0.031
11	12.6	160 M	3560	30		91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	1LE1643-1DA2■-■■■■	100	0.053
15	17.3	160 M	3565	40		91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	1LE1643-1DA3■-■■■■	110	0.061
18.5	21.3	160 L	3560	50		91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1643-1DA4■-■■■■	127	0.068
22	24.5	180 M	3560	59		91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	1LE1643-1EA2■-■■■■	160	0.08
30	33.5	200 L	3560	80		92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	1LE1643-2AA4■-■■■■	225	0.134
37	41.5	200 L	3560	99		93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	1LE1643-2AA5■-■■■■	250	0.158
45	51	225 M	3570	120		93.6	93.7	93.1	0.88	69	2.7	7.6	3.5	75	89	1LE1643-2BA2■-■■■■	315	0.26
55	62	250 M	3578	147		93.6	93.4	92.3	0.89	83	2.5	7.3	3.3	76	90	1LE1643-2CA2■-■■■■	385	0.46
75	84	280 S	3578	200	IE2	94.1	93.9	92.7	0.89	112	2.7	7.6	3.2	78	92	1LE1643-2DA0■-■■■■	510	0.77
90	101	280 M	3578	240	IE2	95	94.8	93.8	0.9	132	2.7	8.1	3.3	78	92	1LE1643-2DA2■-■■■■	590	0.94
110	123	315 S	3585	293		95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	1LE1643-3AA0■-■■■■	750	1.4
132	148	315 M	3585	352		95.4	95.1	94	0.91	191	2.8	8	3.4	79	93	1LE1643-3AA2■-■■■■	880	1.6
160	180	315 L	3588	426	IE2	95.4	95.1	93.9	0.91	230	3.2	8.8	3.5	82	96	1LE1643-3AA4■-■■■■	980	1.9
200	224	315 L	3586	533		95.8	95.7	94.8	0.92	285	3.2	8.3	3.3	82	96	1LE1643-3AA5■-■■■■	1150	2.3

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [1]	**Standard**			A			–
With flange	IM B5 [1]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1643- . . . . ■-■■■■ -Z						F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1643- . . . . ■-■■■■ -Z						. . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power													Cast-iron series 1LE1643 – *Performance Line* Article No.		
P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz		$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
3	3.45	100 L	1760	16.3		89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	1LE1643-1AB5■-■■■■	40	0.014
4	4.55	112 M	1770	19		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	1LE1643-1BB2■-■■■■	46	0.017
5.5	6.3	132 S	1775	30		91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	1LE1643-1CB0■-■■■■	74	0.046
7.5	8.6	132 M	1770	40		91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	1LE1643-1CB2■-■■■■	80	0.046
11	12.6	160 M	1775	59		92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	1LE1643-1DB2■-■■■■	109	0.083
15	17.3	160 L	1780	80		93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	1LE1643-1DB4■-■■■■	127	0.099
18.5	21.3	180 M	1775	100		93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	1LE1643-1EB2■-■■■■	165	0.13
22	25.3	180 L	1775	118		93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	1LE1643-1EB4■-■■■■	170	0.14
30	34.5	200 L	1778	161	IE2	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	1LE1643-2AB5■-■■■■	240	0.22
37	42.5	225 S	1782	198	IE2	94.5	94.7	94.2	0.85	58	2.8	7.5	3	66	80	1LE1643-2BB0■-■■■■	285	0.42
45	52	225 M	1782	241	IE2	95.0	95.3	95.1	0.85	70	3	7.7	3.3	66	80	1LE1643-2BB2■-■■■■	340	0.52
55	63	250 M	1786	294	IE2	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	67	81	1LE1643-2CB2■-■■■■	420	0.85
75	86	280 S	1785	460	IE2	94.5	94.7	94.2	0.87	131	2.5	6.8	2.9	77	91	1LE1643-2DB0■-■■■■	570	1.39
90	104	280 M	1788	481	IE2	95.4	95.5	94.9	0.87	136	2.9	8	3.3	79	93	1LE1643-2DB2■-■■■■	670	1.7
110	127	315 S	1790	587		95.8	95.9	95.4	0.86	168	3	7.5	3.1	73	87	1LE1643-3AB0■-■■■■	760	2.2
132	152	315 M	1790	704		96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	76	90	1LE1643-3AB2■-■■■■	960	2.9
160	184	315 L	1791	853		96.2	96.2	95.7	0.87	240	3.3	8.4	3.3	76	90	1LE1643-3AB4■-■■■■	990	3.1
200	230	315 L	1791	1066	IE2	96.2	96.2	95.5	0.87	300	3.5	8.7	3.2	78	93	1LE1643-3AB5■-■■■■	1190	3.7

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [1]	**Standard**			A			–
With flange	IM B5 [1]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1643-. . . . ■-■■■■					-Z	F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1643-. . . . ■-■■■■					-Z	. . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1643 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
1.1	**1.27**	**100 L**	1180	8.9		87.5	87.2	84.8	0.69	2.3	2.4	6.7	3.3	62	74	**1LE1643-1AC3■-■■■■**	25	0.011
1.5	**1.75**	**112 M**	1175	12		88.5	88.3	86.2	0.73	2.9	2.2	6.9	3.2	65	77	**1LE1643-1BC1■-■■■■**	53	0.017
2.2	**2.55**	**132 S**	1180	21		89.5	89.2	87.7	0.72	4.3	2.4	7.3	3.5	58	71	**1LE1643-1CC1■-■■■■**	60	0.033
3	**3.45**	**132 S**	1180	24		89.5	89.5	87.9	0.70	6.	2.6	7.6	3.8	55	69	**1LE1643-1CC0■-■■■■**	60	0.034
4	**4.55**	**132 M**	1180	30		89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	57	70	**1LE1643-1CC2■-■■■■**	64	0.039
5.5	**6.3**	**132 M**	1180	45		91.0	90.8	89.2	0.69	11	3	7.8	4	61	75	**1LE1643-1CC3■-■■■■**	76	0.050
7.5	**8.6**	**160 M**	1185	60		91.0	90.8	89.3	0.80	12.9	2.7	9.3	3.7	68	81	**1LE1643-1DC2■-■■■■**	124	0.132
11	**12.6**	**160 L**	1185	89		91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	67	80	**1LE1643-1DC4■-■■■■**	138	0.164
15	**18**	**180 L**	1178	122	IE2	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	**1LE1643-1EC4■-■■■■**	180	0.19
18.5	**22**	**200 L**	1180	150	IE2	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	**1LE1643-2AC4■-■■■■**	215	0.28
22	**26.5**	**200 L**	1180	178	IE2	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	**1LE1643-2AC5■-■■■■**	230	0.32
37	**44.5**	**250 M**	1188	297	IE2	94.1	94.4	93.9	0.83	59	3.1	8	3.1	63	76	**1LE1643-2CC2■-■■■■**	405	1
45	**54**	**280 S**	1190	361	IE2	94.5	94.6	94.1	0.83	72	3.3	7.7	3.1	66	80	**1LE1643-2DC0■-■■■■**	510	1.4
55	**66**	**280 M**	1190	441	IE2	94.5	94.6	94	0.83	88	3.6	7.9	3.3	66	80	**1LE1643-2DC2■-■■■■**	560	1.64
75	**90**	**315 S**	1192	601		95	94.9	94.1	0.82	121	3.1	8.4	3.3	64	79	**1LE1643-3AC0■-■■■■**	750	2.6
90	**108**	**315 M**	1192	721	IE2	95	95	94.4	0.84	142	2.7	7.7	3	64	79	**1LE1643-3AC2■-■■■■**	890	3.1
110	**132**	**315 L**	1192	881	IE2	95.8	95.9	95.5	0.83	174	3.2	8.2	3.4	64	79	**1LE1643-3AC4■-■■■■**	990	3.9
132	**158**	**315 L**	1193	1057	IE2	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80	**1LE1643-3AC5■-■■■■**	1130	4.48

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages and more information, see from page 2/96			**9**	**0**				. . .
Types of construction		Version						Order code
Without flange	IM B3 [1]	**Standard**			**A**			–
With flange	IM B5 [1]	With additional charge			**F**			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1643-. . . . ■-■■■■-Z**						**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1643-. . . . ■-■■■■-Z**						**. . .+. . .+. . .+. . .**

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power														Cast-iron series 1LE1543 – Basic Line		
P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																			
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																			
4	4.55	100 L	3530	10		88.5	88.0	86.4	0.80	6.6	4.5	12.4	5.8	75	83	1LE1543-1AA6■-■■■■	37	0.0054
11	12.6	132 M	3565	29		91.0	91.3	90.4	0.86	17.6	2.9	10.9	4.7	75	83	1LE1543-1CA6■-■■■■	75	0.031
15	17.3	132 M	3570	40		91.0	90.9	90.1	0.83	24	3.4	11.1	5.4	78	86	1LE1543-1CA7■-■■■■	85	0.035
22	25.3	160 L	3560	59		91.7	91.8	90.9	0.9	33.5	3.1	9.7	4.5	77	89	1LE1543-1DA6■-■■■■	148	0.073
30	33.5	180 L	3560	80		92.4	92.6	92.1	0.87	47	2.9	8.8	4.5	77	89	1LE1543-1EA6■-■■■■	180	0.094
45	51	200 L	3560	121		93.6	93.7	93	0.86	70	3	8.4	3.7	77	84	1LE1543-2AA6■-■■■■	245	0.17
55	62	225 M	3570	147		93.6	93.6	92.8	0.88	84	3.2	8.9	4	76	89	1LE1543-2BA6■-■■■■	370	0.31
75	84	250 M	3575	200		94.1	93.9	92.9	0.9	111	2.5	7.5	3.2	82	96	1LE1543-2CA6■-■■■■	455	0.56
110	123	280 M	3578	294		95	94.8	94	0.91	160	2.9	8.5	3.5	82	96	1LE1543-2DA6■-■■■■	660	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																			
11	12.6	132 M	1775	59		92.4	92.6	91.8	0.79	19	3.1	8.7	4.1	68	80	1LE1543-1CB6■-■■■■	82	0.046
18.5	21.3	160 L	1780	99		93.6	93.3	91.9	0.75	33	3.9	9.6	4.5	69	81	1LE1543-1DB6■-■■■■	140	0.099
30	34.5	180 L	1775	160		94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	79	86	1LE1543-1EB6■-■■■■	193	0.173
37	42.5	200 L	1780	198		94.5	94.7	94.2	0.8	61	3.3	9	4	70	77	1LE1543-2AB6■-■■■■	258	0.275
55	63	225 M	1782	295	IE2	95.4	95.7	95.4	0.85	85	3.1	7.4	3	75	89	1LE1543-2BB6■-■■■■	405	0.65
75	86	250 M	1788	401		95.4	95.4	94.8	0.84	117	3.4	8.8	3.8	75	89	1LE1543-2CB6■-■■■■	510	1.1
110	127	280 M	1788	587	IE2	95.8	95.7	94.9	0.85	170	3.4	9.2	3.7	82	96	1LE1543-2DB6■-■■■■	710	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																			
18.5	22	180 L	1180	150		93	93.2	92.6	0.75	33.5	2.9	7.9	3.7	69	81	1LE1543-1EC6■-■■■■	185	0.247
30	36	200 L	1182	242	IE2	94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	1LE1543-2AC6■-■■■■	270	0.434
37	44.5	225 M	1186	298	IE2	94.1	94.3	93.7	0.8	62	3.3	8.2	3.5	71	85	1LE1543-2BC6■-■■■■	395	0.84
45	54	250 M	1188	362	IE2	94.5	94.7	94.2	0.83	72	2.8	8.1	3.2	69	83	1LE1543-2CC6■-■■■■	480	1.3
75	90	280 M	1190	602		95	95.1	94.6	0.82	121	4.2	9.5	3.6	70	84	1LE1543-2DC6■-■■■■	630	1.9
160	192	315 L	1193	1281	IE2	95.8	95.8	95.2	0.81	260	4	9.8	4	68	82	1LE1543-3AC6■-■■■■	1260	5.4

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages and more information, see from page 2/96			9	0	. . .
Types of construction		Version			Order code
Without flange	IM B3 [1]	**Standard**	A		–
With flange	IM B5 [1]	With additional charge	F		–
For other types of construction and more information, see from page 2/103			■		. . .
Motor protection		Version			Order code
Without		**Standard**	A		–
PTC thermistor with 3 temperature sensors		With additional charge	B		–
For other motor protection and more information, see from page 2/113			■		. . .
Terminal box position		Version			
Terminal box at top		**Standard**	4		
For other terminal box positions and more information, see from page 2/116			■		
Special versions					Order code(s)
For options, see from page 2/125		1LE1543- . . . . ■-■■■■	-Z		. . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class 60 Hz/P60	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1643 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
4	**4.55**	**100 L**	3530	10		88.5	88.0	86.4	0.80	6.6	4.5	12.4	5.8	75	83	**1LE1643-1AA6■-■■■■**	37	0.0054
11	**12.6**	**132 M**	3565	29		91.0	91.3	90.4	0.86	17.6	2.9	10.9	4.7	75	83	**1LE1643-1CA6■-■■■■**	75	0.031
15	**17.3**	**132 M**	3570	40		91.0	90.9	90.1	0.83	24	3.4	11.1	5.4	78	86	**1LE1643-1CA7■-■■■■**	85	0.035
22	**25.3**	**160 L**	3560	59		91.7	91.8	90.9	0.9	33.5	3.1	9.7	4.5	77	89	**1LE1643-1DA6■-■■■■**	148	0.073
30	**33.5**	**180 L**	3560	80		92.4	92.6	92.1	0.87	47	2.9	8.8	4.5	77	89	**1LE1643-1EA6■-■■■■**	180	0.094
45	**51**	**200 L**	3560	121		93.6	93.7	93	0.86	70	3	8.4	3.7	77	84	**1LE1643-2AA6■-■■■■**	245	0.17
55	**62**	**225 M**	3570	147		93.6	93.6	92.8	0.88	84	3.2	8.9	4	76	89	**1LE1643-2BA6■-■■■■**	370	0.31
75	**84**	**250 M**	3575	200		94.1	93.9	92.9	0.9	111	2.5	7.5	3.2	82	96	**1LE1643-2CA6■-■■■■**	455	0.56
110	**123**	**280 M**	3578	294		95	94.8	94	0.91	160	2.9	8.5	3.5	82	96	**1LE1643-2DA6■-■■■■**	660	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
11	**12.6**	**132 M**	1775	59		92.4	92.6	91.8	0.79	19	3.1	8.7	4.1	68	80	**1LE1643-1CB6■-■■■■**	82	0.046
18.5	**21.3**	**160 L**	1780	99		93.6	93.3	91.9	0.75	33	3.9	9.6	4.5	69	81	**1LE1643-1DB6■-■■■■**	140	0.099
30	**34.5**	**180 L**	1775	160		94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	79	86	**1LE1643-1EB6■-■■■■**	193	0.173
37	**42.5**	**200 L**	1780	198		94.5	94.7	94.2	0.8	61	3.3	9	4	70	77	**1LE1643-2AB6■-■■■■**	258	0.275
55	**63**	**225 M**	1782	295	IE2	95.4	95.7	95.4	0.85	85	3.1	7.4	3	75	89	**1LE1643-2BB6■-■■■■**	405	0.65
75	**86**	**250 M**	1788	401		95.4	95.4	94.8	0.84	117	3.4	8.8	3.8	75	89	**1LE1643-2CB6■-■■■■**	510	1.1
110	**127**	**280 M**	1788	587	IE2	95.8	95.7	94.9	0.85	170	3.4	9.2	3.7	82	96	**1LE1643-2DB6■-■■■■**	710	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
18.5	**22**	**180 L**	1180	150		93	93.2	92.6	0.75	33.5	2.9	7.9	3.7	69	81	**1LE1643-1EC6■-■■■■**	185	0.247
30	**36**	**200 L**	1182	242	IE2	94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	**1LE1643-2AC6■-■■■■**	270	0.434
37	**44.5**	**225 M**	1186	298	IE2	94.1	94.3	93.7	0.8	62	3.3	8.2	3.5	71	85	**1LE1643-2BC6■-■■■■**	395	0.84
45	**54**	**250 M**	1188	362	IE2	94.5	94.7	94.2	0.83	72	2.8	8.1	3.2	69	83	**1LE1643-2CC6■-■■■■**	480	1.3
75	**90**	**280 M**	1190	602		95	95.1	94.6	0.82	121	4.2	9.5	3.6	70	84	**1LE1643-2DC6■-■■■■**	630	1.9
160	**192**	**315 L**	1193	1281	IE2	95.8	95.8	95.2	0.81	260	4	9.8	4	68	82	**1LE1643-3AC6■-■■■■**	1260	5.4

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages and more information, see from page 2/96			**9**	**0**	. . .
Types of construction		Version			Order code
Without flange	IM B3 [1]	**Standard**		**A**	–
With flange	IM B5 [1]	With additional charge		**F**	–
For other types of construction and more information, see from page 2/103				■	. . .
Motor protection		Version			Order code
PTC thermistor with 3 temperature sensors		**Standard**		**B**	–
For other motor protection and more information, see from page 2/113				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**			**4**
For other terminal box positions and more information, see from page 2/116					■
Special versions					Order code(s)
For options, see from page 2/125			**1LE1643-. . . . ■-■■■■**		**-Z** . . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1041 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)			
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																	
0.75	**0.86**	**80 M**	3445	2.1	75.5	76.2	74.8	0.83	1.5	2.1	6	3	64	75	**1LE1041-0DA2 ■-■■■■**	9	0.0008
1.5	**1.75**	**90 S**	3505	4.1	84	83.5	80.7	0.82	2.75	3.1	8.5	4.5	69	81	**1LE1041-0EA0 ■-■■■■**	13	0.0017
2.2	**2.55**	**90 L**	3510	6	85.5	85.2	82.6	0.83	3.9	3	8.7	4.6	69	81	**1LE1041-0EA4 ■-■■■■**	15	0.0021
4	**4.55**	**112 M**	3555	10	87.5	86.9	84.6	0.83	6.4	2.7	9.9	4.5	73	85	**1LE1041-1BA2 ■-■■■■**	27	0.0092
5.5	**6.3**	**132 S**	3555	15	88.5	88.4	87	0.86	9.1	2	7.6	3.3	72	84	**1LE1041-1CA0 ■-■■■■**	39	0.02
7.5	**8.6**	**132 S**	3560	20	89.5	89.7	88.7	0.87	12.1	2.3	8.2	3.6	72	84	**1LE1041-1CA1 ■-■■■■**	43	0.024
11	**12.6**	**160 M**	3560	30	90.2	89.6	87.4	0.86	17.8	2.4	8.2	3.6	77	89	**1LE1041-1DA2 ■-■■■■**	67	0.045
15	**17.3**	**160 M**	3565	40	90.2	90	88.6	0.87	24	2.8	8.4	3.9	77	89	**1LE1041-1DA3 ■-■■■■**	75	0.053
18.5	**21.3**	**160 L**	3565	50	91	90.8	89.5	0.87	29.5	3.3	8.9	4.1	77	89	**1LE1041-1DA4 ■-■■■■**	84	0.061
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																	
0.75	**0.86**	**80 M**	1750	4.1	78	77.4	74.6	0.72	1.68	2.5	6.8	3.8	55	66	**1LE1041-0DB3 ■-■■■■**	11	0.0021
1.5	**1.75**	**90 L**	1745	8.2	84	84	81.9	0.75	3	2.9	7.5	4	58	70	**1LE1041-0EB4 ■-■■■■**	16	0.0036
2.2	**2.55**	**100 L**	1760	12	87.5	88.3	87.4	0.78	4.05	2.5	8.1	3.9	62	74	**1LE1041-1AB4 ■-■■■■**	21	0.0086
4	**4.55**	**112 M**	1770	20	87.5	87.2	85.1	0.77	6.9	3	8.7	4	62	74	**1LE1041-1BB2 ■-■■■■**	29	0.014
5.5	**6.3**	**132 S**	1770	30	89.5	89.6	88.1	0.78	9.9	2.6	8	3.3	68	80	**1LE1041-1CB0 ■-■■■■**	42	0.027
7.5	**8.6**	**132 M**	1770	40	89.5	90	89.3	0.82	12.8	2.7	8	3.4	68	80	**1LE1041-1CB2 ■-■■■■**	49	0.034
11	**12.6**	**160 M**	1775	59	91	91.2	90.1	0.84	18.1	2.5	7.7	3.2	69	81	**1LE1041-1DB2 ■-■■■■**	71	0.065
15	**17.3**	**160 L**	1780	80	91	91.1	90.1	0.84	24.5	2.6	8.5	3.4	69	81	**1LE1041-1DB4 ■-■■■■**	83	0.083

Voltages (≤ 600 V)		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/93			**9**	**0**			. . .
Types of construction		Version					Order code
With flange	IM B5 [1]	With additional charge			**F**		–
With flange	IM B14 [1]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1041-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 2/118		**1LE1041-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

[1] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) and stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1041 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)			
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																	
0.75	**0.86**	**90 S**	1145	6.3	73	72.7	69.7	0.65	1.98	2.2	4.5	3	46	58	**1LE1041-0EC0** ■-■■■■	13	0.003
1.5	**1.75**	**100 L**	1175	12	86.5	86.3	84.2	0.69	3.15	2.2	6.4	3.2	62	74	**1LE1041-1AC4** ■-■■■■	25	0.011
2.2	**2.55**	**112 M**	1170	18	87.5	87.6	86	0.73	4.3	2.1	6.3	3.2	65	77	**1LE1041-1BC2** ■-■■■■	29	0.014
4	**4.55**	**132 M**	1180	30	87.5	87.5	85.7	0.71	7.5	1.9	6.2	3	67	79	**1LE1041-1CC2** ■-■■■■	43	0.029
5.5	**6.3**	**132 M**	1175	45	89.5	89.9	88.9	0.73	10.6	2.1	6.5	2.9	67	79	**1LE1041-1CC3** ■-■■■■	52	0.037
7.5	**8.6**	**160 M**	1180	61	89.5	89.6	88.4	0.73	14.4	2.1	5.4	2.5	70	82	**1LE1041-1DC2** ■-■■■■	77	0.075
11	**12.6**	**160 L**	1180	89	90.2	90.5	89.5	0.74	20.5	2.2	5.5	2.5	70	82	**1LE1041-1DC4** ■-■■■■	93	0.098

Voltages (≤ 600 V)		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**				–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VY		Without additional charge	**2**	**7**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
For other voltages and more information, see from page 2/93			**9**	**0**				. . .
Types of construction		Version						Order code
With flange	IM B5 [1]	With additional charge			**F**			–
With flange	IM B14 [1]	With additional charge			**K**			–
For other types of construction and more information, see from page 2/99					■			. . .
Motor protection		Version						Order code
Without		**Standard**				**A**		–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 90 or 100 to 200)		With additional charge				**B**		–
For other motor protection and more information, see from page 2/112						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 2/115							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1041-. . . .** ■-■■■■					**-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/118		**1LE1041-. . . .** ■-■■■■					**-Z**	**. . .+. . .+. . .+. . .**

[1] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) and stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1041 Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
4	**4.55**	**100 L**	3530	10		87.5	87.5	85.9	0.84	6.3	3.3	9.6	4.6	71	83	**1LE1041-1AA6** ■-■■■■	26	0.0054
5.5	**6.3**	**112 M**	3550	15		88.5	88.6	87.4	0.87	9	2.8	9.9	4.5	73	85	**1LE1041-1BA6** ■-■■■■	34	0.012
11	**12.6**	**132 M**	3555	30		90.2	90.5	89.8	0.9	17	2.7	9.3	3.6	72	84	**1LE1041-1CA6** ■-■■■■	57	0.031
15	**17.3**	**132 L**	3555	40		90.2	90.6	90.3	0.91	23	2.5	10	4.7	72	84	**1LE1041-1CA7** ■-■■■■	65	0.035
22	**25.3**	**160 L**	3565	59		91	91	89.9	0.89	34	3.6	9.6	4.3	77	89	**1LE1041-1DA6** ■-■■■■	94	0.068
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
4	**4.55**	**100 L**	1770	20		87.5	87.7	86.3	0.76	7	2.8	9.2	4.3	62	74	**1LE1041-1AB6** ■-■■■■	30	0.014
5.5	**6.3**	**112 M**	1765	30		89.5	89.3	87.4	0.8	9.6	2.8	8.3	3.6	62	74	**1LE1041-1BB6** ■-■■■■	34	0.017
11	**12.6**	**132 M**	1770	59		91	91.5	90.8	0.82	18.5	2.9	8.5	3.6	68	80	**1LE1041-1CB6** ■-■■■■	64	0.046
18.5	**21.3**	**160 L**	1780	99		92.4	92.4	91.3	0.84	30	2.9	8.8	3.6	69	81	**1LE1041-1DB6** ■-■■■■	100	0.099
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
7.5	**8.6**	**132 M**	1175	61		89.5	89.8	88.7	0.72	14.6	2.2	6.4	3	67	79	**1LE1041-1CC6** ■-■■■■	64	0.046
15	**17.3**	**160 L**	1180	121	IE1	90.2	90.4	89.3	0.73	28.5	2.3	5.8	2.6	70	82	**1LE1041-1DC6** ■-■■■■	115	0.12

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/93			**9**	**0**			. . .
Types of construction [2]		Version					Order code
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 3 temperature sensors		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1041-. . . . ■-■■■■ -Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/118	**1LE1041-. . . . ■-■■■■ -Z**	**. . .+. . .+. . .+. . .**

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-11.

[2] Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

[3] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) and stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

2

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1541 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm			%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
22	**24.5**	**180 M**	3550	59		91	90.8	89.5	0.86	35.5	3	8.4	4.1	81	84	**1LE1541-1EA2■-■■■■**	145	0.069
30	**33.5**	**200 L**	3565	80		91.7	91.2	89.6	0.86	47.5	2.9	7.7	3.8	82	89	**1LE1541-2AA4■-■■■■**	200	0.13
37	**41.5**	**200 L**	3565	99		92.4	92.2	91	0.87	58	3.3	8.1	3.8	82	89	**1LE1541-2AA5■-■■■■**	225	0.15
45	**51**	**225 M**	3570	120		93	92.7	91.3	0.88	69	3.1	8.7	3.8	77	90	**1LE1541-2BA2■-■■■■**	295	0.23
55	**62**	**250 M**	3575	147		93	92.5	91	0.89	83	2.4	7.4	3.5	80	94	**1LE1541-2CA2■-■■■■**	360	0.4
75	**84**	**280 S**	3580	200		93.6	92.9	91.1	0.87	116	2.8	7.7	3.5	81	95	**1LE1541-2DA0■-■■■■**	490	0.71
90	**101**	**280 M**	3578	240		94.5	94.2	93.1	0.88	136	2.7	7.9	3.4	81	95	**1LE1541-2DA2■-■■■■**	530	0.83
110	**123**	**315 S**	3585	293		94.5	94	92.5	0.9	162	2.6	7.9	3.3	82	96	**1LE1541-3AA0■-■■■■**	720	1.3
132	**148**	**315 M**	3585	352		95	94.7	93.6	0.91	192	2.7	8.1	3.4	82	96	**1LE1541-3AA2■-■■■■**	880	1.6
160	**180**	**315 L**	3585	426		95	94.6	93.3	0.92	230	2.7	8	3.2	84	99	**1LE1541-3AA4■-■■■■**	930	1.8
200	**224**	**315 L**	3585	533		95.4	95.2	94.2	0.92	285	3.1	8.3	3.2	84	99	**1LE1541-3AA5■-■■■■**	1130	2.2
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
18.5	**21.3**	**180 M**	1770	100		92.4	92.6	91.9	0.83	30.5	2.8	7.7	3.9	64	77	**1LE1541-1EB2■-■■■■**	160	0.12
22	**25.3**	**180 L**	1770	119		92.4	92.5	91.8	0.83	36	3	8.4	3.9	72	79	**1LE1541-1EB4■-■■■■**	170	0.13
30	**34.5**	**200 L**	1778	161		93	93.1	92.2	0.84	48	3.2	8.2	3.7	72	79	**1LE1541-2AB5■-■■■■**	230	0.2
37	**42.5**	**225 S**	1778	199		93	93.2	92.5	0.87	57	2.7	7.2	3.3	69	82	**1LE1541-2BB0■-■■■■**	280	0.42
45	**52**	**225 M**	1778	242		93.6	93.8	93.1	0.86	70	3	7.6	3.5	69	83	**1LE1541-2BB2■-■■■■**	305	0.46
55	**63**	**250 M**	1785	294		94.1	94.1	93.3	0.84	87	3.1	7.3	3.3	69	83	**1LE1541-2CB2■-■■■■**	385	0.75
75	**86**	**280 S**	1788	401		94.5	94.3	93.2	0.87	114	2.7	7.6	3.2	79	92	**1LE1541-2DB0■-■■■■**	550	1.3
90	**104**	**280 M**	1788	481		94.5	94.3	93.3	0.87	137	2.9	8.1	3.4	78	92	**1LE1541-2DB2■-■■■■**	570	1.4
110	**127**	**315 S**	1790	587		95	94.8	93.8	0.86	169	3.1	8	3.3	79	93	**1LE1541-3AB0■-■■■■**	740	2
132	**152**	**315 M**	1790	704		95	94.8	94	0.86	205	3.1	7.8	3.2	79	93	**1LE1541-3AB2■-■■■■**	870	2.3
160	**184**	**315 L**	1790	854		95	94.7	93.5	0.87	245	3.1	8.3	3.2	80	95	**1LE1541-3AB4■-■■■■**	940	2.8
200	**230**	**315 L**	1792	1066		95.4	94.7	93.6	0.86	305	3.8	9	3.2	84	98	**1LE1541-3AB5■-■■■■**	1140	3.5

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**	–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VY		Without additional charge	**2**	**7**	–
50 Hz 500 VΔ		Without additional charge	**4**	**0**	–
For other voltages and more information, see from page 2/96			**9**	**0**	. . .

Types of construction		Version		Order code
With flange	IM B5 [1]	With additional charge	**F**	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	**A**	–
PTC thermistor with 3 temperature sensors	With additional charge	**B**	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1541-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125	**1LE1541-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1541 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm			%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to IEC 60034-30-1: IE2 High Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
15	18	180 L	1178	122		90.2	90.2	89	0.77	27	2.8	6.9	3.4	60	73	1LE1541-1EC4■-■■■■	155	0.17
18.5	22	200 L	1182	149	IE1	91.7	92	91.5	0.81	31.5	2.6	6.7	3	66	79	1LE1541-2AC4■-■■■■	200	0.25
22	26.5	200 L	1182	178	IE1	91.7	92.1	91.6	0.81	37	3	7.4	3	66	79	1LE1541-2AC5■-■■■■	220	0.3
30	36	225 M	1182	242	IE1	93	93.3	92.6	0.83	49	2.9	7	3.1	66	79	1LE1541-2BC2■-■■■■	300	0.58
37	44.5	250 M	1185	298	IE1	93	93.3	92.6	0.83	60	3.3	7.3	2.8	66	79	1LE1541-2CC2■-■■■■	370	0.86
45	54	280 S	1188	362	IE1	93.6	93.8	93.1	0.84	72	3.1	7.4	3	67	81	1LE1541-2DC0■-■■■■	460	1.1
55	66	280 M	1188	442	IE1	93.6	93.9	93.4	0.85	87	3.1	7.2	2.9	67	81	1LE1541-2DC2■-■■■■	510	1.4
75	90	315 S	1190	602	IE1	94.1	94.1	93.2	0.83	121	2.7	7.5	3	67	82	1LE1541-3AC0■-■■■■	660	2.1
90	108	315 M	1190	722	IE1	94.1	94.4	93.5	0.84	143	2.9	7.6	3.1	68	83	1LE1541-3AC2■-■■■■	730	2.5
110	132	315 L	1190	883	IE1	95	95	94.6	0.85	171	3.3	8.1	3.2	69	84	1LE1541-3AC4■-■■■■	940	3.6
132	158	315 L	1190	1059		95	95	94.4	0.85	205	3.7	9.2	3.6	69	84	1LE1541-3AC5■-■■■■	990	4
160	192	315 L	1192	1282		95	94.9	94.2	0.85	250	3.8	9.3	3.4	72	87	1LE1541-3AC6■-■■■■	1160	4.7

Voltages		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages and more information, see from page 2/96			9	0				. . .
Types of construction [1]		Version						Order code
With flange	IM B5 [2]	With additional charge			F			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				A		–
PTC thermistor with 3 temperature sensors		With additional charge				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1541-. . . . ■-■■■■-Z	F90 +. . .+. . .+. . .
For options, see from page 2/125	1LE1541-. . . . ■-■■■■-Z	. . .+. . .+. . .+. . .

[1] Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

[2] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard 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.

Cast-iron series SIMOTICS SD 1LE1541 Basic Line with increased power – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	Different IE class	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1541 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm			%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency according to IEC 60034-30-1: IE2 High Efficiency																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
30	**33.5**	**180 L**	3550	81		91.7	91.8	90.6	0.89	46	2.5	8.5	3.7	81	83	**1LE1541-1EA6■-■■■■**	180	0.094
45	**51**	**200 L**	3560	121		93	93.1	92.4	0.86	71	3	8.4	3.7	82	89	**1LE1541-2AA6■-■■■■**	245	0.176
55	**62**	**225 M**	3565	147		93	92.8	91.8	0.88	84	2.8	7.9	3.6	77	91	**1LE1541-2BA6■-■■■■**	320	0.26
75	**84**	**250 M**	3578	200		93.6	93.1	91.6	0.85	118	2.4	7.7	3.5	80	94	**1LE1541-2CA6■-■■■■**	390	0.46
110	**123**	**280 M**	3582	293		94.5	94.4	93.5	0.9	162	3.5	9.6	3.9	82	96	**1LE1541-2DA6■-■■■■**	650	1.2
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
30	**34.5**	**180 L**	1770	162		93	93.2	92.7	0.8	51	2.6	8.7	3.9	71	78	**1LE1541-1EB6■-■■■■**	185	0.159
37	**42.5**	**200 L**	1775	199		93	93.4	93.1	0.84	59	2.6	8.4	3.3	71	78	**1LE1541-2AB6■-■■■■**	240	0.246
55	**63**	**225 M**	1780	295		94.1	94.4	94	0.84	87	2.8	7.1	3	72	85	**1LE1541-2BB6■-■■■■**	320	0.47
75	**86**	**250 M**	1785	401		94.5	94.6	94	0.85	117	2.6	7.1	3.1	76	89	**1LE1541-2CB6■-■■■■**	440	0.85
110	**127**	**280 M**	1786	588		95	95.1	94.5	0.86	169	2.9	7.9	3.3	80	94	**1LE1541-2DB6■-■■■■**	680	1.7
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
18.5	**22**	**180 L**	1180	150		91.7	91.8	90.9	0.75	34	2.6	7	3.4	70	83	**1LE1541-1EC6■-■■■■**	165	0.206
30	**34.5**	**200 L**	1180	243		93	93.4	93	0.77	53	2.9	7.4	3.1	71	78	**1LE1541-2AC6■-■■■■**	240	0.381
37	**44.5**	**225 M**	1182	299	IE1	93	93.3	92.8	0.82	61	2.8	7.3	3.2	66	79	**1LE1541-2BC6■-■■■■**	325	0.67
45	**54**	**250 M**	1186	362	IE1	93.6	93.9	93.4	0.84	72	2.7	7.8	3	70	84	**1LE1541-2CC6■-■■■■**	410	1
75	**90**	**280 M**	1188	603		94.1	94.3	93.9	0.84	119	3.7	8	3.2	69	83	**1LE1541-2DC6■-■■■■**	570	1.8

Voltages		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ/690 VY	60 Hz 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages and more information, see from page 2/96			9	0	. . .

Types of construction [1]		Version		Order code
With flange	IM B5 [2]	With additional charge	F	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 3 temperature sensors	With additional charge	B	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions			Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1541-....**	**■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 2/125	**1LE1541-....**	**■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

[2] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power												Aluminum series 1LE1073		
P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P50	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 440 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Article No.	$m_{IM\ B3}$	J
kW	CV (hp)	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to NBR 17094-1: IR3 Rendimento Premium • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																	
1.1	**1.5**	**80 M**	3485	3	84.0	84.3	82.5	0.84	2.05	3.5	8.5	3.6	69	77	▲ **1LE1073-0DA3■-■■■■**	12	0.0013
1.5	**2**	**80 M**	3470	4.15	85.5	85.7	85.0	0.85	2.7	4.2	9.2	4.2	74	82	▲ **1LE1073-0DA6■-■■■■**	18	0.0014
2.2	**3**	**90 S**	3515	6	86.5	86.5	84.2	0.88	3.8	2.7	9.1	4.6	74	82	▲ **1LE1073-0EA4■-■■■■**	20	0.0031
3	**4**	**100 L**	3520	8.1	88.5	88.9	88.0	0.90	4.95	3.2	9.4	4.6	75	83	▲ **1LE1073-1AA4■-■■■■**	26	0.0054
3.7	**5**	**100 L**	3515	10.1	88.5	89.1	88.4	0.87	6.3	3.7	9.6	4.1	75	83	▲ **1LE1073-1AA6■-■■■■**	26	0.0054
4.5	**6**	**112 M**	3550	12.1	88.5	89.2	87.9	0.90	7.4	2.4	9.6	3.9	79	87	▲ **1LE1073-1BA5■-■■■■**	36	0.012
5.5	**7.5**	**112 M**	3545	14.8	89.5	90.6	90.6	0.88	9.2	2.4	9.7	3.7	79	87	▲ **1LE1073-1BA6■-■■■■**	36	0.012
7.5	**10**	**132 S**	3560	20	90.2	90.3	89.7	0.92	11.9	2.3	10	3.8	75	83	▲ **1LE1073-1CA1■-■■■■**	57	0.0031
9.2	**12.5**	**132 M**	3550	24.5	91.0	91.5	91.5	0.82	14.4	2.0	8.8	3.3	76	84	▲ **1LE1073-1CA5■-■■■■**	62	0.0031
11	**15**	**132 M**	3555	29.5	91.0	91.8	91.8	0.90	17.6	2.1	9.6	4.5	76	84	▲ **1LE1073-1CA6■-■■■■**	62	0.0031
15	**20**	**160 M**	3560	40	91.0	90.9	89.6	0.90	24	2.3	9.2	3.9	81	89	▲ **1LE1073-1DA3■-■■■■**	84	0.0061
18.5	**25**	**160 M**	3555	49.5	91.7	91.8	90.8	0.91	29	2.6	9.0	3.8	81	89	▲ **1LE1073-1DA4■-■■■■**	94	0.0068
22	**30**	**160 L**	3550	59	91.7	92.1	91.5	0.92	34	2.7	9.1	3.8	81	89	▲ **1LE1073-1DA6■-■■■■**	120	0.077
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																	
0.75	**1**	**80 M**	1760	4.05	83.0	81.6	77.8	0.70	1.69	3.2	7.8	4.2	58	66	▲ **1LE1073-0DB3■-■■■■**	13	0.0029
1.1	**1.5**	**80 M**	1750	6	84.0	84.4	83.1	0.78	2.2	3.1	8.0	3.9	58	66	▲ **1LE1073-0DB6■-■■■■**	14	0.0032
1.5	**2**	**90 S**	1750	8.2	86.5	86.7	85.1	0.79	2.9	2.8	8.0	4.1	62	70	▲ **1LE1073-0EB4■-■■■■**	20	0.0049
2.2	**3**	**90 L**	1745	12	87.5	87.3	85.7	0.79	4.2	3.1	8.5	4.2	65	73	▲ **1LE1073-0EB6■-■■■■**	25	0.0057
3	**4**	**100 L**	1760	16.3	89.5	90.8	89.7	0.84	5.2	2.8	8.9	4.2	66	74	▲ **1LE1073-1AB5■-■■■■**	30	0.014
3.7	**5**	**100 L**	1760	20	89.5	90.4	90.2	0.82	6.6	2.7	8.6	3.7	66	74	▲ **1LE1073-1AB6■-■■■■**	42	0.016
4.5	**6**	**112 M**	1765	24.5	89.5	89.8	88.9	0.83	7.9	2.3	8.5	3.6	68	76	▲ **1LE1073-1BB5■-■■■■**	34	0.017
5.5	**7.5**	**112 M**	1765	30	91.0	91.2	90.5	0.80	9.9	3.0	9.8	4.2	71	79	▲ **1LE1073-1BB6■-■■■■**	39	0.020
7.5	**10**	**132 S**	1770	40.5	91.7	92.2	91.6	0.85	12.6	2.4	8.9	3.8	72	80	▲ **1LE1073-1CB2■-■■■■**	61	0.046
9.2	**12.5**	**132 M**	1770	49.5	92.4	92.8	93.1	0.84	15.6	2.5	8.2	3.2	70	78	▲ **1LE1073-1CB5■-■■■■**	80	0.049
11	**15**	**132 M**	1765	60	92.4	92.9	92.3	0.84	18.6	2.5	8.2	3.4	68	76	▲ **1LE1073-1CB6■-■■■■**	80	0.049
15	**20**	**160 M**	1780	80	93.0	93.3	92.5	0.84	25	2.5	7.6	3.7	69	77	▲ **1LE1073-1DB4■-■■■■**	100	0.099
18.5	**25**	**160 L**	1780	99	93.6	93.7	93.1	0.81	32	2.5	8.5	3.6	69	77	▲ **1LE1073-1DB6■-■■■■**	110	0.101

Voltages	Version						Order code
50 Hz 220 VΔΔ/380 VYY/440 VΔ	**Standard**	**6**	**4**				–
For other voltages and more information, see from page 2/98		**9**	**0**				. . .
Types of construction	Version						Order code
Without flange IM B3 [1]	**Standard**			**A**			–
With flange IM B5 [1]	With additional charge			**F**			–
For other types of construction and more information, see from page 2/108				■			. . .
Motor protection	Version						Order code
Without	**Standard**				**A**		–
PTC thermistor with 3 temperature sensors	With additional charge				**B**		–
For other motor protection and more information, see from page 2/114					■		. . .
Terminal box position	Version						
Terminal box at top	**Standard**					**4**	
For other terminal box positions and more information, see from page 2/117						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE1073-. . . . ■-■■■■-Z** **F90 +. . .+. . .+. . .**
For options, see from page 2/133							**1LE1073-. . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

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Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P50	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 440 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1073 Article No.	$m_{IM\ B3}$	J
kW	CV (hp)	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to NBR 17094-1: IR3 Rendimento Premium • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																	
0.37	**0.5**	**80 M**	1150	3.05	75.3	73.8	68.7	0.59	1.09	3.2	4.8	3.5	55	63	▲ **1LE1073-0DC2■-■■■■**	12	0.0025
0.55	**0.75**	**80 M**	1135	4.65	79.5	79.3	76.3	0.66	1.38	2.8	4.9	3.1	58	66	▲ **1LE1073-0DC3■-■■■■**	13	0.0031
0.75	**1**	**90 S**	1150	6.2	82.5	83.3	81.8	0.70	1.78	2.2	5.2	2.8	61	69	▲ **1LE1073-0EC0■-■■■■**	16	0.004
1.1	**1.5**	**100 L**	1170	9	87.5	87.2	87.2	0.66	2.5	3.0	7.0	3.9	62	70	▲ **1LE1073-1AC3■-■■■■**	28	0.014
1.5	**2**	**112 M**	1175	12.2	88.5	88.2	86.2	0.70	3.2	3.5	9.0	4.3	62	70	▲ **1LE1073-1BC1■-■■■■**	32	0.017
2.2	**3**	**132 S**	1175	17.9	89.5	89.5	88.2	0.74	4.35	2.1	6.8	3.2	63	71	▲ **1LE1073-1CC1■-■■■■**	43	0.037
3	**4**	**132 S**	1178	24.5	89.5	89.5	88.0	0.70	6.3	2.5	7.2	3.6	63	71	▲ **1LE1073-1CC0■-■■■■**	43	0.037
3.7	**5**	**132 S**	1180	30	89.5	89.3	88.0	0.71	7.6	2.7	7.6	3.7	65	73	▲ **1LE1073-1CC2■-■■■■**	47	0.037
4.5	**6**	**132 S**	1175	36.5	89.5	89.7	88.2	0.70	9	2.7	7.1	3.6	67	75	▲ **1LE1073-1CC4■-■■■■**	47	0.037
5.5	**7.5**	**132 M**	1175	44.5	91.0	91.0	89.8	0.73	10.9	2.7	7.3	3.6	67	75	▲ **1LE1073-1CC3■-■■■■**	58	0.046
7.5	**10**	**132 M**	1180	61	91.0	91.5	91.2	0.69	15.7	3.2	7.7	4.0	67	75	▲ **1LE1073-1CC6■-■■■■**	58	0.046
9.2	**12.5**	**160 M**	1185	74	91.7	91.9	90.5	0.78	16.9	3.1	7.8	3.1	71	79	▲ **1LE1073-1DC3■-■■■■**	105	0.12
11	**15**	**160 M**	1180	89	91.7	91.9	91.1	0.80	19.7	3.1	7.3	2.9	72	80	▲ **1LE1073-1DC4■-■■■■**	105	0.12
15	**20**	**160 L**	1185	121	91.7	91.7	90.5	0.74	29	3.8	8.1	3.5	73	81	▲ **1LE1073-1DC6■-■■■■**	105	0.12
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																	
0.25	**0.33**	**80 M**	855	2.8	68.0	66.6	61.0	0.54	0.89	1.9	3.3	2.5	56	64	▲ **1LE1073-0DD3■-■■■■**	13	0.003
0.37	**0.5**	**90 S**	840	4.2	72.0	72.1	68.8	0.67	1.01	1.6	3.2	2.1	64	72	▲ **1LE1073-0ED0■-■■■■**	16	0.004
0.55	**0.75**	**90 L**	850	6.2	74.0	73.9	70.9	0.66	1.48	2.1	3.9	2.6	63	71	▲ **1LE1073-0ED4■-■■■■**	19	0.0048
0.75	**1**	**100 L**	855	8.4	75.5	76.6	74.4	0.70	1.86	1.6	4.0	2.2	65	73	▲ **1LE1073-1AD4■-■■■■**	21	0.0089
2.2	**3**	**132 S**	880	24	85.5	84.9	82.3	0.68	4.95	2.2	6.1	3.1	62	70	▲ **1LE1073-1CD0■-■■■■**	42	0.048
3.7	**5**	**132 M**	875	40.5	86.5	86.2	83.8	0.66	7.9	2.5	6.1	3.2	67	75	▲ **1LE1073-1CD6■-■■■■**	58	0.069
4.5	**6**	**160 M**	875	49	86.5	86.5	85.3	0.72	9.5	1.9	6.1	2.8	74	82	▲ **1LE1073-1DD1■-■■■■**	60	0.078
5.5	**7.5**	**160 M**	880	60	86.5	88.5	89.9	0.73	11.4	1.8	5.1	2.1	73	81	▲ **1LE1073-1DD3■-■■■■**	60	0.078
7.5	**10**	**160 L**	885	81	89.5	90.0	88.8	0.72	15.3	2.4	6.3	2.8	70	78	▲ **1LE1073-1DD4■-■■■■**	78	0.131

Voltages	Version	Order code
50 Hz 220 VΔΔ/380 VYY/440 VΔ	**Standard**	–
For other voltages and more information, see from page 2/98		. . .

Types of construction		Version	Order code
Without flange	IM B3 [1]	**Standard**	–
With flange	IM B5 [1]	With additional charge	–
For other types of construction and more information, see from page 2/108			. . .

Motor protection	Version	Order code
Without	**Standard**	–
PTC thermistor with 3 temperature sensors	With additional charge	–
For other motor protection and more information, see from page 2/114		. . .

Terminal box position	Version	
Terminal box at top	**Standard**	
For other terminal box positions and more information, see from page 2/117		

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1073-. . . .■-■■■■**	**-Z F90 +. . .+. . .+. . .**
For options, see from page 2/133	**1LE1073-. . . .■-■■■■**	**-Z . . .+. . .+. . .+. . .**

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P50	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 440 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1573/1LE5773 Article No.	$m_{IM\ B3}$	J
kW	CV (hp)	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to NBR 17094-1: IR3 Rendimento Premium • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																	
30	**40**	**200 L**	3565	80	92.4	92.6	92.1	0.86	49.5	2.9	8.2	3.7	78	86	▲ **1LE1573-2AA4■-■■■■**	220	0.134
37	**50**	**200 L**	3560	99	93.0	93.4	92.3	0.87	60	3.1	8.5	3.7	78	86	▲ **1LE1573-2AA5■-■■■■**	245	0.158
45	**60**	**225 S**	3565	121	93.6	93.7	92.9	0.89	71	2.7	7.2	3.1	75	89	▲ **1LE1573-2BA2■-■■■■**	325	0.265
55	**75**	**225 M**	3555	148	93.6	94.0	93.8	0.88	88	2.2	6.6	2.8	76	89	▲ **1LE1573-2BA6■-■■■■**	385	0.315
75	**100**	**250 M**	3570	201	94.1	94.1	93.3	0.90	116	2.1	6.6	2.7	82	96	▲ **1LE1573-2CA6■-■■■■**	475	0.564
90	**125**	**280 S**	3575	240	95.0	95.0	94.2	0.90	138	2.2	7.0	2.7	78	92	▲ **1LE1573-2DA2■-■■■■**	610	0.934
110	**150**	**280 M**	3570	294	95.0	95.0	94.3	0.91	167	2.3	7.0	2.8	82	96	▲ **1LE1573-2DA6■-■■■■**	680	1.08
132	**175**	**315 S**	3575	353	95.4	95.3	94.3	0.88	205	1.7	6.1	2.3	84	99	▲ **1LE5773-3AA2■-■■■■**	1030	2.0
150	**200**	**315 M**	3582	400	95.4	95.1	94.0	0.90	230	2.4	8.0	3.1	84	99	▲ **1LE5773-3AA4■-■■■■**	1190	2.0
185	**250**	**315 M**	3578	394	95.8	95.9	95.4	0.90	280	1.5	6.1	2.2	82	96	▲ **1LE5773-3AA5■-■■■■**	1280	2.38
220	**300**	**315 L**	3582	587	95.8	95.8	95.2	0.91	330	2.2	8.0	2.9	84	99	▲ **1LE5773-3AA6■-■■■■**	1340	2.73
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																	
22	**30**	**180 M**	1775	118	93.6	93.9	93.4	0.81	38	2.7	8.3	3.7	69	77	▲ **1LE1573-1EB4■-■■■■**	178	0.14
30	**40**	**200 L**	1775	161	94.1	94.6	94.5	0.84	50	2.7	7.9	3.1	66	74	▲ **1LE1573-2AB5■-■■■■**	240	0.22
37	**50**	**200 L**	1775	199	94.5	94.7	94.6	0.83	62	2.9	8.4	3.3	66	74	▲ **1LE1573-2AB6■-■■■■**	258	0.275
45	**60**	**225 S**	1782	241	95.0	95.3	94.9	0.84	74	2.9	7.6	2.9	69	82	▲ **1LE1573-2BB2■-■■■■**	315	0.47
55	**75**	**225 M**	1782	295	95.4	95.8	95.6	0.85	89	3.0	7.8	2.9	75	89	▲ **1LE1573-2BB6■-■■■■**	420	0.655
75	**100**	**250 M**	1780	403	95.4	95.6	95.4	0.85	121	2.1	6.2	2.5	75	89	▲ **1LE1573-2CB6■-■■■■**	530	1.07
90	**125**	**280 S**	1782	482	95.4	95.7	95.4	0.88	141	2.2	6.6	2.5	79	93	▲ **1LE1573-2DB2■-■■■■**	690	1.56
110	**150**	**280 M**	1785	589	95.8	96.0	95.7	0.90	167	2.5	7.2	2.7	82	96	▲ **1LE1573-2DB6■-■■■■**	740	1.67
132	**175**	**315 S**	1790	704	96.2	96.3	95.7	0.86	210	2.1	7.5	2.6	79	93	▲ **1LE5773-3AB2■-■■■■**	1350	2.8
150	**200**	**315 M**	1790	800	96.2	96.3	95.7	0.85	240	1.9	6.9	2.6	81	96	▲ **1LE5773-3AB4■-■■■■**	1110	3.13
185	**250**	**315 M**	1790	987	96.2	96.3	95.8	0.90	280	2.3	8	2.8	82	96	▲ **1LE5773-3AB5■-■■■■**	1210	3.64
220	**300**	**315 L**	1790	1174	96.2	96.3	95.8	0.87	345	2.3	7.2	2.7	81	96	▲ **1LE5773-3AB6■-■■■■**	1400	4.53
300	**400**	**315 L**	1788	1602	96.2	96.5	96.4	0.86	475	2.3	6.8	2.7	81	95	▲ **1LE5773-3AB7■-■■■■**	1560	5.28

Voltages	Version						Order code
50 Hz 220 VΔΔ/380 VYY/440 VΔ	**Standard**	**6**	**4**				–
For other voltages and more information, see from page 2/98		**9**	**0**				. . .
Types of construction	Version						Order code
Without flange IM B3 [1]	**Standard**			**A**			–
With flange IM B5 [1]	With additional charge			**F**			–
For other types of construction and more information, see from page 2/108				■			. . .
Motor protection	Version						Order code
Without	**Standard**				**A**		–
PTC thermistor with 3 temperature sensors	With additional charge				**B**		–
For other motor protection and more information, see from page 2/114					■		. . .
Terminal box position	Version						
Terminal box at top	**Standard**					**4**	
For other terminal box positions and more information, see from page 2/117						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE . . 73- . . . . ■-■■■■ -Z F90 + . . .+. . .+. . .**
For options, see from page 2/133							**1LE . . 73- . . . . ■-■■■■ -Z** . . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

P_{rated}, 60 Hz/P50	P_{rated}, 60 Hz/P50	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 440 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1573/1LE5773 Article No.	$m_{IM\ B3}$	J
kW	CV (hp)	FS	rpm	Nm	%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency according to NBR 17094-1: IR3 Rendimento Premium • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																	
18.5	25	180 L	1180	150	93.0	93.3	92.8	0.75	35	2.9	7.9	3.7	73	81	▲ 1LE1573-1EC6■-■■■■	185	0.247
22	30	200 L	1180	178	93.0	93.4	93.3	0.78	40	2.6	6.5	2.8	62	70	▲ 1LE1573-2AC5■-■■■■	230	0.32
30	40	200 L	1182	240	94.1	94.3	93.7	0.75	56	3.2	7.8	3.3	66	74	▲ 1LE1573-2AC6■-■■■■	264	0.434
37	50	225 M	1186	298	94.1	94.5	94.2	0.81	64	3.0	7.7	3.1	71	85	▲ 1LE1573-2BC6■-■■■■	320	0.815
45	60	250 S	1186	363	94.5	95.0	94.7	0.84	74	2.8	7.7	2.9	69	83	▲ 1LE1573-2CC6■-■■■■	500	1.27
55	75	280 S	1186	443	94.5	95.0	94.8	0.85	90	2.5	6.8	2.3	66	80	▲ 1LE1573-2DC2■-■■■■	580	1.64
75	100	280 S	1186	604	95.0	95.7	95.9	0.84	123	3.2	7.4	2.7	70	84	▲ 1LE1573-2DC6■-■■■■	650	1.93
90	125	280 M	1186	725	95.0	95.7	95.8	0.85	146	3.2	7.9	2.7	71	85	▲ 1LE1573-2DC7■-■■■■	760	2.41
110	150	315 M	1190	883	95.8	96.3	96.3	0.86	175	2.2	7.3	2.8	67	82	▲ 1LE5773-3AC4■-■■■■	1080	4.36
132	175	315 M	1188	1061	95.8	96.5	96.6	0.85	215	2.0	6.5	2.6	68	82	▲ 1LE5773-3AC5■-■■■■	1160	4.99
150	200	315 M	1191	1203	95.8	96.1	96.0	0.83	250	2.3	7.3	2.8	69	83	▲ 1LE5773-3AC6■-■■■■	1250	5.56
185	250	315 L	1191	1483	95.8	96.2	96.2	0.83	305	2.3	7.0	2.6	71	86	▲ 1LE5773-3AC7■-■■■■	1410	6.06
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																	
9.2	12.5	180 M	875	100	89.5	90.2	89.9	0.72	18.7	2.1	5.2	2.5	75	83	▲ 1LE1573-1ED3■-■■■■	153	0.195
11	15	180 L	875	120	89.5	90.1	89.7	0.74	22.0	2.3	5.8	2.7	68	76	▲ 1LE1573-1ED4■-■■■■	190	0.267
15	20	180 L	875	164	90.2	91.4	91.6	0.75	29.0	2.1	5.4	2.5	69	77	▲ 1LE1573-1ED6■-■■■■	187	0.267
18.5	25	200 L	880	200	90.2	90.3	89.2	0.68	39.5	3.3	7.2	4.1	62	76	▲ 1LE1573-2AD6■-■■■■	255	0.420
22	30	225 S	882	238.2	91.7	92.2	91.8	0.78	40.5	2.6	6.4	3.0	60	74	▲ 1LE1573-2BD2■-■■■■	315	0.549
30	40	225 M	886	323.3	91.7	92.4	92.1	0.76	56.0	2.8	6.4	3.2	66	79	▲ 1LE1573-2BD6■-■■■■	335	0.672
37	50	250 M	886	398.8	92.4	92.5	91.6	0.78	67.0	2.8	7.0	3.0	65	79	▲ 1LE1573-2CD6■-■■■■	425	1.02
45	60	250 M	882	487.2	92.4	93.2	93.2	0.82	78.0	2.4	6.3	2.7	66	80	▲ 1LE1573-2CD7■-■■■■	435	1.02
55	75	280 S	888	591.5	93.6	94.1	93.8	0.79	98.0	2.5	6.1	2.5	70	81	▲ 1LE1573-2DD6■-■■■■	580	1.62
75	100	280 M	888	806.5	93.6	94.1	93.8	0.79	133	2.8	6.8	2.7	69	80	▲ 1LE1573-2DD7■-■■■■	680	1.89
90	125	315 M	893	962.4	94.1	94.4	94.0	0.82	153	2.5	7.0	2.6	74	88	▲ 1LE5773-3AD4■-■■■■	1000	3.74
110	150	315 M	891	1179	94.1	94.5	94.4	0.83	185	2.2	6.5	2.4	79	93	▲ 1LE5773-3AD5■-■■■■	1100	4.48
132	175	315 L	890	1416	94.5	95.0	94.9	0.84	220	2.1	6.0	2.3	82	97	▲ 1LE5773-3AD6■-■■■■	1150	5.36
150	200	315 L	890	1609	94.5	95.3	95.5	0.80	260	2.1	5.9	2.1	76	90	▲ 1LE5773-3AD7■-■■■■	1420	6.76
185	250	315 L	893	1978	95.0	95.3	95.0	0.78	330	2.7	7.3	2.9	76	90	▲ 1LE5773-3AD8■-■■■■	1660	8.4

Voltages	Version						Order code
50 Hz 220 VΔΔ/380 VYY/440 VΔ	**Standard**	6	4				–
For other voltages and more information, see from page 2/98		9	0				. . .
Types of construction	Version						Order code
Without flange IM B3 [1]	**Standard**			A			–
With flange IM B5 [1]	With additional charge			F			–
For other types of construction and more information, see from page 2/108				■			. . .
Motor protection	Version						Order code
Without	**Standard**				A		–
PTC thermistor with 3 temperature sensors	With additional charge				B		–
For other motor protection and more information, see from page 2/114					■		. . .
Terminal box position	Version						
Terminal box at top	**Standard**					4	
For other terminal box positions and more information, see from page 2/117						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							1LE . . 73- . . . . ■-■■■■-Z F90 +. . .+. . .+. . .
For options, see from page 2/133							1LE . . 73- . . . . ■-■■■■-Z . . .+. . .+. . .+. . .

[1] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

			Operating values at rated power													Aluminum series 1LE1023 Article No.		
P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz		$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.75	1	80 M	3480	2.1	✓	77	77.2	75.7	0.84	1.45	3	7.1	3.6	64	75	1LE1023-0DA2■-■■■■	11	0.0011
1.1	1.5	80 M	3500	3	✓	84	84	82	0.83	1.98	3.3	8.4	4	64	75	1LE1023-0DA3■-■■■■	12	0.0013
1.5	2	90 S	3525	4.1	✓	85.5	84.8	82.3	0.84	2.6	3.1	9.8	4.9	69	81	1LE1023-0EA0■-■■■■	15	0.0021
2.2	3	90 L	3530	6	✓	86.5	86.4	84.5	0.87	3.65	3	9.6	4.9	69	81	1LE1023-0EA4■-■■■■	19	0.0031
3	4	100 L	3525	8.1	✓	88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	1LE1023-1AA4■-■■■■	26	0.0054
3.7	5	112 M	3560	10	✓	88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	1LE1023-1BA2■-■■■■	34	0.012
5.5	7.5	132 S	3555	15	✓	89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	1LE1023-1CA0■-■■■■	43	0.024
7.5	10	132 S	3555	20	✓	90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	1LE1023-1CA1■-■■■■	57	0.031
11	15	160 M	3560	30	✓	91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	1LE1023-1DA2■-■■■■	75	0.053
15	20	160 M	3565	40	✓	91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	1LE1023-1DA3■-■■■■	84	0.061
18.5	25	160 L	3560	50	✓	91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1023-1DA4■-■■■■	94	0.068
22	30	180 M	3560	59	✓	91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	1LE1023-1EA2■-■■■■	129	0.08
30	40	200 L	3560	80	✓	92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	1LE1023-2AA4■-■■■■	173	0.134
37	50	200 L	3560	99	✓	93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	1LE1023-2AA5■-■■■■	194	0.158
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.55	0.75	80 M	1750	3	–	81.1	80.8	78.2	0.74	1.15	2.7	6.9	3.8	55	66	1LE1023-0DB2■-■■■■	11	0.0021
0.75	1	80 M	1760	4.1	✓	83.5	82.6	79.3	0.71	1.59	3.1	8.3	4.7	55	66	1LE1023-0DB3■-■■■■	14	0.0029
1.1	1.5	90 S	1750	6	✓	86.5	86.4	84.2	0.75	2.15	3.4	8.2	4.4	58	70	1LE1023-0EB0■-■■■■	16	0.0036
1.5	2	90 L	1755	8.2	✓	86.5	86.2	84.5	0.77	2.85	3.4	8.6	4.3	62	70	1LE1023-0EB4■-■■■■	19	0.0049
2.2	3	100 L	1770	11.9	✓	89.5	89.2	87.2	0.81	3.8	3.5	9.6	5.1	62	74	1LE1023-1AB4■-■■■■	30	0.014
3	4	100 L	1760	16.3	✓	89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	1LE1023-1AB5■-■■■■	30	0.014
3.7	5	112 M	1770	19	✓	89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	1LE1023-1BB2■-■■■■	34	0.017
5.5	7.5	132 S	1775	30	✓	91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	1LE1023-1CB0■-■■■■	64	0.046
7.5	10	132 M	1770	40	✓	91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	1LE1023-1CB2■-■■■■	64	0.046
11	15	160 M	1775	59	✓	92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	1LE1023-1DB2■-■■■■	83	0.083
15	20	160 L	1780	80	✓	93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	1LE1023-1DB4■-■■■■	100	0.099
18.5	25	180 M	1775	100	✓	93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	1LE1023-1EB2■-■■■■	134	0.13
22	30	180 L	1775	118	✓	93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	1LE1023-1EB4■-■■■■	142	0.14
30	40	200 L	1778	161	✓	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	1LE1023-2AB5■-■■■■	189	0.22

Voltages (≤ 600 V) [1]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2		–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4		–
50 Hz 500 VY		Without additional charge	2	7		–
50 Hz 500 VΔ		Without additional charge	4	0		–
For other voltages and more information, see from page 2/93			9	0		. . .
Types of construction		Version				Order code
Without flange	IM B3 [2]	**Standard**			A	–
With flange	IM B5 [2]	With additional charge			F	–
With flange	IM B14 [2]	With additional charge			K	–
For other types of construction and more information, see from page 2/99					■	. . .
Motor protection		Version				Order code
Without		**Standard**				A –
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)		With additional charge				B –
For other motor protection and more information, see from page 2/112						■ . . .
Terminal box position		Version				
Terminal box at top		**Standard**				4
For other terminal box positions and more information, see from page 2/115						■
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1023-. . . . ■–■■■■				-Z F90 +. . .+. . .+. . .
For options, see from page 2/118		1LE1023-. . . . ■–■■■■				-Z . . .+. . .+. . .+. . .

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Aluminum series SIMOTICS GP 1LE1023 – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1023 Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.37	**0.5**	**80 M**	1150	3.1	–	75.3	74.3	70	0.61	1.01	2.7	5	3.3	45	56	**1LE1023-0DC2■-■■■■**	12	0.0025
0.55	**0.75**	**80 M**	1145	4.6	–	81.7	80.5	76.4	0.63	1.34	2.8	5.3	3.4	45	56	**1LE1023-0DC3■-■■■■**	14	0.0031
0.75	**1**	**90 S**	1155	6.2	✓	82.5	82.4	79.9	0.65	1.76	2.4	5.3	3.1	46	58	**1LE1023-0EC0■-■■■■**	16	0.004
1.1	**1.5**	**100 L**	1180	8.9	✓	87.5	87.2	84.8	0.69	2.3	2.4	6.7	3.3	62	74	**1LE1023-1AC3■-■■■■**	30	0.014
3	**4**	**132 S**	1180	24	✓	89.5	89.5	87.9	0.70	6	2.6	7.6	3.8	61	69	**1LE1023-1CC0■-■■■■**	42	0.034
3.7	**5**	**132 M**	1180	30	✓	89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	62	70	**1LE1023-1CC2■-■■■■**	46	0.039
5.5	**7.5**	**132 M**	1180	45	✓	91.0	90.8	89.2	0.69	11	3	7.8	4	67	75	**1LE1023-1CC3■-■■■■**	58	0.05
7.5	**10**	**160 M**	1185	60	✓	91.0	90.8	89.3	0.80	12.9	2.7	9.3	3.7	73	81	**1LE1023-1DC2■-■■■■**	95	0.132
11	**15**	**160 L**	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	72	80	**1LE1023-1DC4■-■■■■**	106	0.164
15	**20**	**180 L**	1178	122	✓	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	**1LE1023-1EC4■-■■■■**	130	0.19
18.5	**25**	**200 L**	1180	150	✓	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	**1LE1023-2AC4■-■■■■**	166	0.28
22	**30**	**200 L**	1180	178	✓	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	**1LE1023-2AC5■-■■■■**	179	0.32
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
2.2	**3**	**132 S**	880	24	✓	85.5	85.6	83.6	0.6	5.4	1.5	4	2.1	67	80	**1LE1023-1CD0■-■■■■**	56	0.038
3	**4**	**132 M**	880	33	✓	86.5	86.7	84.9	0.6	7.3	1.7	4.3	2.3	67	80	**1LE1023-1CD2■-■■■■**	65	0.048
3.7	**5**	**160 M**	885	40	✓	86.5	86.2	84	0.62	8.7	2	4.4	2.2	66	79	**1LE1023-1DD2■-■■■■**	72	0.065
5.5	**7.5**	**160 M**	884	59	✓	86.5	86.5	85	0.64	12.5	1.9	4.4	2.2	66	79	**1LE1023-1DD3■-■■■■**	86	0.083
7.5	**10**	**160 L**	882	81	✓	89.5	89.8	88.9	0.64	16.4	2	4.3	2.2	66	79	**1LE1023-1DD4■-■■■■**	110	0.116
11	**15**	**180 L**	880	119	✓	89.5	89.9	89.3	0.72	21.5	2.3	5.8	2.7	65	78	**1LE1023-1ED4■-■■■■**	161	0.267
15	**20**	**200 L**	882	162	✓	90.2	90.2	89.2	0.7	30	3.4	7.7	4.2	60	73	**1LE1023-2AD5■-■■■■**	212	0.420

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages and more information, see from page 2/93			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 1 or 3 temperature sensors (frame sizes 80, 90 or 100 to 200)		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1023-. . . .** ■–■■■■					-Z F90 +. . .+. . .+. . .
For options, see from page 2/118		**1LE1023-. . . .** ■–■■■■					-Z . . .+. . .+. . .+. . .

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1523 – Basic Line Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.37	0.5	71 M	3470	1	–	73.4	71.7	67	0.73	0.87	4.2	6.8	4.2	57	68	1LE1523-0CA2■-■■■■	13	0.00045
0.55	0.75	71 M	3470	1.5	–	76.8	75.3	71	0.73	1.23	4.5	7.2	4.5	62	73	1LE1523-0CA3■-■■■■	15	0.00056
0.75	1	80 M	3480	2.1	✓	77	77.2	75.7	0.84	1.45	3	7.1	3.6	64	75	1LE1523-0DA2■-■■■■	18	0.0011
1.1	1.5	80 M	3500	3	✓	84	84	82	0.83	1.98	3.3	8.4	4	64	75	1LE1523-0DA3■-■■■■	21	0.0013
1.5	2	90 S	3525	4.1	✓	85.5	84.8	82.3	0.84	2.6	3.1	9.8	4.9	69	81	1LE1523-0EA0■-■■■■	26	0.0021
2.2	3	90 L	3530	6	✓	86.5	86.4	84.5	0.87	3.65	3	9.6	4.9	69	81	1LE1523-0EA4■-■■■■	32	0.0031
3	4	100 L	3525	8.1	✓	88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	1LE1523-1AA4■-■■■■	36	0.0054
3.7	5	112 M	3560	10	✓	88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	1LE1523-1BA2■-■■■■	45	0.012
5.5	7.5	132 S	3555	15	✓	89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	1LE1523-1CA0■-■■■■	58	0.024
7.5	10	132 S	3555	20	✓	90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	1LE1523-1CA1■-■■■■	73	0.031
11	15	160 M	3560	30	✓	91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	1LE1523-1DA2■-■■■■	100	0.053
15	20	160 M	3565	40	✓	91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	1LE1523-1DA3■-■■■■	110	0.061
18.5	25	160 L	3560	50	✓	91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1523-1DA4■-■■■■	127	0.068
22	30	180 M	3560	59	✓	91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	1LE1523-1EA2■-■■■■	160	0.08
30	40	200 L	3560	80	✓	92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	1LE1523-2AA4■-■■■■	225	0.134
37	50	200 L	3560	99	✓	93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	1LE1523-2AA5■-■■■■	250	0.158
45	60	225 M	3570	120	✓	93.6	93.7	93.1	0.88	69	2.7	7.6	3.5	75	89	1LE1523-2BA2■-■■■■	315	0.26
55	75	250 M	3578	147	✓	93.6	93.4	92.3	0.89	83	2.5	7.3	3.3	76	90	1LE1523-2CA2■-■■■■	385	0.46
75	100	280 S	3578	200	✓	94.1	93.9	92.7	0.89	112	2.7	7.6	3.2	78	92	1LE1523-2DA0■-■■■■	510	0.77
90	125	280 M	3578	240	✓	95	94.8	93.8	0.9	132	2.7	8.1	3.3	78	92	1LE1523-2DA2■-■■■■	590	0.94
110	150	315 S	3585	293	✓	95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	1LE1523-3AA0■-■■■■	750	1.4
132	175	315 M	3585	352	✓	95.4	95.1	94	0.91	191	2.8	8	3.4	79	93	1LE1523-3AA2■-■■■■	880	1.6
150	200	315 L	3588	399	✓	95.4	95.1	93.9	0.91	215	3.3	9.1	3.7	82	96	1LE1523-3AA4■-■■■■	980	1.9
185	250	315 L	3586	493	✓	95.8	95.7	94.8	0.92	265	3.5	8.5	3.5	82	96	1LE1523-3AA5■-■■■■	1150	2.3

Voltages (≤ 600 V) [1]		Version						Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2				–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4				–
50 Hz 500 VY		Without additional charge	2	7				–
50 Hz 500 VΔ		Without additional charge	4	0				–
For other voltages and more information, see from page 2/96			9	0				. . .
Types of construction		Version						Order code
Without flange	IM B3 [2]	**Standard**			A			–
With flange	IM B5 [2]	With additional charge			F			–
With flange	IM B14 [2]	With additional charge			K			–
For other types of construction and more information, see from page 2/103					■			. . .
Motor protection		Version						Order code
Without		**Standard**				A		–
PTC thermistor with 3 temperature sensors		With additional charge				B		–
For other motor protection and more information, see from page 2/113						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 2/116							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1523-. . . . ■-■■■■						-Z F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1523-. . . . ■-■■■■						-Z . . .+. . .+. . .+. . .

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Cast-iron series SIMOTICS SD 1LE1523 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1523 – *Basic Line* Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.25	**0.33**	**71 M**	1715	1.4	–	73.4	72.3	68	0.68	0.63	2.9	4.9	3.1	47	58	**1LE1523-0CB2■-■■■■**	13	0.00095
0.37	**0.5**	**71 M**	1720	2.1	–	78.2	76.9	72.5	0.66	0.9	3.6	5.7	3.8	62	73	**1LE1523-0CB3■-■■■■**	16	0.0014
0.55	**0.75**	**80 M**	1750	3	–	81.1	80.8	78.2	0.74	1.15	2.7	6.9	3.8	55	66	**1LE1523-0DB2■-■■■■**	19	0.0021
0.75	**1**	**80 M**	1760	4.1	✓	83.5	82.6	79.3	0.71	1.59	3.1	8.3	4.7	55	66	**1LE1523-0DB3■-■■■■**	23	0.0029
1.1	**1.5**	**90 S**	1750	6	✓	86.5	86.4	84.2	0.75	2.15	3.4	8.2	4.4	58	70	**1LE1523-0EB0■-■■■■**	25	0.0036
1.5	**2**	**90 L**	1755	8.2	✓	86.5	86.2	84.5	0.77	2.85	3.4	8.6	4.3	62	70	**1LE1523-0EB4■-■■■■**	31	0.0049
2.2	**3**	**100 L**	1770	11.9	✓	89.5	89.2	87.2	0.81	3.8	3.5	9.6	5.1	62	74	**1LE1523-1AB4■-■■■■**	40	0.014
3	**4**	**100 L**	1760	16.3	✓	89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	**1LE1523-1AB5■-■■■■**	40	0.014
3.7	**5**	**112 M**	1770	19	✓	89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	**1LE1523-1BB2■-■■■■**	46	0.017
5.5	**7.5**	**132 S**	1775	30	✓	91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	**1LE1523-1CB0■-■■■■**	74	0.046
7.5	**10**	**132 M**	1770	40	✓	91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	**1LE1523-1CB2■-■■■■**	80	0.046
11	**15**	**160 M**	1775	59	✓	92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	**1LE1523-1DB2■-■■■■**	109	0.083
15	**20**	**160 L**	1780	80	✓	93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	**1LE1523-1DB4■-■■■■**	127	0.099
18.5	**25**	**180 M**	1775	100	✓	93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	**1LE1523-1EB2■-■■■■**	165	0.13
22	**30**	**180 L**	1775	118	✓	93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	**1LE1523-1EB4■-■■■■**	170	0.14
30	**40**	**200 L**	1778	161	✓	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	**1LE1523-2AB5■-■■■■**	240	0.22
37	**50**	**225 S**	1782	198	✓	94.5	94.7	94.2	0.85	58	2.8	7.5	3	66	80	**1LE1523-2BB0■-■■■■**	285	0.42
45	**60**	**225 M**	1782	241	✓	95	95.3	95.1	0.85	70	3	7.7	3	66	80	**1LE1523-2BB2■-■■■■**	340	0.52
55	**75**	**250 M**	1786	294	✓	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	67	81	**1LE1523-2CB2■-■■■■**	420	0.85
75	**100**	**280 S**	1788	401	✓	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	**1LE1523-2DB0■-■■■■**	570	1.4
90	**125**	**280 M**	1788	481	✓	95.4	95.5	94.9	0.87	136	2.9	8	3.3	79	93	**1LE1523-2DB2■-■■■■**	670	1.7
110	**150**	**315 S**	1790	587	✓	95.8	95.9	95.4	0.86	168	3	7.5	3.1	73	87	**1LE1523-3AB0■-■■■■**	760	2.2
132	**175**	**315 M**	1790	704	✓	96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	76	90	**1LE1523-3AB2■-■■■■**	960	2.9
150	**200**	**315 L**	1791	800	✓	96.2	96.2	95.7	0.87	225	3.5	8.8	3.6	76	90	**1LE1523-3AB4■-■■■■**	990	3.1
185	**250**	**315 L**	1791	986	✓	96.2	96.2	95.5	0.87	275	3.9	9	3.6	78	93	**1LE1523-3AB5■-■■■■**	1190	3.7

Voltages (≤ 600 V) [1]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages and more information, see from page 2/96			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 3 temperature sensors	With additional charge	B	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1523-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1523-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Cast-iron series SIMOTICS SD 1LE1523 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1523 – Basic Line Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.18	0.25	71 M	1110	1.5	–	67.5	66.3	61	0.63	0.53	2.8	3.5	2.9	42	53	1LE1523-0CC2■-■■■■	13	0.001
0.25	0.33	71 M	1110	2.2	–	71.4	70.6	66.4	0.64	0.69	3.2	3.9	3.2	48	59	1LE1523-0CC3■-■■■■	16	0.015
0.37	0.5	80 M	1150	3.1	–	75.3	74.3	70	0.61	1.01	2.7	5	3.3	45	56	1LE1523-0DC2■-■■■■	19	0.0025
0.55	0.75	80 M	1145	4.6	–	81.7	80.5	76.4	0.63	1.34	2.8	5.3	3.4	45	56	1LE1523-0DC3■-■■■■	23	0.0031
0.75	1	90 S	1155	6.2	✓	82.5	82.4	79.9	0.65	1.76	2.4	5.3	3.1	46	58	1LE1523-0EC0■-■■■■	27	0.0040
3	4	132 S	1180	24	✓	89.5	89.5	87.9	0.70	6	2.6	7.6	3.8	61	69	1LE1523-1CC0■-■■■■	60	0.034
3.7	5	132 M	1180	30	✓	89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	62	70	1LE1523-1CC2■-■■■■	64	0.039
5.5	7.5	132 M	1180	45	✓	91.0	90.8	89.2	0.69	11	3	7.8	4	67	75	1LE1523-1CC3■-■■■■	76	0.05
7.5	10	160 M	1185	60	✓	91.0	90.8	89.3	0.80	12.9	2.7	9.3	3.7	73	81	1LE1523-1DC2■-■■■■	124	0.132
11	15	160 L	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	72	80	1LE1523-1DC4■-■■■■	138	0.164
15	20	180 L	1178	122	✓	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	1LE1523-1EC4■-■■■■	180	0.19
18.5	25	200 L	1180	150	✓	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	1LE1523-2AC4■-■■■■	215	0.28
22	30	200 L	1180	178	✓	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	1LE1523-2AC5■-■■■■	230	0.32
30	40	225 M	1185	242	✓	94.1	94.4	94.1	0.82	49	2.9	7.6	3.3	66	79	1LE1523-2BC2■-■■■■	325	0.67
37	50	250 M	1188	297	✓	94.1	94.4	93.9	0.83	59	3.1	8	3.1	63	76	1LE1523-2CC2■-■■■■	405	1
45	60	280 S	1190	361	✓	94.5	94.6	94.1	0.83	72	3.3	7.7	3.1	66	80	1LE1523-2DC0■-■■■■	510	1.4
55	75	280 M	1190	441	✓	94.5	94.6	93.9	0.84	87	3.6	9.2	3.3	66	80	1LE1523-2DC2■-■■■■	560	1.64
75	100	315 S	1192	601	✓	95	94.9	94.1	0.82	121	3.1	8.4	3.3	64	79	1LE1523-3AC0■-■■■■	750	2.6
90	125	315 M	1192	721	✓	95	95	94.4	0.84	142	2.7	7.7	3	64	79	1LE1523-3AC2■-■■■■	890	3.1
110	150	315 L	1192	881	✓	95.8	95.9	95.5	0.83	174	3.2	8.2	3.4	64	79	1LE1523-3AC4■-■■■■	990	3.9
132	175	315 L	1193	1057	✓	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80	1LE1523-3AC5■-■■■■	1130	4.48
150	200	315 L	1194	1200	✓	95.8	95.7	95.0	0.80	245	4.3	11	4.3	69	83	1LE1523-3AC6■-■■■■	1260	5.41

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4			–
50 Hz 500 VY		Without additional charge	2	7			–
50 Hz 500 VΔ		Without additional charge	4	0			–
For other voltages and more information, see from page 2/96			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/116							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1523- . . . . ■-■■■■	-Z F90+. . .+. . .+. . .
For options, see from page 2/125	1LE1523- . . . . ■-■■■■	-Z . . .+. . .+. . .+. . .

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Cast-iron series SIMOTICS SD 1LE1623 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1623 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
3	4	100 L	3525	8.1	✓	88.5	88.7	87.2	0.87	4.9	3.8	9.7	5.5	71	83	1LE1623-1AA4■-■■■■	36	0.0054
3.7	5	112 M	3560	10	✓	88.5	88	86.2	0.88	6	3.2	10.8	5.1	73	85	1LE1623-1BA2■-■■■■	45	0.012
5.5	7.5	132 S	3555	15	✓	89.5	89.4	88.2	0.9	8.6	2.1	8.6	4.4	72	84	1LE1623-1CA0■-■■■■	58	0.024
7.5	10	132 S	3555	20	✓	90.2	90.5	90	0.91	11.5	2.4	9.5	4.7	72	84	1LE1623-1CA1■-■■■■	73	0.031
11	15	160 M	3560	30	✓	91	90.4	88.4	0.88	17.2	2.8	8.5	4.3	77	89	1LE1623-1DA2■-■■■■	100	0.053
15	20	160 M	3565	40	✓	91	90.5	88.9	0.86	24	3.1	9.7	4.8	77	89	1LE1623-1DA3■-■■■■	110	0.061
18.5	25	160 L	3560	50	✓	91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1623-1DA4■-■■■■	127	0.068
22	30	180 M	3560	59	✓	91.7	91.4	90	0.89	34	2.8	8.2	3.9	77	89	1LE1623-1EA2■-■■■■	160	0.08
30	40	200 L	3560	80	✓	92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	77	84	1LE1623-2AA4■-■■■■	225	0.134
37	50	200 L	3560	99	✓	93	92.8	91.6	0.88	57	2.8	7.5	3.6	77	84	1LE1623-2AA5■-■■■■	250	0.158
45	60	225 M	3570	120	✓	93.6	93.7	93.1	0.88	69	2.7	7.6	3.5	75	89	1LE1623-2BA2■-■■■■	315	0.26
55	75	250 M	3578	147	✓	93.6	93.4	92.3	0.89	83	2.5	7.3	3.3	76	90	1LE1623-2CA2■-■■■■	385	0.46
75	100	280 S	3578	200	✓	94.1	93.9	92.7	0.89	112	2.7	7.6	3.2	78	92	1LE1623-2DA0■-■■■■	510	0.77
90	125	280 M	3578	240	✓	95	94.8	93.8	0.9	132	2.7	8.1	3.3	78	92	1LE1623-2DA2■-■■■■	590	0.94
110	150	315 S	3585	293	✓	95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	1LE1623-3AA0■-■■■■	750	1.4
132	175	315 M	3585	352	✓	95.4	95.1	94	0.91	191	2.8	8	3.4	79	93	1LE1623-3AA2■-■■■■	880	1.6
150	200	315 L	3588	399	✓	95.4	95.1	93.9	0.91	215	3.3	9.1	3.7	82	96	1LE1623-3AA4■-■■■■	980	1.9
185	250	315 L	3586	493	✓	95.8	95.7	94.8	0.92	265	3.5	8.5	3.5	82	96	1LE1623-3AA5■-■■■■	1150	2.3

Voltages (≤ 600 V) [1]		Version				Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2		–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4		–
50 Hz 500 VY		Without additional charge	2	7		–
50 Hz 500 VΔ		Without additional charge	4	0		–
For other voltages and more information, see from page 2/96			9	0		. . .
Types of construction		Version				Order code
Without flange	IM B3 [2]	**Standard**			A	–
With flange	IM B5 [2]	With additional charge			F	–
With flange	IM B14 [2]	With additional charge			K	–
For other types of construction and more information, see from page 2/103					■	. . .
Motor protection		Version				Order code
PTC thermistor with 3 temperature sensors		**Standard**			B	–
For other motor protection and more information, see from page 2/113					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**				4
For other terminal box positions and more information, see from page 2/116						■
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1623-. . . . ■-■■■■				-Z F90+. . .+. . .+. . .
For options, see from page 2/125		1LE1623-. . . . ■-■■■■				-Z . . .+. . .+. . .+. . .

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1623 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
2.2	**3**	**100 L**	1770	11.9	✓	89.5	89.2	87.2	0.81	3.8	3.5	9.6	5.1	62	74	**1LE1623-1AB4■-■■■■**	40	0.014
3	**4**	**100 L**	1760	16.3	✓	89.5	89.5	88.3	0.82	5.1	3.1	9.5	4.6	62	74	**1LE1623-1AB5■-■■■■**	40	0.014
3.7	**5**	**112 M**	1770	19	✓	89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	**1LE1623-1BB2■-■■■■**	46	0.017
5.5	**7.5**	**132 S**	1775	30	✓	91.7	91.6	90.5	0.81	9.3	3.9	9.7	4.5	68	80	**1LE1623-1CB0■-■■■■**	74	0.046
7.5	**10**	**132 M**	1770	40	✓	91.7	91.8	91	0.83	12.4	2.7	9.6	4.2	68	80	**1LE1623-1CB2■-■■■■**	80	0.046
11	**15**	**160 M**	1775	59	✓	92.4	92.3	91.1	0.83	18	3	8.9	3.8	69	81	**1LE1623-1DB2■-■■■■**	109	0.083
15	**20**	**160 L**	1780	80	✓	93	92.8	91.4	0.81	25	2.9	9.5	4.3	69	81	**1LE1623-1DB4■-■■■■**	127	0.099
18.5	**25**	**180 M**	1775	100	✓	93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	**1LE1623-1EB2■-■■■■**	165	0.13
22	**30**	**180 L**	1775	118	✓	93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	**1LE1623-1EB4■-■■■■**	170	0.14
30	**40**	**200 L**	1778	161	✓	94.1	94.3	93.8	0.83	48	3	8.1	3.5	70	77	**1LE1623-2AB5■-■■■■**	240	0.22
37	**50**	**225 S**	1782	198	✓	94.5	94.7	94.2	0.85	58	2.8	7.5	3	66	80	**1LE1623-2BB0■-■■■■**	285	0.42
45	**60**	**225 M**	1782	241	✓	95	95.3	95.1	0.85	70	3	7.7	3	66	80	**1LE1623-2BB2■-■■■■**	340	0.52
55	**75**	**250 M**	1786	294	✓	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	67	81	**1LE1623-2CB2■-■■■■**	420	0.85
75	**100**	**280 S**	1788	401	✓	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	**1LE1623-2DB0■-■■■■**	570	1.4
90	**125**	**280 M**	1788	481	✓	95.4	95.5	94.9	0.87	136	2.9	8	3.3	79	93	**1LE1623-2DB2■-■■■■**	670	1.7
110	**150**	**315 S**	1790	587	✓	95.8	95.9	95.4	0.86	168	3	7.5	3.1	73	87	**1LE1623-3AB0■-■■■■**	760	2.2
132	**175**	**315 M**	1790	704	✓	96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	76	90	**1LE1623-3AB2■-■■■■**	960	2.9
150	**200**	**315 L**	1791	800	✓	96.2	96.2	95.7	0.87	225	3.5	8.8	3.6	76	90	**1LE1623-3AB4■-■■■■**	990	3.1
185	**250**	**315 L**	1791	986	✓	96.2	96.2	95.5	0.87	275	3.9	9	3.6	78	93	**1LE1623-3AB5■-■■■■**	1190	3.7

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			**A**		–
With flange	IM B5 [2]	With additional charge			**F**		–
With flange	IM B14 [2]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1623-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1623-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Cast-iron series SIMOTICS SD 1LE1623 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1623 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
3	**4**	**132 S**	1180	24	✓	89.5	89.5	87.9	0.70	6	2.6	7.6	3.8	61	69	**1LE1623-1CC0■-■■■■**	60	0.034
3.7	**5**	**132 M**	1180	30	✓	89.5	89.9	88.2	0.69	7.1	2.8	7.5	3.8	62	70	**1LE1623-1CC2■-■■■■**	64	0.039
5.5	**7.5**	**132 M**	1180	45	✓	91.0	90.8	89.2	0.69	11	3	7.8	4	67	75	**1LE1623-1CC3■-■■■■**	76	0.05
7.5	**10**	**160 M**	1185	60	✓	91.0	90.8	89.3	0.80	12.9	2.7	9.3	3.7	73	81	**1LE1623-1DC2■-■■■■**	124	0.132
11	**15**	**160 L**	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	72	80	**1LE1623-1DC4■-■■■■**	138	0.164
15	**20**	**180 L**	1178	122	✓	91.7	92	91.4	0.79	26	2.5	6.8	3	61	68	**1LE1623-1EC4■-■■■■**	180	0.19
18.5	**25**	**200 L**	1180	150	✓	93	93.8	93.8	0.78	32	2.8	6.5	3	64	71	**1LE1623-2AC4■-■■■■**	215	0.28
22	**30**	**200 L**	1180	178	✓	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	**1LE1623-2AC5■-■■■■**	230	0.32
30	**40**	**225 M**	1185	242	✓	94.1	94.4	94.1	0.82	49	2.9	7.6	3.3	66	79	**1LE1623-2BC2■-■■■■**	325	0.67
37	**50**	**250 M**	1188	297	✓	94.1	94.4	93.9	0.83	59	3.1	8	3.1	63	76	**1LE1623-2CC2■-■■■■**	405	1
45	**60**	**280 S**	1190	361	✓	94.5	94.6	94.1	0.83	72	3.3	7.7	3.1	66	80	**1LE1623-2DC0■-■■■■**	510	1.4
55	**75**	**280 M**	1190	441	✓	94.5	94.6	93.9	0.84	87	3.6	9.2	3.3	66	80	**1LE1623-2DC2■-■■■■**	560	1.64
75	**100**	**315 S**	1192	601	✓	95	94.9	94.1	0.82	121	3.1	8.4	3.3	64	79	**1LE1623-3AC0■-■■■■**	750	2.6
90	**125**	**315 M**	1192	721	✓	95	95	94.4	0.84	142	2.7	7.7	3	64	79	**1LE1623-3AC2■-■■■■**	890	3.1
110	**150**	**315 L**	1192	881	✓	95.8	95.9	95.5	0.83	174	3.2	8.2	3.4	64	79	**1LE1623-3AC4■-■■■■**	990	3.9
132	**175**	**315 L**	1193	1057	✓	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80	**1LE1623-3AC5■-■■■■**	1130	4.48
150	**200**	**315 L**	1194	1200	✓	95.8	95.7	95.0	0.80	245	4.3	11	4.3	69	83	**1LE1623-3AC6■-■■■■**	1260	5.41

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/96			**9**	**0**			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			**A**		–
With flange	IM B5 [2]	With additional charge			**F**		–
With flange	IM B14 [2]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1623-. . . . ■-■■■■**					**-Z F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1623-. . . . ■-■■■■**					**-Z . . .+. . .+. . .+. . .**

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Cast-iron series 1LE1623 – *Performance Line* Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm^2
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418) • Efficiency: NEMA Premium Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA, Canada, and Mexico • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
2.2	**3**	**132 S**	880	24	✓	85.5	85.6	83.6	0.6	5.4	1.5	4	2.1	67	80	**1LE1623-1CD0■-■■■■**	66	0.038
3	**4**	**132 M**	880	33	✓	86.5	86.7	84.9	0.6	7.3	1.7	4.3	2.3	67	80	**1LE1623-1CD2■-■■■■**	78	0.048
3.7	**5**	**160 M**	885	40	✓	86.5	86.2	84	0.62	8.7	2	4.4	2.2	66	79	**1LE1623-1DD2■-■■■■**	98	0.065
5.5	**7.5**	**160 M**	884	59	✓	86.5	86.5	85	0.64	12.5	1.9	4.4	2.2	66	79	**1LE1623-1DD3■-■■■■**	110	0.083
7.5	**10**	**160 L**	882	81	✓	89.5	89.8	88.9	0.64	16.4	2	4.3	2.2	66	79	**1LE1623-1DD4■-■■■■**	135	0.116
11	**15**	**180 L**	880	119	✓	89.5	89.9	89.3	0.72	21.5	2.3	5.8	2.7	65	78	**1LE1623-1ED4■-■■■■**	190	0.267
15	**20**	**200 L**	882	162	✓	90.2	90.2	89.2	0.7	30	3.4	7.7	4.2	60	73	**1LE1623-2AD5■-■■■■**	255	0.420
18.5	**25**	**225 S**	886	199	✓	90.2	90.2	89	0.73	35.5	2.9	6.6	3.4	58	72	**1LE1623-2BD0■-■■■■**	270	0.50
22	**30**	**225 M**	886	237	✓	91.7	91.8	90.8	0.76	39.5	2.9	6.8	3.3	60	74	**1LE1623-2BD2■-■■■■**	280	0.55
30	**40**	**250 M**	888	323	✓	91.7	91.9	91.1	0.77	53	2.9	7	3.3	63	77	**1LE1623-2CD2■-■■■■**	370	0.86
37	**50**	**280 S**	890	397	✓	92.4	92.6	91.9	0.77	65	2.5	6.1	2.6	64	78	**1LE1623-2DD0■-■■■■**	460	1.1
45	**60**	**280 M**	890	483	✓	92.4	92.5	91.9	0.79	77	2.7	6.8	2.7	65	79	**1LE1623-2DD2■-■■■■**	550	1.6
55	**75**	**315 S**	891	589	✓	93.6	93.6	92.9	0.79	93	2.6	6.8	3	68	82	**1LE1623-3AD0■-■■■■**	650	2.0
75	**100**	**315 M**	890	805	✓	93.6	93.7	93	0.8	126	2.5	6.7	3	73	87	**1LE1623-3AD2■-■■■■**	720	2.5
90	**125**	**315 L**	890	966	✓	94.1	94.4	94.1	0.81	148	2.4	6.5	2.8	74	88	**1LE1623-3AD4■-■■■■**	860	3.1
110	**150**	**315 L**	891	1179	✓	94.1	94.2	93.7	0.81	181	2.8	7.2	3.2	74	88	**1LE1623-3AD5■-■■■■**	980	3.9
132	**175**	**315 L**	892	1413	✓	94.5	94.5	93.9	0.8	220	3.2	7.9	3.7	78	92	**1LE1623-3AD6■-■■■■**	1070	4.5

Voltages (≤ 600 V) [1]		Version			Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	2	2	–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	3	4	–
50 Hz 500 VY		Without additional charge	2	7	–
50 Hz 500 VΔ		Without additional charge	4	0	–
For other voltages and more information, see from page 2/96			9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/103			■	. . .

Motor protection	Version		Order code
PTC thermistor with 3 temperature sensors	**Standard**	B	–
For other motor protection and more information, see from page 2/113		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 2/116		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1623-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 2/125	**1LE1623-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	Operating values at rated power: n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\varphi_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Aluminum series 1LE1021 Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)			
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Energy Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA and Canada, not admissible for exporting to Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.55	**0.75**	**80 M**	1750	3	–	75.5	74.6	71.1	0.71	1.29	2.7	6.4	3.8	55	66	**1LE1021-0DB2■-■■■■**	10	0.0017
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.37	**0.5**	**80 M**	1140	3.1	–	64	63	59.1	0.63	1.15	2.3	4.6	2.9	45	56	**1LE1021-0DC2■-■■■■**	9	0.0017
0.55	**0.75**	**80 M**	1135	4.6	–	68	67.4	63.7	0.61	1.66	2.9	5.2	3.6	45	56	**1LE1021-0DC3■-■■■■**	12	0.0025

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/93			**9**	**0**			. . .
Types of construction [2]		Version					Order code
With flange	IM B5 [3]	With additional charge			**F**		–
With flange	IM B14 [3]	With additional charge			**K**		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 1 temperature sensor		With additional charge				**B**	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1021-. . . . ■-■■■■-Z**					**F90 +. . .+. . .+. . .**
For options, see from page 2/118		**1LE1021-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

– Not required
✓ Available

1) Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-11.

2) Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

3) Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) and stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

			Operating values at rated power													Cast-iron series 1LE1521 – *Basic Line*		
P_{rated}, 60 Hz/ P50	P_{rated}, 60 Hz/ P60	Frame size	n_{rated}, 60 Hz	T_{rated}, 60 Hz	EISA CC No. CC032A	η_{rated}, 60 Hz, 4/4	η_{rated}, 60 Hz, 3/4	η_{rated}, 60 Hz, 2/4	$\cos\eta_{rated}$, 60 Hz, 4/4	I_{rated}, 60 Hz, 460 V	T_{LR}/T_{rated}, 60 Hz	I_{LR}/I_{rated}, 60 Hz	T_B/T_{rated}, 60 Hz	L_{pfA}, 60 Hz	L_{WA}, 60 Hz	Article No.	$m_{IM\ B3}$	J
kW	hp	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC418)																		
• Efficiency: NEMA Energy Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA and Canada, not admissible for exporting to Mexico																		
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
0.37	**0.5**	**71 M**	3410	1.0	–	72	71.4	67.8	0.77	0.84	2.9	5.1	3	63	74	**1LE1521-0CA2■-■■■■**	12	0.00035
0.55	**0.75**	**71 M**	3420	1.5	–	74	73.4	69.6	0.76	1.23	3.4	5.4	3.4	63	74	**1LE1521-0CA3■-■■■■**	13	0.00045
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
0.25	**0.33**	**71 M**	1715	1.4	–	70	68.5	63.6	0.64	0.7	2.8	4.4	3.1	53	64	**1LE1521-0CB2■-■■■■**	12	0.00076
0.37	**0.5**	**71 M**	1705	2.1	–	72	71.2	66.9	0.67	0.96	2.8	4.4	2.8	53	64	**1LE1521-0CB3■-■■■■**	13	0.00095
0.55	**0.75**	**80 M**	1750	3.0	–	75.5	74.6	71.1	0.71	1.29	2.7	6.4	3.8	55	66	**1LE1521-0DB2■-■■■■**	17	0.0017
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.18	**0.25**	**71 M**	1105	1.6	–	55	53.6	48.8	0.61	0.67	2.9	2.7	2.9	49	60	**1LE1521-0CC2■-■■■■**	12	0.00080
0.25	**0.33**	**71 M**	1100	2.4	–	59.5	58.9	54.7	0.64	0.82	2.7	3	2.7	49	60	**1LE1521-0CC3■-■■■■**	13	0.00100
0.37	**0.5**	**80 M**	1140	3.1	–	64	63	59.1	0.63	1.15	2.3	4.6	2.9	45	56	**1LE1521-0DC2■-■■■■**	17	0.0017
0.55	**0.75**	**80 M**	1135	4.6	–	68	67.4	63.7	0.61	1.66	2.9	5.2	3.6	45	56	**1LE1521-0DC3■-■■■■**	19	0.0025
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
0.09	**0.12**	**71 M**	815	1.1	-	40	38	33	0.59	0.5	2.1	1.8	2.1	59	63	**1LE1521-0CD2■-■■■■**	12	0.00077
0.12	**0.16**	**71 M**	815	1.4	-	40	38	33	0.57	0.7	2.3	2.1	2.4	52	63	**1LE1521-0CD3■-■■■■**	13	0.00100
0.18	**0.25**	**80 M**	855	2.1	-	46	43.5	37	0.53	0.93	2	2.5	2.6	55	66	**1LE1521-0DD2■-■■■■**	17	0.00175
0.25	**0.33**	**80 M**	860	2.8	-	52	49	43	0.51	1.21	2.2	2.9	3	55	66	**1LE1521-0DD3■-■■■■**	19	0.00246
0.37	**0.5**	**90 S**	845	4.2	-	58	55.8	49.5	0.64	1.25	1.6	3	2.1	57	69	**1LE1521-0ED0■-■■■■**	23	0.00225
0.55	**0.75**	**90 L**	840	6.3	-	62	61.2	56.5	0.66	1.69	1.8	3.1	2.1	57	69	**1LE1521-0ED4■-■■■■**	26	0.00305

Voltages (≤ 600 V) [1]		Version					Order code
50 Hz 230 VΔ/400 VY	60 Hz 460 VY	**Standard**	**2**	**2**			–
50 Hz 400 VΔ	60 Hz 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VY		Without additional charge	**2**	**7**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
For other voltages and more information, see from page 2/96			**9**	**0**			. . .
Types of construction [2]		Version					Order code
Without flange	IM B3 [3]	**Standard**			**A**		–
With flange	IM B5 [3]	With additional charge			**F**		–
For other types of construction and more information, see from page 2/103					■		. . .
Motor protection		Version					Order code
Without		**Standard**				**A**	–
PTC thermistor with 1 temperature sensor		With additional charge				**B**	–
For other motor protection and more information, see from page 2/113						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 2/116							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1521-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 2/125		**1LE1521-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

– Not required
✓ Available

[1] Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-11.
Parallel supply lines are required in the case of connection to ≤ 240 V.
For frame size 315 with connection to ≤ 240 V, due to the high current, a drilled, removable entry plate (order code **R52**) or a larger terminal box (order code **R50**) can be used. Order codes **R52** and **R50** alter the motor dimensions.

[2] Types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with MG1 Table 12-11.

[3] Types derived from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirement exists for stamping of the type on the rating plate. The basic type IM B5 or IM B14 is stamped as standard 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.

2

Selection and ordering data

P_{rated1}, 50 Hz	P_{rated2}, 50 Hz	Frame size	Operating values at rated power for N1: n_{rated1}, 50 Hz	T_{rated1}, 50 Hz	η_{rated1}, 50 Hz, 4/4	$\cos\varphi_{rated1}$, 50 Hz, 4/4	I_{rated1}, 50 Hz, 400 V	T_{LR}/T_{rated1}, 50 Hz	I_{LR}/I_{rated1}, 50 Hz	T_B/T_{rated1}, 50 Hz	Operating values at rated power for N2: n_{rated2}, 50 Hz	T_{rated2}, 50 Hz	η_{rated2}, 50 Hz, 4/4	$\cos\varphi_{rated2}$, 50 Hz, 4/4	I_{rated2}, 50 Hz, 400 V	T_{LR}/T_{rated2}, 50 Hz	I_{LR}/I_{rated2}, 50 Hz	T_B/T_{rated2}, 50 Hz	**Aluminum series 1LE1011 – *one winding*** Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%		A				rpm	Nm	%		A					kg	kgm²
• Cooling: Self-ventilated (IC411) • Line operation: Double pole-changing for constant load torque • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																					
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**	1390	13.1	72	0.87	4.40	1.7	4.1	1.8	2800	8.2	70	0.88	5.6	1.8	4.2	1.8	**1LE1011-1AJ4** ■-■■■■	18	0.0059
2.5	**3.1**	**100 L**	1440	16.6	76.3	0.87	5.4	1.9	5.2	2.8	2840	10.4	77.3	0.9	6.4	2.1	5.2	2.9	**1LE1011-1AJ5** ■-■■■■	22	0.0078
3.7	**4.4**	**112 M**	1420	24.9	79.9	0.86	7.8	1.8	4.9	2.3	2885	14.6	80.8	0.92	8.5	2.1	6.4	2.6	**1LE1011-1BJ2** ■-■■■■	27	0.01
4.7	**5.9**	**132 S**	1440	31.2	82	0.84	9.8	1.6	5.6	2.7	2875	19.6	80	0.89	12.0	1.8	5.6	2.8	**1LE1011-1CJ0** ■-■■■■	38	0.019
6.5	**8.0**	**132 M**	1435	43.3	82	0.86	13.3	1.7	5.4	2.6	2880	26.5	82	0.92	15.3	1.8	6.3	2.8	**1LE1011-1CJ2** ■-■■■■	44	0.024
9.3	**11.5**	**160 M**	1440	61.7	84.5	0.87	18.3	1.7	5.7	2.8	2870	38.3	82	0.92	22.0	1.8	6	2.9	**1LE1011-1DJ2** ■-■■■■	62	0.044
13.0	**16**	**160 L**	1450	85.6	87	0.85	25.5	1.6	6	2.3	2920	52.3	86	0.94	35.5	1.9	7.1	2.8	**1LE1011-1DJ6** ■-■■■■	85	0.068
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**	715	7.3	57	0.53	2.65	2	3	2.7	1425	7.4	77.7	0.87	2.35	1.7	4.6	2.1	**1LE1011-1AL4** ■-■■■■	18	0.0059
0.9	**1.5**	**100 L**	700	12.3	64.2	0.64	3.15	1.5	2.9	2	1415	10.1	77.7	0.89	3.15	1.5	4.5	1.9	**1LE1011-1AL5** ■-■■■■	22	0.0078
1.1	**1.9**	**112 M**	715	14.7	66.5	0.6	4.00	1.6	3.2	2.3	1440	12.6	80.9	0.87	3.90	1.6	5.4	2.3	**1LE1011-1BL2** ■-■■■■	27	0.01
1.6	**3.2**	**132 S**	730	20.9	61.5	0.53	7.1	1.6	3.3	2.6	1450	21.1	82.3	0.87	6.5	1.4	5	2.1	**1LE1011-1CL0** ■-■■■■	38	0.019
2.2	**4.4**	**132 M**	730	28.8	68	0.52	9.0	2	3.8	3	1450	29	84.5	0.88	8.5	1.5	5.5	2.3	**1LE1011-1CL2** ■-■■■■	44	0.024
3.5	**7**	**160 M**	730	45.8	77.5	0.57	11.4	2	4.2	2.8	1450	46.1	84	0.9	13.4	1.6	5.2	2.2	**1LE1011-1DL2** ■-■■■■	62	0.044
5.6	**11**	**160 L**	725	73.8	80.2	0.6	16.8	1.9	4	2.7	1445	72.7	84.4	0.9	21.0	1.5	5.1	2.2	**1LE1011-1DL4** ■-■■■■	73	0.056

Voltages	Version			Order code
50 Hz 230 V	**Standard**	2	2	–
50 Hz 400 V	**Standard**	3	4	–
50 Hz 500 V	Without additional charge	4	0	–
50 Hz 690 V	Without additional charge	4	7	–
For other voltages [1] and more information, see from page 2/95		9	0	. . .

Types of construction		Version		Order code
Without flange	IM B3 [2]	**Standard**	A	–
With flange	IM B5 [2]	With additional charge	F	–
With flange	IM B14 [2]	With additional charge	K	–
For other types of construction and more information, see from page 2/99			■	. . .

Motor protection	Version		Order code
Without	**Standard**	A	–
PTC thermistor with 3 temperature sensors	With additional charge	B	–
For other motor protection and more information, see from page 2/112		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	4
For other terminal box positions and more information, see from page 2/115		■

Special versions		Order code(s)
For options, see from page 2/118	**1LE1011-. . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

Note: Pole-changing motors (4/2-pole) do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also page 1/50).

1) Operating values for 60 Hz are available on request.

2) Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

P_{rated1}, 50 Hz	P_{rated2}, 50 Hz	Frame size	Operating values at rated power for N1: n_{rated1}, 50 Hz	T_{rated1}, 50 Hz	η_{rated1}, 50 Hz, 4/4	cos φ_{rated1}, 50 Hz, 4/4	I_{rated1}, 50 Hz, 400 V	T_{LR}/T_{rated1}, 50 Hz	I_{LR}/I_{rated1}, 50 Hz	T_B/T_{rated1}, 50 Hz	Operating values at rated power for N2: n_{rated2}, 50 Hz	T_{rated2}, 50 Hz	η_{rated2}, 50 Hz, 4/4	cos φ_{rated2}, 50 Hz, 4/4	I_{rated2}, 50 Hz, 400 V	T_{LR}/T_{rated2}, 50 Hz	I_{LR}/I_{rated2}, 50 Hz	T_B/T_{rated2}, 50 Hz	**Aluminum series** **1LE1011** – *one winding* **1LE1012** – *two windings* Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%		A				rpm	Nm	%		A						
• Cooling: Self-ventilated (IC411) • Line operation: 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)																					
4/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit																					
1500 rpm	*3000 rpm*		*1500 rpm*								*3000 rpm*										
0.65	**2.4**	**100 L**	1415	4.4	75	0.86	1.45	1.6	4.1	1.8	2800	8.2	70	0.88	5.6	1.8	4.2	1.8	**1LE1011-1AP4■-■■■■**	18	0.0059
0.8	**3.1**	**100 L**	1435	5.3	79	0.85	1.72	1.9	5.2	2.8	2840	10.4	77.3	0.9	6.4	2.1	5.2	2.8	**1LE1011-1AP5■-■■■■**	22	0.0078
1.1	**4.4**	**112 M**	1455	7.2	83.4	0.85	2.25	2.2	6.1	2.5	2885	14.6	80.8	0.92	8.5	2.1	6.4	2.5	**1LE1011-1BP2■-■■■■**	27	0.01
1.45	**5.9**	**132 S**	1460	9.5	84	0.84	2.95	1.6	5.8	2.8	2875	19.6	80	0.89	12.0	1.8	5.6	2.8	**1LE1011-1CP0■-■■■■**	38	0.019
2.0	**8.0**	**132 M**	1455	13.1	85	0.85	4.00	1.8	5.6	2.8	2880	26.5	82	0.92	15.3	1.8	6.3	2.8	**1LE1011-1CP2■-■■■■**	44	0.024
2.9	**11.5**	**160 M**	1465	18.9	86.5	0.86	5.6	1.8	5.9	2.9	2870	38.3	82	0.92	22.0	1.8	6	2.9	**1LE1011-1DP2■-■■■■**	62	0.044
4.3	**16**	**160 L**	1455	28.2	87	0.85	8.4	1.6	6	2.3	2920	52.3	86	0.94	28.5	1.9	7.1	2.3	**1LE1011-1DP6■-■■■■**	85	0.068
6/4-pole: 1000/1500 rpm at 50 Hz with two windings																					
1000 rpm	*1500 rpm*		*1000 rpm*								*1500 rpm*										
0.6	**1.7**	**100 L**	970	5.9	55.5	0.62	2.50	1.7	3.4	2.7	1435	11.3	76.2	0.83	3.90	1.8	4.6	2.7	**1LE1012-1AQ4■-■■■■**	18	0.0059
0.75	**2.1**	**100 L**	955	8	64.2	0.77	2.20	1.2	3.4	2	1435	14	78.4	0.84	4.60	2	5.4	2	**1LE1012-1AQ5■-■■■■**	22	0.0078
0.9	**3.0**	**112 M**	975	8.8	64.7	0.66	3.05	1.6	3.9	2.5	1455	19.7	81.4	0.78	6.8	2.1	6.4	2.5	**1LE1012-1BQ2■-■■■■**	27	0.01
1.2	**3.9**	**132 S**	980	11.7	72.3	0.7	3.40	1.4	4.6	2.5	1455	25.6	83.1	0.83	8.2	1.5	5.7	2.5	**1LE1012-1CQ0■-■■■■**	38	0.019
1.7	**5.4**	**132 M**	980	16.6	74.1	0.71	4.65	1.7	5	2.5	1465	35.2	85.9	0.82	11.1	2	6.9	2.5	**1LE1012-1CQ2■-■■■■**	44	0.024
2.5	**7.2**	**160 M**	985	24.2	77.7	0.71	6.5	1.5	4.7	2.6	1470	46.8	86.9	0.85	14.1	1.8	6.3	2.6	**1LE1012-1DQ2■-■■■■**	62	0.044
3.7	**12.0**	**160 L**	985	35.9	82.4	0.69	9.4	2.3	6.2	3.5	1475	77.7	87.9	0.8	24.5	2.1	7.5	3.5	**1LE1012-1DQ4■-■■■■**	73	0.059
6.5	**19**	**180 L**	985	63	81.0	0.7	16.5	1.8	5.5	2.7	1475	123	0.9	0.8	38.0	2.5	8.1	3.7	**1LE1012-1EQ4■-■■■■**	132	0.13
9.5	**26**	**200 L**	985	92	84.5	0.7	23.0	2.3	6.5	2.8	1475	168	0.91	0.8	52	2.3	7.5	3.4	**1LE1012-2AQ5■-■■■■**	173	0.20

Voltages		Version					Order code
50 Hz 230 V		**Standard**	2	2			–
50 Hz 400 V		**Standard**	3	4			–
50 Hz 500 V		Without additional charge	4	0			–
50 Hz 690 V		Without additional charge	4	7			–
For other voltages [1] and more information, see from page 2/95			9	0			...
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		...
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	...
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
For options, see from page 2/118							**1LE101■-.... ■-■■■■-Z** ...+...+...

Note: Pole-changing motors (4/2-pole) do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also page 1/50).

[1] Operating values for 60 Hz are available on request.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Aluminum series SIMOTICS GP 1LE1011/1LE1012 for square-law load torque – self-ventilated

Selection and ordering data

P_{rated1}, 50 Hz	P_{rated2}, 50 Hz	Frame size	Operating values at rated power for N1: n_{rated1}, 50 Hz	T_{rated1}, 50 Hz	η_{rated1}, 50 Hz, 4/4	cos φ_{rated1}, 50 Hz, 4/4	I_{rated1}, 50 Hz, 400 V	T_{LR}/T_{rated1}, 50 Hz	I_{LR}/I_{rated1}, 50 Hz	T_B/T_{rated1}, 50 Hz	Operating values at rated power for N2: n_{rated2}, 50 Hz	T_{rated2}, 50 Hz	η_{rated2}, 50 Hz, 4/4	cos φ_{rated2}, 50 Hz, 4/4	I_{rated2}, 50 Hz, 400 V	T_{LR}/T_{rated2}, 50 Hz	I_{LR}/I_{rated2}, 50 Hz	T_B/T_{rated2}, 50 Hz	**Aluminum series 1LE1011 – *one winding*** Article No.	$m_{IM\ B3}$	J
kW	kW	FS	rpm	Nm	%		A				rpm	Nm	%		A						
• Cooling: Self-ventilated (IC411) • Line operation: 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)																					
8/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit																					
750 rpm	*1500 rpm*		*750 rpm*								*1500 rpm*										
0.5	**2.0**	**100 L**	720	6.6	52	0.5	2.80	1.3	3.3	3.4	1440	13.3	82	0.79	4.45	3	7.5	3.4	**1LE1011-1AR4■-■■■■**	22	0.0078
0.65	**2.5**	**100 L**	715	8.7	56	0.58	2.90	1	3.2	2.6	1425	16.8	81	0.84	5.3	2.3	6.3	2.6	**1LE1011-1AR5■-■■■■**	22	0.0078
0.9	**3.6**	**112 M**	715	12	56	0.57	4.05	1	2.8	2.1	1430	24	82	0.84	7.5	1.9	5.6	2.1	**1LE1011-1BR2■-■■■■**	27	0.01
1.1	**4.7**	**132 S**	730	14.4	62	0.54	4.75	1	3.2	2.2	1430	31.4	82	0.86	9.6	1.7	5.2	2.2	**1LE1011-1CR0■-■■■■**	38	0.019
1.4	**6.4**	**132 M**	730	18.3	67.5	0.52	5.8	1.1	3.5	2.3	1440	42.4	84.5	0.87	12.6	1.9	5.7	2.3	**1LE1011-1CR2■-■■■■**	44	0.024
2.2	**9.5**	**160 M**	730	28.8	80.6	0.63	6.3	1.5	4	2.5	1465	61.9	86.1	0.84	19.0	2	6.3	2.5	**1LE1011-1DR2■-■■■■**	62	0.044
3.3	**14**	**160 L**	735	42.9	81.4	0.56	10.4	2.5	4.8	3.3	1475	90.6	85.8	0.73	32.5	2.5	7.2	3.3	**1LE1011-1DR4■-■■■■**	73	0.056
4.5	**16**	**180 M**	730	59	79.3	0.59	13.9	1.4	3.8	2.3	1470	104	84.6	0.83	33.0	1.4	7	2.9	**1LE1011-1ER2■-■■■■**	128	0.12
5	**18.5**	**180 L**	730	65	78.3	0.6	15.4	1.5	3.8	2.1	1470	120	86.6	0.83	37.0	2.3	7	2.7	**1LE1011-1ER4■-■■■■**	132	0.13
7.5	**28**	**200 L**	735	97	85.0	0.6	21.0	1.7	4	2.1	1475	181	90.5	0.85	53	2.7	7.4	3.1	**1LE1011-2AR5■-■■■■**	173	0.20

Voltages		Version					Order code
50 Hz 230 V		**Standard**	2	2			–
50 Hz 400 V		**Standard**	3	4			–
50 Hz 500 V		Without additional charge	4	0			–
50 Hz 690 V		Without additional charge	4	7			–
For other voltages [1] and more information, see from page 2/95			9	0			. . .
Types of construction		Version					Order code
Without flange	IM B3 [2]	**Standard**			A		–
With flange	IM B5 [2]	With additional charge			F		–
With flange	IM B14 [2]	With additional charge			K		–
For other types of construction and more information, see from page 2/99					■		. . .
Motor protection		Version					Order code
Without		**Standard**				A	–
PTC thermistor with 3 temperature sensors		With additional charge				B	–
For other motor protection and more information, see from page 2/112						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 2/115							■
Special versions							Order code(s)
For options, see from page 2/118							**1LE101■-. . . . ■-■■■■-Z** . . .+. . .+. . .

Note: Pole-changing motors (4/2-pole) do not comply with the vibration values stipulated in IEC 60034-14 when rigidly installed (see also page 1/50).

[1] Operating values for 60 Hz are available on request.

[2] Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (**H03**) or stamping of the type on the rating plate. The basic type IM B3, IM B5, or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (**H03**), the type must be specified.

Selection and ordering data

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Frame size: 63	71	80	90	100	112	132	160	180	200	Motor version		
								1LE1004						IEC	IE4	①
						1LE1003									IE3	②
								1LE1083								③
				1LE1001											IE2	④
				1LE1002											IE1	⑤
						1LE1043								APAC Line	IE3	⑥
						1LE1041									IE2	⑦
						1LE1023								Eagle Line	NPE (NEMA)	⑧
1LE10 . . - . . . . ■ - ■ . . .			Order code				1LE1021								NEE (NEMA)	⑨
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	⑥, ⑦ ⑧, ⑨
50 Hz 400 VΔ, 60 Hz 460 VΔ [1]				–	–	□	□	□	□	□	□	□	□	Only for:	APAC Line Eagle Line	⑥, ⑦ ⑧, ⑨
50 Hz 400 VY, 60 Hz 460 VY [2] [3]	**0**	**2**	**–**	–	–	□	□	□	□	□	□	□	□	Not for:	IEC IE3	③
50 Hz 400 VΔ, 60 Hz 460 VΔ [4]	**0**	**4**	**–**	–	–	□	□	□	□	□	□	□	□	Not for:	IEC IE3	③
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 690 VY	**0**	**6**	**–**	–	–	–	○	○	○	○	○	○	○	Only for:	IEC IE3	③
50 Hz 690 VΔ	**4**	**7**	**–**	–	–	–	○	○	○	○	○	○	○	Only for:	IEC IE3	③
50 Hz 220 VΔ/380 VY 60 Hz 440 VY	**2**	**1**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
50 Hz 380 VΔ/660 VY [1], 60 Hz 440 VΔ	**3**	**3**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
50 Hz 380 VΔ [1]				–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	**2**	**3**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
50 Hz 415 VΔ, 60 Hz 480 VΔ	**3**	**5**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
60 Hz 220 VΔ/380 VY	**1**	**7**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 IEC IE3	⑤ ③
60 Hz 230 VΔ/400 VY	**1**	**8**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 IEC IE3	⑤ ③
60 Hz 380 VΔ/660 VY [1]	**3**	**0**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
60 Hz 380 VΔ [1]			**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Eagle Line	⑧, ⑨
60 Hz 400 VΔ/690 VY [1]	**3**	**1**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 Eagle Line IEC IE3	⑤ ⑧, ⑨ ③
60 Hz 400 VΔ [1]			**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Eagle Line	⑧, ⑨
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 version according to NEMA	**6**	**0**	**–**	–	–	–	–	–	–	–	–	✓	✓	Not for:	IEC IE1 APAC Line IE2 IEC IE3	⑤ ⑦ ③
60 Hz 230 VYY/460 VY; 60 Hz power, 9 main terminals and electrical version according to NEMA	**6**	**1**	**–**	–	–	–	–	–	–	–	–	✓	✓	Not for:	IEC IE1 APAC Line IE2 IEC IE3	⑤ ⑦ ③
60 Hz 230 VΔΔ/460 VΔ; 50 Hz power, 12 main terminals and electrical version according to NEMA	**6**	**2**	**–**	–	–	–	–	–	–	–	–	✓	✓	Not for:	IEC IE1 APAC Line IE2 IEC IE3	⑤ ⑦ ③
60 Hz 230 VΔΔ/460 VΔ; 60 Hz power, 12 main terminals and electrical version according to NEMA	**6**	**3**	**–**	–	–	–	–	–	–	–	–	✓	✓	Not for:	IEC/IE1 APAC Line IE2 IEC IE3	⑤ ⑦ ③
Voltage at 60 Hz and required power at 60 Hz																
220 VΔ/380 VY; 50 Hz power	**9**	**0**	**M2A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
220 VΔ/380 VY; 60 Hz power	**9**	**0**	**M1A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
380 VΔ/660 VY; 50 Hz power [1]	**9**	**0**	**M2B**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
380 VΔ; 50 Hz power [1]				–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	APAC Line Eagle Line	⑥, ⑦ ⑧, ⑨

For legends and footnotes, see page 2/94.

Aluminum series SIMOTICS GP 1LE10

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Frame size: 63	71	80	90	100	112	132	160	180	200	Motor version		
								1LE1004						IEC	IE4	①
						1LE1003									IE3	②
								1LE1083								③
				1LE1001											IE2	④
				1LE1002											IE1	⑤
						1LE1043								APAC Line	IE3	⑥
						1LE1041									IE2	⑦
						1LE1023								Eagle Line	NPE (NEMA)	⑧
1LE10 . . - . . . . ■ - ■ . . .			Order code				1LE1021								NEE (NEMA)	⑨
Voltage at 60 Hz and required power at 60 Hz (continued)																
380 VΔ/660 VY; 60 Hz power [1) 5)]	9	0	**M1B**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
440 VY; 50 Hz power	9	0	**M2C**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
440 VY; 60 Hz power	9	0	**M1C**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
440 VΔ; 50 Hz power	9	0	**M2D**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
440 VΔ; 60 Hz power	9	0	**M1D**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
460 VY; 50 Hz power	9	0	**M2E**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
460 VY; 60 Hz power	9	0	**M1E**	○	○	○	○	○	○	○	○	○	○	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
460 VΔ; 50 Hz power	9	0	**M2F**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
460 VΔ; 60 Hz power	9	0	**M1F**	○	○	○	○	○	○	○	○	○	○	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
575 VY; 50 Hz power [7)]	9	0	**M2G**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE4 IEC IE3	① ③
575 VY; 60 Hz power [7)]	9	0	**M1G**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
575 VΔ; 50 Hz power [7)]	9	0	**M2H**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE4 IEC IE3	① ③
575 VΔ; 60 Hz power [7)]	9	0	**M1H**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line Eagle Line IEC IE3	⑥, ⑦ ⑧, ⑨ ③
400 VΔ/690 VY; 50 Hz power [1)]	9	0	**M2J**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Eagle Line IEC IE3	⑧, ⑨ ③
400 VΔ; 50 Hz power				–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Eagle Line IEC IE3	⑧, ⑨ ③
400 VΔ/690 VY; 60 Hz power	9	0	**M1J**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Eagle Line IEC IE3	⑧, ⑨ ③
480 VY; 50 Hz power	9	0	**M2K**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
480 VY; 60 Hz power	9	0	**M1K**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Eagle Line IEC IE3	⑧, ⑨ ③
480 VΔ; 50 Hz power	9	0	**M2L**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
480 VΔ; 60 Hz power	9	0	**M1L**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Eagle Line IEC IE3	⑧, ⑨ ③
230 VΔ/400 VY; 50 Hz power	9	0	**M2M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
230 VΔ/400 VY; 60 Hz power	9	0	**M1M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Eagle Line IEC IE3	⑧, ⑨ ③
Voltage at 87 Hz and 87 Hz power																
400 VΔ [5)]	9	0	**M3A**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	③
Non-standard voltage and/or frequencies																
Non-standard winding [6)]	9	0	**M1Y** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

□ Standard version
○ Without additional charge
• This order code only determines the price of the version – Additional plain text is required.
✓ With additional charge
– Not possible

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

2) Frame sizes 80 and 90 with voltage code 02 can only be supplied without motor protection (motor protection code letter 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) in frame sizes 80 and 90.

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						Pole-changing
				1LE1012						
1LE10 . . - . . . . ■ - ■ . . .			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.	O. R.	
220 V; 60 Hz power	**9**	**0**	**M5C**	O. R.	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.	O. R.	
380 V; 60 Hz power	**9**	**0**	**M5D**	O. R.	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.	O. R.	
440 V; 60 Hz power	**9**	**0**	**M5E**	O. R.	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.	O. R.	
460 V; 60 Hz power	**9**	**0**	**M5F**	O. R.	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.	O. R.	
575 V; 60 Hz power	**9**	**0**	**M5G**	O. R.	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	✓	✓	✓	✓	✓	✓	

□ Standard version
○ Without additional charge
• This order code only determines the price of the version – Additional plain text is required.
✓ With additional charge
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.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Selection and ordering data

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
							1LE1504 Basic Line										IEC	IE4	①
							1LE1604 Performance Line												②
				1LE1503 Basic Line														IE3	③
							1LE1603 Performance Line												④
							1LE1583												⑤
				1LE1501 Basic Line														IE2	⑥
							1LE1601 Performance Line												⑦
							1LE1502 Basic Line											IE1	⑧
					1LE1543 Basic Line												APAC Line	IE3	⑨
							1LE1643 Performance Line												⑩
											1LE1541 Basic Line							IE2	⑪
				1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
			Order code				1LE1623 Performance Line												⑬
1LE1 . . . - . . . . ■ - ■ . . .							1LE1521 Basic Line											NEE (NEMA)	⑭
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 [1]	**3**	**4**	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭	
50 Hz 400 VΔ, 60 Hz 460 VΔ [1]				□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭	
50 Hz 400 VY, 60 Hz 460 VY [2] [3]	**0**	**2**	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	IEC IE3	⑤
50 Hz 400 VΔ, 60 Hz 460 VΔ [4]	**0**	**4**	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	IEC IE3	⑤
50 Hz 500 VY/575 VY	**2**	**7**	–	○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	IEC IE4 ①, ② frame sizes 100 … 160	
50 Hz 500 VΔ, 60 Hz 575 VΔ	**4**	**0**	–	–	–	–	○	○	○	○	○	○	○	○	○	○	Not for:	IEC IE4 ①, ② frame sizes 100 … 160	
50 Hz 690 VY	**0**	**6**	–	–	–	–	○	○	○	○	○	○	○	○	○	○	Only for:	IEC IE3	⑤
50 Hz 690 VΔ	**4**	**7**	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE3	⑤
50 Hz 220 VΔ/380 VY, 60 Hz 440 VY	**2**	**1**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ [1]	**3**	**3**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
50 Hz 380 VΔ [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭	
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	**2**	**3**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
50 Hz 415 VΔ, 60 Hz 480 VΔ	**3**	**5**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
60 Hz 220 VΔ/380 VY	**1**	**7**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
60 Hz 230 VΔ/400 VY	**1**	**8**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
60 Hz 380 VΔ/660 VY [1]	**3**	**0**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3 ⑤ IEC IE1 ⑧ Eagle Line ⑫, ⑬	
60 Hz 380 VΔ [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
60 Hz 400 VΔ/690 VY [1]	**3**	**1**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3 ⑤ IEC IE1 ⑧ Eagle Line ⑫, ⑬	
60 Hz 400 VΔ [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
Voltage at 60 Hz and required power																			
220 VΔ/380 VY; 50 Hz power	**9**	**0**	**M2A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
220 VΔ/380 VY; 60 Hz power [2]	**9**	**0**	**M1A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
380 VΔ/660 VY; 50 Hz power [1]	**9**	**0**	**M2B**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
380 VΔ; 50 Hz power [1]				–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭	
380 VΔ/660 VY; 60 Hz power [1] [2]	**9**	**0**	**M1B**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
440 VY; 50 Hz power	**9**	**0**	**M2C**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
440 VY; 60 Hz power [2]	**9**	**0**	**M1C**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑧, ⑨, ⑩ Eagle Line ⑪, ⑫, ⑬	

For legends and footnotes, see page 2/97.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
							1LE1504 Basic Line										IEC	IE4	①
							1LE1604 Performance Line												②
				1LE1503 Basic Line														IE3	③
							1LE1603 Performance Line												④
							1LE1583												⑤
				1LE1501 Basic Line														IE2	⑥
							1LE1601 Performance Line												⑦
							1LE1502 Basic Line											IE1	⑧
					1LE1543 Basic Line												APAC Line	IE3	⑨
							1LE1643 Performance Line												⑩
											1LE1541 Basic Line							IE2	⑪
				1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
			Order code				1LE1623 Performance Line												⑬
1LE1 . . . -. . . . ■ - ■ . . .							1LE1521 Basic Line											NEE (NEMA)	⑭
Voltage at 60 Hz and required power (continued)																			
440 VΔ; 50 Hz power	**9**	**0**	**M2D**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
440 VΔ; 60 Hz power [2]	**9**	**0**	**M1D**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
460 VY; 50 Hz power	**9**	**0**	**M2E**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
460 VY; 60 Hz power [2]	**9**	**0**	**M1E**	–	–	–	○	○	○	○	○	○	○	○	○	○	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
460 VΔ; 50 Hz power	**9**	**0**	**M2F**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
460 VΔ; 60 Hz power [2]	**9**	**0**	**M1F**	–	–	–	○	○	○	○	○	○	○	○	○	○	Not for:	APAC Line ⑨, ⑩, ⑪ Eagle Line ⑫, ⑬, ⑭ IEC IE3 ⑤	
575 VY; 50 Hz power	**9**	**0**	**M2G**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE4 ①, ② frame sizes 100 … 160 IEC IE3 ⑤	
575 VY; 60 Hz power [2]	**9**	**0**	**M1G**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑪, ⑫, ⑬, ⑭ and ①, ② frame sizes 100 … 160	
575 VΔ; 50 Hz power	**9**	**0**	**M2H**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE4 ①, ② frame sizes 100 … 160 IEC IE3 ⑤	
575 VΔ; 60 Hz power [2]	**9**	**0**	**M1H**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑪, ⑫, ⑬, ⑭ and ①, ② frame sizes 100 … 160	
400 VΔ/690 VY; 50 Hz power [1]	**9**	**0**	**M2J**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
400 VΔ; 50 Hz power [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
400 VΔ/690 VY; 60 Hz power	**9**	**0**	**M1J**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
480 VY; 50 Hz power	**9**	**0**	**M2K**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
480 VY; 60 Hz power	**9**	**0**	**M1K**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
480 VΔ; 50 Hz power	**9**	**0**	**M2L**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
480 VΔ; 60 Hz power	**9**	**0**	**M1L**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
230 VΔ/400 VY; 50 Hz power	**9**	**0**	**M2M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
230 VΔ/400 VY; 60 Hz power	**9**	**0**	**M1M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE1 ⑧ Eagle Line ⑫, ⑬	
Voltage at 87 Hz and 87 Hz power																			
400 VΔ [5]	**9**	**0**	**M3A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3	⑤
Non-standard voltage and/or frequencies																			
Non-standard winding [6]	**9**	**0**	**M1Y** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

□ Standard version
○ Without additional charge
✓ With additional charge
O. R. Possible on request
– Not possible
• This order code only determines the price of the version – Additional plain text is required.

1) For North America export versions Eagle Line 1LE1521 NEMA Energy Efficient, 1LE1523/1LE1623 NEMA Premium Efficient and 1LE583, 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.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

2

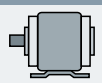
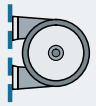
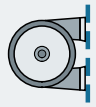
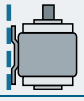
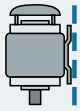
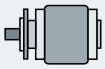
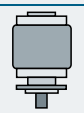
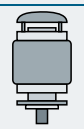
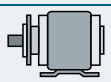
Selection and ordering data

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	Frame size: 80	90	100	112	132	160	180	200	225	250	280	315	Motor version: IEC	IE3
				1LE1073													
										1LE1573							
													1LE5773				
1LE . . . . - . . . . ■ - ■ . . .			Order code														
Voltage at 60 Hz and 50 Hz power																	
220 VΔΔ/380 VYY, 440 VΔ 50 Hz power	**6**	**4**	**–**	□	□	□	□	□	□	□	□	□	□	□	□		
220 VΔ/380 VY; 50 Hz power	**9**	**0**	**M2A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
380 VΔ/660 VY; 50 Hz power	**9**	**0**	**M2B**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
440 VY; 50 Hz power	**9**	**0**	**M2C**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
440 VΔ; 50 Hz power	**9**	**0**	**M2D**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
460 VY; 50 Hz power	**9**	**0**	**M2E**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
460 VΔ; 50 Hz power	**9**	**0**	**M2F**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
575 VY; 50 Hz power	**9**	**0**	**M2G**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
575 VΔ; 50 Hz power	**9**	**0**	**M2H**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
400 VΔ/690 VY; 50 Hz power	**9**	**0**	**M2J**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
480 VY; 50 Hz power	**9**	**0**	**M2K**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
480 VΔ; 50 Hz power	**9**	**0**	**M2L**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
230 VΔ/400 VY; 50 Hz power	**9**	**0**	**M2M**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
Non-standard voltage and/or frequencies																	
Non-standard winding [1]	**9**	**0**	**M1Y** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

□ Standard version
✓ With additional charge
• This order code only determines the price of the version – Additional plain text is required.
– Not possible

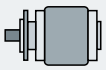
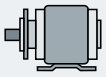
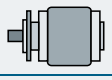
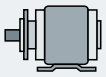
[1] Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated power in kW.

Selection and ordering data

Types of construction		Article No. supplement		Frame size										Motor version	
		Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**63**	**71**	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**		
								1LE1004						IEC	IE4 ①
						1LE1003									IE3 ②
								1LE1083							③
				1LE1001											IE2 ④
				1LE1002											IE1 ⑤
						1LE1043								APAC Line	IE3 ⑥
						1LE1041									IE2 ⑦
						1LE1023								Eagle Line	NPE (NEMA) ⑧
							1LE1021								NEE (NEMA) ⑨
								1LE1011						Pole-changing	⑩
1LE10 . . - . . . . . - .	■ . . (-Z)		Order code					**1LE1012**							⑪
Without flange															
IM B3 [1) 2) 3)]		**A**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM B6 [2) 3)]		**T**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM B7 [2) 3) 9)]		**U**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM B8 [2) 3)]		**V**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM V6 [2) 3)]		**D**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM V5 without protective cover [2) 3)]		**C**	–	□	□	□	□	□	□	□	□	□	□	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨
IM V5 with protective cover [2) 3) 4) 5) 6)]		**C**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨ 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**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V1 without protective cover [2)]		**G**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V1 with protective cover [2) 4) 5) 6)]		**G**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Combination with order code F90
IM V3 [4)]		**H**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM B35 [3)]		**J**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨

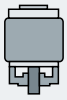
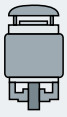
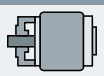
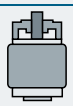
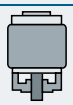
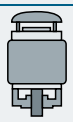
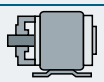
For legends and footnotes, see page 2/102.

Aluminum series SIMOTICS GP 1LE10

Types of construction	Article No. supplement: Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Frame size: 63	71	80	90	100	112	132	160	180	200	Motor version		
							1LE1004						IEC	IE4	①
					1LE1003									IE3	②
							1LE1083								③
			1LE1001											IE2	④
			1LE1002											IE1	⑤
					1LE1043								APAC Line	IE3	⑥
					1LE1041									IE2	⑦
					1LE1023								Eagle Line	NPE (NEMA)	⑧
						1LE1021								NEE (NEMA)	⑨
							1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . ■ . . (-Z)		Order code					1LE1012								⑪
With flange next largest	**EN 50347 DIN 42948**		– –	– –	– –	FF215 A 250	FF265 A 300	FF265 A 300	FF300 A 350	– –	– –	– –			
IM B5 [2) 7)] 	**F**	**P01**	–	–	–	✓	✓	✓	✓	–	–	–			
IM V1 without protective cover [2)] 	**G**	**P01**	–	–	–	✓	✓	✓	✓	–	–	–			
IM V1 with protective cover [2) 4) 5) 6)] 	**G**	**P01+H00**	–	–	–	✓	✓	✓	✓	–	–	–	Not for:	Combination with order code F90	
IM V3 [4)] 	**H**	**P01**	–	–	–	✓	✓	✓	✓	–	–	–			
IM B35 [3)] 	**J**	**P01**	–	–	–	✓	✓	✓	✓	–	–	–	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨	
With flange next smallest	**EN 50347 DIN 42948**		FF100 A 120	FF115 A 140	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**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓			
IM V1 without protective cover [2)] 	**G**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓			
IM V1 with protective cover [2) 4) 5) 6)] 	**G**	**P02+H00**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	Combination with order code F90	
IM V3 [4)] 	**H**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓			
IM B35 [3)] 	**J**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨	

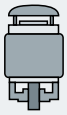
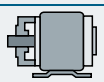
For legends and footnotes, see page 2/102.

Types of construction	Article No. supplement		Frame size										Motor version		
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**63**	**71**	**80**	**90**	**100**	**112**	**132**	**160**	**180**	**200**			
							1LE1004						IEC	IE4	①
					1LE1003									IE3	②
							1LE1083								③
			1LE1001											IE2	④
			1LE1002											IE1	⑤
					1LE1043								APAC Line	IE3	⑥
					1LE1041									IE2	⑦
					1LE1023								Eagle Line	NPE (NEMA)	⑧
						1LE1021								NEE (NEMA)	⑨
							1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . ■ **. . (-Z)**		Order code					**1LE1012**								⑪

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**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	–	–		
IM V19 [2)]		**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	–	–		
IM V18 without protective cover [2)]		**M**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	–	–		
IM V18 with protective cover [2) 4) 5) 6)]		**M**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	Not for:	Combination with order code F90
IM B34 [3)]		**N**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	Not for:	Eagle Line NEE ⑨
With flange next largest [10)]		**EN 50347** / **DIN 42948**		**FT100** / **C 120**	**FT115** / **C 140**	**FT130** / **C 160**	**FT130** / **C 160**	**FT165** / **C 200**	**FT165** / **C 200**	**FT215** / **C 250**	**–** / **–**	**–** / **–**	**–** / **–**		
IM B14 [2) 8)]		**K**	**P01**	✓	✓	✓	✓	✓	✓	✓	–	–	–		
IM V19 [2)]		**L**	**P01**	✓	✓	✓	✓	✓	✓	✓	–	–	–		
IM V18 without protective cover [2)]		**M**	**P01**	✓	✓	✓	✓	✓	✓	✓	–	–	–		
IM V18 with protective cover [2) 4) 5) 6)]		**M**	**P01+H00**	✓	✓	✓	✓	✓	✓	✓	–	–	–	Not for:	Combination with order code F90
IM B34 [3)]		**N**	**P01**	✓	✓	✓	✓	✓	✓	✓	–	–	–	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨

For legends and footnotes, see page 2/102.

Aluminum series SIMOTICS GP 1LE10

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

□ Standard version
✓ With additional charge
– 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 there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

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

3) 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.

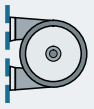
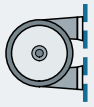
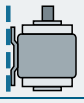
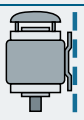
7) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B5 is then stamped 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 there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

9) When ordering frame size B7 and the required cable outlet below, option **R12** must also be ordered.

10) For the standard EN 50347, flanges which are 2 levels larger are used in frame size 80 with option **P01**.

Selection and ordering data

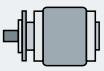
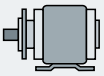
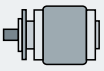
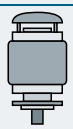
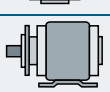
Types of construction		Article No. supplement		Frame size														Motor version		
				71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4- to 8-pole		
		Type of construction code letter 14th position of the Article No.	For types of construction with order code(s)				1LE1504 Basic Line												IEC	IE4 ①
			Article No. with additional identification code **-Z**				1LE1604 Performance Line													②
				1LE1503 Basic Line																IE3 ③
							1LE1603 Performance Line													④
							1LE1583													⑤
				1LE1501 Basic Line																IE2 ⑥
							1LE1601 Performance Line													⑦
							1LE1502 Basic Line													IE1 ⑧
					1LE1543 Basic Line														APAC Line	IE3 ⑨
							1LE1643 Performance Line													⑩
											1LE1541 Basic Line									IE2 ⑪
				1LE1523 Basic Line															Eagle Line	NPE (NEMA) ⑫
			Order code				1LE1623 Performance Line													⑬
1LE1 . . . - . . . . . - . ■ . . (-Z)							1LE1521 Basic Line													NEE (NEMA) ⑭
Without flange																				
IM B3 1) 2) 3)		**A**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM B6 2) 3)		**T**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM B7 2) 3) 9)		**U**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM B8 2) 3)		**V**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM V6 2) 3)		**D**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	✓	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM V5 without protective cover 2) 3)		**C**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	✓	□	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp
IM V5 with protective cover 2) 3) 4) 5)		**C**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp

For legends and footnotes, see page 2/107.

SIMOTICS GP and SIMOTICS SD standard motors

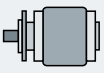
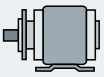
Article No. supplements and special versions · Types of construction

Cast-iron series SIMOTICS SD 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- to 8-pole			
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s)				1LE1504 Basic Line												IEC	IE4	①
						1LE1604 Performance Line														②
			1LE1503 Basic Line																IE3	③
						1LE1603 Performance Line														④
						1LE1583														⑤
			1LE1501 Basic Line																IE2	⑥
						1LE1601 Performance Line														⑦
						1LE1502 Basic Line													IE1	⑧
				1LE1543 Basic Line														APAC Line	IE3	⑨
						1LE1643 Performance Line														⑩
										1LE1541 Basic Line									IE2	⑪
			1LE1523 Basic Line															Eagle Line	NPE (NEMA)	⑫
						1LE1623 Performance Line														⑬
1LE1 . . . - . . . . . - . ■ . . (-Z)		Order code				1LE1521 Basic Line													NEE (NEMA)	⑭
With flange	**EN 50347**		FF130	FF165	FF165	FF215	FF215	FF265	FF300	FF300	FF350	FF400	FF500	FF500	FF600	FF600	FF600			
	DIN 42948		A 160	A 200	A 200	A 250	A 250	A 300	A 350	A 350	A 400	A 450	A 550	A 550	A 660	A 660	A 660			
IM B5 2) 6) 	F	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–			
IM V1 without protective cover 2) 	G	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
IM V1 with protective cover 2) 4) 5) 	G	H00	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
IM V3 5) 	H	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–			
IM B35 3) 	J	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp	
With flange next largest	**EN 50347**		–	–	FF215	FF265	FF265	FF300	–	–	–	–	–	–	–	–	–			
	DIN 42948		–	–	A 250	A 300	A 300	A 350	–	–	–	–	–	–	–	–	–			
IM B5 2) 6) 	F	P01	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V1 without protective cover 2) 	G	P01	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V1 with protective cover 2) 4) 5) 	G	P01+ H00	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V3 5) 	H	P01	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM B35 3) 	J	P01	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp	

For legends and footnotes, see page 2/107.

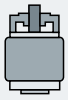
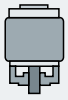
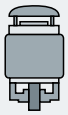
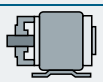
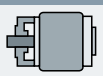
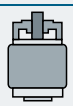
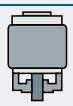
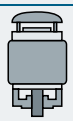
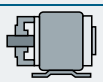
Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

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- to 8-pole			
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s)				1LE1504 Basic Line												IEC	IE4	①
						1LE1604 Performance Line														②
			1LE1503 Basic Line																IE3	③
						1LE1603 Performance Line														④
						1LE1583														⑤
			1LE1501 Basic Line																IE2	⑥
						1LE1601 Performance Line														⑦
						1LE1502 Basic Line													IE1	⑧
				1LE1543 Basic Line														APAC Line	IE3	⑨
						1LE1643 Performance Line														⑩
										1LE1541 Basic Line									IE2	⑪
			1LE1523 Basic Line															Eagle Line	NPE (NEMA)	⑫
		Order code				1LE1623 Performance Line														⑬
1LE1 . . . -. . . . . -. . ■ . . (-Z)						1LE1521 Basic Line													NEE (NEMA)	⑭
With flange next smallest	**EN 50347**		–	FF130	–	FF165	FF165	FF215	FF265	FF265	FF300	–	–	–	–	–	–			
	DIN 42948		–	A 160	–	A 200	A 200	A 250	A 300	A 300	A 350	–	–	–	–	–	–			
IM B5 2) 6) 	**F**	**P02**	–	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–			
IM V1 without protective cover 2) 	**G**	**P02**	–	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–			
IM V1 with protective cover 2) 4) 5) 	**G**	**P02+ H00**	–	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–			
IM V3 5) 	**H**	**P02**	–	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–			
IM B35 3) 	**J**	**P02**	–	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp	

For legends and footnotes, see page 2/107.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

2

Types of construction	Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code -Z	Frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4- to 8-pole	Motor version		
						1LE1504 Basic Line												IEC	IE4	①
						1LE1604 Performance Line														②
			1LE1503 Basic Line																IE3	③
						1LE1603 Performance Line														④
						1LE1583														⑤
			1LE1501 Basic Line																IE2	⑥
						1LE1601 Performance Line														⑦
						1LE1502 Basic Line													IE1	⑧
				1LE1543 Basic Line														APAC Line	IE3	⑨
						1LE1643 Performance Line														⑩
										1LE1541 Basic Line									IE2	⑪
			1LE1523 Basic Line															Eagle Line	NPE (NEMA)	⑫
						1LE1623 Performance Line														⑬
1LE1 . . . - . . . . . - . ■ . . (-Z)		Order code				1LE1521 Basic Line													NEE (NEMA)	⑭
With flange	**EN 50347**		**FT85**	**FT100**	**FT115**	**FT130**	**FT130**	**FT165**	**FT215**	–	–	–	–	–	–	–	–			
	DIN 42948		**C 105**	**C 120**	**C 140**	**C 160**	**C 160**	**C 200**	**C 250**	–	–	–	–	–	–	–	–			
IM B14 2) 7) 	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–			
IM V19 2) 	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–			
IM V18 without protective cover 2) 	**M**	**–**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–			
IM V18 with protective cover 2) 4) 5) 	**M**	**H00**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–			
IM B34 3) 	**N**	**–**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp	
With flange next largest	**EN 50347**		**FT115**	**FT130**	**FT130**	**FT165**	**FT165**	**FT215**	–	–	–	–	–	–	–	–	–			
	DIN 42948		**C 140**	**C 160**	**C 160**	**C 200**	**C 200**	**C 250**	–	–	–	–	–	–	–	–	–			
IM B14 2) 7) 8) 	**K**	**P01**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V19 2) 8) 	**L**	**P01**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V18 without protective cover 2) 8) 	**M**	**P01**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM V18 with protective cover 2) 4) 5) 8) 	**M**	**P01+ H00**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–			
IM B34 3) 8) 	**N**	**P01**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp	

For legends and footnotes, see page 2/107.

Cast-iron series SIMOTICS SD 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- to 8-pole			
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s)				1LE1504 Basic Line												IEC	IE4	①
						1LE1604 Performance Line														②
			1LE1503 Basic Line																IE3	③
						1LE1603 Performance Line														④
						1LE1583														⑤
			1LE1501 Basic Line																IE2	⑥
						1LE1601 Performance Line														⑦
						1LE1502 Basic Line													IE1	⑧
				1LE1543 Basic Line														APAC Line	IE3	⑨
						1LE1643 Performance Line														⑩
										1LE1541 Basic Line									IE2	⑪
			1LE1523 Basic Line															Eagle Line	NPE (NEMA)	⑫
						1LE1623 Performance Line														⑬
1LE1 . . . -. . . . . -. .	■ **. . (-Z)**	Order code				1LE1521 Basic Line													NEE (NEMA)	⑭
With flange next smallest	**EN 50347**		–	–	–	FT115	–	–	–	–	–	–	–	–	–	–	–			
	DIN 42948		–	–	–	C 140	–	–	–	–	–	–	–	–	–	–	–			
IM B14 2) 7)	**K**	**P02**	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3	⑤
IM V19 2)	**L**	**P02**	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3	⑤
IM V18 without protective cover 2)	**M**	**P02**	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3	⑤
IM V18 with protective cover 2) 4) 5)	**M**	**P02+ H00**	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3	⑤
IM B34 3)	**N**	**P02**	–	–	–	✓	–	–	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3	⑤

□ Standard version
✓ With additional charge
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 design (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.

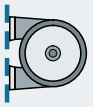
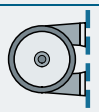
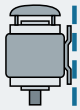
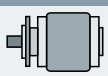
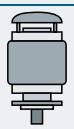
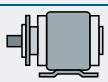
8) With reference to standard EN 50347, flanges that are 2 levels larger are used with option **P01** in the frame sizes 71 and 80.

9) When ordering frame size B7 and the required cable outlet below, option **R12** must also be ordered.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

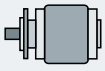
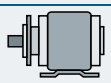
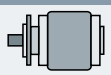
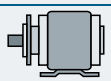
2

Selection and ordering data

Types of construction		Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code **-Z**	Frame size												Motor version	
				80	**90**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**		
				1LE1073												IEC	IE3
										1LE1573							
													1LE5773				
1LE . . . . - . . . . . - . ■ . . (-Z)		■	Order code														
Without flange																	
IM B3 [1] [2]		**A**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM B6 [2]		**T**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM B7 [2] [8]		**U**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM B8 [2]		**V**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM V6 [2]		**D**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM V5 without protective cover [2]		**C**	–	□	□	□	□	□	□	□	□	□	□	□	□		
IM V5 with protective cover [2] [3] [4] [5]		**C**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
With flange		**EN 50347 DIN 42948**		**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**		
IM B5 [2] [6]		**F**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V1 without protective cover [2]		**G**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V1 with protective cover [2] [3] [4] [5]		**G**	**H00**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM V3 [3]		**H**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IM B35		**J**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

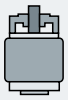
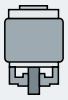
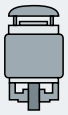
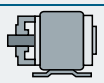
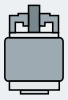
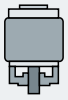
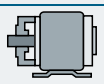
For legends and footnotes, see page 2/111.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Types of construction		Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code **-Z**	Frame size: 80	90	100	112	132	160	180	200	225	250	280	315	Motor version: IEC	IE3
				1LE1073													
										1LE1573							
													1LE5773				
1LE . . . . - . . . . . - . ■ **. . (-Z)**			Order code														
With flange next largest		**EN 50347**		–	FF215	FF265	FF265	FF300	–	–	–	–	–	–	–		
		DIN 42948		–	A 250	A 300	A 300	A 350	–	–	–	–	–	–	–		
IM B5 [2) 6)]		**F**	**P01**	–	✓	✓	✓	✓	–	–	–	–	–	–	–		
IM V1 without protective cover [2)]		**G**	**P01**	–	✓	✓	✓	✓	–	–	–	–	–	–	–		
IM V1 with protective cover [2) 3) 4) 5)]		**G**	**P01+H00**	–	✓	✓	✓	✓	–	–	–	–	–	–	–		
IM V3 [3)]		**H**	**P01**	–	✓	✓	✓	✓	–	–	–	–	–	–	–		
IM B35		**J**	**P01**	–	✓	✓	✓	✓	–	–	–	–	–	–	–		
With flange next smallest		**EN 50347**		FF130	–	FF165	FF165	FF215	FF265	FF265	FF300	–	–	–	–		
		DIN 42948		A 160	–	A 200	A 200	A 250	A 300	A 300	A 350	–	–	–	–		
IM B5 [2) 6)]		**F**	**P02**	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–		
IM V1 without protective cover [2)]		**G**	**P02**	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–		
IM V1 with protective cover [2) 3) 4) 5)]		**G**	**P02+H00**	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–		
IM V3 [3)]		**H**	**P02**	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–		
IM B35		**J**	**P02**	✓	–	✓	✓	✓	✓	✓	✓	–	–	–	–		

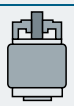
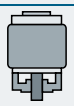
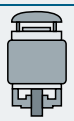
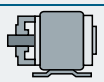
For legends and footnotes, see page 2/111.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Types of construction	Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code -Z	Frame size: 80	90	100	112	132	160	180	200	225	250	280	315	Motor version
			1LE1073												IEC IE3
									1LE1573						
													1LE5773		
1LE . . . . - . . . . . - .	■ . . (-Z)	Order code													
With flange	**EN 50347**		FT100	FT115	FT130	FT130	FT165	FT215	–	–	–	–	–	–	
	DIN 42948		C 120	C 140	C 160	C 160	C 200	C 250	–	–	–	–	–	–	
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 flange next largest [9)]	**EN 50347**		FT130	FT130	FT165	FT165	FT215	–	–	–	–	–	–	–	
	DIN 42948		C 160	C 160	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 2/111.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Types of construction		Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code **-Z**	Frame size: 80	90	100	112	132	160	180	200	225	250	280	315	Motor version: IEC	IE3
				1LE1073													
										1LE1573							
													1LE5773				
1LE . . . . - . . . . . - . ■ . . (-Z)			Order code														
With flange next smallest		**EN 50347** / **DIN 42948**		– / –	– / –	FT115 / C 140	FT115 / C 140	FT130 / C 160	FT165 / C 200	– / –	– / –	– / –	– / –				
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
✓ With additional charge
– 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 there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

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

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

4) 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 1LE1 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 there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM 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 there are no condensation drainage holes (order code **H03**) and these types of construction do not have to be stamped on the rating plate. As standard the type of construction IM 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) When ordering frame size B7 and the required cable outlet below, option **R12** must also be ordered.

9) For the standard EN 50347, flanges which are 2 levels larger are used in frame size 80 with option **P01**.

Selection and ordering data

Motor protection	Article No. supplement		Frame size										Motor version		
	Motor protection code letter 15th position of the Article No.	Additional identification code with order code and plain text if required	63	71	80	90	100	112	132	160	180	200			
							1LE1004						IEC	IE4	①
					1LE1003									IE3	②
							1LE1083								③
			1LE1001											IE2	④
			1LE1002											IE1	⑤
					1LE1043								APAC Line	IE3	⑥
					1LE1041									IE2	⑦
					1LE1023								Eagle Line	NPE (NEMA)	⑧
						1LE1021								NEE (NEMA)	⑨
							1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . ■ .		Order code					1LE1012								⑪
Motor protection															
None (standard)	**A**	**–**	□	□	□	□	□	□	□	□	□	□			
1 or 3 PTC thermistors – for tripping (2 terminals) [1]	**B**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [1]	**C**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 KTY84-130 temperature sensor (2 terminals) [1]	**F**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 KTY84-130 temperature sensors (4 terminals) [1]	**G**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 2-wire input (6 terminals) [1]	**H**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 2-wire input (12 terminals)	**J**		–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	IEC IE3	③
1 Pt1000 resistance thermometer (2 terminals) [2]	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt1000 resistance thermometers (4 terminals) [2]	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**P**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 3-wire input (9 terminals)	**Q**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 3-wire input (18 terminals)	**R**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
3 NTC thermistors – for tripping (6 terminals) [1]	**Z**	**Q2A**	–	–	–	–	✓	✓	✓	✓	–	–			
3 bimetal sensors (NC contacts) – for tripping (2 terminals) [1]	**Z**	**Q3A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

□ Standard version
✓ With additional charge
– 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 in combination with option **D31**.

Selection and ordering data

Motor protection	Article No. supplement: Motor protection code letter 15th position of the Article No.	Article No. supplement: Additional identification code with order code and plain text if required	Frame size: 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version	
						1LE1504 Basic Line										IEC	IE4 ①
						1LE1604 Performance Line											②
			1LE1503 Basic Line														IE3 ③
						1LE1603 Performance Line											④
						1LE1583											⑤
			1LE1501 Basic Line														IE2 ⑥
						1LE1601 Performance Line											⑦
						1LE1502 Basic Line											IE1 ⑧
				1LE1543 Basic Line												APAC Line	IE3 ⑨
						1LE1643 Performance Line											⑩
										1LE1541 Basic Line							IE2 ⑪
			1LE1523 Basic Line													Eagle Line	NPE (NEMA) ⑫
						1LE1623 Performance Line											⑬
1LE1 . . . - . . . . . - . . .	■ .	Order code				1LE1521 Basic Line											NEE (NEMA) ⑭
Motor protection																	
Without (standard) [1]	**A**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	Basic Line ①, ③, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭
1 or 3 PTC thermistors – for tripping (2 terminals) [1] [2]	**B**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Basic Line ①, ③, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭
			□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	Performance Line ②, ④, ⑦, ⑩, ⑬
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [2]	**C**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 KTY84-130 temperature sensor (2 terminals) [2]	**F**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 KTY84-130 temperature sensors (4 terminals) [2]	**G**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 2-wire input (6 terminals)	**H**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 2-wire input (12 terminals)	**J**	**–**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometers (2 terminals) [3]	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 Pt1000 resistance thermometers (4 terminals) [3]	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**P**	**–**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 3-wire input (9 terminals)	**Q**	**–**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 3-wire input (18 terminals)	**R**	**–**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 NTC thermistors – for tripping (6 terminals)	**Z**	**Q2A**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–	–		
3 bimetal sensors (NC contacts) – for tripping (2 terminals) [2]	**Z**	**Q3A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals) [2]	**Z**	**Q9A**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

□ Standard version
✓ With additional charge
– Not possible

Note:

Options are available specifically for bearing protection – for order codes and descriptions, see from page 2/125.

1) For the Performance Line, motor protection by means of PTC thermistors with 3 built-in temperature sensors for tripping (motor protection code letter B) is already included in the basic price. For the Performance Line, the option "Without motor protection" (motor protection code letter A) is not possible.

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

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

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Selection and ordering data

Motor protection	Article No. supplement		Frame size												Motor version	
	Motor protection code letter 15th position of the Article No.	Additional identification code with order code and plain text if required	80	90	100	112	132	160	180	200	225	250	280	315	IEC	IE3
			1LE1073													
									1LE1573							
												1LE5773				
1LE . . . . - . . . . . - . .	■ .	Order code														
Motor protection																
None (standard)	**A**	**–**	□	□	□	□	□	□	□	□	□	□	□	□		
1 or 3 PTC thermistors – for tripping (2 terminals) [1]	**B**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [1]	**C**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 KTY84-130 temperature sensor (2 terminals) [1]	**F**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 KTY84-130 temperature sensors (4 terminals) [1]	**G**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 2-wire input (6 terminals)	**H**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 2-wire input (12 terminals)	**J**	**–**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometer (2 terminals) [2]	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 Pt1000 resistance thermometers (4 terminals) [2]	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**P**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 3-wire input (9 terminals)	**Q**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 3-wire input (18 terminals)	**R**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 NTC thermistors – for tripping (6 terminals)	**Z**	**Q2A**	–	–	✓	✓	✓	✓	–	–	–	–	–	–		
3 bimetal sensors (NC contacts) – for tripping (2 terminals) [1]	**Z**	**Q3A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals) [1]	**Z**	**Q9A**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

□ Standard version
✓ With additional charge
– Not possible

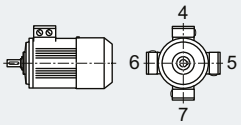
Note:

Options are available specifically for bearing protection – for order codes and descriptions, see from page 2/125.

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

[2] Not UL-certified. Not in combination with option **D31**.

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
							1LE1083								③
			1LE1001											IE2	④
			1LE1002											IE1	⑤
					1LE1043								APAC Line	IE3	⑥
					1LE1041									IE2	⑦
					1LE1023								Eagle Line	NPE (NEMA)	⑧
						1LE1021								NEE (NEMA)	⑨
							1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . ■		Order code					1LE1012								⑪
Terminal box position															
Terminal box top [1]	**4**	–	□	□	□	□	□	□	□	□	□	□			
Terminal box right-hand side [2]	**5**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box left-hand side [2]	**6**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box at bottom [2] [3]	**7**	–	–	–	–	–	✓	✓	✓	✓	–	–			

□ Standard version
✓ With additional charge
– Not possible

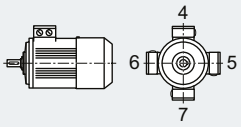
[1] For types of construction with feet up to and including frame size 160, cast feet are standard. Screwed-on feet are available with order code **H01**. Frame sizes 180 and 200 are fitted as standard with screwed-on feet.

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

[3] Not generally possible for motors with feet.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Selection and ordering data

Terminal box position	Article No. supplement		Frame size													Motor version		
	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	71	80	90	100	112	132	160	180	200	225	250	280	315			
						1LE1504 Basic Line										IEC	IE4	①
						1LE1604 Performance Line												②
			1LE1503 Basic Line														IE3	③
						1LE1603 Performance Line												④
						1LE1583												⑤
			1LE1501 Basic Line														IE2	⑥
						1LE1601 Performance Line												⑦
						1LE1502 Basic Line											IE1	⑧
				1LE1543 Basic Line												APAC Line	IE3	⑨
						1LE1643 Performance Line												⑩
										1LE1541 Basic Line							IE2	⑪
			1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
						1LE1623 Performance Line												⑬
1LE1 . . . - . . . . . - . . . ■		Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
Terminal box position																		
Terminal box top [1]	**4**	**–**	□	□	□	□	□	□	□	□	□	□	□	□	□			
Terminal box right-hand side [2]	**5**	**–**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box left-hand side [2]	**6**	**–**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box bottom [3]	**7**	**–**	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–			

□ Standard version
✓ With additional charge
– 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.

Selection and ordering data

Terminal box position	Article No. supplement		Frame size												Motor version	
	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	80	90	100	112	132	160	180	200	225	250	280	315		
			1LE1073												IEC	IE3
									1LE1573							
														1LE5773		
1LE . . . . - . . . . . - . . . ■		Order code														
Terminal box position																
Terminal box base left with terminal box at the top	**0**	**–**	–	–	–	–	–	–	–	–	–	–	–	✓		
Terminal box base right with terminal box at the top	**1**	**–**	–	–	–	–	–	–	–	–	–	–	–	✓		
Terminal box base left with oblique terminal box 45°	**2**	**–**	–	–	–	–	–	–	–	–	–	–	–	○		
Terminal box base right with oblique terminal box 45°	**3**	**–**	–	–	–	–	–	–	–	–	–	–	–	□		
Terminal box at top	**4**	**–**	□	□	□	□	□	□	□	□	□	□	□	–		
Terminal box on right-hand side	**5**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminal box on left-hand side	**6**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminal box bottom [1]	**7**	**–**	–	–	✓	✓	✓	✓	–	–	–	–	–	–		
Terminal box left-hand side (base below) [1]	**9**	**R5L**	–	–	–	–	–	–	–	–	–	–	–	✓		
Terminal box right-hand side (base below) [1]	**9**	**R6R**	–	–	–	–	–	–	–	–	–	–	–	✓		
Terminal box bottom left [1]	**9**	**R7L**	–	–	–	–	–	–	–	–	–	–	–	✓		
Terminal box bottom right [1]	**9**	**R7R**	–	–	–	–	–	–	–	–	–	–	–	✓		

□ Standard version
○ Without additional charge
✓ With additional charge
– Not possible

[1] Not generally possible for motors with feet.

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version		
						1LE1004						IEC	IE4	①
				1LE1003									IE3	②
						1LE1083								③
		1LE1001											IE2	④
		1LE1002											IE1	⑤
				1LE1043								APAC Line	IE3	⑥
				1LE1041									IE2	⑦
				1LE1023								Eagle Line	NPE (NEMA)	⑧
					1LE1021								NEE (NEMA)	⑨
						1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					1LE1012								⑪
Motor protection														
1 or 3 PTC thermistors – for tripping (2 terminals)	**Q11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	**Q12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 KTY84-130 temperature sensor (2 terminals)	**Q23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 KTY84-130 temperature sensors (4 terminals)	**Q25**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 bimetal sensors (NC contacts) for tripping (2 terminals)	**Q31**	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals)	**Q32**	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
3 bimetal sensors (NC contacts) for tripping (6 terminals)	**Q33**	–	–	–	–	–	–	–	–	✓	✓			
6 bimetal sensors (NC contacts) for alarm and tripping (12 terminals)	**Q34**	–	–	–	–	–	–	–	–	✓	✓			
1 Pt1000 resistance thermometer (2 terminals) [40]	**Q35**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt1000 resistance thermometers (4 terminals) [40]	**Q36**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 2-wire input (6 terminals)	**Q60**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 2-wire input (12 terminals)	**Q61**	–	–	–	–	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**Q62**	–	–	–	–	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 3-wire input (9 terminals)	**Q63**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 3-wire input (18 terminals)	**Q64**	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers in basic configuration for bearings (2 terminals)	**Q72**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓			
2 Pt100 resistance thermometers in 3-wire input for bearing (6 terminals)	**Q78**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓			
2 Pt100 double resistance thermometers in 3-wire input for bearing (12 terminals)	**Q79**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓			
Motor connection and terminal box														
External grounding	**H04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box on NDE [3]	**H08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from DE [1]	**R10**	O	O	O	O	O	O	O	O	✓	✓			
Rotation of the terminal box through 90°, entry from NDE	**R11**	O	O	O	O	O	O	O	O	✓	✓			
Rotation of the terminal box through 180°	**R12**	O	O	O	O	O	O	O	O	✓	✓			
Terminal box in position 0°, connection from right [41]	**R13**	O	O	O	O	O	O	O	–	–	–	Not for:		③
One metal cable gland	**R15**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 cables protruding, 0.5 m long [4][5]	**R20**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	Not for:		⑩, ⑪
3 cables protruding, 1.5 m long [4][5]	**R21**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	Not for:		⑩, ⑪
6 cables protruding, 0.5 m long [4]	**R22**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
6 cables protruding, 1.5 m long [4]	**R23**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			

For legends and footnotes, see page 2/124.

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version		
						1LE1004						IEC	IE4	①
				1LE1003									IE3	②
						1LE1083								③
		1LE1001											IE2	④
		1LE1002											IE1	⑤
				1LE1043								APAC Line	IE3	⑥
				1LE1041									IE2	⑦
				1LE1023								Eagle Line	NPE (NEMA)	⑧
					1LE1021								NEE (NEMA)	⑨
						1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					1LE1012								⑪
Motor connection and terminal box (continued)														
6 cables protruding, 3 m long [4]	**R24**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
Reduction piece for M cable gland in accordance with British Standard, mounted on both cable entries [2]	**R30**	–	–	–	–	✓	✓	✓	✓	–	–			
Larger terminal box	**R50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧, ⑨ < frame size 100	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨ < frame size 100	
Auxiliary terminal box, aluminum	**R60**	–	–	–	–	–	–	–	–	✓	✓			
Motor connector Han-Drive 10e for 230 VΔ/400 VY [30]	**R70**	✓	✓	✓	✓	✓	✓	✓	–	–	–			
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY [30]	**R71**	✓	✓	✓	✓	✓	✓	✓	–	–	–			
Small motor connector CQ12 with EMC	**R72**	–	–	✓	✓	–	–	–	–	–	–	Not for:	③	
Small motor connector CQ12 without EMC	**R73**	–	–	✓	✓	–	–	–	–	–	–	Not for:	③	
Windings and insulation														
Temperature class 155 (F), utilized acc. to 155 (F), with service factor	**N01**	–	–	–	–	✓	✓	✓	✓	✓	✓	Not for:	③	
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	**N02**	–	–	–	–	✓	✓	✓	✓	✓	✓	Not for:	③	
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	③	
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 180 (H) [31]	**N10**	✓	✓	✓	✓	–	–	–	–	–	–	Not for:	①, ③, ⑥, ⑦, ⑨, ⑪	
Temperature class 180 (H) at rated power and max. CT 60 °C [6] [31]	**N11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	**Y52 •** and spec. power, CT .. °C or IA …. m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	③	
Temperature class 180 (H), utilized according to 155 (F)	**Y75 •** and spec. power, CT .. °C or IA …. m above sea level	–	–	–	–	O. R.	O. R.	O. R.	O. R.	–	–	Not for:	①, ③	

For legends and footnotes, see page 2/124.

Aluminum series SIMOTICS GP 1LE10

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version		
						1LE1004						IEC	IE4	①
				1LE1003									IE3	②
						1LE1083								③
		1LE1001											IE2	④
		1LE1002											IE1	⑤
				1LE1043								APAC Line	IE3	⑥
				1LE1041									IE2	⑦
				1LE1023								Eagle Line	NPE (NEMA)	⑧
					1LE1021								NEE (NEMA)	⑨
						1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					1LE1012								⑪
Colors and paint finish														
Standard paint finish C2 in RAL 7030 stone gray		□	□	□	□	□	□	□	□	□	□			
Unpainted (only cast-iron parts primed)	**S00**	○	○	○	○	○	○	○	○	○	○			
Unpainted, only primed	**S01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special paint finish C3	**S02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Internal coating	**S05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Top coat polyurethane [34]	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Paint 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 paint finish RAL….	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Paint finish in special RAL colors: For RAL colors, see "Special paint finish in special RAL colors" (see Catalog Section 1 "Introduction")	**Y56 •** and paint finish RAL….	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Modular technology – Basic versions [7]														
Mounting of holding brake (standard assignment) [8] [28]	**F01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	**G11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	**G12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Modular technology – Additional versions														
Brake supply voltage 24 V DC	**F10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	✓	✓	✓	✓	○	○	○	○	○	○			
Brake supply voltage 400 V AC, 50/60 Hz	**F12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 180 V DC	**F17**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Motors in combination with order code F01	
Brake supply voltage 205 V DC	**F18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Motors in combination with order code F01	
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special technology [7]														
Mounting of LL 861 900 220 rotary pulse encoder [9]	**G04**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOG 9 DN 1024 I rotary pulse encoder [9]	**G05**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 D 1024 I rotary pulse encoder [9]	**G06**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder	**G21**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder	**G22**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder	**G25**	–	–	–	–		–	–	–	✓	✓	Only for:	③	
Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder	**G27**	–	–	–	–	–	–	–	–	✓	✓	Only for:	③	

For legends and footnotes, see page 2/124.

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version		
						1LE1004						IEC	IE4	①
				1LE1003									IE3	②
						1LE1083								③
		1LE1001											IE2	④
		1LE1002											IE1	⑤
				1LE1043								APAC Line	IE3	⑥
				1LE1041									IE2	⑦
				1LE1023								Eagle Line	NPE (NEMA)	⑧
					1LE1021								NEE (NEMA)	⑨
						1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					1LE1012								⑪
Mechanical version and degrees of protection														
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	–	–	–	–	–	–	✓	✓	✓	✓			
Low-noise version for 2-pole motors with counterclockwise direction of rotation	**F78**	–	–	–	–	–	–	✓	✓	✓	✓			
Prepared for mountings, centering hole only [10]	**G40**	–	–	✓	✓	✓	✓	✓	✓	□	□			
Prepared for mountings with shaft D12 [15]	**G41**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Prepared for mountings with shaft D16 [15]	**G42**	–	–	O. R.	O. R.	✓	✓	✓	✓	✓	✓			
Mechanical protection for encoder	**G43**	O. R.	O. R.	✓	✓	✓	✓	✓	✓	✓	✓			
Protective cover [9] [11]	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Screwed-on (instead of cast) feet	**H01**	–	–	✓	✓	✓	✓	✓	✓	□	□			
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 [39]	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Condensation drainage holes [14]	**H03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Housing with screw mounting [32]	**H10**	–	–	✓	✓	–	–	–	–	✓	✓	Only for:	②, ④, ⑥, ⑦ (frame sizes 80, 90), ⑧, ⑨	
Degree of protection IP65 [13]	**H20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP56 [12]	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar [16]	**H23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature and installation altitude														
Coolant temperature –40 to +40 °C [16] [28]	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –30 to +40 °C [16] [28]	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Versions in accordance with standards and specifications														
VIK version	**C02**	–	–	✓	✓	✓	✓	✓	✓	–	–	Only for:	②	
CCC China Compulsory Certification [17]	**D01**	✓	✓	✓	✓	–	–	–	–	–	–	Only for:	Voltage code 21st or 22nd	
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	**D22**	–	○	○	○	○	○	○	○	○	○	Only for:	④	
Electrical according to NEMA MG1-12 [18]	**D30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧, ⑨	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
Design according to UL with "Recognition Mark" [19]	**D31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧, ⑨	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
KEMCO Korea Energy Efficiency Label	**D33**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑥, ⑦	
		–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③ (2-pole to 6-pole)	
China Energy Efficiency Label [38]	**D34**	–	–	○	○	○	○	○	○	○	○	Not for:	①, ⑤, ⑩, ⑪	
		–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③	
Canadian regulations (CSA) [33] [37]	**D40**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤, ⑧, ⑨, ⑩, ⑪	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-11, incl. UL and CSA	**D41**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③	
TR CU product safety certificate EAC for Eurasian Customs Union [35]	**D47**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MEPS Australia	**D70**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③	
Version suitable for railways IC411, EN IEC 60349, without EN 45545, with external fan and fan cover in plastic	**L90**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	
Version suitable for railways IC411, EN IEC 60349, with EN 45545, with external fan and fan cover in metal	**L91**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	
Version suitable for railways IC418, EN IEC 60349, without EN 45545, without external fan and fan cover	**L92**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	

For legends and footnotes, see page 2/124.

Aluminum series SIMOTICS GP 1LE10

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version	
						1LE1004						IEC	IE4 ①
				1LE1003									IE3 ②
						1LE1083							③
		1LE1001											IE2 ④
		1LE1002											IE1 ⑤
				1LE1043								APAC Line	IE3 ⑥
				1LE1041									IE2 ⑦
				1LE1023								Eagle Line	NPE (NEMA) ⑧
					1LE1021								NEE (NEMA) ⑨
						1LE1011						Pole-changing	⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					1LE1012							⑪
Bearings and lubrication													
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A [20]	**L19**	–	–	–	–	–	–	–	–	✓	✓		
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Located bearing NDE	**L21**	✓	✓	✓	✓	✓	✓	✓	□	□	□		
Bearing design for increased cantilever forces [36]	**L22**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors of frame sizes 80 and 90 in combination with order code F01
Regreasing device [20]	**L23**	–	–	–	–	✓	✓	✓	✓	✓	✓		
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors of frame sizes 80 and 90 in combination with order code F01
Bearing insulation NDE	**L51**	–	–	–	–	✓	✓	✓	✓	✓	✓		
Measuring nipple for SPM shock pulse measurement for bearing inspection [20]	**Q01**	–	–	–	–	✓	✓	✓	✓	✓	✓		
Balance and vibration severity													
Vibration severity grade A		□	□	□	□	□	□	□	□	□	□		
Vibration severity grade B	**L00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Half-key balancing (standard)		□	□	□	□	□	□	□	□	□	□		
Balancing without feather key	**L01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Full-key balancing	**L02**	–	–	✓	✓	✓	✓	✓	✓	✓	✓		
Shaft and rotor													
Shaft extension with standard dimensions, without feather keyway	**L04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard, cylindrical shaft extension (second shaft extension) NDE acc. to EN 50347	**L05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard shaft made of stainless steel (e.g. 1.4021)	**L06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Shaft extension run-out in accordance with IEC 60072-1 precision class	**L07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Shaft extension run-out, concentricity and perpendicularity in accordance with IEC 60072-1 precision class for flange-mounted motors	**L08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, DE [21]	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, NDE [21]	**Y59** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Heating and ventilation													
Sheet metal fan cover	**F74**	–	–	✓	✓	✓	✓	✓	✓	✓	✓		
Fan cover for textile industry [22]	**F75**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Metal external fan [23] [29]	**F76**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Without external fan and without fan cover	**F90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑩, ⑪
Anti-condensation heating for 230 V (2 terminals)	**Q02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 115 V (2 terminals)	**Q03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see page 2/124.

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 63	71	80	90	100	112	132	160	180	200	Motor version		
						1LE1004						IEC	IE4	①
				1LE1003									IE3	②
						1LE1083								③
		1LE1001											IE2	④
		1LE1002											IE1	⑤
				1LE1043								APAC Line	IE3	⑥
				1LE1041									IE2	⑦
				1LE1023								Eagle Line	NPE (NEMA)	⑧
					1LE1021								NEE (NEMA)	⑨
						1LE1011						Pole-changing		⑩
1LE10 . . - . . . . . - . . . . -Z	Order code					**1LE1012**								⑪
Rating plate and additional rating plates														
Additional rating plate for voltage tolerance [24]	**B07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for: ⑩, ⑪, 8-pole motors		
Second rating plate, loose [25]	**M10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rating plate, stainless steel	**M11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Additional rating plate with deviating rating plate data	**Y80** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Additional rating plate with customer specifications	**Y82** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Additional information on rating plate and on package label (max. 20 characters)	**Y84** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Adhesive label, supplied loose (printed with: Article No., Serial No.; 2 lines of text)	**Y85** • and customer specifications	–	–	–	–	✓	✓	✓	✓	✓	✓			
Packaging, safety notes, documentation and test certificates														
A printed version of the safety notes in German/English and safety notes in the language of the country of use is supplied in each wire-lattice pallet [27]	**B01**	○	○	○	○	○	○	○	○	○	○			
Inspection certificate 3.1 according to EN 10204 [26]	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Type test with heat run for horizontal motors, with acceptance	**B83**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Basic" documentation package	**B90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Advanced" documentation package	**B91**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Projects" documentation package	**B92**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Wire-lattice pallet packaging	**B99**	✓	✓	○	○	○	○	○	○	○	○			
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/124.

Aluminum series SIMOTICS GP 1LE10

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

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 the DT Configurator (see Appendix, "Tools and engineering").

4) In conjunction 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 Catalog Section 1 "Introduction" refers to CT 40 °C. If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are halved.

7) A second shaft extension is not possible. Please inquire for mounted brakes.

8) For order codes **F10**, **F11**, **F12**, **F17**, and **F18**, 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) As standard, motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are shipped without protective cover. 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 severity grade 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 BFK458 – order code **F01**.

13) Not possible in combination with HOG 9 DN 1024 I rotary pulse encoder (order code **G05**) and/or brake BFK458 (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) As standard, motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are shipped without protective cover. 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 severity grade B.

16) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.

17) CCC mandatory certification, see Chapter 1 Page 1/21.

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 specifications 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 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** the following applies:
– Dimensions D and DA ≤ ball bearing inner diameter (see dimension tables for "Dimensions")
– Dimensions E and EA ≤ 2 × length E (standard) 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 housing. 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 manufacturer's test certificate may differ from the delivery time for the motor and will be dispatched by e-mail.

27) The manual "Low-Voltage motors SIMOTICS GP, SD, DP Safety instructions SH 63 ... 355" is available in the Internet as PDF in all official languages of the EU:
https://support.industry.siemens.com/cs/ww/en/view/109756537

28) Not possible in combination with order codes **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) in frame sizes 80 and 90.

32) Possible with frame sizes 180 and 200 with screw-mounted fan cover.

33) For frame sizes 180 and 200, constructed 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 · F_{max} is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.

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 code (12th or 13th position of the Article No.) 17, 18, 30, 31, 60, 61, 62, 63 and 90 with the additional order 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 in combination with option **D31**.

41) Only possible in combination with order codes **R70**, **R71**, **R72**, and **R73**.

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			
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
Motor protection																	
1 or 3 PTC thermistors – for tripping (2 terminals)	**Q11**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	**Q12**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 KTY84-130 temperature sensor (2 terminals)	**Q23**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 KTY84-130 temperature sensors (4 terminals)	**Q25**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 bimetal sensors (NC contacts) for tripping (2 terminals)	**Q31**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals)	**Q32**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 bimetal sensors (NC contacts) for tripping (6 terminals)	**Q33**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 bimetal sensors (NC contacts) for alarm and tripping (12 terminals)	**Q34**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt1000 resistance thermometer (2 terminals) [40]	**Q35**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt1000 resistance thermometers (4 terminals) [40]	**Q36**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 2-wire input (6 terminals)	**Q60**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 2-wire input (12 terminals) [27]	**Q61**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**Q62**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – 3-wire input (9 terminals) [30]	**Q63**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – 3-wire input (18 terminals) [30]	**Q64**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers in basic configuration for bearing (2 terminals) [2]	**Q72**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers in 3-wire input for bearing (6 terminals)	**Q78**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 double resistance thermometers in 3-wire input for bearing (12 terminals)	**Q79**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Motor connection and terminal box																	
External grounding	**H04**	✓	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□			
Terminal box on NDE [27]	**H08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Second external grounding	**H70**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from DE [41]	**R10**	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from NDE	**R11**	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 180°	**R12**	○	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓			
One EMC cable gland	**R14**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
One metal cable gland	**R15**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
EMC cable gland, maximum configuration	**R16**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Stud terminal for cable connection, accessories pack (3 items)	**R17**	–	–	–	–	–	–	–	–	–	–	✓	✓	✓			
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
Motor connection and terminal box (continued)																	
Saddle terminal for connection without cable lug, accessories pack	**R19**	–	–	–	–	–	–	–	–	–	–	✓	✓	✓			
3 cables protruding, 0.5 m long	**R20**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–			
3 cables protruding, 1.5 m long	**R21**	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
6 cables protruding, 0.5 m long	**R22**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–			
6 cables protruding, 1.5 m long	**R23**	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
6 cables protruding, 3 m long	**R24**	✓	✓	✓	✓	✓	✓	✓	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**	–	–	–	✓	✓	✓	✓	–	–	–	–	–	–			
Larger terminal box	**R50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box without cable entry opening	**R51**	–	–	–	○	○	○	○	○	○	○	○	○	○			
Drilled removable entry plate	**R52**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Undrilled removable entry plate	**R53**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Cast-iron auxiliary terminal box (small) [30]	**R62**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓			
		–	–	–	✓	✓	✓	–	–	–	–	–	–	–	Only for:	Motors with order code R50 possible	
Silicone-free version	**R74**	–	–	–	□	□	□	□	□	□	□	✓	✓	✓			
Non-standard threaded through hole (NPT or G thread)	**Y61** • and customer specifications	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Windings and insulation																	
Temperature class 155 (F), utilized according to 155 (F), with service factor	**N01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤	
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	**N02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤	
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤	
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 180 (H)	**N10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ②, ⑤, ⑨, ⑩, ⑪, ⑫, ⑬, ⑭	
Temperature class 180 (H) at rated power and max. CT 60 °C [4) 5)]	**N11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ②, ⑤	
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 155 (F), other requirements [5]	**Y52** • and spec. power, CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤	
Temperature class 180 (H), utilized according to 155 (F)	**Y75** • and spec. power, CT .. °C or IA .... m above sea level	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ②, ⑤	
Colors and paint finish																	
Standard paint finish C2 in RAL 7030 stone gray		◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
Unpainted (only cast-iron parts primed)	**S00**	○	○	○	○	○	○	○	○	○	○	○	○	○			
Unpainted, only primed	**S01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special paint finish C3	**S02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	②, ④, ⑦, ⑩, ⑬	
	–	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	◘	Only for:	②, ④, ⑦, ⑩, ⑬	
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special paint finish for use offshore C5	**S04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Internal coating	**S05**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Top coat polyurethane [33]	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Paint 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 paint finish RAL....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
Paint finish in special RAL colors: For RAL colors, see "Special paint finish in special RAL colors" (see Catalog Section 1 "Introduction")	**Y56** • and paint finish RAL....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Modular technology – Basic versions [6]																	
Mounting of holding brake (standard assignment) [7] [31] [32]	**F01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of PRECIMA brake	**F04**	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
Mounting of separately driven fan [28] [34]	**F70**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	**G11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	**G12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
Modular technology – Additional versions																	
Brake supply voltage 24 V DC	**F10**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	–	–	–	○	○	○	○	○	○	○	○	○	○			
Brake supply voltage 400 V AC, 50/60 Hz [32]	**F12**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 180 V DC	**F17**	–	–	–	✓	✓	✓	✓	✓	✓	✓	–	–	–	Only for:	Motors in combination with order code F01	
Brake supply voltage 205 V DC	**F18**	–	–	–	✓	✓	✓	✓	✓	✓	✓	–	–	–	Only for:	Motors in combination with order code F01	
Backstop, counterclockwise motion blocked, clockwise direction of rotation	**F40**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code Q79	
Backstop, clockwise motion blocked, counterclockwise direction of rotation	**F41**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code Q79	
Mechanical manual brake release with lever (no locking)	**F50**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special technology [6]																	
Mounting of LL 861 900 220 rotary pulse encoder [10]	**G04**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 9 DN 1024 I rotary pulse encoder [10]	**G05**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 D 1024 I rotary pulse encoder [10]	**G06**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake) [11]	**G07**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) [11]	**G08**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection	**G15**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box dust protection	**G16**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder	**G21**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑤	
Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder	**G22**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑤	
Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder	**G25**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	⑤	
Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder	**G27**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	⑤	
Mounting of 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.	Only for:	⑤	
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	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
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	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
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	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				1LE1521 Basic Line											NEE (NEMA)	⑭
Mechanical version and degrees of protection																	
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Low-noise version for 2-pole motors with counterclockwise direction of rotation	**F78**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Prepared for mounted components, centering hole only	**G40**	–	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□	Not for:	Motors in combination with order code F90	
Prepared for mountings with D12 shaft	**G41**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Prepared for mountings with D16 shaft	**G42**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Mechanical protection for encoder	**G43**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Protective cover [8) 10) 12)]	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order code F90	
Screwed-on (instead of cast) feet	**H01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 [39)]	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Condensation drainage holes [38)]	**H03**	✓	✓	✓	□	□	□	□	□	□	□	□	□	□			
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP65 [14)]	**H20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP54	**H21**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Degree of protection IP56 [15)]	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar [13) 29)]	**H23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Grounding brush for converter operation	**L52**	–	–	–	–	–	–	–	–	–	–	–	✓	✓			
Coolant temperature and installation altitude																	
Coolant temperature –50 to +40 °C	**D02**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –40 to +40 °C [16)]	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –30 to +40 °C [17)]	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Versions in accordance with standards and specifications																	
VIK version	**C02**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for: Not for:	③, ④ ⑤	
CCC China Compulsory Certification	**D01**	✓	✓	✓	–	–	–	–	–	–	–	–	–	–	Only for: Not for:	Voltage code 21 or 22 ⑤	
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**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	
Design according to UL with "Recognition Mark" [18)]	**D31**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	
KEMCO Korea Energy Efficiency Label	**D33**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑨, ⑩, ⑪	
		–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	⑤	
China Energy Efficiency Label [42)]	**D34**	○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	①, ②, ⑧, motors with increased power	
		–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	⑤	
Canadian regulations (CSA) [17)]	**D40**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				**1LE1521 Basic Line**											NEE (NEMA)	⑭
Versions in accordance with standards and specifications (continued)																	
NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-11, incl. UL and CSA	**D41**	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	⑤	
TR CU product safety certificate EAC for Eurasian Customs Union [35]	**D47**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MEPS Australia	**D70**	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	⑤	
Bearings and lubrication																	
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A [1]	**L19**	–	–	–	–	–	–	–	✓	✓	✓	✓	○	○	Only for:	①, ③, ⑤, ⑤, ⑥, ⑧, ⑨, ⑫, ⑭	
		–	–	–	–	–	–	–	○	○	○	○	○	○	Only for:	②, ④, ⑦, ⑩, ⑬	
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Located bearing NDE	**L21**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□	□			
Bearing design for increased cantilever forces [36]	**L22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	②, ④, ⑦, ⑩, ⑬	
		✓	✓	✓	□	□	□	□	✓	✓	✓	✓	✓	✓	Only for:	②, ④, ⑦, ⑩, ⑬	
Regreasing device [1]	**L23**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	□	□	Not for:	②, ④, ⑦, ⑩, ⑬	
		–	–	–	✓	✓	✓	□	□	□	□	□	□	□	Only for:	②, ④, ⑦, ⑩, ⑬	
Bearings reinforced at both ends for DE and NDE, bearing size 63 [19]	**L25**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	□	□	Not for:	②, ④, ⑦, ⑩, ⑬	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	②, ④, ⑦, ⑩, ⑬	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	–	–	–	–	–	–	–	✓	✓	✓	✓	–	–			
Bearing insulation DE	**L50**	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
Bearing insulation NDE	**L51**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Measuring nipple for SPM shock pulse measurement for bearing inspection [1]	**Q01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Balance and vibration severity																	
Vibration severity grade A		□	□	□	□	□	□	□	□	□	□	□	□	□			
Vibration severity grade B [20]	**L00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Half-key balancing (standard)		□	□	□	□	□	□	□	□	□	□	□	□	□			
Balancing without feather key	**L01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Full-key balancing	**L02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Shaft and rotor																	
Shaft extension with standard dimensions, without feather keyway	**L04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Standard, cylindrical shaft extension (second shaft extension) NDE acc. to EN 50347	**L05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Standard shaft made of stainless steel (e.g. 1.4021)	**L06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Shaft extension run-out in accordance with IEC 60072-1 precision class	**L07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Shaft extension run-out, concentricity and perpendicularity in accordance with IEC 60072-1 precision class for flange-mounted motors	**L08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard cylindrical shaft extension, DE [21]	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard cylindrical shaft extension, NDE [21]	**Y59** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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.			

For legends and footnotes, see page 2/132.

Cast-iron series SIMOTICS SD 1LE15 Basic Line, 1LE16 Performance Line

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 71	80	90	100	112	132	160	180	200	225	250	280	315	Motor version		
					1LE1504 Basic Line										IEC	IE4	①
					1LE1604 Performance Line												②
		1LE1503 Basic Line														IE3	③
					1LE1603 Performance Line												④
					1LE1583												⑤
		1LE1501 Basic Line														IE2	⑥
					1LE1601 Performance Line												⑦
					1LE1502 Basic Line											IE1	⑧
			1LE1543 Basic Line												APAC Line	IE3	⑨
					1LE1643 Performance Line												⑩
									1LE1541 Basic Line							IE2	⑪
		1LE1523 Basic Line													Eagle Line	NPE (NEMA)	⑫
					1LE1623 Performance Line												⑬
1LE1 . . . -. . . . . -. . . . -Z	Order code				**1LE1521 Basic Line**											NEE (NEMA)	⑭
Heating and ventilation																	
Sheet metal fan cover	**F74**	□	□	□	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	②, ④, ⑦, ⑩, ⑬	
Metal external fan [22) 28)]	**F76**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Without external fan and without fan cover	**F90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Anti-condensation heating for 230 V (2 terminals)	**Q02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Anti-condensation heating for 115 V (2 terminals)	**Q03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Separately driven fan with non-standard voltage and/or frequency	**Y81** • and customer specifications	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
Rating plate and additional rating plates																	
Additional rating plate for voltage tolerance [23)]	**B07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	8-pole motors	
Second rating plate, loose	**M10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rating plate, stainless steel	**M11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
		–	–	–	○	○	○	○	○	○	○	○	○	○	Only for:	④, ⑦, ⑩, ⑬	
	–	–	–	–	□	□	□	□	□	□	□	□	□	□	Only for:	②	
Additional rating plate with deviating rating plate data	**Y80** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Additional rating plate with customer specifications	**Y82** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Additional information on rating plate and on package label (max. 20 characters)	**Y84** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Adhesive label, supplied loose (printed with: Article No., Serial No.; 2 lines of text)	**Y85** • and customer specifications	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery [24)]	**Q82**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
	–	–	–	–	□	□	□	□	□	□	□	□	□	□	Only for:	②, ④, ⑦, ⑩, ⑬ 36 months	
Packaging, safety notes, documentation and test certificates																	
Inspection certificate 3.1 according to EN 10204 [25)]	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Standard test (routine test) with acceptance	**B65**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Type test with heat run for horizontal motors, without acceptance	**B82**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Type test with heat run for horizontal motors, with acceptance	**B83**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Basic" documentation package	**B90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Advanced" documentation package	**B91**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
"Projects" documentation package	**B92**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see page 2/132.

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

1) Up to frame size 160 not possible when brake is mounted.

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

3) Parallel Whitworth threaded pipe DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) threaded pipe 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 Catalog Section 1 "Introduction" refers to CT 40 °C. If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are 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**, **F12**, **F17**, and **F18**, 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) 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 an external fan). This option can be used in combination with brakes of type KFB! This option cannot be used in combination with brakes of type BFK458!

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 BFK458 (order code **F01**).

15) Not possible in combination with brake BFK458 – order code **F01**.

16) In connection with mountings, the respective technical specifications 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 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** the following applies:
– Dimensions D and DA ≤ ball bearing inner diameter (see dimension tables for "Dimensions")
– Dimensions E and EA ≤ 2 × length E (standard) 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) Wearing parts (bearings) are excluded from the warranty extension.

25) The delivery time for the manufacturer's test certificate may differ from the delivery time for the motor.

26) The Operating Instructions (compact) are available in PDF format for all official EU languages at http://support.automation.siemens.com/WW/view/en/40761976.

27) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in the DT Configurator (see Appendix, "Tools and engineering").

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 codes **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 · F_{max} is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.

37) Order code **R62** 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 in combination with option **D31**.

41) With IM B5 flange, only possible in combination with **H08**.

42) Not possible in combination with voltage code (12th or 13th position of the Article No.) 17, 18, 30, 31 and 90 with the additional order codes M1E; M2E; M1F; M2F; M1G; M2G; M1H; M2H; M1J; M2J; M1K; M2K; M1L; M2L; M1M; M2M and M3A.

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 80	90	100	112	132	160	180	200	225	250	280	315	Motor version IEC	IE3
		1LE1073													
								1LE1573							
											1LE5773				
1LE1 . . . - . . . . . - . . . . -Z	Order code														
Motor protection															
1 or 3 PTC thermistors – for tripping (2 terminals)	**Q11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	**Q12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 KTY84-130 temperature sensor (2 terminals)	**Q23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 KTY84-130 temperature sensors (4 terminals)	**Q25**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 bimetal sensors (NC contacts) for tripping (2 terminals)	**Q31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals)	**Q32**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 bimetal sensors (NC contacts) for tripping (6 terminals)	**Q33**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
6 bimetal sensors (NC contacts) for alarm and tripping (12 terminals)	**Q34**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometer (2 terminals)	**Q35**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 Pt1000 resistance thermometer (4 terminals)	**Q36**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 2-wire input (6 terminals)	**Q60**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 2-wire input (12 terminals) [19]	**Q61**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer – 2-wire input (2 terminals)	**Q62**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – 3-wire input (9 terminals) [22]	**Q63**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – 3-wire input (18 terminals) [22]	**Q64**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers in basic configuration for bearing (2 terminals) [2]	**Q72**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers in 3-wire input for bearing (6 terminals)	**Q78**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 double resistance thermometers in 3-wire input for bearing (12 terminals)	**Q79**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Not for:	Motors in combination with order codes F40 and F41 (frame sizes 225 to 315)
Motor connection and terminal box															
External grounding	**H04**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□		
Terminal box on NDE [19]	**H08**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	✓	✓	✓	✓		
Second external grounding	**H70**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Rotation of the terminal box through 90°, entry from DE [30]	**R10**	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓		
Rotation of the terminal box through 90°, entry from NDE	**R11**	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓		
Rotation of the terminal box through 180°	**R12**	○	○	○	○	○	○	✓	✓	✓	✓	✓	✓		
One EMC cable gland	**R14**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
One metal cable gland	**R15**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
EMC cable gland, maximum configuration	**R16**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Stud terminal for cable connection, accessories pack (3 items)	**R17**	–	–	–	–	–	–	–	–	–	✓	✓	✓		
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Saddle terminal for connection without cable lug, accessories pack	**R19**	–	–	–	–	–	–	–	–	–	✓	✓	✓		
3 cables protruding, 0.5 m long	**R20**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–		
3 cables protruding, 1.5 m long	**R21**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
6 cables protruding, 0.5 m long	**R22**	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–		
6 cables protruding, 1.5 m long	**R23**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
6 cables protruding, 3 m long	**R24**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		

For legends and footnotes, see page 2/138.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 80	90	100	112	132	160	180	200	225	250	280	315	Motor version IEC	IE3
		1LE1073													
								1LE1573							
											1LE5773				
1LE1 . . . -. . . . . -. . . . -Z	Order code														
Motor connection and terminal box (continued)															
12 cables protruding with cable lugs	**R31**	□	□	□	□	□	□	□	□	□	□	□	□		
Larger terminal box	**R50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminal box without cable entry opening	**R51**	–	–	–	–	–	–	○	○	○	○	○	○		
Drilled removable entry plate	**R52**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Undrilled removable entry plate	**R53**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Cast-iron auxiliary terminal box (small) [22]	**R62**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓		
Cast-iron auxiliary terminal box (large)	**R63**	–	–	–	–	–	–	–	–	–	–	–	✓		
Silicone-free version	**R74**	–	–	□	□	□	□	□	□	□	✓	✓	✓		
Non-standard threaded through hole (NPT or G thread)	**Y61** • and customer specifications	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Windings and insulation															
Temperature class 155 (F), utilized according to 155 (F), with service factor	**N01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	**N02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 180 (H)	**N10**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	✓	✓	✓	✓		
Temperature class 180 (H) at rated power and max. CT 60 °C [4]	**N11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
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	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	**Y52** • and spec. power, CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Temperature class 180 (H), utilized according to 155 (F)	**Y75** • and spec. power, CT .. °C or IA .... m above sea level	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓	✓	✓	✓	✓		
Colors and paint finish															
Unpainted (only cast-iron parts primed)	**S00**	○	○	○	○	○	○	○	○	○	○	○	○		
Unpainted, only primed	**S01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Special paint finish C3	**S02**	□	□	□	□	□	□	□	□	□	□	□	□		
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Special paint finish for use offshore C5	**S04**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see page 2/138.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 80	90	100	112	132	160	180	200	225	250	280	315	Motor version IEC	IE3
		1LE1073													
								1LE1573							
											1LE5773				
1LE1 . . . -. . . . . -. . . . -Z	Order code														
Colors and paint finish (continued)															
Internal coating	**S05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Top coat polyurethane [25]	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Paint 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 paint finish RAL....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Paint finish in special RAL colors: For RAL colors, see "Special paint finish in special RAL colors" (see Catalog Section 1 "Introduction")	**Y56 •** and paint finish RAL....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Modular technology – Basic versions [5]															
Mounting of holding brake (standard assignment) [6] [23] [24]	**F01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of PRECIMA brake	**F04**	–	–	–	–	–	–	–	–	✓	✓	✓	–		
Mounting of separately driven fan [20] [26]	**F70**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of Kübler Sendix 5020 HTL, 1024 I rotary pulse encoder	**G11**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of Kübler Sendix 5020 TTL, 1024 I rotary pulse encoder	**G12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Modular technology – Additional versions															
Brake supply voltage 24 V DC	**F10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	✓	✓	○	○	○	○	○	○	○	○	○	○		
Brake supply voltage 400 V AC, 50/60 Hz [24]	**F12**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Brake supply voltage 180 V DC	**F17**	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–		
Brake supply voltage 205 V DC	**F18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–		
Backstop, counterclockwise motion blocked, clockwise direction of rotation	**F40**	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓		
Backstop, clockwise motion blocked, counterclockwise direction of rotation	**F41**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
Special technology [5]															
Mounting of LL 861 900 220 rotary pulse encoder [7]	**G04**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of HOG 9 DN 1024 I rotary pulse encoder [7]	**G05**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of HOG 10 D 1024 I rotary pulse encoder [7]	**G06**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake) [7]	**G07**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake) [8]	**G08**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box moisture protection	**G15**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of HOG 10 DN 1024 I rotary pulse encoder, terminal box dust protection	**G16**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of Kübler Sendix 5834FS2 1024, SIL-2 rotary pulse encoder	**G21**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of Kübler Sendix 5834FS3 1024, SIL-3 rotary pulse encoder	**G22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of HOGS100S-B76.626.01024.1 rotary pulse encoder	**G25**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of LL FSI 862-184560-1024, SIL-2 rotary pulse encoder	**G27**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
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	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see page 2/138.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 80	90	100	112	132	160	180	200	225	250	280	315	Motor version IEC	IE3
		1LE1073						1LE1573							
											1LE5773				
1LE1 . . . -. . . . . -. . . . -Z	Order code														
Special technology [5] (continued)															
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	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
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	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mechanical version and degrees of protection															
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓		
Low-noise version for 2-pole motors with counterclockwise direction of rotation	**F78**	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓		
Prepared for mounted components, centering hole only	**G40**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□		
Prepared for mountings with D12 shaft	**G41**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Prepared for mountings with D16 shaft	**G42**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mechanical protection for encoder	**G43**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Protective cover [7] [9]	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Screwed-on (instead of cast) feet	**H01**	□	□	□	□	□	□	□	□	□	□	□	–		
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994 [29]	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Condensation drainage holes [28]	**H03**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□		
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Degree of protection IP56 [12]	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar [10] [21]	**H23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Grounding brush for converter operation	**L52**	–	–	–	–	–	–	–	–	–	–	✓	✓		
Coolant temperature and installation altitude															
Coolant temperature –50 to +40 °C	**D02**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Coolant temperature –40 to +40 °C [13]	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Versions in accordance with standards and specifications															
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	**D22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Bearings and lubrication															
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A [1]	**L19**	–	–	–	–	–	–	✓	✓	✓	✓	○	○		
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Located bearing NDE	**L21**	✓	✓	✓	✓	✓	□	□	□	□	□	□	□		
Bearing design for increased cantilever forces [27]	**L22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Regreasing device [1]	**L23**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	□	□		
Bearings reinforced at both ends for DE and NDE, bearing size 63 [14]	**L25**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	□	□		
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	–	–	–	–	–	–	✓	✓	✓	✓	–	–		
Bearing insulation DE	**L50**	–	–	–	–	–	–	–	–	✓	✓	✓	✓		
Bearing insulation NDE	**L51**	–	–	–	–	–	–	–	–	✓	✓	✓	✓		
Measuring nipple for SPM shock pulse measurement for bearing inspection [1]	**Q01**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Balance and vibration severity															
Vibration severity grade A		□	□	□	□	□	□	□	□	□	□	□	□		
Vibration severity grade B [15]	**L00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Half-key balancing (standard)		□	□	□	□	□	□	□	□	□	□	□	□		
Balancing without feather key	**L01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Full-key balancing	**L02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see page 2/138.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 80	90	100	112	132	160	180	200	225	250	280	315	Motor version IEC	IE3
		1LE1073													
								1LE1573							
											1LE5773				
1LE1 . . . -. . . . . -. . . . -Z	Order code														
Shaft and rotor															
Shaft extension with standard dimensions, without feather keyway	**L04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard, cylindrical shaft extension (second shaft extension) NDE acc. to EN 50347	**L05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard shaft made of stainless steel (e.g. 1.4021)	**L06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Shaft extension run-out in accordance with IEC 60072-1 precision class	**L07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Shaft extension run-out, concentricity and perpendicularity in accordance with IEC 60072-1 precision class for flange-mounted motors	**L08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, DE [16]	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, NDE [16]	**Y59** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Special shaft steel	**Y60** • and customer specifications	–	–	–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
Heating and ventilation															
Sheet metal fan cover	**F74**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Metal external fan [17) 29)]	**F76**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Without external fan and without fan cover	**F90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 230 V (2 terminals)	**Q02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 115 V (2 terminals)	**Q03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Separately driven fan with non-standard voltage and/or frequency	**Y81** • and customer specifications	–	–	–	–	–	–	–	–	✓	✓	✓	✓		
Rating plate and additional rating plates															
Second rating plate, loose	**M10**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Rating plate, stainless steel	**M11**	□	□	□	□	□	□	□	□	□	□	□	□		
Additional rating plate with deviating rating plate data	**Y80** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Additional rating plate with customer specifications	**Y82** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Additional information on rating plate and on package label (max. 20 characters)	**Y84** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Adhesive label, supplied loose (printed with: Article No., Serial No.; 2 lines of text)	**Y85** • and customer specifications	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Packaging, safety notes, documentation and test certificates															
Inspection certificate 3.1 according to EN 10204 [18]	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard test (routine test) with acceptance	**B65**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Type test with heat run for horizontal motors, without acceptance	**B82**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Type test with heat run for horizontal motors, with acceptance	**B83**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see page 2/138.

Aluminum series SIMOTICS GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

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

1) Up to frame size 160 not possible when brake is mounted.

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

3) Parallel Whitworth threaded pipe DIN ISO 228 (DIN 259) BSPP (British Standard Pipe Parallel) threaded pipe 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 Catalog Section 1 "Introduction" refers to CT 40 °C. If the coolant temperature is increased by 10 K, the grease lifetime and regreasing interval are halved.

5) A second shaft extension is not possible. Please inquire for mounted brakes.

6) For order codes **F10**, **F11**, **F12**, **F17**, and **F18**, the brake supply voltage must be specified or ordered.

7) LL and HOG rotary pulse encoders up to frame size 160 are fitted with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.

8) Option (encoder mounting) is only possible for motors with a mounted separately driven fan or for naturally cooled motors (without an external fan). This option can be used in combination with brakes of type KFB! This option cannot be used in combination with brakes of type 2LM8!

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

10) Not possible for type of construction IM V3.

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

12) Not possible in combination with 2LM8 brake – order code **F01**.

13) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.

14) From frame size 280 standard version.

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

16) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with EN 50347, Form A are 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** the following applies:
– Dimensions D and DA ≤ ball bearing inner diameter (see dimension tables for "Dimensions")
– Dimensions E and EA ≤ 2 × length E (standard) of the shaft extension.

17) Converter operation is permitted for 1LE1 motors with metal external fans.

18) The delivery time for the manufacturer's test certificate may differ from the delivery time for the motor.

19) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in the DT Configurator (see Appendix, "Tools and engineering").

20) Order codes **F70** and **F76** cannot be combined.

21) Not possible in combination with order codes **Q72** and **Q78**.

22) For frame sizes 100 to 132 only possible in combination with order code **R50**.

23) Not possible in combination with order codes **N05**, **N06**, **N07**, **N08**, and **N11**.

24) For frame size 315, when combining order codes **F01** and **F12**, the rectifier for the brake will be supplied separately as a single part.

25) Order code **S06** cannot be combined with order codes **S00**, **S01**, and **S02**. It can be combined with **Y53** and **Y56** on request.

26) Order codes **F70** (separately driven fan) and **H02** (vibration-proof version) cannot be combined for motors in frame sizes 71, 80, and 90.

27) A minimum cantilever force F_{min} of 0.5 · F_{max} is required for NU bearings (cylindrical roller bearings) in contrast to ball bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.

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

29) Not possible in combination with order code **R50**.

30) With IM B5 flange, only possible in combination with **H08**.

Overview

Couplings

The motor from Siemens is connected to the machine or gear unit through a coupling. Flender is an important coupling manufacturer with a wide range of products.

For standard applications, Siemens recommends that flexible couplings, types N-EUPEX and RUPEX or torsionally rigid couplings, types ARPEX and ZAPEX are used. For special applications, FLUDEX and ELPEX-S couplings are recommended.

Available from:

Siemens contact partner – ordering from catalog
Siemens MD 10.1 "FLENDER Standard Couplings"

or

Flender GmbH
Kupplungswerk Mussum
Industriepark Bocholt
Schlavenhorst 100
46395 Bocholt, Germany
Phone +49 (2871) 922185
Fax +49 (2871) 922579

www.flender.com
Email: flender-kupplungen-2.pd.de@siemens.com

Taper pins according to DIN 258 with threaded ends and constant taper lengths

Taper pins are used for components that are repeatedly removed. The drilled hole is conically ground using a conical reamer until the pin can be pushed in by hand until the cone shoulder lies approx. 3 to 4 mm above the rim of the hole.

It can then be driven in using a hammer until it is correctly seated. The pin is removed from the drilled hole by screwing on the nut and tightening it.

Standardized taper pins are commercially available.

For instance, available from:

Otto Roth GmbH & Co. KG
Rutesheimer Strasse 22
70499 Stuttgart, Germany
Phone +49 (711) 1388-0
Fax +49 (711) 1388-233

www.ottoroth.de
Email: info@ottoroth.de

Foundation block according to DIN 799

The foundation blocks are inserted into the stone foundation and embedded in concrete. They are used for fixing machines of medium size, slide rails, pedestal bearings, base frames, etc. After the fixing bolts have been unscrewed, the machines can be shifted without them having to be lifted.

When the machine is initially installed, the foundation block that is bolted to the machine (without washers) and fitted with taper pins is not embedded with concrete until the machine has been fully aligned. In this case, the machine is positioned 2 to 3 mm lower. The difference in shaft height is compensated by inserting shims on final installation. The taper pins safeguard the exact position of the machine when it is repeatedly removed and replaced without the need for realignment.

Available from:

Lütgert & Co. GmbH
Postfach 42 51
33276 Gütersloh, Germany
Phone +49 (5241) 7407-0
Fax +49 (5241) 7407-90

www.luetgert-antriebe.de
Email: info@luetgert-antriebe.de

Slide rails with fixing bolts and tensioning screws according to DIN 42923

Slide rails are used to tension the belt of a machine easily and conveniently when there is no belt-tensioning pulley. They are fixed to the base using stone bolts or foundation blocks.

The assignment of slide rails to motor size can be found in DIN 42923.
For motors of frame sizes 355 to 450, there are no standardized slide rails (please inquire).

Available from:

Lütgert & Co. GmbH
Postfach 42 51
33276 Gütersloh, Germany
Phone +49 (5241) 7407-0
Fax +49 (5241) 7407-90

www.luetgert-antriebe.de
Email: info@luetgert-antriebe.de

More information

Replacement motors and repair parts

- Commitment to provide replacement motors and repair parts following delivery of the motor:
  - For up to 3 years after delivery of the original motor, in the event of total motor failure, Siemens will supply a comparable replacement motor with regard to the mounting dimensions and functions (the type series may vary).
  - If a replacement motor is supplied within the 3-year period, this does not mean that the warranty restarts.
  - Replacement motors delivered after the active production of the machine series are also identified as spare motors on the rating plate.
  - Spare parts are offered only for these spare motors on-request; repair and replacement are not possible.
  - After a period of 3 years (after the delivery of the original motor), it is only possible to repair these motors (depending on the availability of the spare parts required).
  - For up to 5 years after the delivery of the original motor, spare parts will be available and for a further 5 years, Siemens will provide information about spare parts and will supply documents when required.
- When repair parts are ordered, the following details must be provided:
  - Designation and part number
  - Article No. and factory number of the motor.

  Example for ordering a fan cover 1LE1003, frame size 112 M, 4-pole:

  Fan cover No. 7.40,
  1LE1003-1BB23-4AA4-Z, part No. E1001/5236197_01_001
- For bearing types, see Catalog Section 1 "Introduction".
- Repair parts for 1MJ6, 1MJ7, 1MJ8, 1MJ1, 1ME8, 1ML8 motors are available on request.
- For standard components, a commitment to supply repaired parts does not apply.
- Support hotline
  In Germany
  Phone +49 (180) 5050448

You will find telephone numbers for other countries on our Internet site:
www.siemens.com/automation/service&support

Overview

- Dimension designations according to EN 50347 and IEC 60072.
- Fits
  The shaft extensions specified in the dimension tables (DIN 748) and centering spigot diameters (EN 50347) are machined with the following fits:

Dimension designation	ISO fit DIN ISO 286-2	
D, DA	to 30	j6
	over 30 to 50	k6
	over 50	m6
N	to 250	j6
	over 250	h6
F, FA		h9
K		H17
S	flange (FF)	H17

  The drilled holes of couplings and belt pulleys should have an ISO fit of at least H7.

- Dimensional tolerances
  For the following dimensions, the admissible deviations are given below:

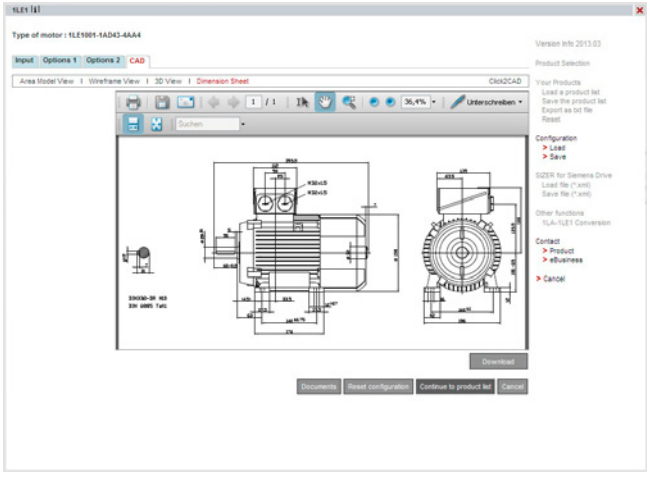
Dimension designation	Dimension	Admissible deviation
H	to 250	– 0.5
	over 250	– 1.0
E, EA		– 0.5

  Keyways and feather keyways (dimensions GA, GC, F, and FA) are made in compliance with DIN 6885 Part 1.
- All dimensions are specified in mm.

Dimension sheet generator (within the DT Configurator)

Overview

A dimensional drawing can be created in the "Drive Technology Configurator" (DT Configurator) for every configurable motor.
A dimensional drawing can be requested for every other motor.



When a complete Article No. is entered with or without order codes, a dimensional drawing can be called up under the "Documentation" tab.
These dimensional drawings can be presented in different views and sections and printed.
The corresponding dimension sheets can be exported, saved and processed further in DXF format (interchange/import format for CAD systems) or as bitmap graphics.

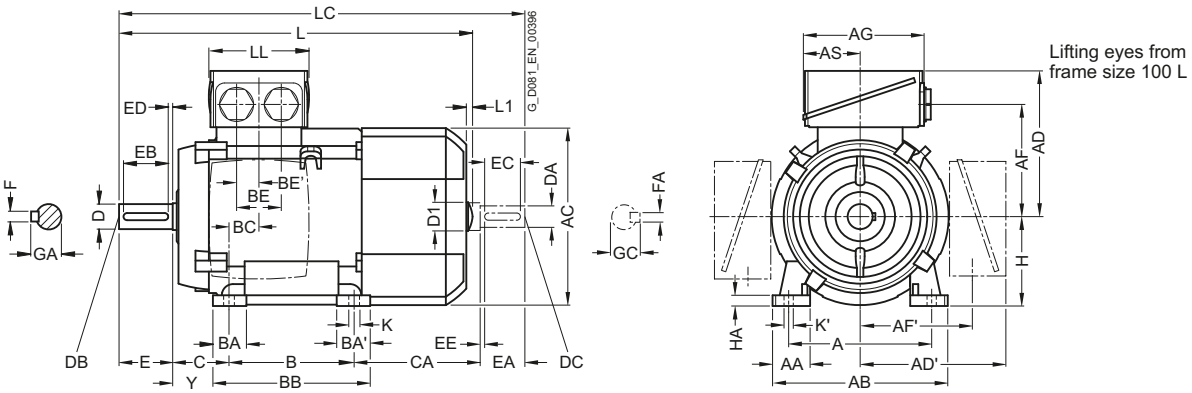
Online access in the Siemens Industry Mall

The DT Configurator is integrated into 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

2

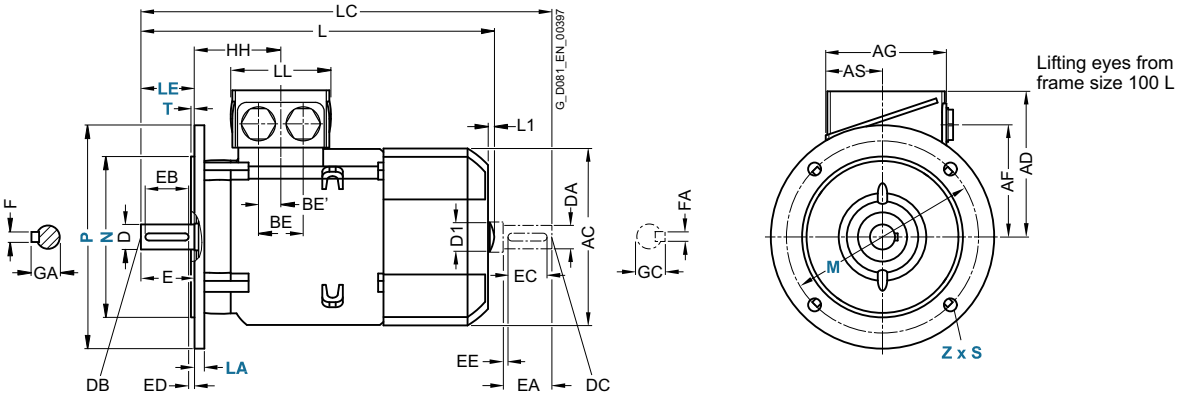
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



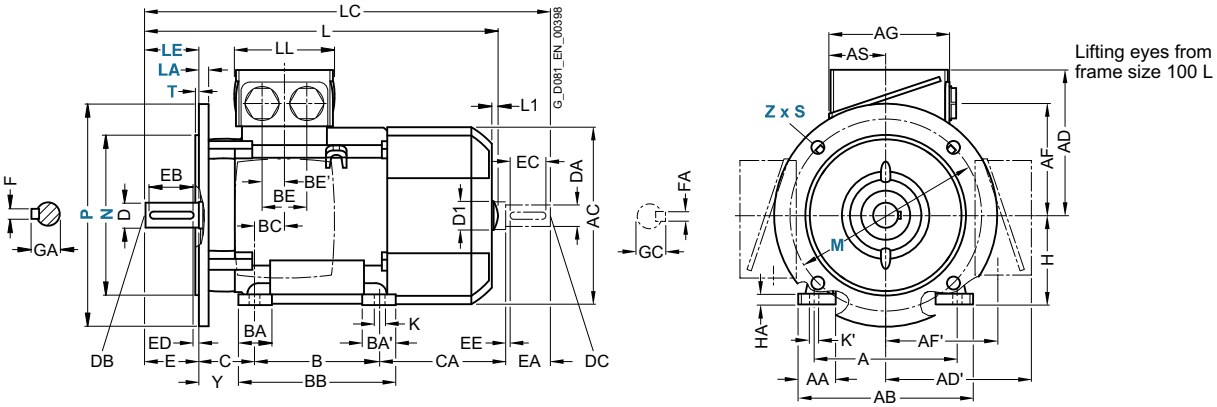
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE100. 1LE101. 1LE1021	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
63 M	1LE100.-0B.2 1LE1002-0B.3	2, 4, 6	100	27	**120**	124	**101**	–	78	–	75	37.5	80	27	–	96	30	32	18	40	66	**63**	7	26.5
	1LE1001-0B.3 1LE1002-0B.6	2, 4																			92			
71 M	1LE1001, 1LE1002	2, 4, 6, 8	112	30.5	**132**	145	**111**	–	88	–	75	37.5	90	27	–	106	18	32	18	45	83	**71**	7	31.5
80 M	1LE1001 1LE1041	2, 4, 6	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	32	118	23	–	18[1]	50	113	**80**	8	41
90 S		2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	100	33	54	143	22.5	–	18[1]	56	174	**90**	10	47
90 L		2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	125	33	54	143	22.5	–	18[1]	56	174	**90**	10	47
100 L	All	2, 4, 6, 8	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	141	**100**	12	45
112 M	All	2, 4, 6, 8	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	130	**112**	12	52
132 S	All	2, 4, 6, 8	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76[3]	218[4]	26.5	48	24	89	167	**132**	15	69
132 M	All	2, 4, 6, 8	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	179	**132**	15	69
160 M	All	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[5]	300[6]	47	57	28.5	108	192	**160**	18	85
160 L	All	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	148[2]	**160**	18	85
180 M	All	2, 4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	232	**180**	20	95
180 L	All	2, 4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	All	2, 4, 6, 8	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

[1] Only one termination hole available.
[2] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension CA* is 208 mm.
[3] With screwed-on feet, dimension BA' is 38 mm.
[4] With screwed-on feet, dimension BB is 180 mm.
[5] With screwed-on feet, dimension BA' is 44 mm.
[6] With screwed-on feet, dimension BB is 256 mm.

Dimensional drawings

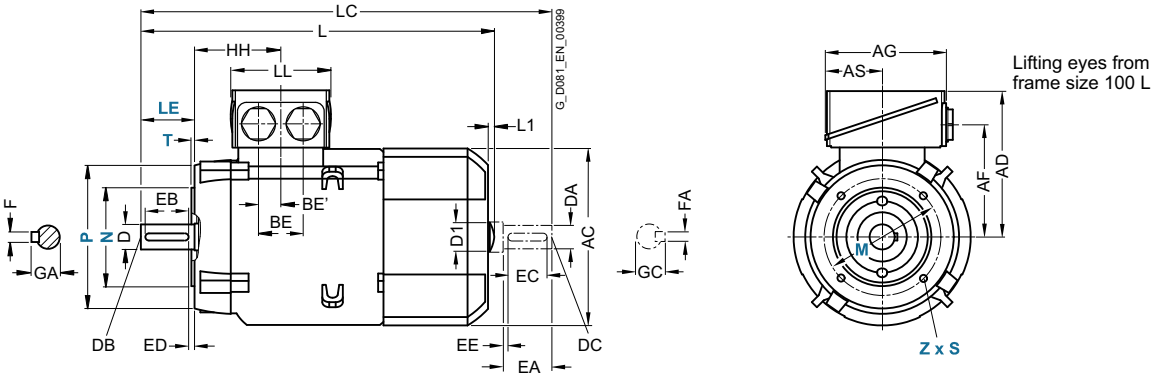
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE100. 1LE101. 1LE1021	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
63 M	1LE100.-0B.2 1LE1002-0B.3	2, 4, 6	69.5	7	10	**202.5**[4]	–	–	232[4]	75	11	M4	23	16	3.5	4	12.5	11	M4	23	16	3.5	4	12.5
	1LE1001-0B.3 1LE1002-0B.6	2, 4				**228.5**			258															
71 M	1LE1001, 1LE1002	2, 4, 6, 8	63.5	7	10	**240**	–	–	278	75	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
80 M	1LE1001 1LE1041	2, 4, 6	73	9.5	13.5	**292**	–	–	342.5	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S		2, 4, 6	78.5	10	14	**347**	–	–	405	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
90 L		2, 4, 6	78.5	10	14	**347**	–	–	405	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	All	2, 4, 6, 8	96.5	12	16	**395.5**	7	32	454	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6, 8	96	12	16	**389** **414**	7	32	450 475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4, 6, 8	115.5	12	16	**465**	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	All	2, 4, 6, 8	115.5	12	16	**465**	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	All	2, 4, 6, 8	155	15	19	**604**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	155	15	19	**604**[2]	10	45	730[3]	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	All	2, 4, 6, 8	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	All	2, 4, 6, 8	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	All	2, 4, 6, 8	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] The length is specified as far as the tip of the fan cover.

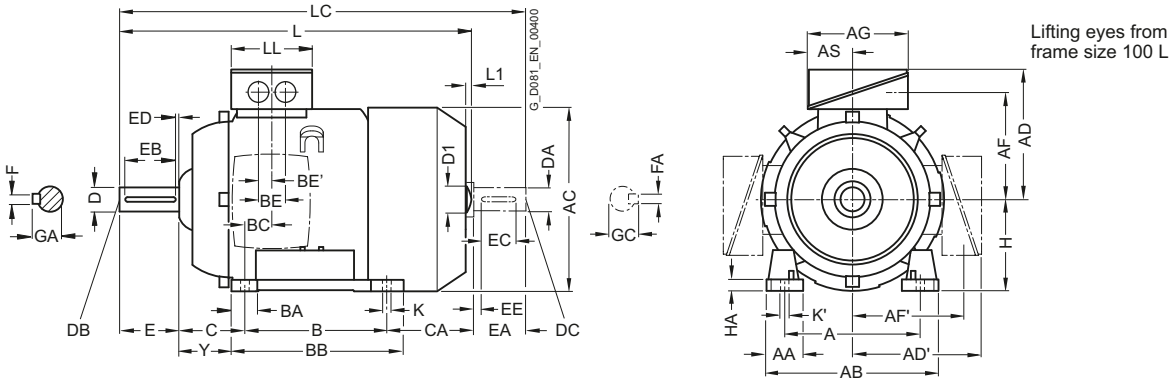
[2] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension L is 664 mm.

[3] Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension LC is 790 mm.

[4] For 1LE1002-0B.3 with the type of construction code letters (14th position of the article number) **F**, **G**, **H** (IM B5, IM V1 without protective cover, IM V3) is dimension L 228.5 mm. Dimension LC is 258 mm.

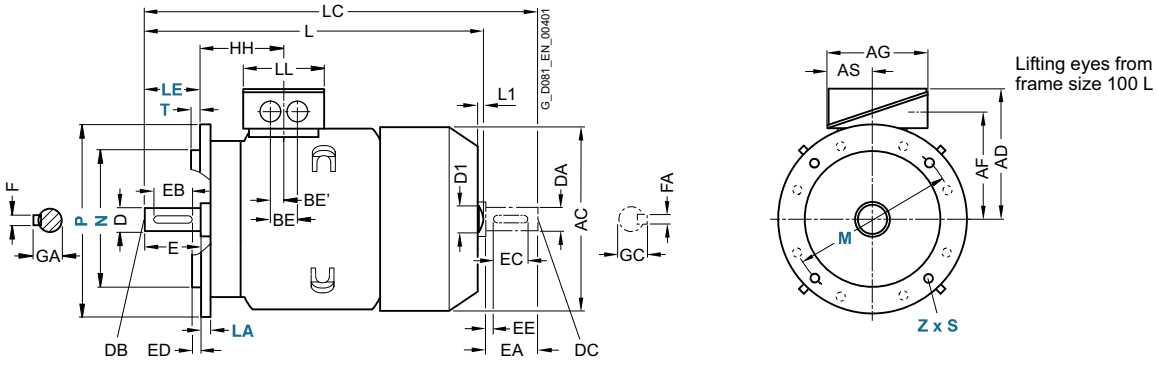
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



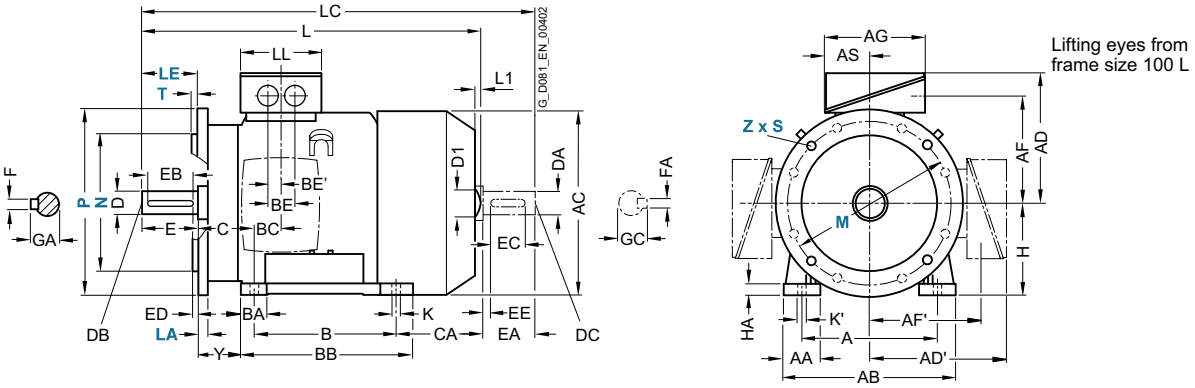
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE1001 1LE1002 1LE1041	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
80 M	All	2, 4	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	32	118	23	–	18[1)]	50	148	**80**	8	41
90 L	All	2, 4	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	125	33	54	143	22.5	–	18[1)]	56	174	**90**	10	47
100 L	All	2, 4, 6, 8	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176	**100**	12	45
112 M	All	2, 4, 6, 8	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	155	**112**	12	52
132 M	All	2, 4, 6, 8	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	179	**132**	15	69
160 L	All	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	208	**160**	18	85
180 L	1LE1001 1LE1002	2, 4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	1LE1001 1LE1002	2, 4, 6, 8	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

[1)] Only one termination hole available.

Dimensional drawings

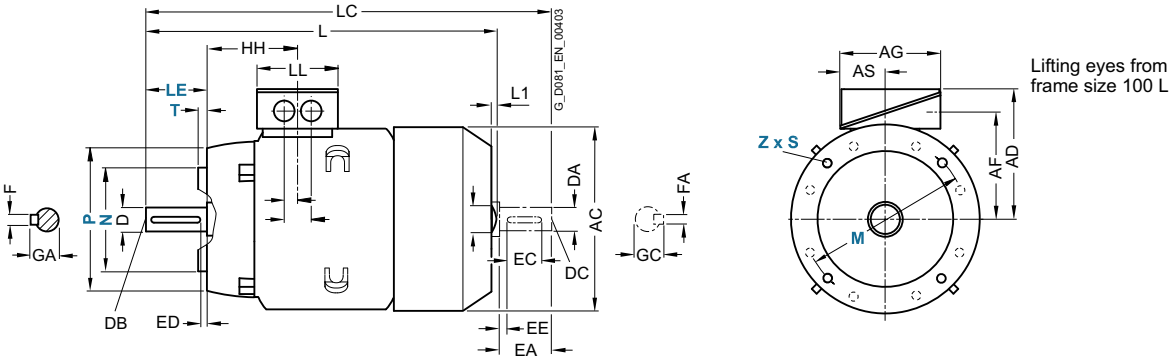
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



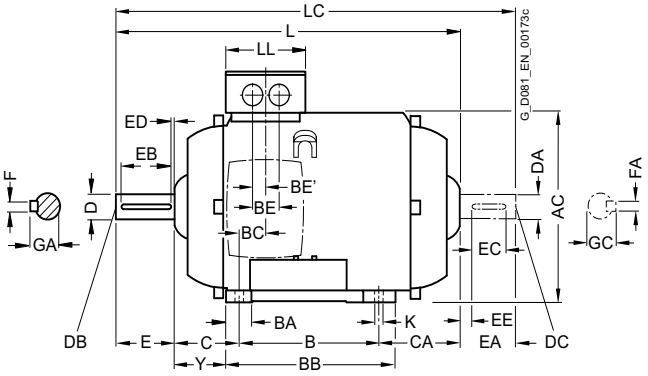
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1001 1LE1002 1LE1041	No. of poles	HH	K	K'	**L** [1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	All	2, 4	73	9.5	13.5	**327**	327	–	378	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 L	All	2, 4	78.5	10	14	**387**	–	–	445	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	All	2, 4, 6, 8	96.5	12	16	**430.5**	7	32	489	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6, 8	96	12	16	**414**	7	32	475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 M	All	2, 4, 6, 8	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 L	All	2, 4, 6, 8	155	15	19	**664**	10	45	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 L	1LE1001 1LE1002	2, 4, 6	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	1LE1001 1LE1002	2, 4, 6	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

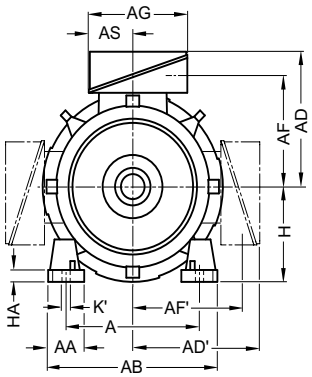
[1] The length is specified as far as the tip of the fan cover.

2

Dimensional drawings

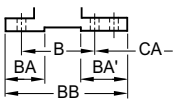
Type of construction IM B3





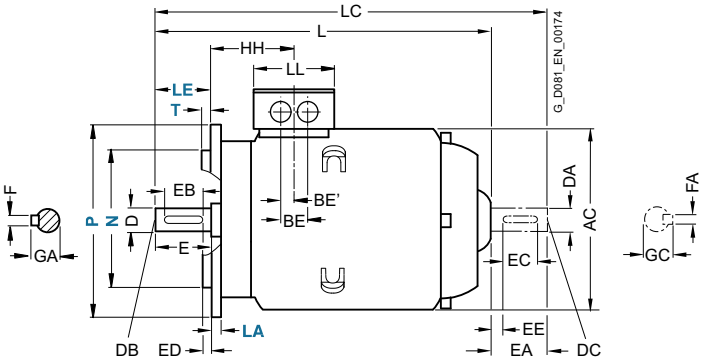
Lifting eyes from frame size 100 L

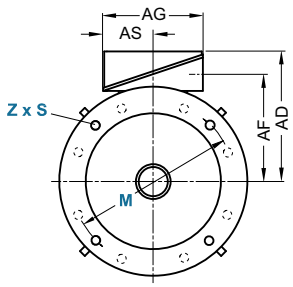
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





Lifting eyes from frame size 100 L

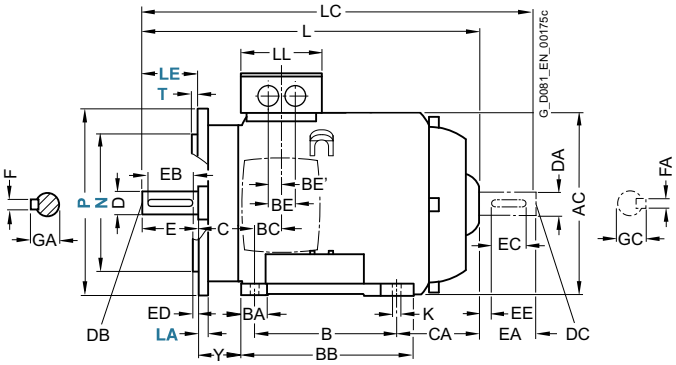
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE100. 1PC100. 1LE1021	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
80 M	1LE1001	2, 4, 6	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	32	118	23	–	18[5]	50	70.5	**80**	8	41
	1LE1021	2, 4, 6					**149.5**	149.5	112.5	112.5	119.5	61.5												
90 S	1LE1001	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	100	33	54	143	22.5	–[5]	18[5]	56	103	**90**	10	47
	1LE1021	2, 4, 6					**154.5**	154.5	117.5	117.5	119.5	61.5												
90 L	1LE1001	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	125	33	54	143	22.5	–[5]	18[5]	56	78	**90**	10	47
	1LE1021	2, 4, 6					**154.5**	154.5	117.5	117.5	119.5	61.5												
100 L	All	2, 4, 6, 8	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	63	**100**	12	45
112 M	All	2, 4 6, 8	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	45 70	**112**	12	52
132 S	All	2, 4, 6, 8	216	53	**256**	261	**202**	202	159.5	159.5	155	70.5	140	38	76[1]	218[2]	26.5	48	24	89	77	**132**	15	69
132 M	All	2, 4, 6, 8	216	53	**256**	261	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	39	**132**	15	69
160 M	All	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[3]	300[4]	47	57	28.5	108	92	**160**	18	85
160 L	All	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	48	**160**	18	85
180 M	1LE1001 1LE1021	2, 4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	124	**180**	20	95
200 L	1LE1001 1LE1021	2, 4, 6, 8	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	101	**200**	25	108

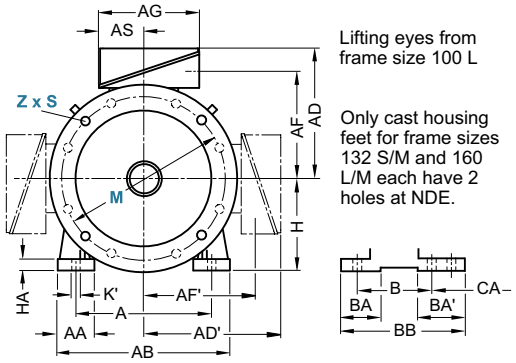
[1] With screwed-on feet, dimension BA' is 38 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 44 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] Only one termination hole available, except for 1LE1021. In this case, dimension BE is 32 mm.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



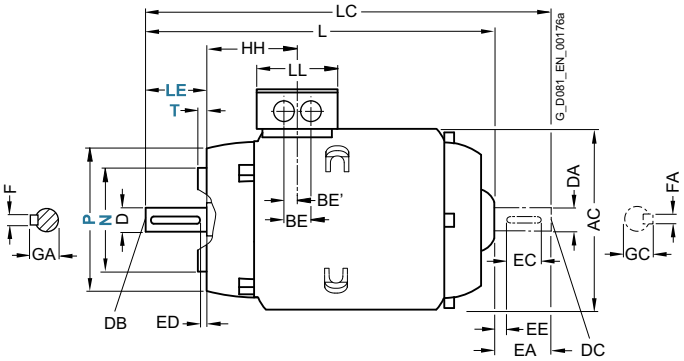


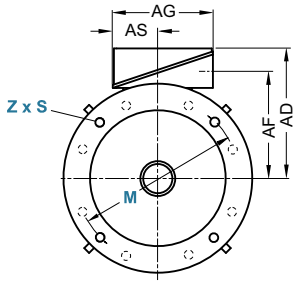
Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





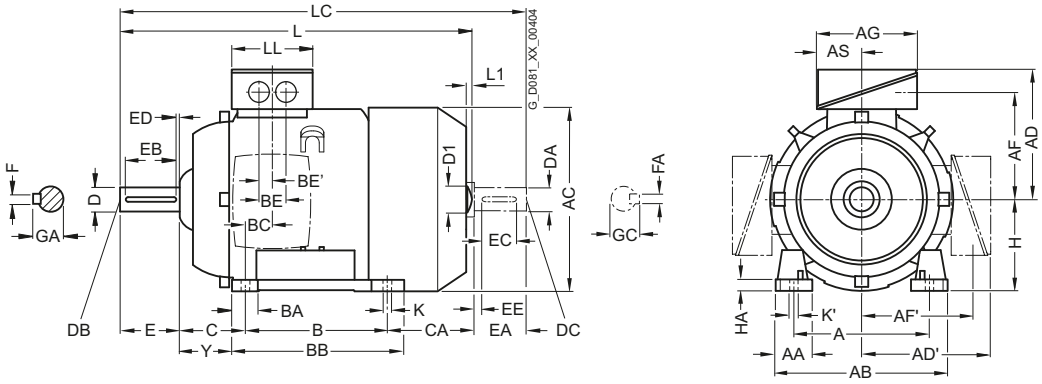
Lifting eyes from frame size 100 L

For motor			Dimension designation acc. to **IEC**						DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE100. 1PC100. 1LE1021	No. of poles	HH	K	K'	**L**	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	1LE1001	2, 4, 6	73	9.5	13.5	**253**	300.5	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
	1LE1021	2, 4, 6						123														
90 S	1LE1021	2, 4, 6	78.5	10	14	**294.5**	349	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	1LE1021	2, 4, 6						123														
90 L	1LE1021	2, 4, 6	78.5	10	14	**294.5**	349	123	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	1LE1021	2, 4, 6						123														
100 L	All	2, 4, 6, 8	96.5	12	16	**324**	376	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4 6, 8	96	12	16	**311 336**	365 390	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4, 6, 8	115.5	12	16	**380.5**	446	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	All	2, 4, 6, 8	115.5	12	16	**380.5**	446	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	All	2, 4, 6, 8	155	15	19	**510**	630	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	155	15	19	**510**	630	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1LE1001 1LE1021	2, 4, 6, 8	151	14.5	19	**698**	706	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	51.5
200 L	1LE1001 1LE1021	2, 4, 6, 8	178	18.5	25	**746**	759	185	55	M20	110	100	5	16	59	55	M20	110	100	100	16	59

2

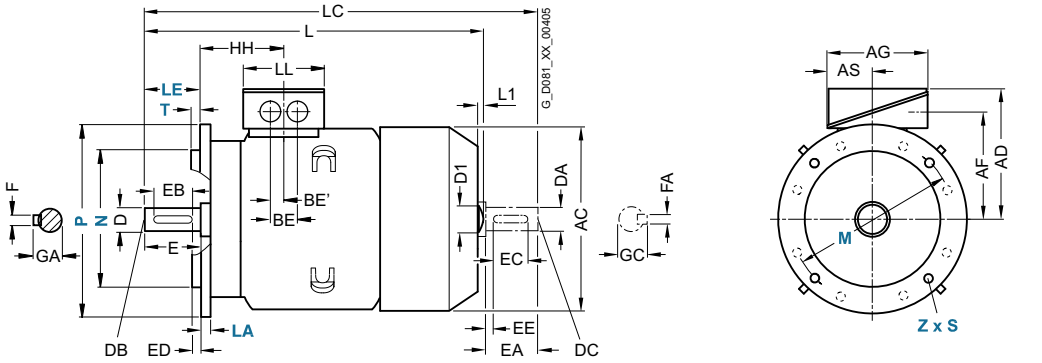
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



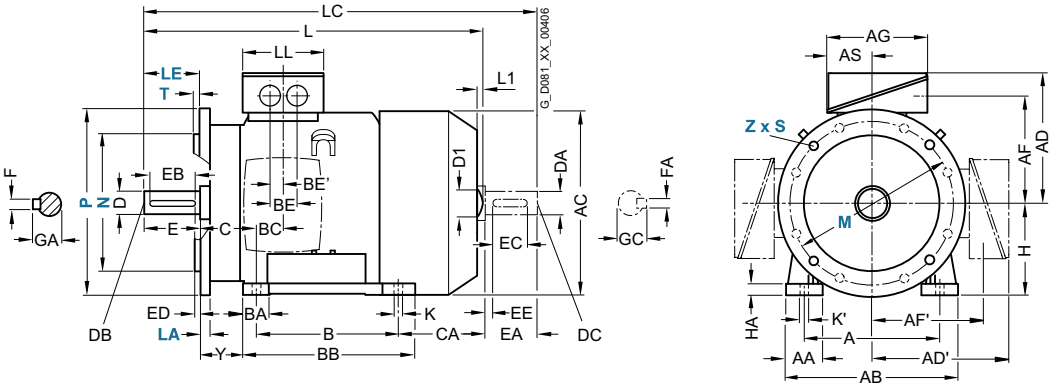
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BB	BC	BE	BE'	C	CA	**H**	HA	Y
80 M	1LE1003-0DA2, -0DB2, -0DC2 -0DA3, -0DB3, -0DC3	2, 4, 6	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	118	23	–[1]	18[1]	50	113 148	**80**	8	41
	1LE1043-0DA2,	2																					
	1LE1023-0DA2, -0DB2, -0DC2 -0DA3, -0DB3, -0DC3	2, 4, 6					**149.5**	149.5	112	112	119.5	61.5								113 148			
90 S	1LE1003-0EA0, -0EB0, -0EC0	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	100	33	143	22.5	–[1]	18[1]	56	159	**90**	10	47
	1LE1043-0EA0,	2																					
	1LE1023-0EA0, -0EB0, -0EC0	2, 4, 6					**154.5**		117.5	117	119.5	61.5											
90 L	1LE1003-0EA4, -0EB4, -0EC4	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	125	33	143	22.5	–[1]	18[1]	56	154	**90**	10	47
	1LE1043-0EA4, -0EB4	2, 4																					
	1LE1023-0EA4, -0EB4, -0EC4	2, 4, 6					**154.5**		117.5	117.5	119.5	61.5											

[1] Only one termination hole available, except for 1LE1023.
In this case, dimension BE is 32 mm.

Dimensional drawings

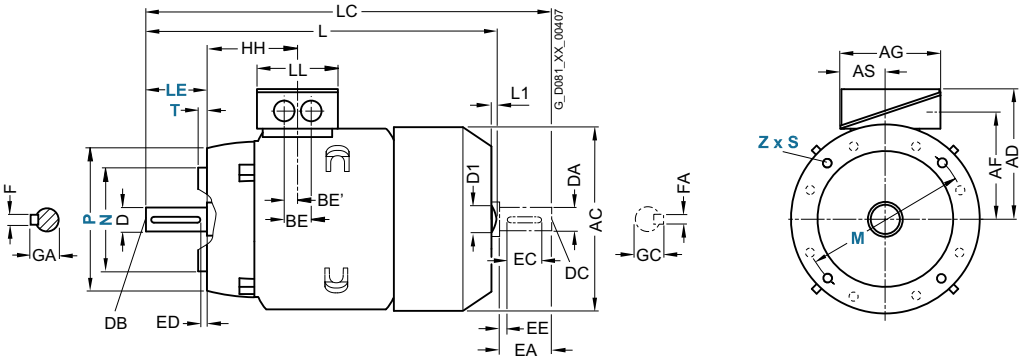
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



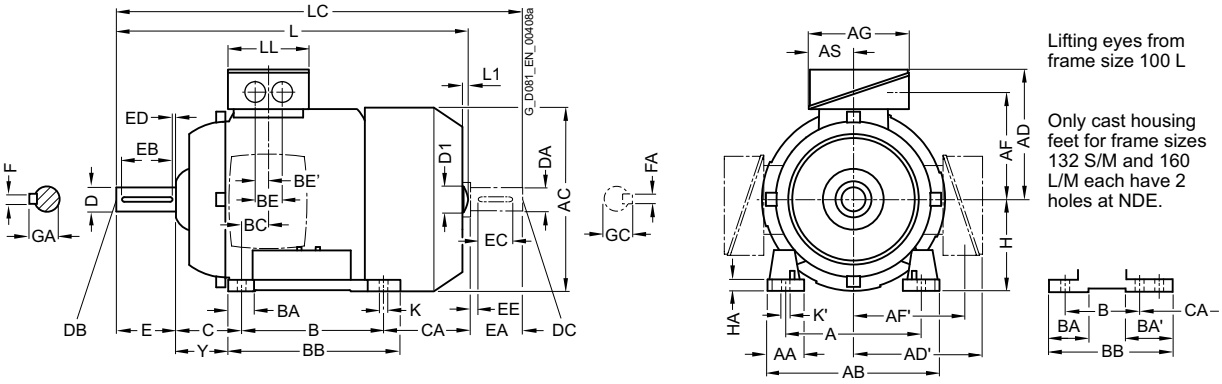
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	1LE1003-0DA2, -0DB2, -0DC2, -0DA3, -0DB3, -0DC3	2, 4, 6	73	9.5	13.5	**292**	–	–	343	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
						327			378															
	1LE1043-0DA2,	2				**292**																		
	1LE1023-0DA2, -0DB2, -0DC2, -0DA3, -0DB3, -0DC3	2, 4, 6				**292**			343	123														
						327			378															
90 S	1LE1003-0EA0, -0EB0, -0EC0	2, 4, 6	78.5	10	14	**347**	–	–	405	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	1LE1043-0EA0,	2																						
	1LE1023-0EA0, -0EB0, -0EC0	2, 4, 6								123														
90 L	1LE1003-0EA4, -0EB4, -0EC4	2, 4, 6	78.5	10	14	**387**	–	–	445	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	1LE1043-0EA4, -0EB4	2, 4																						
	1LE1023-0EA4, -0EB4, -0EC4	2, 4, 6								123														

[1] The length is specified as far as the tip of the fan cover.

2

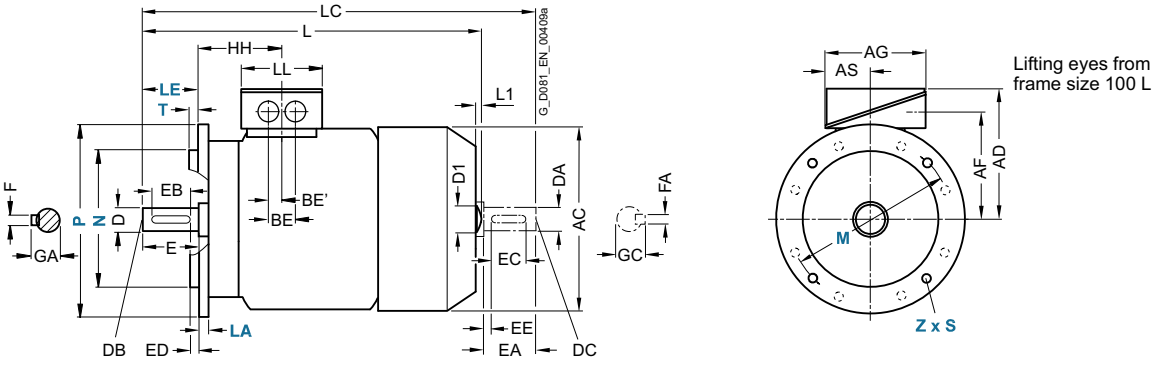
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



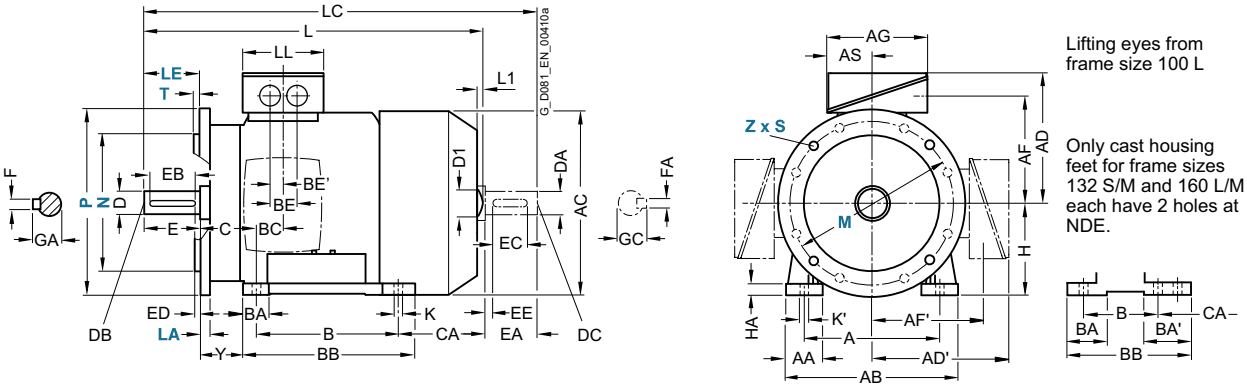
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1003- 1LE1023- 1LE1043-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4, 1AB4, 1AB5, 1AC4	2, 4, 6	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176	**100**	12	45
112 M	1BA2, 1BB2, 1BC2	2, 4, 6	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	155	**112**	12	52
132 S	1CA0, 1CC0, 1CD0	2, 6, 8	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76[1]	218[2]	26.5	48	24	89	167	**132**	15	69
	1CA1, 1CB0	2, 4													38	180					217			
132 M	1CC2	6	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	129	**132**	15	69
	1CB2, 1CC3, 1CD2	4, 6, 8													38						179			
160 M	1DA2, 1DA3, 1DB2, 1DC2, 1DD2, 1DD3	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[3]	300[4]	47	57	28.5	108	192	**160**	18	85
160 L	1DA4, 1DB4, 1DC4, 1DD4	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	208	**160**	18	85
180 M	1EA2 1EB2	2, 4	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	232	**180**	20	95
180 L	1EB4, 1EC4, 1ED4	4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	2, 4, 6, 8	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

[1] With screwed-on feet, dimension BA' is 38 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 44 mm.
[4] With screwed-on feet, dimension BB is 256 mm.

Dimensional drawings

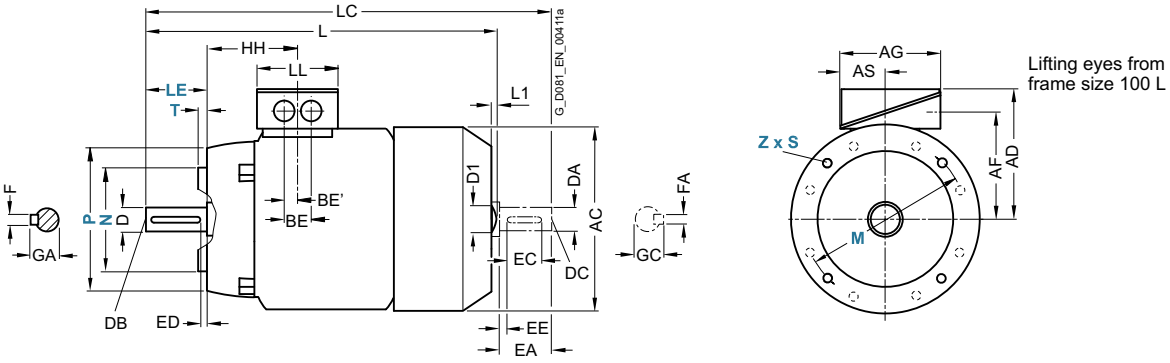
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



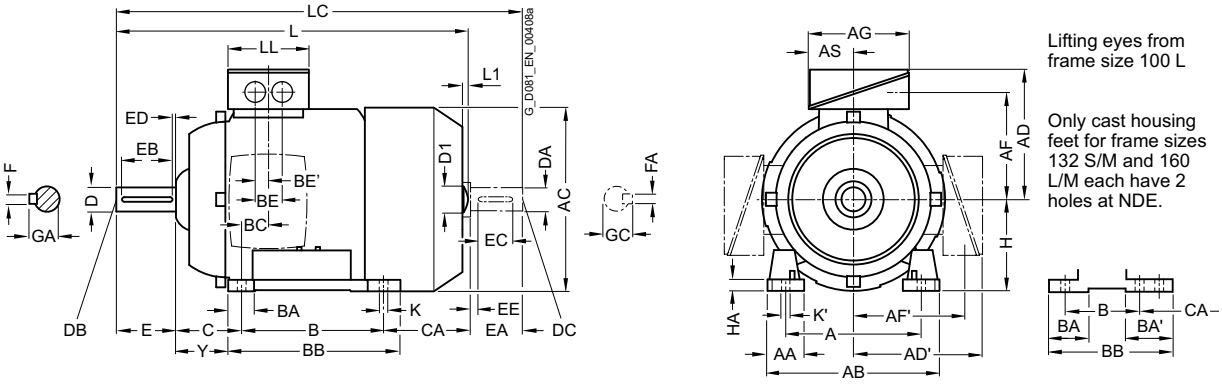
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1003-1LE1023-1LE1043	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4, 1AB4, 1AB5, 1AC4	2, 4, 6	96.5	12	16	**430.5**	7	32	489	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2, 1BB2, 1BC2	2, 4, 6	96	12	16	**414**	7	32	475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0, 1CC0, 1CD0	2, 6, 8	115.5	12	16	**465**	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CA1, 1CB0	2, 4				**515**			585.5															
132 M	1CC2	6	115.5	12	16	**465**	8.5	39	535.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CB2, 1CC3, 1CD2	4, 6, 8				**515**			585.5															
160 M	1DA2, 1DA3, 1DB2, 1DC2, 1DD2, 1DD3	2, 4, 6, 8	155	15	19	**604**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4, 1DB4, 1DC4, 1DD4	2, 4, 6, 8	155	15	19	**664**	10	45	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1EA2 1EB2	2, 4	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	1EB4, 1EC4, 1ED4	4, 6, 8	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	2, 4, 6, 8	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] The length is specified as far as the tip of the fan cover.

2

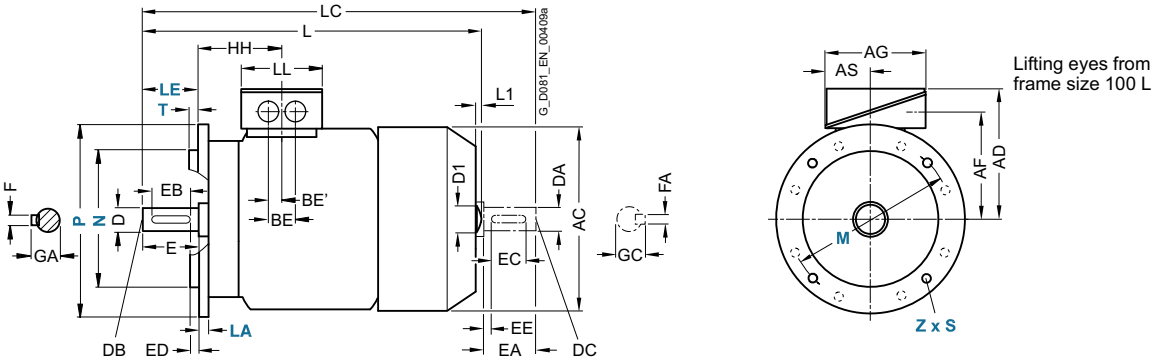
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



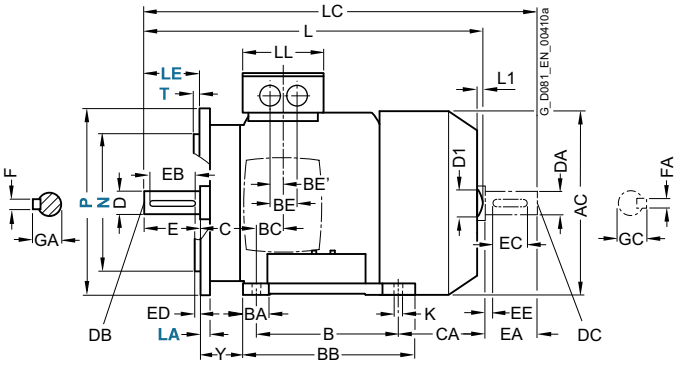
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE1083-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4, 1AB4	2, 4	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176	**100**	12	45
	1AB5	4																			216			
112 M	1BA2	2	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	155	**112**	12	52
	1BB2	4																			200			
132 S	1CA0, 1CA1, 1CB0	2, 4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76[1]	218[2]	26.5	48	24	89	167	**132**	15	69
132 M	1CB2	4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	179	**132**	15	69
160 M	1DA2, 1DA3, 1DB2	2, 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[3]	300[4]	47	57	28.5	108	192	**160**	18	85
160 L	1DA4, 1DB4	2, 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	208	**160**	18	85
180 M	1EA2 1EB2	2, 4	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	232	**180**	20	95
180 L	1EB4, 1EC4, 1ED4	4, 6, 8	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	2, 4, 6, 8	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

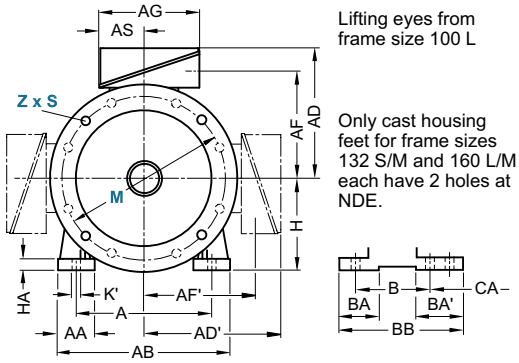
[1] With screwed-on feet, dimension BA' is 38 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 44 mm.
[4] With screwed-on feet, dimension BB is 256 mm.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



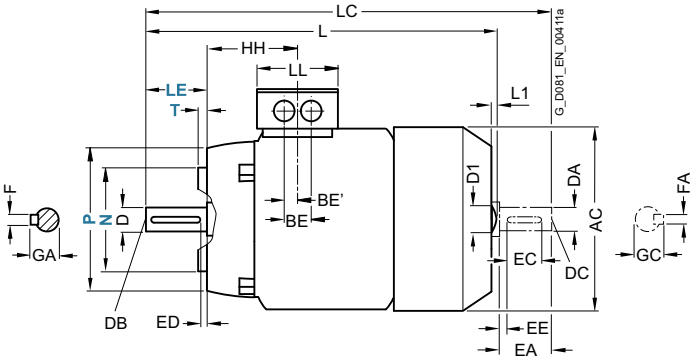


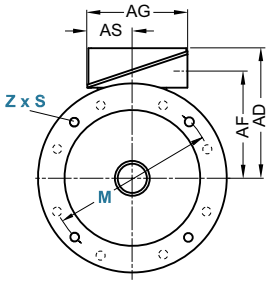
Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





Lifting eyes from frame size 100 L

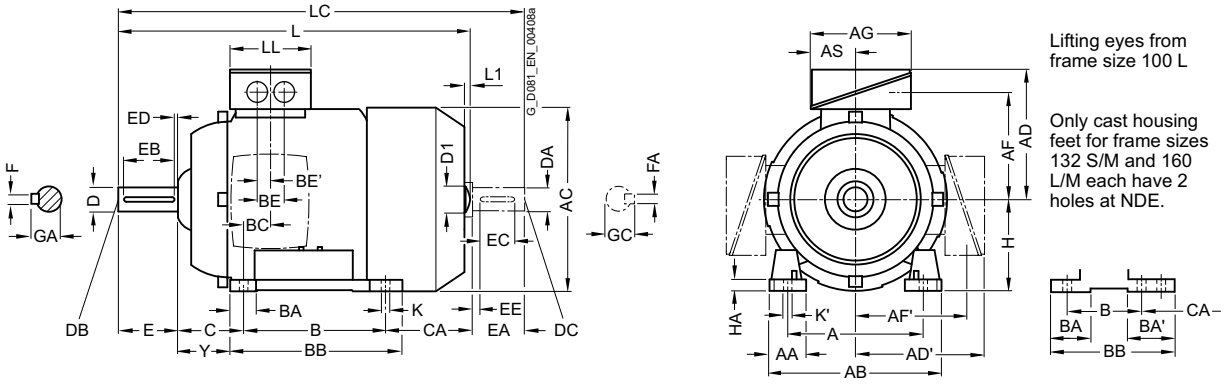
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1083	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4, 1AB4	2, 4	96.5	12	16	**430.5**	7	32	489	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1 AB5	4				**470.5**			529															
112 M	1BA2	2	96	12	16	**414**	7	32	475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1BB2	4				**459**			520															
132 S	1CA0, 1CA1, 1CB0	2, 4	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	1CB2	4	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	1DA2, 1DA3, 1DB2	2, 4	155	15	19	**604**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4, 1DB4	2, 4	155	15	19	**664**	10	45	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1EA2 1EB2	2, 4	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	1EB4, 1EC4, 1ED4	4, 6, 8	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	2, 4, 6, 8	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] The length is specified as far as the tip of the fan cover.

2

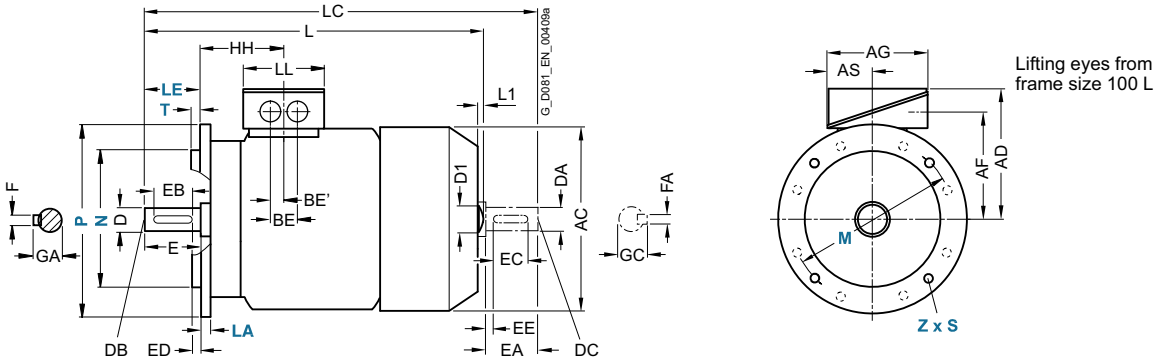
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)

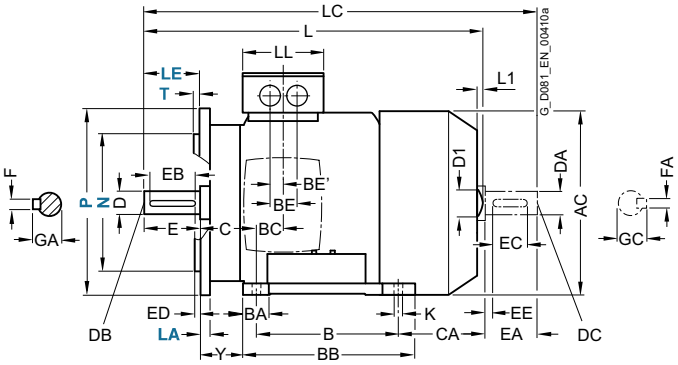


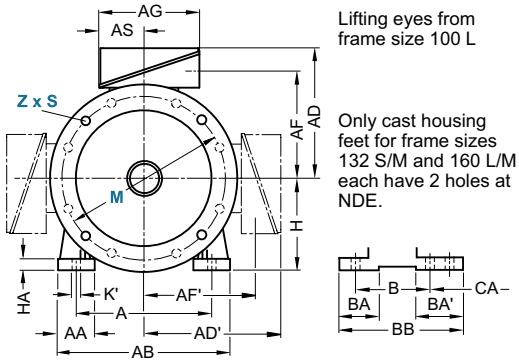
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
132 M	1LE1003-1CA6 1LE1043-1CA6	2	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	38	218	26.5	48	24	89	179	**132**	15	69
160 L	1LE1003-1DA6 -1DB6 1LE1043-1DA6	2, 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	44	300	47	57	28.5	108	268	**160**	18	85
180 L	1LE1003-1EA6 -1EB6 -1EC6	2, 4, 6	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	1LE1003-2AA6 -2AB6 -2AC6	2, 4, 6	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



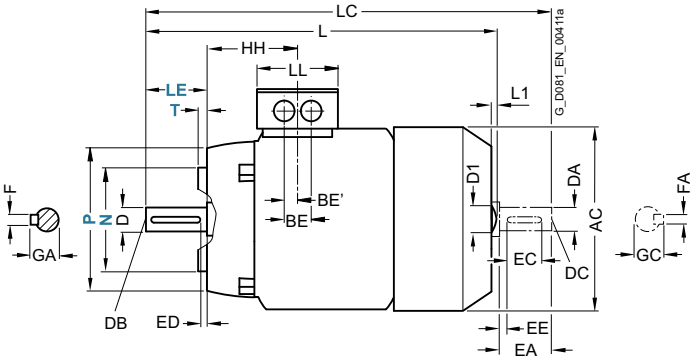


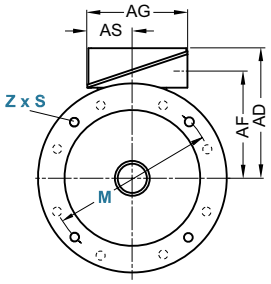
Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





Lifting eyes from frame size 100 L

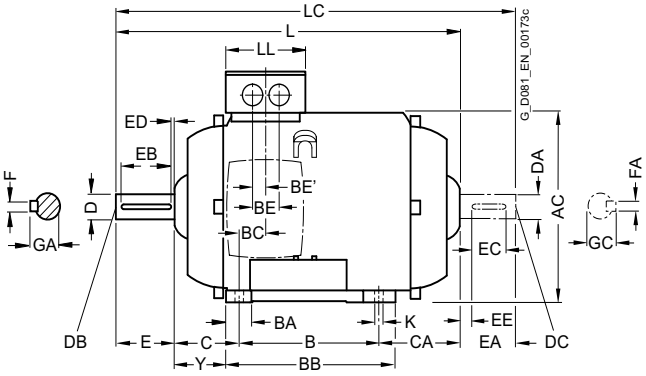
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
132 M	1LE1003-1CA6 1LE1043-1CA6	2	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 L	1LE1003-1DA6 -1DB6 1LE1043-1DA6	2, 4	155	15	19	**664**	10	45	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 L	1LE1003-1EA6 -1EB6 -1EC6	2, 4, 6	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	1LE1003-2AA6 -2AB6 -2AC6	2, 4, 6	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

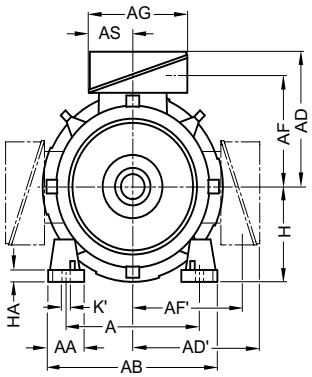
[1] The length is specified as far as the tip of the fan cover.

2

Dimensional drawings

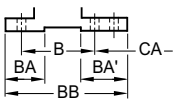
Type of construction IM B3





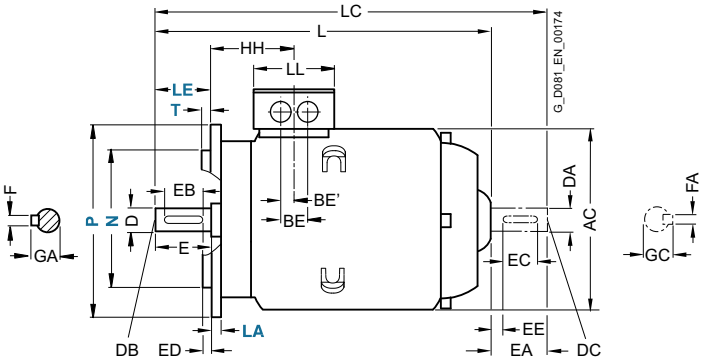
Lifting eyes from frame size 100 L

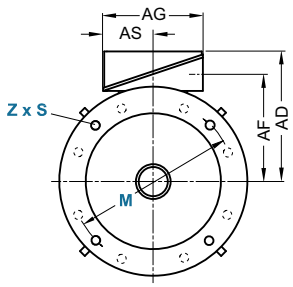
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





Lifting eyes from frame size 100 L

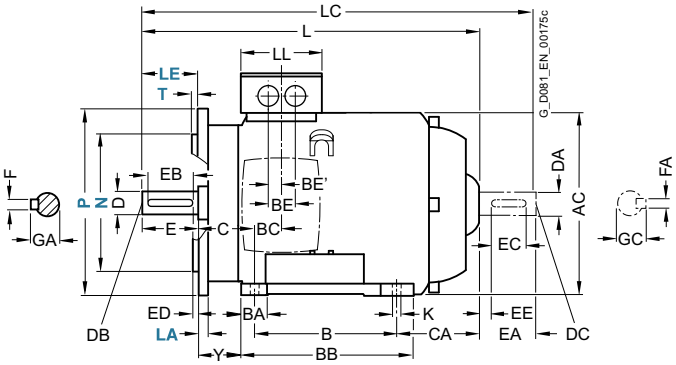
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1023-1LE1043-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
80 M	0DA2, 0DB2, 0DC2	2, 4, 6	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	32	118	23	–	18[1]	50	70	**80**	8	41
	0DA3, 0DB3, 0DC3	2, 4, 6																			105.5			
90 S	0EA0, 0EB0, 0EC0	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	100	33	54	143	22.5	–	18[1]	56	113	**90**	10	47
90 L	0EA4, 0EB4, 0EC4	2, 4, 6	140	30.5	**165**	178	**126**	126	101.5	101.5	93	43	100	33	54	143	22.5	–	18[1]	56	153	**90**	10	47

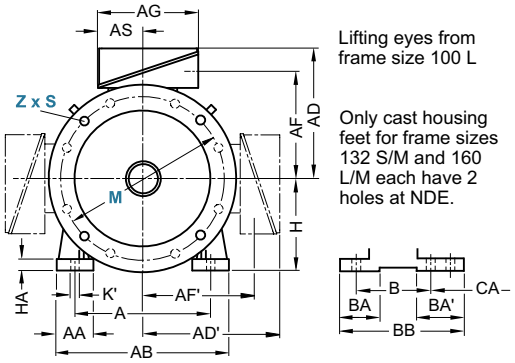
[1] Only one termination hole available.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



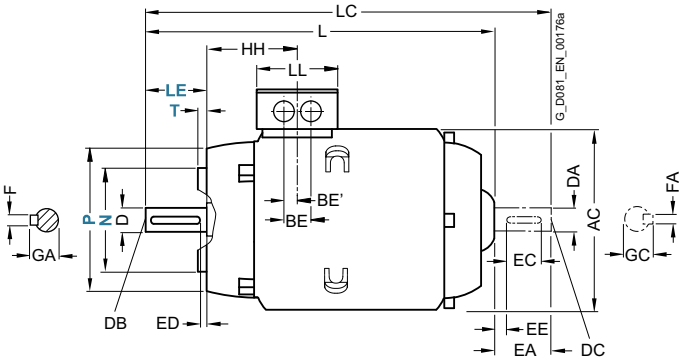


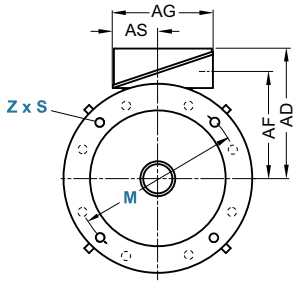
Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





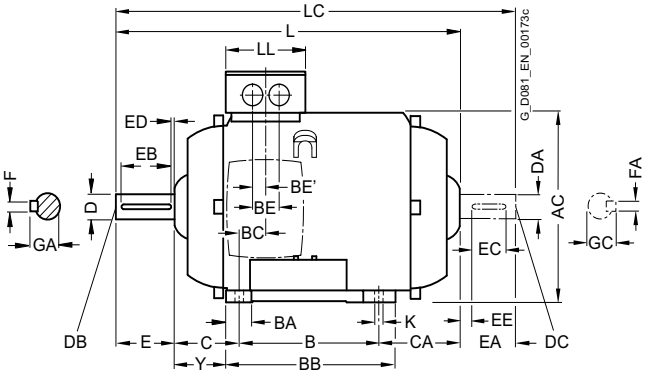
Lifting eyes from frame size 100 L

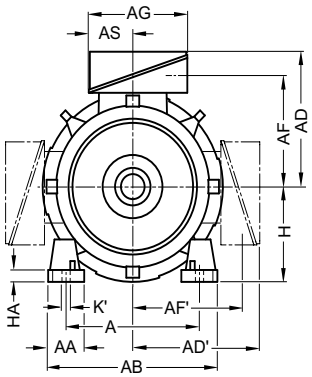
For motor			Dimension designation acc. to **IEC**						DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1023-1LE1043-	No. of poles	HH	K	K'	**L**	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	0DA2, 0DB2, 0DC2	2, 4, 6	73	9.5	13.5	**253.5**	300.5	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
	0DA3, 0DB3, 0DC3	2, 4, 6				**288**	335.5															
90 S	0EA0, 0EB0, 0EC0	2, 4, 6	78.5	10	14	**294.5**	349	79	19	M6	40	32	5	8	27	19	M6	40	32	4	6	21.5
90 L	0EA4, 0EB4, 0EC4	2, 4, 6	78.5	10	14	**334.5**	389	79	19	M6	40	32	5	8	27	19	M6	40	32	4	6	21.5

2

Dimensional drawings

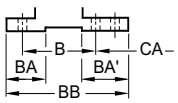
Type of construction IM B3





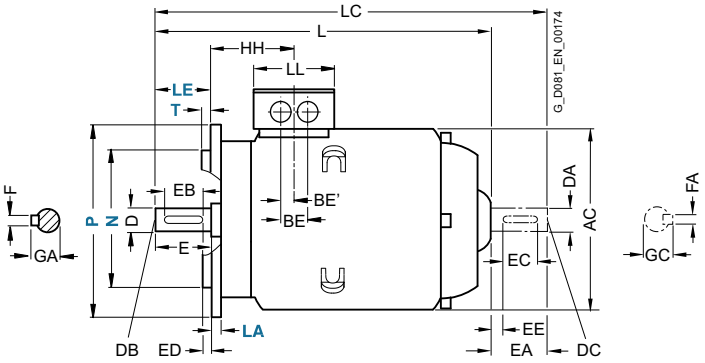
Lifting eyes from frame size 100 L

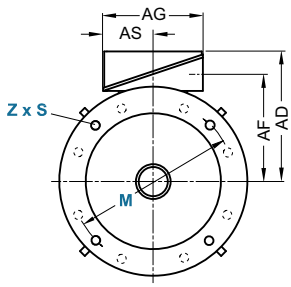
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





Lifting eyes from frame size 100 L

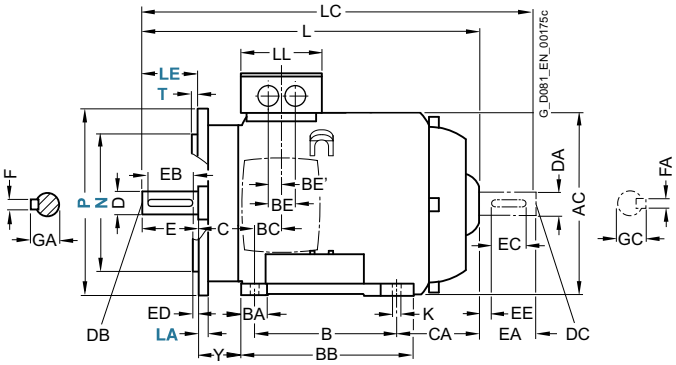
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1023-1LE1043-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4, 1AB4, 1AB5 1AC3	2, 4 6	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	–	**100**	12	45
112 M	1BA2, 1BB2	2, 4	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	–	**112**	12	52
132 S	1CA0, 1CC0	2, 6	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76[1]	218[2]	26.5	48	24	89	–	**132**	15	69
	1CA1, 1CB0	2, 4													38	180								
132 M	1CC2	6	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	–	**132**	15	69
	1CB2, 1CC3	4, 6													38									
160 M	1DA2, 1DA3, 1DB2, 1DC2	2, 4, 6	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[3]	300[4]	47	57	28.5	108	–	**160**	18	85
160 L	1DA4, 1DB4, 1DC4	2, 4, 6	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	44	300	47	57	28.5	108	–	**160**	18	85
180 M	1EA2, 1EB2,	2, 4	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	–	**180**	20	95
180 L	1EB4, 1EC4	4, 6	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	–	**180**	20	95
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	2, 4, 6	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	–	**200**	25	108

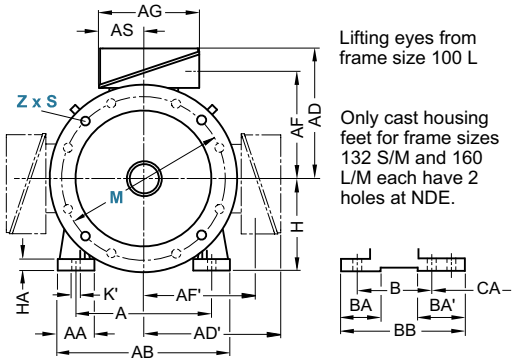
[1] With screwed-on feet, dimension BA' is 38 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 44 mm.
[4] With screwed-on feet, dimension BB is 256 mm.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



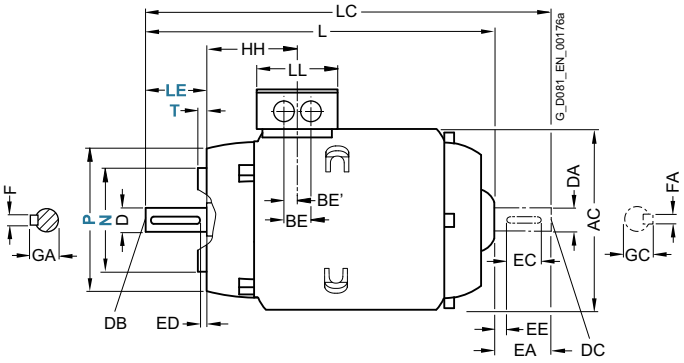


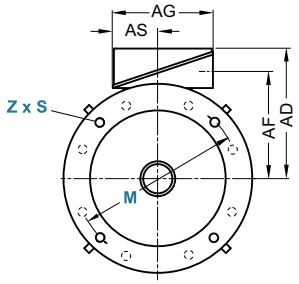
Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





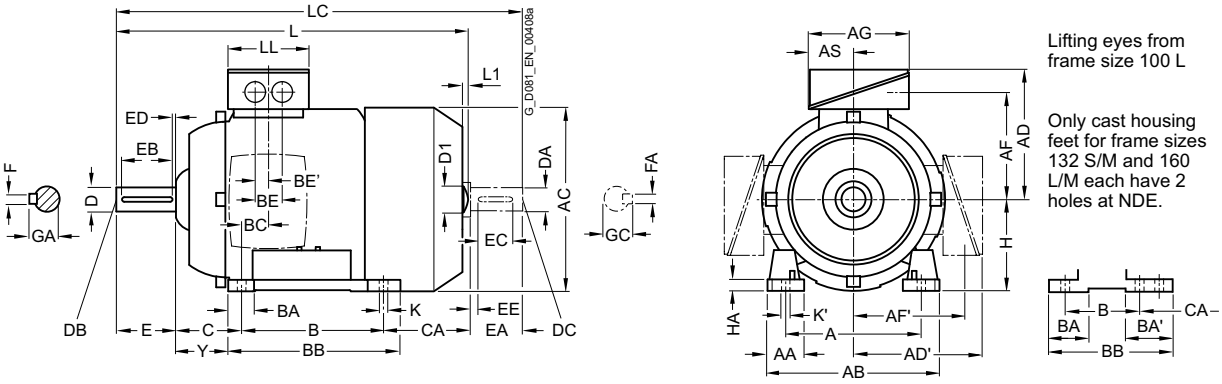
Lifting eyes from frame size 100 L

For motor			Dimension designation acc. to **IEC**						DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1023-1LE1043-	No. of poles	HH	K	K'	**L**	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4, 1AB4, 1AB5 1AC3	2, 4 6	96.5	12	16	**356.5**	411	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2, 1BB2	2, 4	96	12	16	**336**	390	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0, 1CC0	2, 6	115.5	12	16	**380.5**	446	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CA1, 1CB0	2, 4				**430.5**	496									–	–	–	–	–	–	–
132 M	1CC2	6	115.5	12	16	**380.5**	446	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CB2, 1CC3	4, 6				**430.5**	496									–	–	–	–	–	–	–
160 M	1DA2, 1DA3, 1DB2, 1DC2	2, 4, 6	155	15	19	**510**	630	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4, 1DB4, 1DC4	2, 4, 6	155	15	19	**570**	690	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1EA2, 1EB2	2, 4	151	14.5	19	**698**	706	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	1EB4, 1EC4	4, 6	151	14.5	19	**698**	706	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	2, 4, 6	178	18.5	25	**746**	759	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

2

Dimensional drawings

Type of construction IM B3

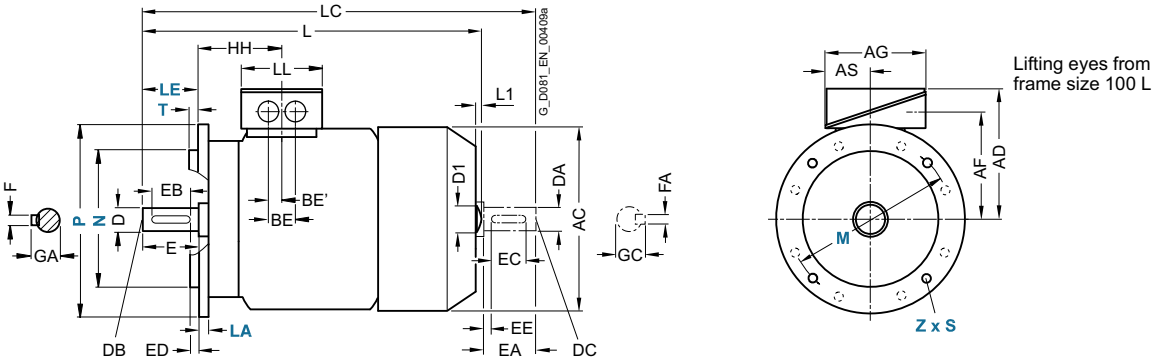


Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Lifting eyes from frame size 100 L

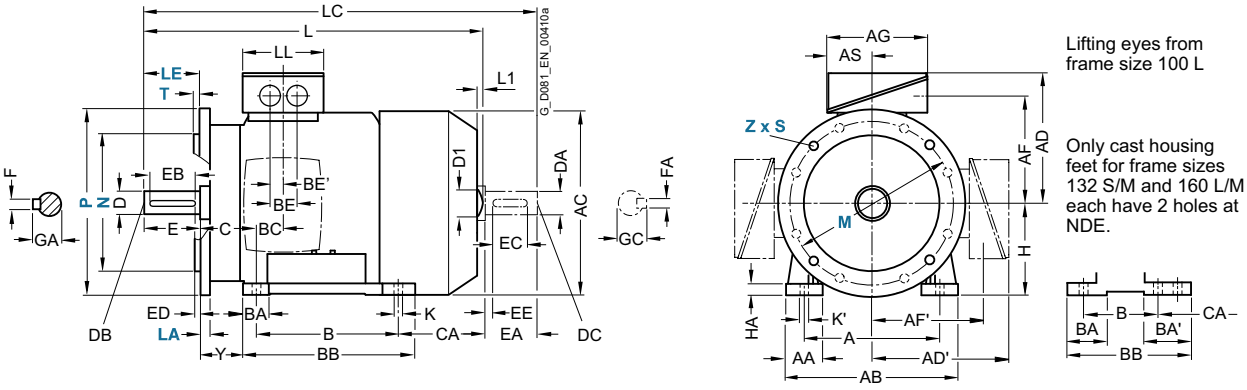
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE1004-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4 1AB4 1AB5	2 4 4	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176	**100**	12	45
112 M	1BA2 1BB2	2 4	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	155	**112**	12	52
132 S	1CA0 1CA1 1CB0	2 2 4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76[1] 38	218[2] 180	26.5	48	24	89	128.5 178.5	**132**	15	69
132 M	1CB2	4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	178.5	**132**	15	69
160 M	1DA2 1DA3 1DB2	2 2 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89[3] 44	300[4] 256	47	57	28.5	108	148[5]	**160**	18	85
160 L	1DA4 1DB4	2 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	44	300	47	57	28.5	108	208	**160**	18	85
180 M	1EA2 1EB2	2 4	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	241	80	100	328	30	57	28.5	121	232	**180**	20	95
180 L	1EB4	4	279	65	**339**	356	**259**	259	212.5	212.5	175	77.5	279	80	100	328	30	57	28.5	121	194	**180**	20	95
200 L	2AA4 2AA5 2AB5	2 2 4	318	70	**378**	396	**296**	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	202	**200**	25	108

[1] With screwed-on feet, dimension BA' is 38 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 44 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] With screwed-on feet, dimension CA is 192 mm.

Dimensional drawings

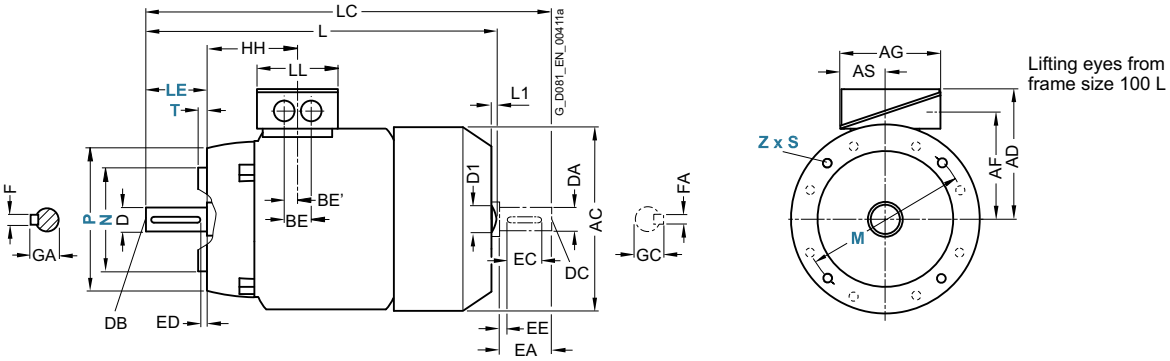
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



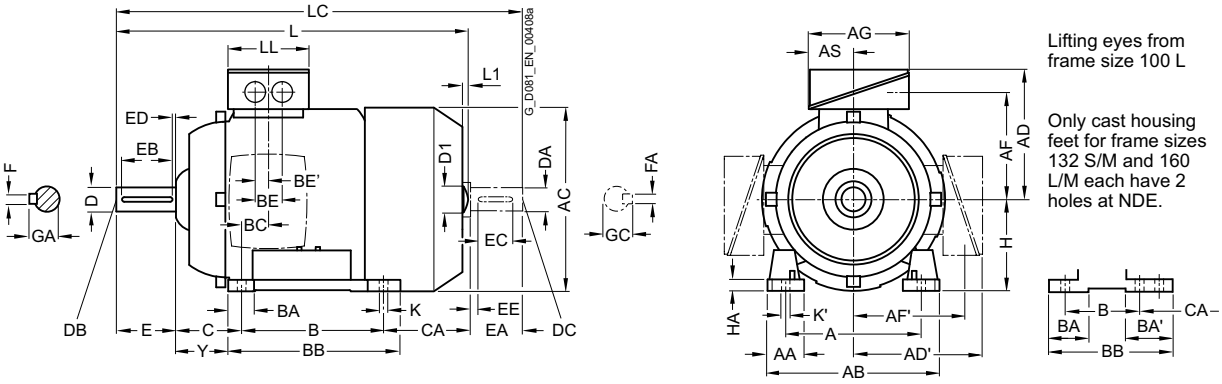
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1004-	No. of poles	HH	K	K'	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4 1AB4 1AB5	2 4 4	96.5	12	16	**430.5** **480.5**	7	32	489 529	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2 1BB2	2 4	96	12	16	**414** **464**	7	32	475 520	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0 1CA1 1CB0	2 2 4	115.5	12	16	**465** **515**	8.5	39	535.5 585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	1CB2	4	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	1DA2 1DA3 1DB2	2 2 4	155	15	19	**604** **664**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4 1DB4	2 4	155	15	19	**664**	10	45	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M	1EA2 1EB2	2 4	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
180 L	1EB4	4	151	14.5	19	**698**	–	–	814	145	48	M16	110	100	5	14	52	48	M16	110	100	5	14	52
200 L	2AA4 2AA5 2AB5	2 2 4	178	18.5	25	**746**	–	–	860	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] The length is specified as far as the tip of the fan cover.

2

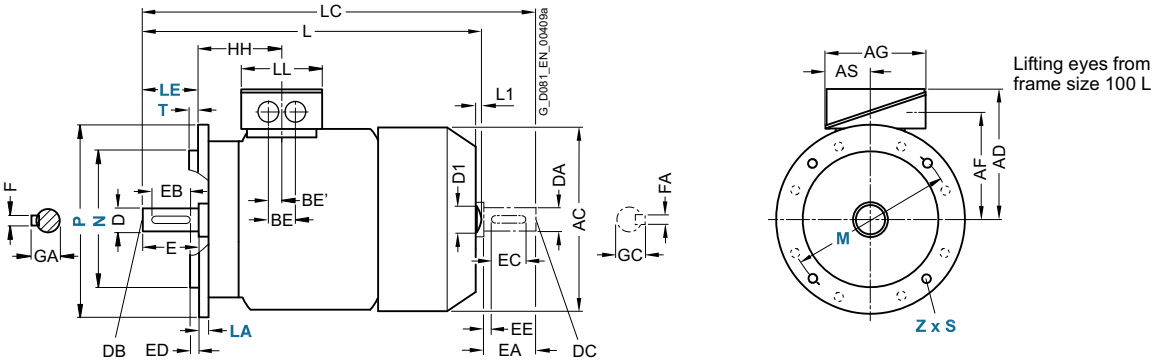
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)

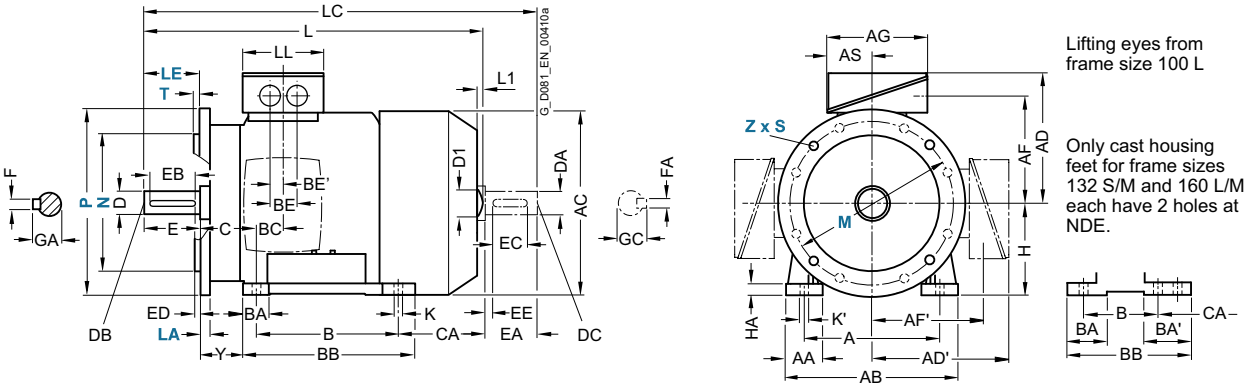


For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1073-	No. of poles	A	AA	**AB**	AC	**AD**	AD´	AF	AF´	AG	AS	B	BA	BA´	BB	BC	BE	BE´	C	CA	**H**	HA	Y
80 M	0DA3, 0DA6, 0DB3, 0DB6, 0DC3, 0DD3	2, 4, 6, 8	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	-	118	23	–	18	50	113	**80**	8	41
	0DC2	6, 8																						
90 S	0EA4, 0EB4	2, 4	140	305	**165**	178	**126**	126	101.5	101.5	93	43	100	33	-	143	22.5	–	18	56	159	**90**	10	47
	0EC0, 0ED0	6, 8																						
90 L	0EB6	4	140	305	**165**	178	**126**	126	101.5	101.5	93	43	125	33	-	143	22.5	–	18	56	154	**90**	10	47
	0ED4	8																						
100 L	1AA4, 1AA6, 1AB5, 1AC3	2, 4, 6, 8	160	42	**196**	198	**166**	166	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176	**100**	12	45
	1AB6	4																						
	1AD4	8																						
112 M	1BA5, 1BA6, 1BB5, 1BC1,	2, 4, 6, 8	190	46	**226**	222	**177**	177	136.5	136.5	135	63.5	140	37.5	37	176	26	50	25	70	155	**112**	12	52
	1BB6	4																						
132 S	1CA1, 1CB2	2, 4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76	218	26.5	48	24	89	178.5	**132**	15	69
	1CC0, 1CC1, 1CC2, 1CC4, 1CD0	6, 8													38	180					128.5			
132 M	1CA5, 1CA6, 1CC3, 1CC6,	2, 6, 8	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	178.5	**132**	15	69
	1CB5, 1CB6	4																						
160 M	1DA4, 1DB4, 1DC3, 1DC4	2, 4, 6	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	44	256	47	57	28.5	108	192	**160**	18	85
	1DA3, 1DD1, 1DD3	2, 8																						
160 L	1DA6, 1DB6, 1DC6, 1DD4	2, 4, 6, 8	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	208	**160**	18	85

Dimensional drawings

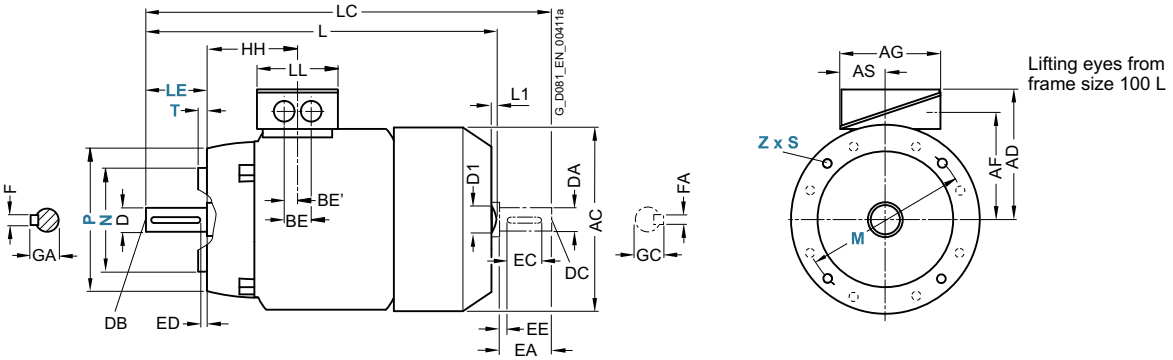
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



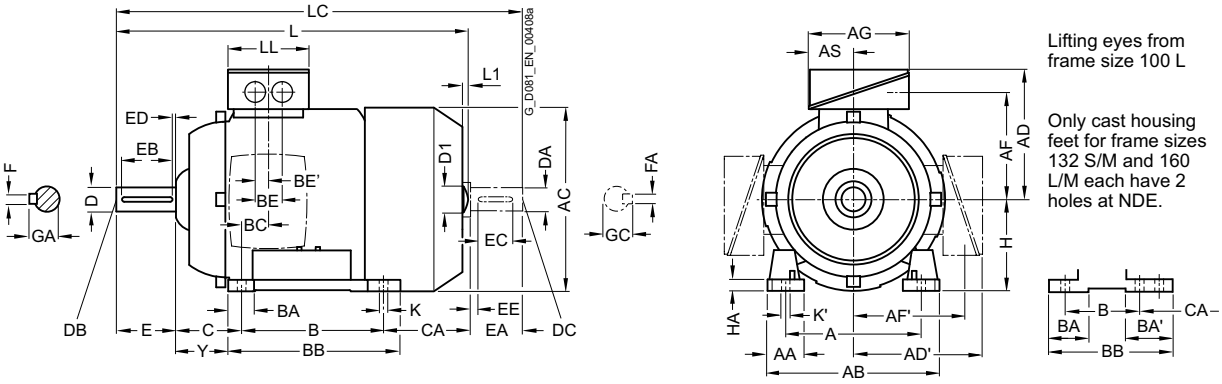
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1073-	No. of poles	HH	K	K´	**L**[1]	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
80 M	0DA3, 0DA6, 0DB3, 0DB6, 0DC3, 0DD3	2, 4, 6, 8	73	9.5	13.5	**327**	–	–	378	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
	0DC2	6, 8				**292**			343															
90 S	0EA4, 0EB4	2, 4	78.5	10	14	**387**	–	–	445	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	0EC0, 0ED0	6, 8				**347**			405															
90 L	0EB6	4	78.5	10	14	**433**	–	–	491	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
	0ED4	8				**347**			405															
100 L	1AA4, 1AA6, 1AB5, 1AC3	2, 4, 6, 8	96.5	12	16	**430.5**	7	32	489	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1AB6	4				**480.5**			529															
	1AD4	8				**395.5**			454															
112 M	1BA5, 1BA6, 1BB5, 1BC1,	2, 4, 6, 8	96	12	16	**414**	7	32	475	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1BB6	4				**464**			520															
132 S	1CA1, 1CB2	2, 4	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CC0, 1CC1, 1CC2, 1CC4, 1CD0	6, 8				**465**			535.5															
132 M	1CA5, 1CA6, 1CC3, 1CC6,	2, 6, 8	115.5	12	16	**515**	8.5	39	585.5	130	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CB5, 1CB6	4				**574**			644.5															
160 M	1DA4, 1DB4, 1DC3, 1DC4	2, 4, 6	155	15	19	**664**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
	1DA3, 1DD1, 1DD3	2, 8				**604**																		
160 L	1DA6, 1DB6, 1DC6, 1DD4	2, 4, 6, 8	155	15	19	**664**	10	54	790	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

2

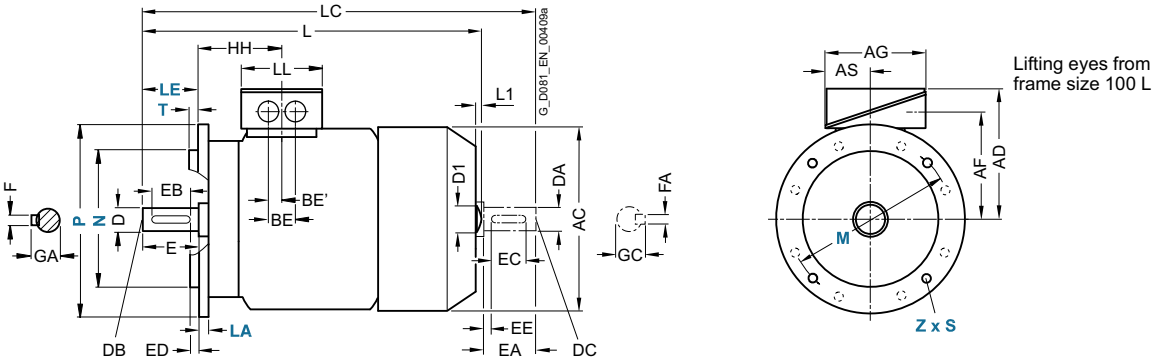
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



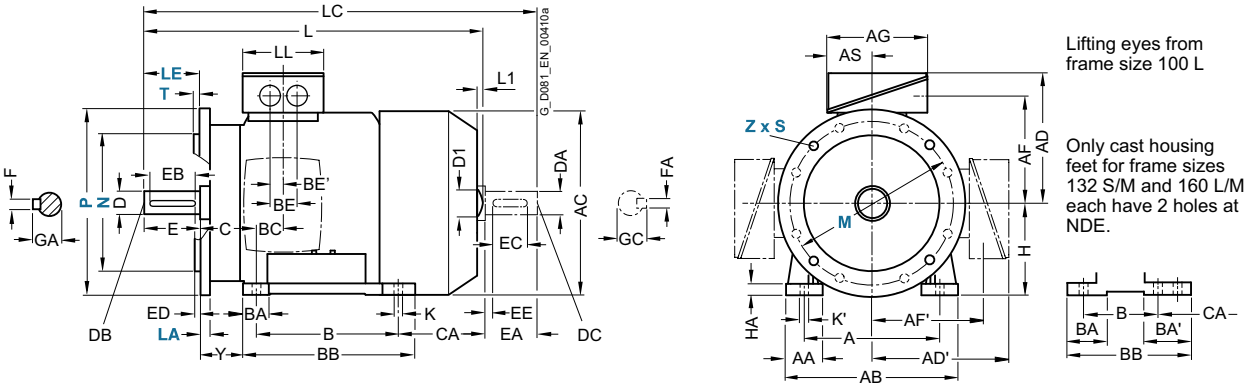
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE15.1, 1LE16.1 1LE1502	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
71 M	1LE15.1	2, 4, 6	112	30.5	**132**	145	**149**	149	112	112	126	62	90	32	32	106	21	36	18	45	83	**71**	7	37
80 M	1LE15.1	2, 4, 6	125	30.5	**150**	162	**159**	159	122	122	126	62	100	32	32	118	22.5	36	18	50	112.5	**80**	8	41
90 S	1LE15.1	2, 4, 6	140	30.5	**165**	180	**164**	164	127	127	126	62	100	33	54	143	24.5	36	18	56	159	**90**	11	47
90 L	1LE15.1	2, 4, 6	140	30.5	**165**	180	**164**	164	127	127	126	62	125	33	54	143	24.5	36	18	56	134	**90**	11	47
100 L	All	2, 4, 6, 8	160	42	**196**	217	**193**	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	141	**100**	12	45
112 M	All	2, 4, 6 8	190	46	**226**	239	**195**	195	150	150	163	80.5	140	48	48	176	30	48	24	70	130 155	**112**	12	52
132 S	All	2, 4, 6, 8	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	140	52[5]	89[1]	218[3]	26.5	48	24	89	166.5	**132**	15	69
132 M	All	2, 4, 6, 8	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	178	52[5]	89[1]	218	26.5	48	24	89	128.5	**132**	15	69
160 M	All	2, 4, 6, 8	254	60	**300**	333.5	**265**	265	213	213	190	92	210	73[6]	117[2]	300[4]	37	60	30	108	192	**160**	18	85
160 L	All	2, 4, 6, 8	254	60	**300**	333.5	**265**	265	213	213	190	92	254	73[6]	117[2]	300	37	60	30	108	148	**160**	18	85

[1] With screwed-on feet, dimension BA' is 41 mm.
[2] With screwed-on feet, dimension BA' is 51 mm.
[3] With screwed-on feet, dimension BB is 180 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] With screwed-on feet, dimension BA is 41 mm.
[6] With screwed-on feet, dimension BA is 51 mm.

Dimensional drawings

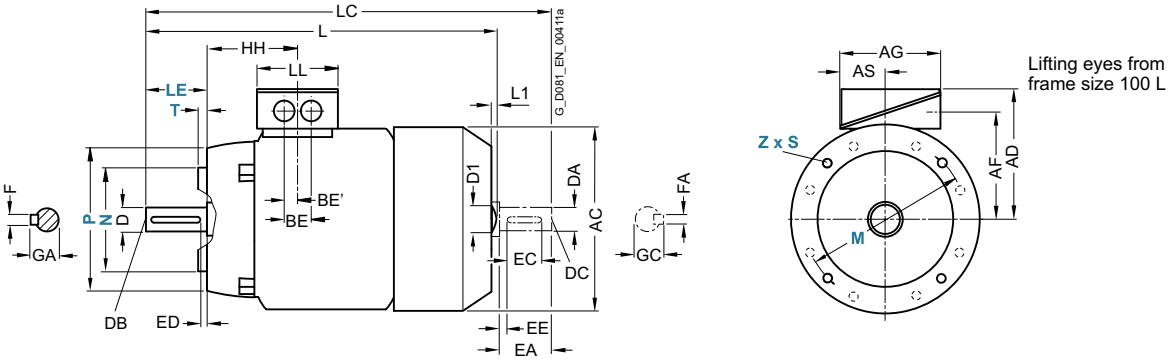
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE15.1, 1LE16.1 1LE1502	No. of poles	HH	K	K'	**L**[1]	L1[2]	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
71 M	1LE15.1	2, 4, 6	64.5	7.5	7.5	**240**	–	–	278	102	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
80 M	1LE15.1	2, 4, 6	71.5	10	10	**292**	–	–	342.5	102	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S	1LE15.1	2, 4, 6	79.5	10	10	**347**	–	–	405	102	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
90 L	1LE15.1	2, 4, 6	79.5	10	10	**347**	–	–	405	102	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21.5
100 L	All	2, 4, 6, 8	100.5	12	16	**397.5**	7	32	454	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	All	2, 4, 6 8	100.5	12	16	**390.5** **415.5**	7	32	450 475	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4, 6, 8	115.5	12	16	**466.5**	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	All	2, 4, 6, 8	115.5	12	16	**466.5**	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	All	2, 4, 6, 8	145	14.5	18	**606**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	145	14.5	18	**606**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

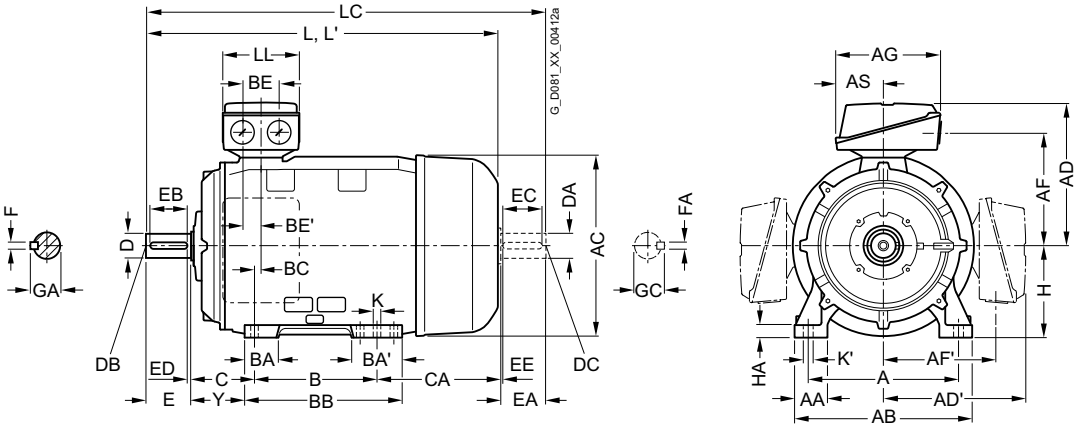
[1] For 1LE16 motors less dimension L1.

[2] Only for 1LE15 motors.

2

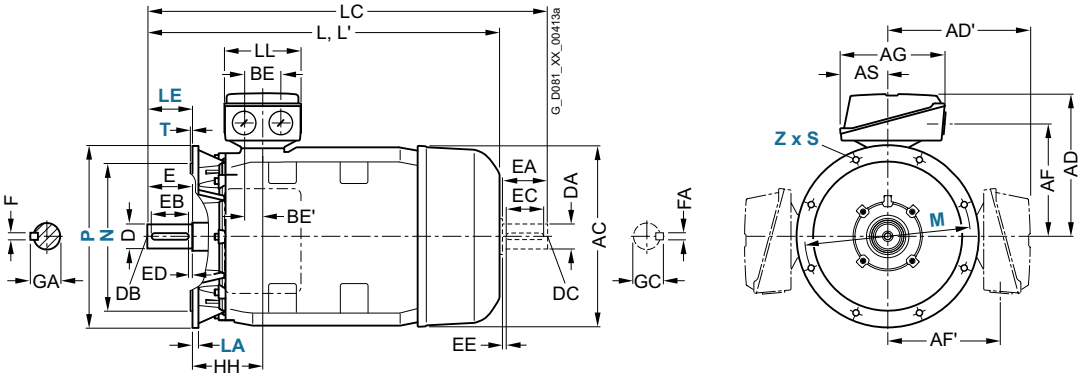
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



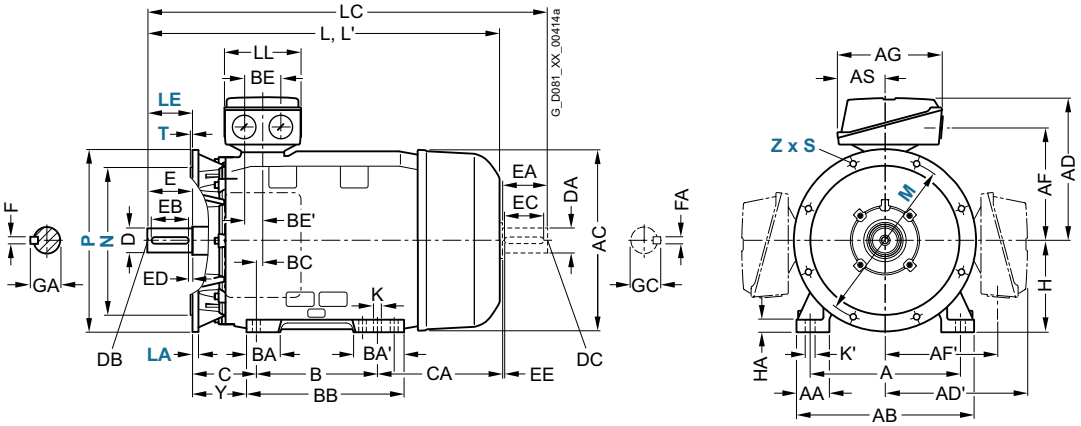
For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1501-, 1LE1521-, 1LE1541-1LE1601-1LE1502-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
180 M/ 180 L	1EB2[1],1EA2, 1EB2, 1EC4	2, 4, 6	279	65	**339**	356	**286**	286	234	234	189	91	241	85	120	328	34	60	30	121	202
	1EB4, 1EA6, 1EB6, 1EC6	2, 4, 6											279								
200 L	2AA4,2AA5, 2AB5, 2AC4,2AC5, 2AD5	2, 4, 6, 8	318	70	**378**	396	**315**	315	258.5	258.5	265	112	305	104	104	355	31	85	42.5	133	177
	2AA6, 2AB6, 2AC6, 2AD6	2, 4, 6, 8																			
225 S/ 225 M	2BB0, 2BD0,	4, 8	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
	2BB2, 2BC2, 2BD2, 2BB6, 2BC6, 2BD6	4, 6, 8											286[1]								
	2BA2, 2BA6	2											286[1]								
250 M	2CA2, 2CA6	2	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	230
	2CB2, 2CC2, 2CD2, 2CC6, 2CD6,	4, 6, 8																			
	2CB6	4																			300

[1] Only applicable for 1LE1502.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor	Dimension designation acc. to **IEC**									DE shaft extension							NDE shaft extension							
Motor type 1LE1501-, 1LE1521-, 1LE1541-1LE1601-1LE1502-	**H**	HA	Y	HH	K	K'	**L**	LC[1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
1EB2[2],1EA2, 1EB2, 1EC4	**180**	20	95	155	15	19	**668**	784	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
1EB4, 1EA6, 1EB6, 1EC6							**698**	814															
2AA4,2AA5, 2AB5, 2AC4,2AC5, 2AD5	**200**	25	108	164	19	25	**721**	835	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
2AA6, 2AB6, 2AC6, 2AD6							**746**	860															
2BB0, 2BD0	**225**	34	124	164	19	25	**788**	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BB2, 2BC2, 2BD2, 2BB6, 2BC6, 2BD6							**848**	963															
2BA2, 2BA6							**818**	933		55		110	100	5	16	59	48	M16				14	51.5
2CA2, 2CA6	**250**	40	138	192	24	30	**887**	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CB2, 2CC2, 2CD2, 2CC6, 2CD6								1032		65						69	60		140	125	10	18	64
2CB6							**957**	1072															

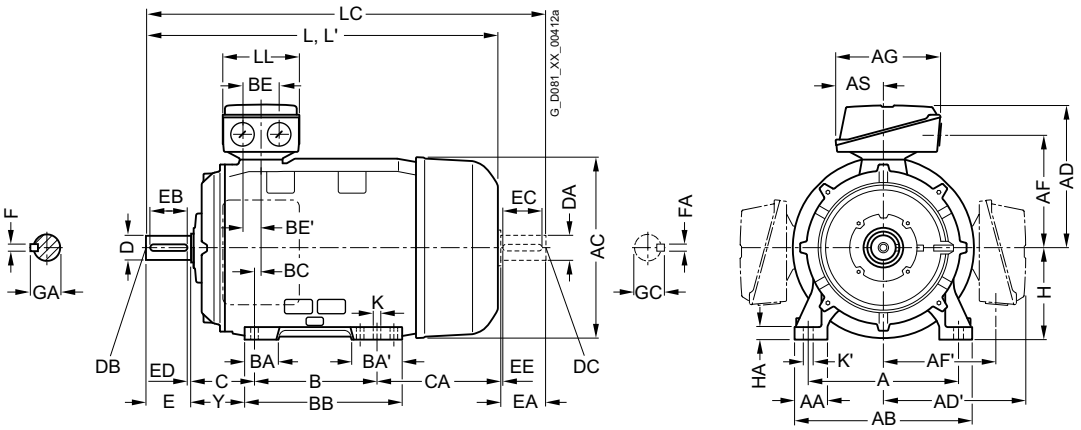
[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

[2] Only applicable for 1LE1502.

2

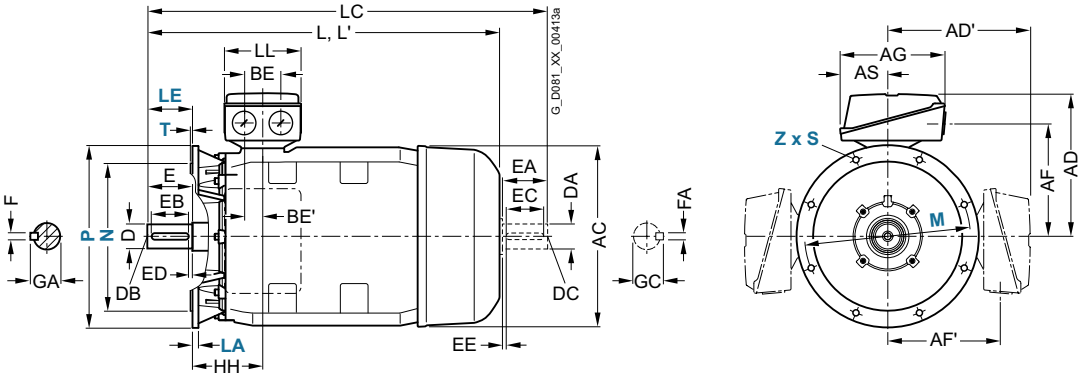
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1501-, 1LE1521-, 1LE1541- 1LE1601- 1LE1502-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
280 S	2DA0	2	457	100	**540**	551	**433**	433	345	345	319	145	368	101	152	479	20	110	55	190	267
	2DB0, 2DC0, 2DD0	4, 6, 8																			267
280 M	2DA6	2											419								326
	2DA2																				216
	2DB2, 2DC2, 2DD2, 2DC6, 2DD6	4, 6, 8																			
	2DB6	4																			326
315 S	3AA0, 3AA2[2]	2	508	120	**610**	616	**515**	515	404	404	374	164	406	113	170	527	22	110	55	216	295
	3AB0, 3AC0, 3AD0	4, 6, 8																			
315 M	3AA2[1], 3AA5[2]	2											457			578					409
	3AB2[1]	4																			
	3AC2, 3AD2	6, 8																			
315 L[1]	3AA4	2											508			578					358
	3AB4, 3AC4, 3AD4, 3AC5, 3AD5, 3AD6	4, 6, 8																			
	3AA5, 3AA6	2											508	176	227	648					
	3AB5, 3AC6	4, 6																			

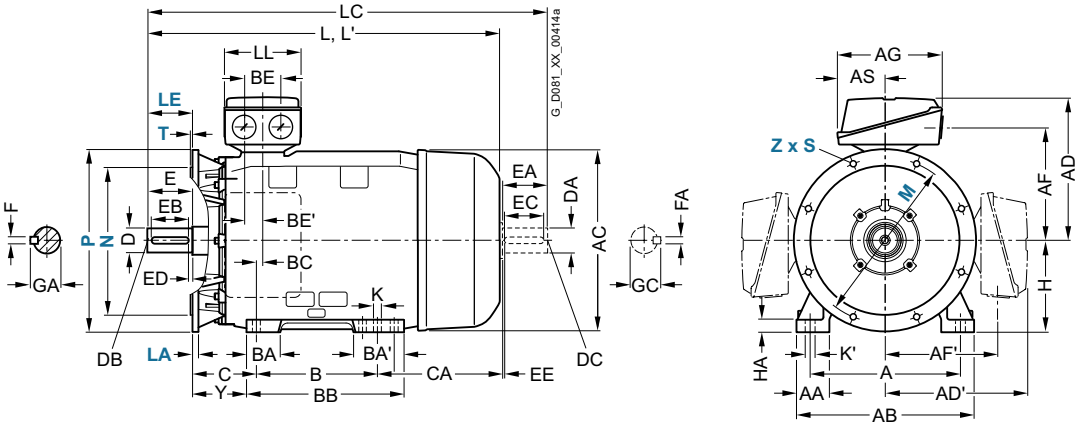
[1] For orders with screwed-on feet (order code **H01**), these screwed-on feet have 3 drilled holes on the NDE side with the dimension B 406 mm, 457 mm, and 508 mm respectively; the dimension BB is 666 mm.

[2] Only applicable for 1LE1502.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



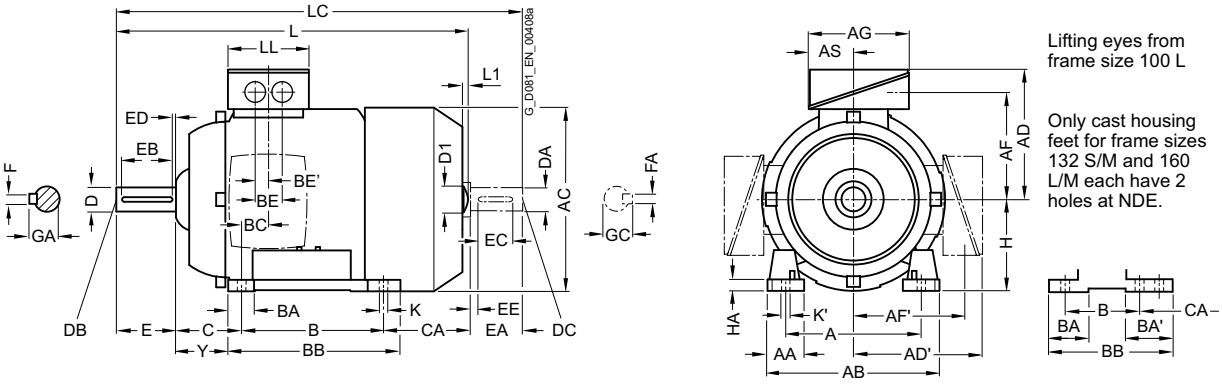
For motor	Dimension designation acc. to **IEC**									DE shaft extension							NDE shaft extension						
Motor type 1LE1501-, 1LE1521-, 1LE1541-1LE1601-1LE1502-	**H**	HA	Y	HH	K	K'	**L**	LC[1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
2DA0	**280**	40	160	210	24	30	**960**	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0, 2DC0, 2DD0										75					20	79.5	65						69
2DA6							**1070**	1215		65					18	69	60						64
2DA2							**960**	1105															
2DB2, 2DC2, 2DD2, 2DC6, 2DD6										75					20	79.5	65						69
2DB6							**1070**	1215															
3AA0, 3AA2[2]	**315**	50	181	238	28	35	**1052**	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0, 3AC0, 3AD0							**1082**	1227		80		170	140	25	22	85	70					20	74.5
3AA2, 3AA5[2]							**1217**	1362		65		140	125	10	18	69	60					18	64
3AB2							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AC2, 3AD2							**1082**	1227															
3AA4							**1217**	1362		65		140	125	10	18	69	60					18	64
3AB4, 3AC4, 3AD4, 3AC5, 3AD5, 3AD6							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AA5, 3AA6			146				**1372**	1517		65		140	125	10	18	69	60					18	64
3AB5, 3AC6							**1402**	1547		80		170	140	25	22	85	70					20	74.5

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

[2] Only applicable for 1LE1502.

Dimensional drawings

Type of construction IM B3

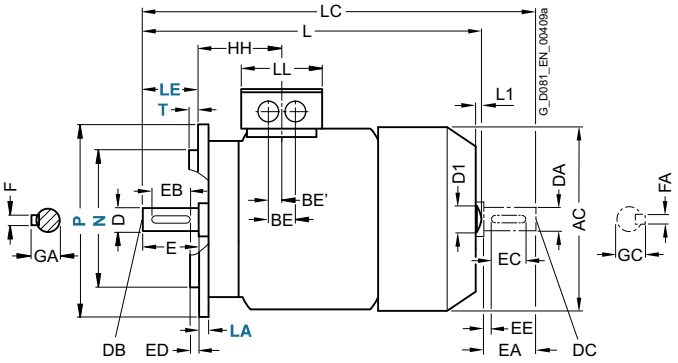


Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Lifting eyes from frame size 100 L

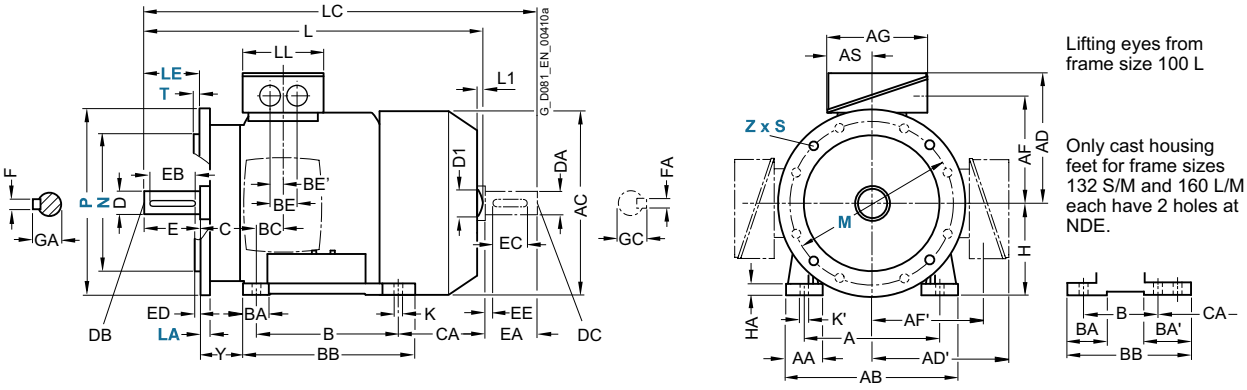
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE15.3- 1LE16.3-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
71 M	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	112	30.5	**132**	145	**149**	149	112	112	126	62	90	32	32	106	21	36	18	45	83	**71**	7	37
80 M	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	125	30.5	**150**	162	**159**	159	122	122	126	62	100	32	32	118	22.5	36	18	50	112.5	**80**	8	41
90 S	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	140	30.5	**165**	180	**164**	164	127	127	126	62	100	33	54	143	24.5	36	18	56	159	**90**	11	47
90 L	1LE15.3	2, 4, 6	140	30.5	**165**	180	**164**	164	127	127	126	62	125	33	54	143	24.5	36	18	56	134	**90**	11	47
100 L	1AA4, 1AB4, 1AB5 1AC4	2, 4 6	160	42	**196**	217	**193**	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	141	**100**	12	45
112 M	All	2, 4, 6	190	46	**226**	239	**195**	195	150	150	163	80.5	140	48	48	176	30	48	24	70	130	**112**	12	52
132 S	1CA0, 1CC0, 1CD0	2, 6, 8	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	140	52[5]	89[1]	218[2]	26.5	48	24	89	166.5	**132**	15	69
	1CA1, 1CB0	2, 4													–						178.5			
132 M	1CC2	6	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	178	52[5]	89[1]	218	26.5	48	24	89	128.5	**132**	15	69
	1CB2, 1CC3, 1CD2	4, 6, 8													–						178.5			
	1CB6	4																						
160 M	All	2, 4, 6, 8	254	60	**300**	333.5	**261**	261	213	213	190	92	210	73[6]	117[3]	300[4]	37	60	30	108	192	**160**	18	85
160 L	All	2, 4, 6, 8	254	60	**300**	333.5	**261**	261	213	213	190	92	254	73[6]	117[3]	300	37	60	30	108	148	**160**	18	85

[1] With screwed-on feet, dimension BA' is 41 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 51 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] With screwed-on feet, dimension BA is 41 mm.
[6] With screwed-on feet, dimension BA is 51 mm.

Dimensional drawings

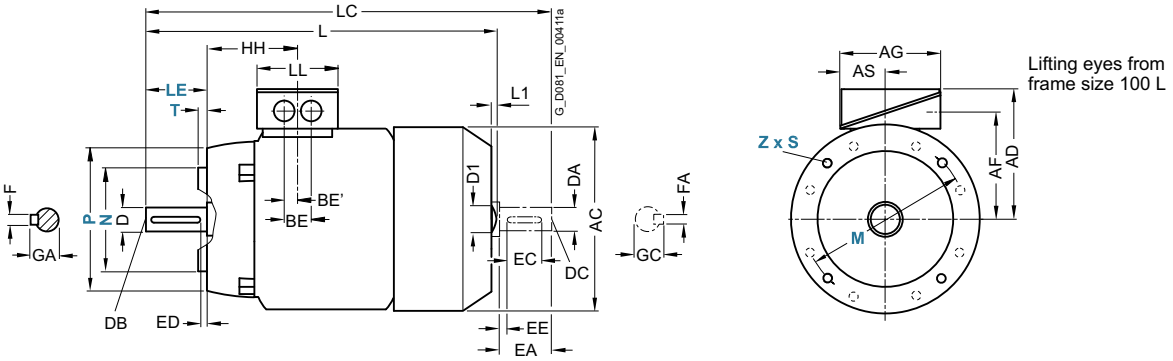
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE15.3- 1LE16.3-	No. of poles	HH	K	K'	**L**[1]	L1[2]	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
71 M	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	64.5	7.5	7.5	**240** **280**	–	–	278 318	102	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
80 M	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	71.5	10	10	**292** **327**	–	–	343 378	102	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
90 S	1LE15.3- 0..0, 0..2 0..3	2, 4, 6	79.5	10	10	**347**	–	–	405	102	24	M8	50	40	5	8	27	19	M6	40	27	4	6	21.5
90 L	1LE15.3	2, 4, 6	79.5	10	10	**387**	–	–	445	102	24	M8	50	40	5	8	27	19	M6	40	27	4	6	21.5
100 L	1AA4, 1AB4, 1AB5	2, 4	100.5	12	16	**432.5**	7	32	489	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1AC4	6				**397**			342.5															
112 M	All	2, 4, 6	100.5	12	16	**415.5**	7	32	475	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0, 1CC0, 1CD0	2, 6, 8	115.5	12	16	**466.5**	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CA1, 1CB0	2, 4				**516.5**			585.5															
132 M	1CC2	6	115.5	12	16	**466.5**	8.5	39	535.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
	1CB2, 1CC3, 1CD2	4, 6, 8				**516.5**			585.5															
	1CB6	4				**567.5**	–		630.5															
160 M	All	2, 4, 6, 8	145	14.5	18	**606**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	All	2, 4, 6, 8	145	14.5	18	**666**	10	45	790	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

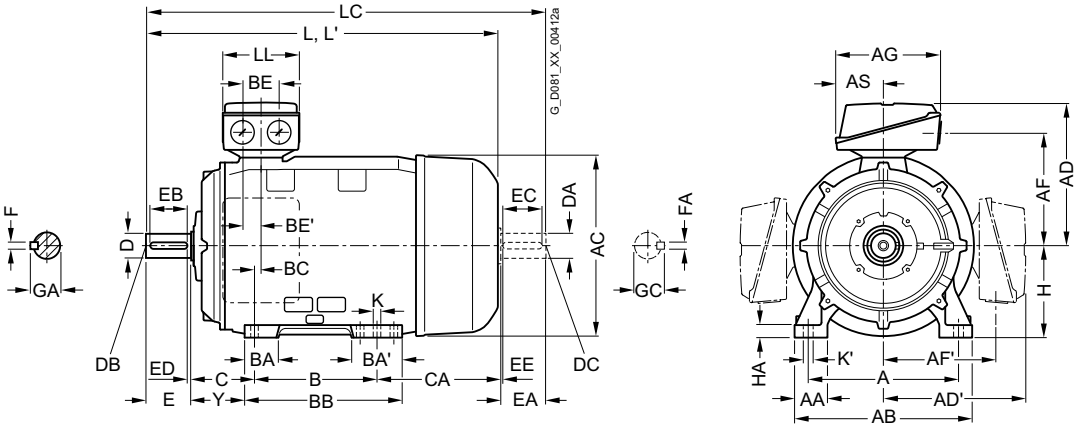
[1] For 1LE16 motors less dimension L1.

[2] Only for 1LE15 motors.

2

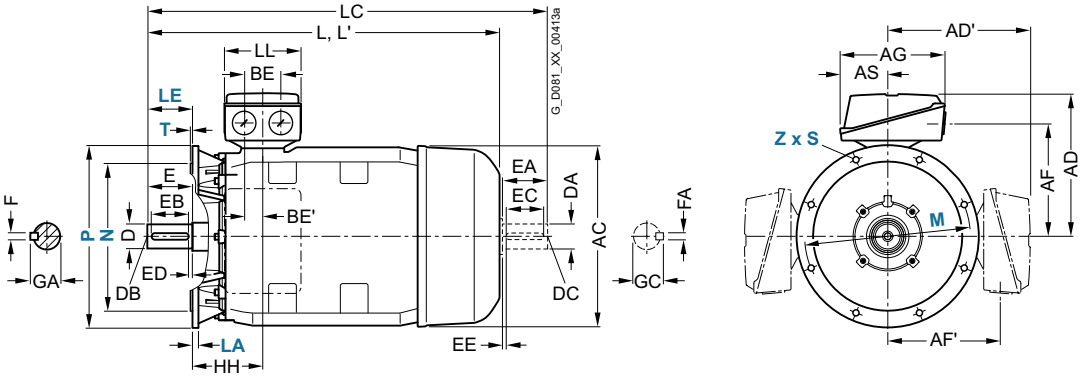
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



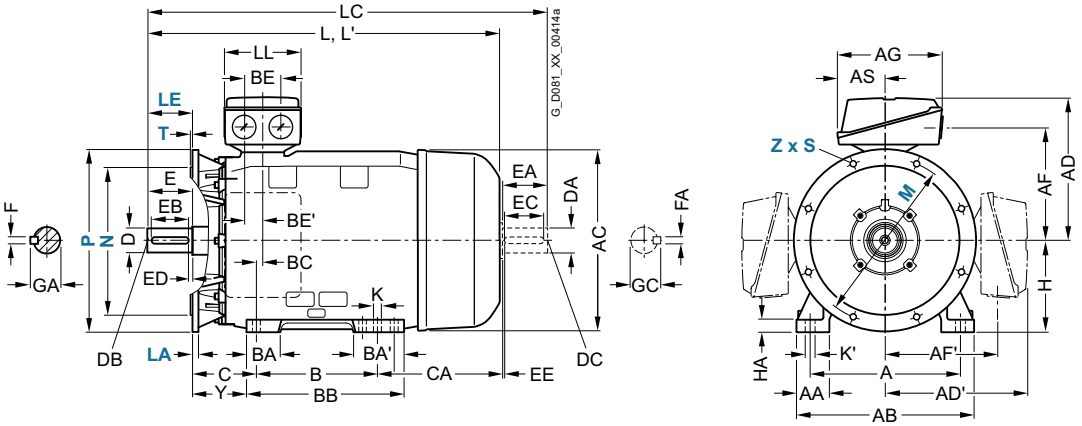
For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1503-, 1LE1523-, 1LE1543- 1LE1603-, 1LE1623-, 1LE1643-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
180 M/ 180 L	1EB2, 1EC4 1EA2, 1EB4, 1ED4	4, 6 2, 4, 8	279	65	**339**	356	**286**	286	234	234	190	92	241	85	120	328	34	60	30	121	202
200 L	2AA4, 2AC4 2AA5, 2AB5,2AC5, 2AD5	2, 6 2, 4, 6, 8	318	70	**378**	396	**315**	315	259	259	266	112	305	104	104	355	31	85	42.5	133	177
225 S	2BB0, 2BD0	4, 8	356	80	**436**	449	**338**	338	282	282	266	112	286	92	117	361	15	85	42.5	149	218
225 M	2BA2 2BB2, 2BC2, 2BD2	2 4, 6, 8	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
250 M	2CA2 2CB2, 2CC2, 2CD2	2 4, 6, 8	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	230
280 S	2DA0 2DB0, 2DC0, 2DD0	2 4, 6, 8	457	100	**540**	551	**433**	433	345	345	319	145	368	101	152	479	20	110	55	190	267
280 M	2DC2, 2DD2 2DA2 2DB2	6, 8 2 4	457	100	**540**	551	**433**	433	345	345	319	145	419	101	152	479	20	110	55	190	267
315 S	3AA0 3AB0, 3AC0, 3AD0	2 4, 6, 8	508	120	**610**	616	**515**	515	404	404	374	164	406	113	170	527	22	110	55	216	295
315 M[1)]	3AA2 3AB2, 3AC2, 3AD2	2 4, 6, 8	508	120	**610**	616	**515**	515	404	404	374	164	457	113	170	578	22	110	55	216	409
315 L[1)]	3AA4 3AB4, 3AC4, 3AD4 3AA5 3AB5, 3AC5, 3AC6, 3AD5, 3AD6	2 4, 6, 8 2 4, 6, 8	508	120	**610**	616	**515**	515	404	404	374	164	508	113 176	170 227	578 648	22	110	55	216	358 513

[1)] With terminal box position right, terminal box left, and with order code **H01** only screwed-on feet with 3 drilled holes with dimension "B" (406, 457, and 508 mm). The dimension "BB" will then be 666 mm.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)

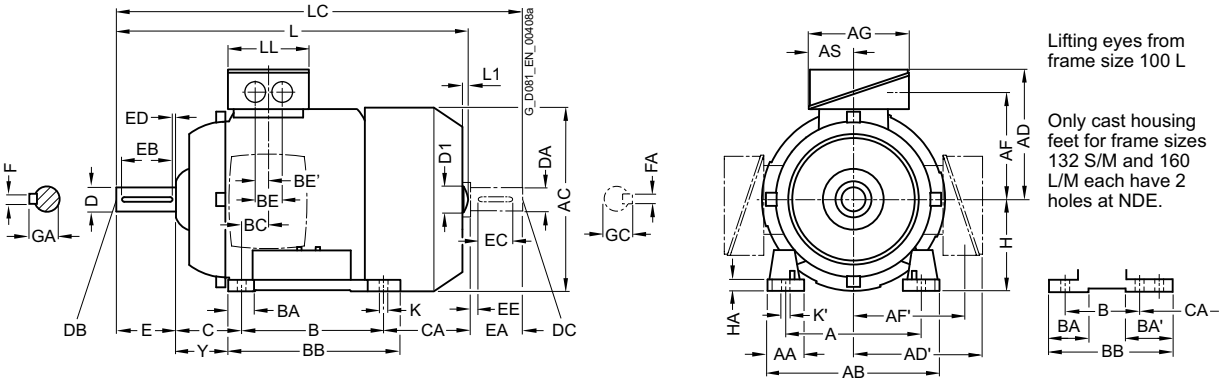


For motor	Dimension designation acc. to **IEC**									DE shaft extension							NDE shaft extension						
Motor type 1LE1503-, 1LE1523-, 1LE1543- 1LE1603-, 1LE1623-, 1LE1643-	**H**	HA	Y	HH	K	K'	**L**	LC[1)]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
1EB2, 1EC4	**180**	20	95	155	15	19	**668**	784	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
1EA2, 1EB4, 1ED4							**698**	814															
2AA4, 2AC4	**200**	25	108	164	19	25	**721**	835	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
2AA5, 2AB5,2AC5, 2AD5							**746**	860															
2BB0, 2BD0	**225**	34	124	164	19	25	**788**	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BA2							**818**	933	197	55		110	100	5	16	59	48	M16				14	51.5
2BB2, 2BC2, 2BD2							**848**	963		60		140	125	10	18	64	55	M20				16	59
2CA2	**250**	40	138	192	24	30	**887**	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CB2, 2CC2, 2CD2								1032		65						69	60		140	125	10	18	64
2DA0	**280**	40	160	210	24	30	**960**	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0, 2DC0, 2DD0										75					20	79.5	65						69
2DC2, 2DD2							**960**	1105	233	75		140	125	10	20	79.5	65				10	18	69
2DA2							**1070**	1215		65					18	69	60						64
2DB2										75					20	79.5	65						69
3AA0	**315**	50	181	238	28	35	**1052**	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0, 3AC0, 3AD0							**1082**	1227		80		170	140	25	22	85	70					20	74.5
3AA2							**1217**	1362	299	65		140	125	10	18	69	60				10	18	64
3AB2, 3AC2, 3AD2							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AA4							**1217**	1362	299	65		140	125	10	18	69	60				10	18	64
3AB4, 3AC4, 3AD4							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AA5			146				**1372**	1517		65		140	125	10	18	69	60					18	64
3AB5, 3AC5, 3AC6, 3AD5, 3AD6							**1402**	1547		80		170	140	25	22	85	70					20	74.5

[1)] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

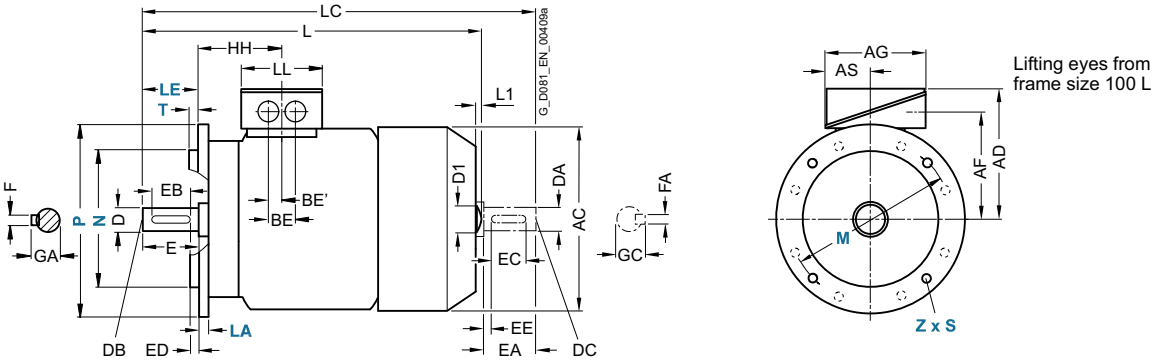
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



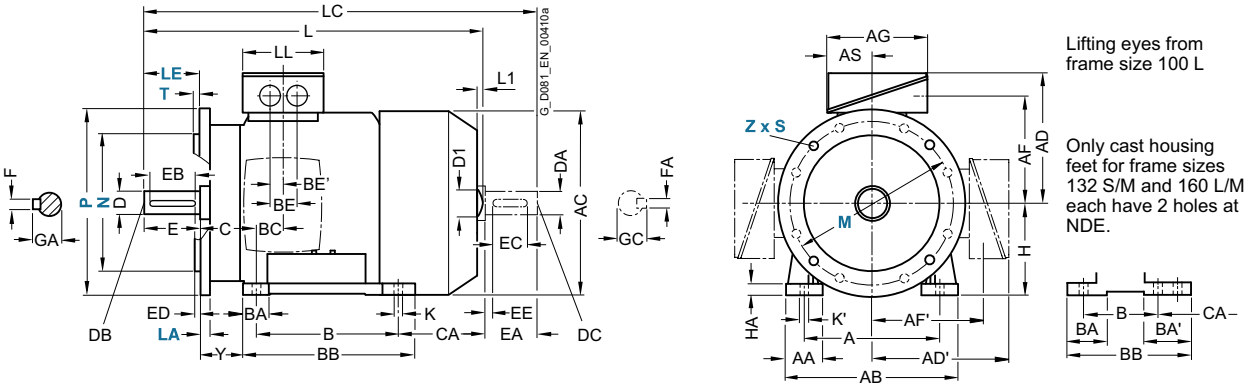
For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE1583-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4, 1AB4, 1AB5	2, 4	160	42	**196**	217	**193**	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	141 181	**100**	12	45
112 M	1BA2, 1BB2	2 4	190	46	**226**	239	**195**	195	150	150	163	80.5	140	48	48	176	30	48	24	70	130 175	**112**	12	52
132 S	1CA0, 1CA1 1CB0	2, 4	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	140	52[5]	89[1]	218[2]	26.5	48	24	89	178.5	**132**	15	69
132 M	1CB2		216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	178	52[5]	89[1]	218	26.5	48	24	89	128.5	**132**	15	69
160 M	1DA2, 1DA3 1DB2	2, 4	254	60	**300**	333.5	**261**	261	213	213	190	92	210	73[6]	117[3]	300[4]	37	60	30	108	192	**160**	18	85
160 L	1DA4, 1DB4	2, 4	254	60	**300**	333.5	**261**	261	213	213	190	92	254	73[6]	117[3]	300	37	60	30	108	208	**160**	18	85
180 M/ 180 L	1EB2, 1EC4 1EA2, 1EB4	4, 6 2, 4	279	65	**339**	356	**286**	286	234	234	190	92	241	85	120	328	34	60	30	121	164 194	**180**	20	95
200 L	2AA4, 2AC4, 2AA5, 2AB5, 2AC5	2, 6 2, 4, 6	318	70	**378**	396	**315**	315	259	259	266	112	305	104	104	355	31	85	42.5	133	177 202	**200**	25	108

[1] With screwed-on feet, dimension BA' is 41 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA' is 51 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] With screwed-on feet, dimension BA is 41 mm.
[6] With screwed-on feet, dimension BA is 51 mm.

Dimensional drawings

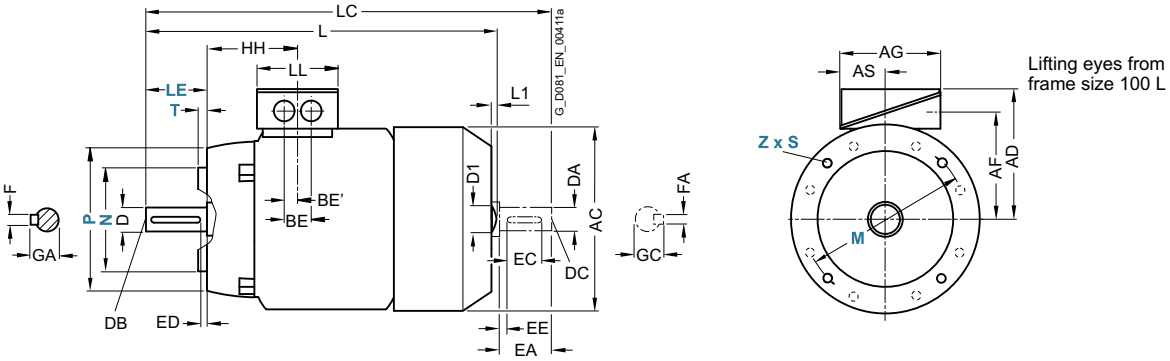
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



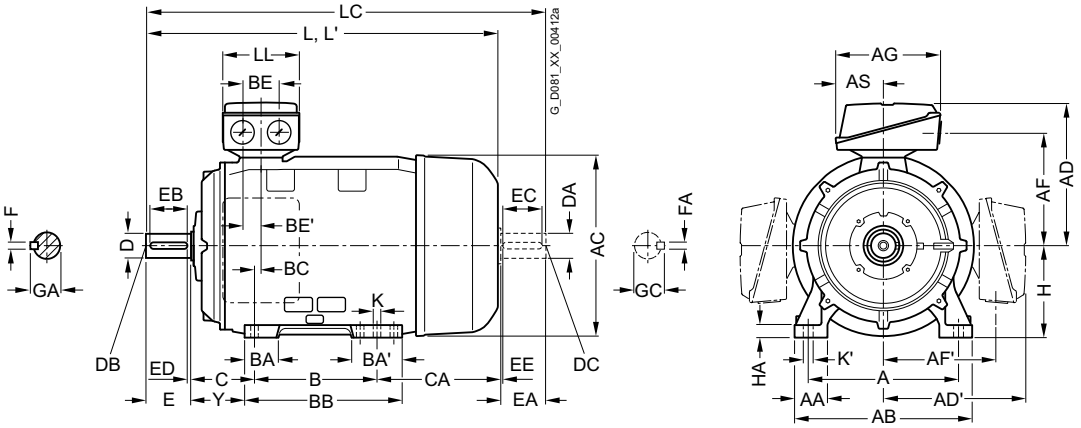
For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1583	No. of poles	HH	K	K'	**L**	L1 [1]	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4, 1AB4, 1AB5	2 4	100.5	12	16	**432.5** **472.5**	7	32	489 529	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2, 1BB2	2 4	100.5	12	16	**415.5** **450.5**	7	32	475 520	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0, 1CA1, 1CB0	2, 4	115.5	12	16	**516.5**	8.5	39	585.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	1CB2	4	115.5	12	16	**516.5**	8.5	39	585.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	1DA2, 1DA3, 1DB2	2, 4	145	14.5	18	**606**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4, 1DB4	2, 4	145	14.5	18	**666**	10	45	790	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
180 M/ 180 L	180 M/ 180 L	4, 6 2, 4	155	15	19	**668** **698**	–	–	784 814	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
200 L	2A4, 2AC4, 2AA5, 2AB5, 2AC5	2, 6 2, 4, 6	164	19	25	**721** **746**	–	–	835 860	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

2

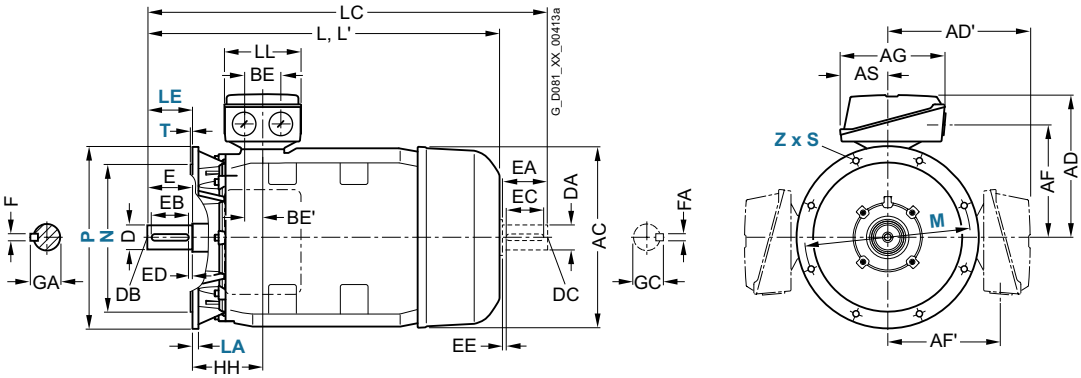
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



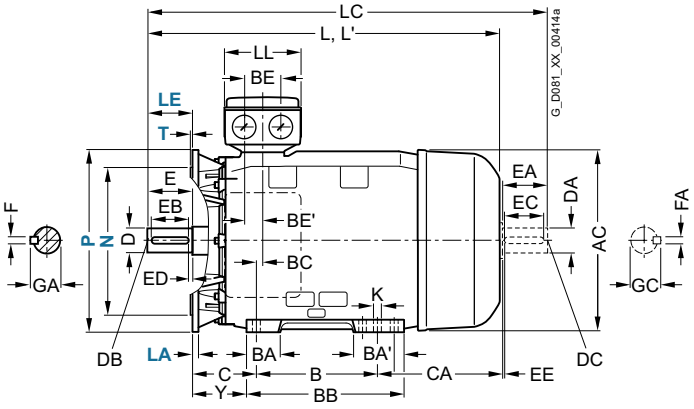
For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1583-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA
225 S	2BB0	4	356	80	**436**	449	**338**	338	282	282	266	112	286	92	117	361	15	85	42.5	149	278
	2BD0	8													118						218
225 M	2BB2, 2BC2	4, 6	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	333
	2BA2	2																			253
	2BD2	8													118						193
250 M	2CA2, 2CD2	2, 8	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	235
	2CB2, 2CC2	4, 6																			305
280 S	2DA0, 2DB0	2, 4	457	100	**540**	551	**433**	433	345	345	319	145	368	101	152	479	20	110	55	190	377
	2DC0, 2DD0	6, 8																			267
280 M	2DA2, 2DB2, 2DC2	2, 4, 6	457	100	**540**	551	**433**	433	345	345	319	145	419	101	152	479	20	110	55	190	326
	2DD2	8																			216
315 S	3AA0, 3AD0	2, 8	508	120	**610**	616	**515**	515	404	404	374	164	406	113	170	527	22	110	55	216	295
	3AC0	6											457			578					409
315 M	3AA2[1], 3AB0, 3AB2[1]	2, 4	508	120	**610**	616	**515**	515	404	404	374	164	457	113	170	578	22	110	55	216	409
	3AD2[1]	8														527					244
315 L[1]	3AA4, 3AB4, 3AC2, 3AD4, 3AD5, 3AD6	2, 4, 6, 8	508	120	**610**	616	**515**	515	404	404	374	164	508	113	170	578	22	110	55	216	358
	3AA5, 3AC4, 3AC5, 3AC6	2, 6												176	227	648					513
	3AB5	4																			

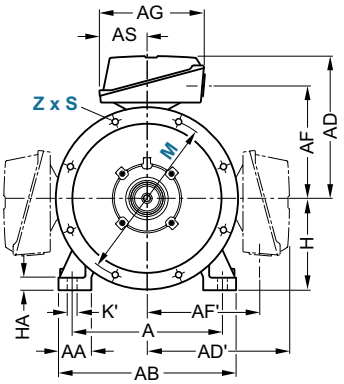
[1] With terminal box position right, terminal box left, and with order code **H01** only screwed-on feet with 3 drilled holes with dimension "B" (406, 457, and 508 mm). The dimension "BB" will then be 666 mm.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)





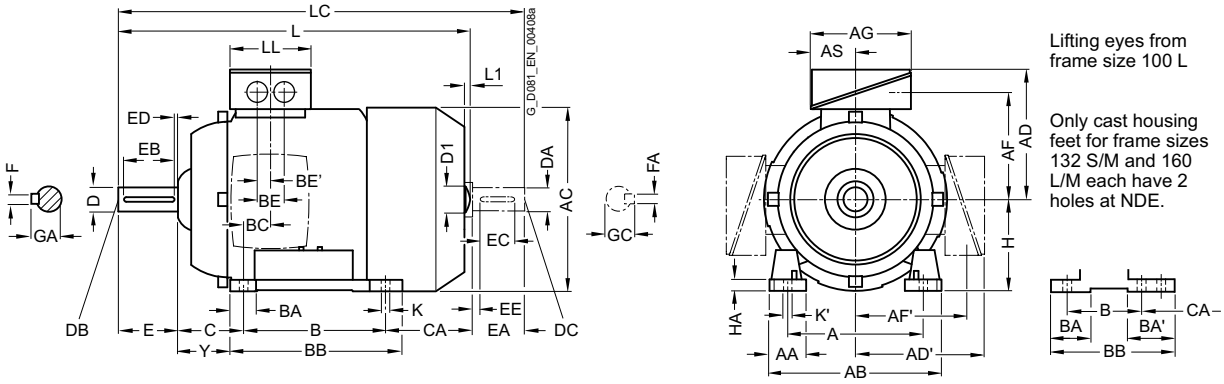
For motor	Dimension designation acc. to **IEC**									DE shaft extension							NDE shaft extension						
Motor type 1LE1583-	**H**	HA	Y	HH	K	K'	**L**	LC [1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
2BB0	**225**	34	124	164	19	25	**848**	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BD0							**788**																
2BB2, 2BC2	**225**	34	124	164	19	25	**928**	963	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BA2							**818**	933		55		110	100	5	16	59	48	M16				14	51.5
2BD2							**788**	903		60		140	125	10	18	64	55	M20				16	59
2CA2,	**250**	40	138	192	24	30	**887**	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CD2								1032		65						69	60		140	125	10	18	64
2CB2,							**957**	1032															
2CC2								1072								64							
2DA0,	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0										75					20	79.5	65						69
2DC0, 2DD0							**960**	1105															
2DA2, 2DB2,	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DC2										75					20	79.5	65						69
2DD2							**960**	1105															
3AA0,	**315**	50	181	238	28	35	**1052**	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AD0							**1082**	1227		80		170	140	25	22	85	70					20	74.5
3AC0							**1247**	1392															
3AA2,	**315**	50	181	238	28	35	**1217**	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0, 3AB2							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AD2							**1082**	1227															
3AA4,	**315**	50	181	238	28	35	**1217**	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB4, 3AC2, 3AD4, 3AD5, 3AD6							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AA5,			146				**1372**	1517		65		140	125	10	18	69	60					18	64
3AC4, 3AC5, 3AC6							**1402**	1547		80		170	140	25	22	85	70					20	74.5
3AB5					22																		

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

2

Dimensional drawings

Type of construction IM B3

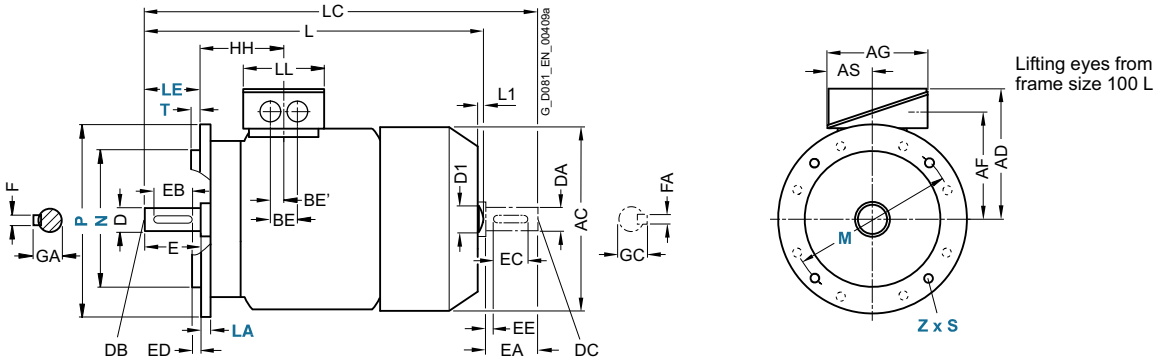


Lifting eyes from frame size 100 L

Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.

Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Lifting eyes from frame size 100 L

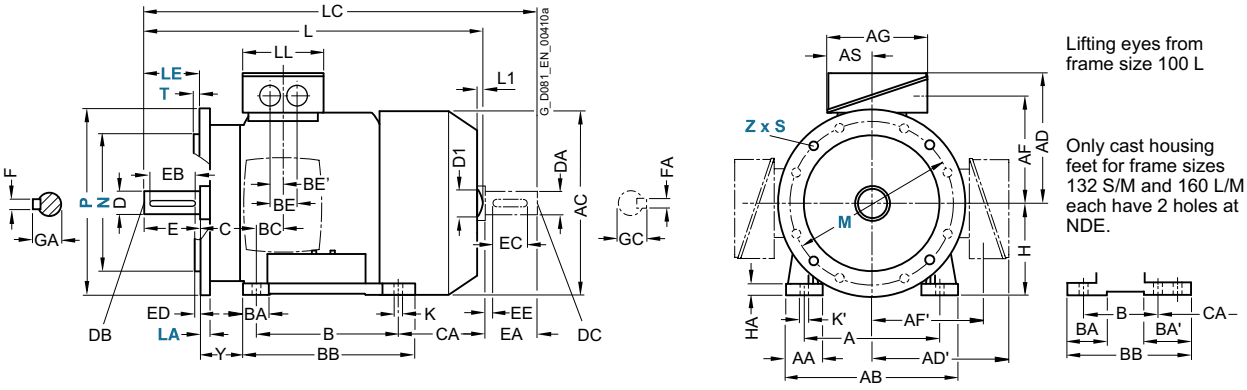
For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1504- 1LE1604-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B	BA	BA'	BB	BC	BE	BE'	C	CA	**H**	HA	Y
100 L	1AA4 1AB4 1AB5	2 4 4	160	42	**196**	217	**193**	193	147	147	163	80.5	140	48	48	176	37.5	48	24	63	176	**100**	12	45
112 M	1BA2 1BB2	2 4	190	46	**226**	239	**195**	195	150	150	163	80.5	140	48	48	176	30	48	24	70	155	**112**	12	52
132 S	1CA0 1CA1, 1CB0	2 2, 4	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	140	52[1]	89[5] –	218[2]	26.5	48	24	89	130 178.5	**132**	15	69
132 M	1CB2	4	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	178	52[1]	89[6]	218	26.5	48	24	89	178.5	**132**	15	69
160 M	1DA2 1DA3,1DB2	2 2, 4	254	60	**300**	333.5	**261**	261	213	213	190	92	210	73[3]	117[7]	300[4]	37	60	30	108	148	**160**	18	85
160 L	1DA4 1DB4	2 4	254	60	**300**	333.5	**261**	261	213	213	190	92	254	73[3]	117[8]	300	37	60	30	108	208	**160**	18	85

[1] With screwed-on feet, dimension BA is 41 mm.
[2] With screwed-on feet, dimension BB is 180 mm.
[3] With screwed-on feet, dimension BA is 51 mm.
[4] With screwed-on feet, dimension BB is 256 mm.
[5] With screwed-on feet, dimension BA' is 41 mm.
[6] With screwed-on feet, dimension BA' is 79 mm.
[7] With screwed-on feet, dimension BA' is 51 mm.
[8] With screwed-on feet, dimension BA' is 95 mm.

Dimensional drawings

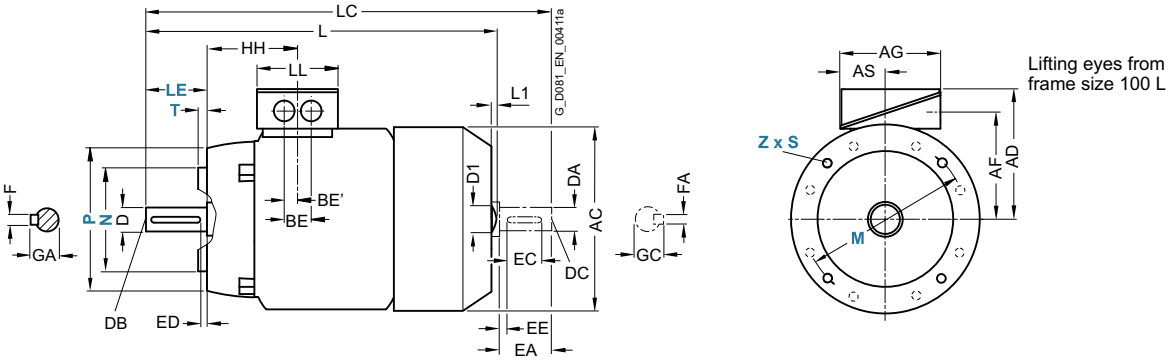
Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1504- 1LE1604-	No. of poles	HH	K	K'	**L**[1]	L1[2]	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4 1AB4 1AB5	2 4 4	100.5	12	16	**432.5** **482.5**	7 7	32	489 529	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2 1BB2	2 4	100.5	12	16	**415.5** **465.5**	7	32	475 515	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	1CA0 1CA1, 1CB0	2 2, 4	115.5	12	16	**466.5** **516.5**	8.5	39	535.5 585.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
132 M	1CB2	4	115.5	12	16	**516.5**	8.5	39	585.5	134	38	M12	80	70	5	10	41	28	M10	60	50	5	8	31
160 M	1DA2 1DA3, 1DB2	2 2, 4	145	15	19	**606** **666**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45
160 L	1DA4 1DB4	2 4	145	15	19	**666**	10	45	790	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

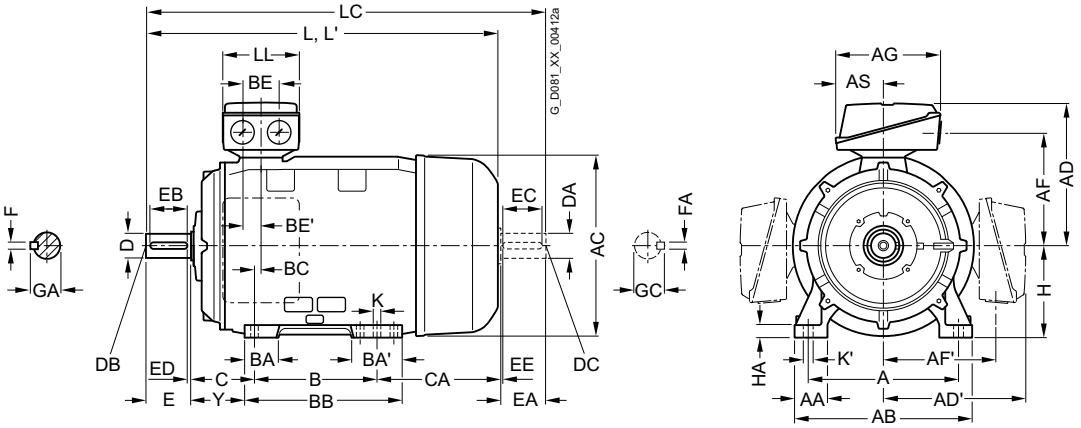
[1] For 1LE16 motors less dimension L1.

[2] Only for 1LE15 motors.

2

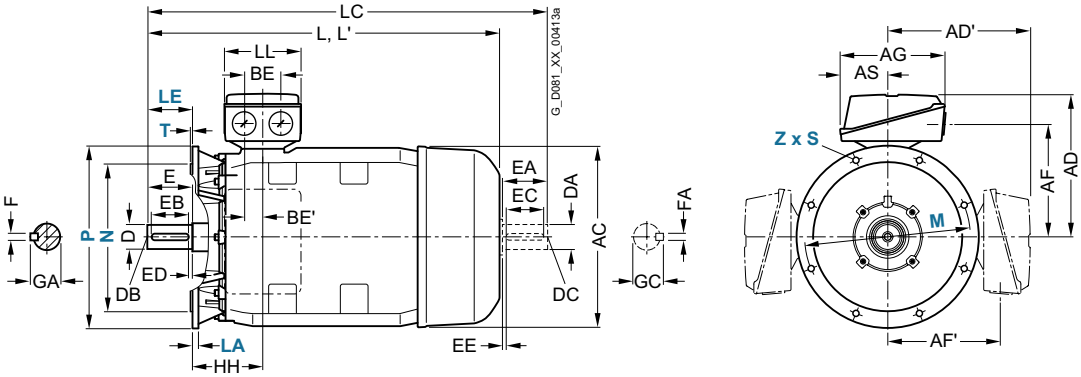
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1504- 1LE1604-	No. of poles	A	AA	**AB**	AC	**AD**	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*
180 M 180 M 180 L	1EA2 1EB2 1EB4	2 4 4	279	65	**339**	356	**286**	286	234	234	189	92	241/ 279	85	120	328	34	60	30	121	202
200 L	2AA4 2AA5, 2AB5	2 2, 4	318	70	**378**	396	**315**	315	258.5	258.5	265	112	305	104	104	355	31	85	42.5	133	177
225 S	2BB0	4	356	80	**436**	449	**338**	338	282	282	266	112	286	92	117	361	15	85	42.5	149	218
225 M	2BA2 2BB2	2 4	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
250 M	2CA2 2CB2	2 4	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	230
280 S	2DA0 2DB0	2 4	457	100	**540**	551	**433**	433	345	345	319	145	368	101	152	479	20	110	55	190	267
280 M	2DA2 2DB2	2 4	457	100	**540**	551	**433**	433	345	345	319	145	419	101	152	479	20	110	55	190	216 326
315 S	3AA0	2	508	120	**610**	616	**515**	515	404	404	374	164	406	113	170	527	22	110	55	216	295
315 M[2)]	3AB0	4	508	120	**610**	616	**515**	515	404	404	374	164	457	113	170	578	22	110	55	216	295
315 M[1)]	3AA2 3AB2	2 4																			409
315 L[1)]	3AA4 3AB4 3AA5 3AB5	2 4 2 4	508	120	**610**	616	**515**	515	404	404	374	164	508	113 176	170 227	578 648	22	110	55	216	358 513

* Please note that version 3AB0 does not comply with EN 50347 with respect to assignment of this dimension to the frame size.

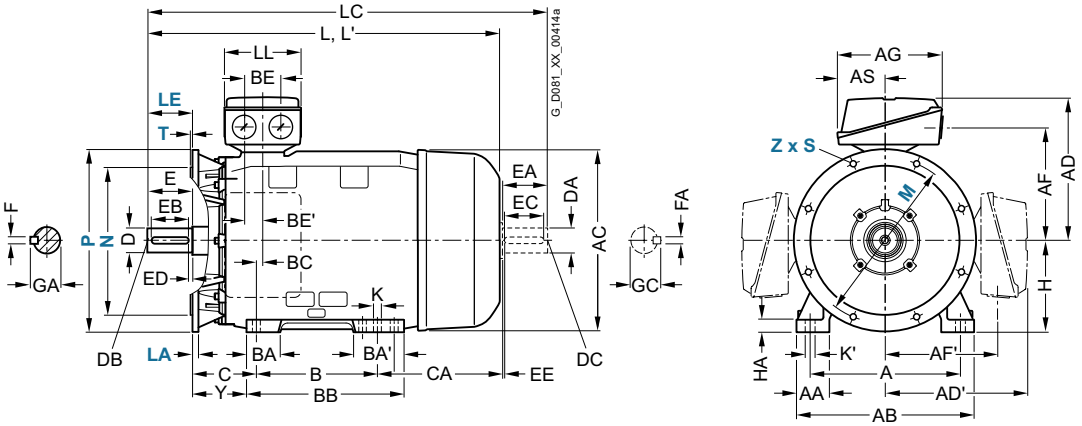
1) With terminal box position right, terminal box left, and with order code **H01** only screwed-on feet with 3 drilled holes with dimension "B" (406, 457, and 508 mm). The dimension "BB" will then be 666 mm.

2) 1LE1504-3AB0 and 1LE1604-3AB0 4-pole motors cannot be constructed in standard frame size 315 S because they require the longer housing of frame size 315 M in order to achieve the requisite efficiency levels. The foot clearance dimension "B" therefore changes from 406 to 457 mm. The motors comply with standard IEC 60034, but not with standard EN 50347 in this respect.

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



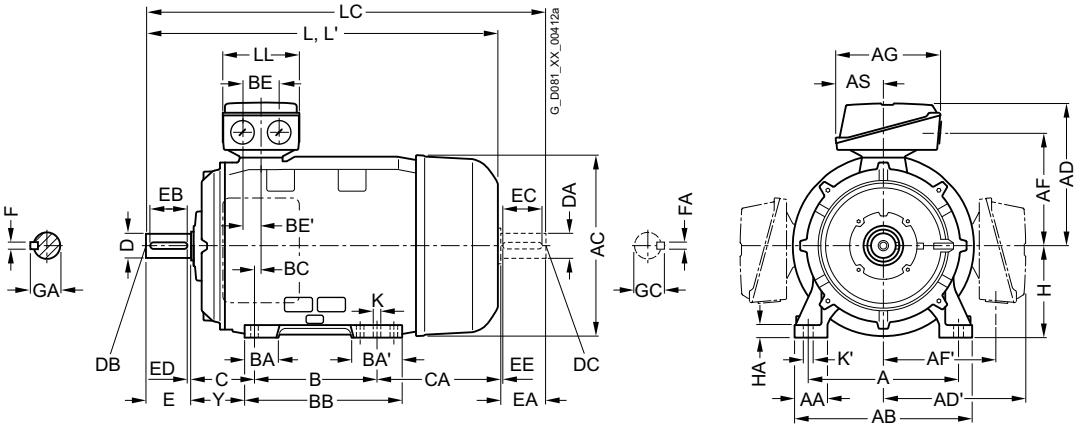
For motor		Dimension designation acc. to **IEC**									DE shaft extension							NDE shaft extension						
Motor type 1LE1504- 1LE1604-	No. of poles	**H**	HA	Y	HH	K	K'	**L**	LC[1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
1EA2	2	**180**	20	95	155	15	19	**698**	814	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
1EB2	4							**668**	784															
1EB4	4							**698**	814															
2AA4	2	**200**	25	108	164	19	25	**746**	860	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
2AA5, 2AB5	2, 4							**746**																
2BB0	4	**225**	34	124	164	19	25	**848**	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2BA2	2	**225**	34	124	164	19	25	**818**	933	197	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
2BB2	4							**928**	963		60		140	125	10	18	64	55	M20				16	59
2CA2	2	**250**	40	138	192	24	30	**887**	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
2CB2	4							**957**	1032		65						69	60		140	125	10	18	64
2DA0	2	**280**	40	160	210	24	30	**1070**	1105	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB0	4										75					20	79.5	65						69
2DA2	2	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB2	4										75					20	79.5	65						69
3AA0	2	**315**	50	181	238	28	35	**1052**	1197	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB0	4	**315**	50	181	238	28	35	**1247**	1392	299	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5
3AA2	2							**1217**	1362		65		140	125	10	18	69	60					18	64
3AB2	4							**1247**	1392		80		170	140	25	22	85	70					20	74.5
3AA4	2	**315**	50	181	238	28	35	**1217**	1362	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
3AB4	4							**1402**	1392		80		170	140	25	22	85	70					20	74.5
3AA5	2			146				**1372**	1517		65		140	125	10	18	69	60					18	64
3AB5	4							**1402**	1547		80		170	140	25	22	85	70					20	74.5

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

2

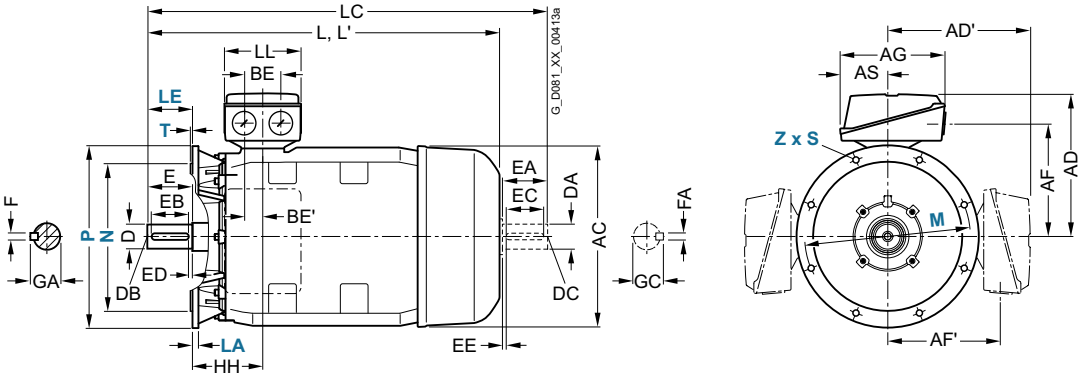
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)

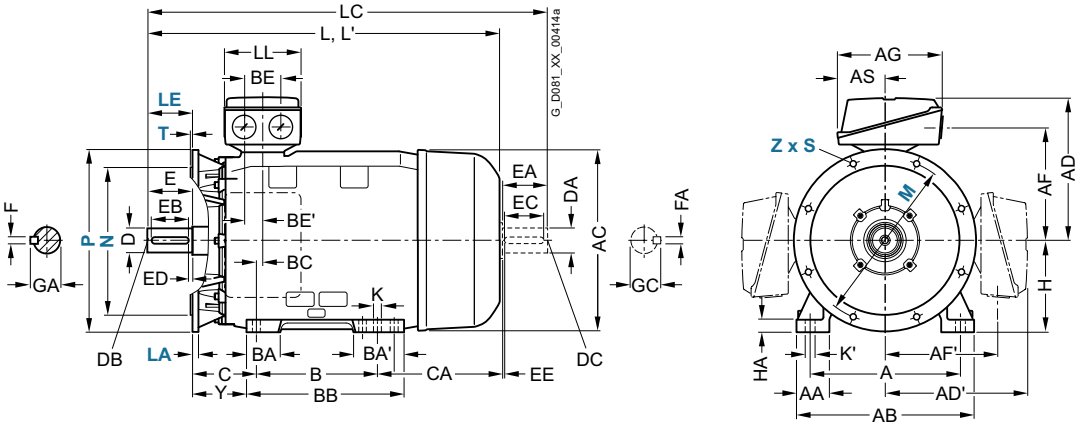


For motor			Dimension designation acc. to **IEC**																		
Frame size	Motor type 1LE1573-	No. of poles	A	AA	**AB**	AC	**AD**	AD´	AF	AF´	AG	AS	B	BA	BA´	BB	BC	BE	BE´	C	CA
180 M	1EB4	4	279	65	**339**	356	**286**	286	234	234	190	92	241	85	120	328	34	60	30	121	202
	1ED3	8																			
180 L	1EC6, 1ED4, 1ED6	6, 8	279	65	**339**	356	**286**	286	234	234	190	92	279	85	120	328	34	60	30	121	202
200 L	2AA5, 2AB5, 2AB6, 2AC5, 2AC6, 2AD6	2, 4, 6, 8	318	70	**378**	396	**315**	315	259	259	266	112	305	104	104	355	31	85	42.5	133	177
	2AA4	2																			
225 S	2BA2	2	356	80	**436**	449	**338**	338	282	282	266	112	286	92	115	361	15	85	42.5	149	278
	2BB2	4																			
225 M	2BD2	8	356	80	**436**	449	**338**	338	282	282	266	112	286	92	118	361	15	85	42.5	149	218
	2BA6	2											311		117						253
	2BB6, 2BC6	4, 6																			
	2BD6	8													115						
250 M	2CA6	2	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	305
	2CB6, 2CC6	4, 6																			
	2CD6, 2CD7	8																			235
280 S	2DA2	2	457	100	**540**	551	**433**	433	345	345	319	145	368	101	152	479	20	110	55	190	377
	2DB2	4																			
	2DC2	6																			267
	2DC6	6																			377
	2DD6	8																			267
280 M	2DA6	2	457	100	**540**	551	**433**	433	345	345	319	145	419	101	152	479	20	110	55	190	326
	2DB6	4																			
	2DC7, 2DD7	6, 8											368								377

Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



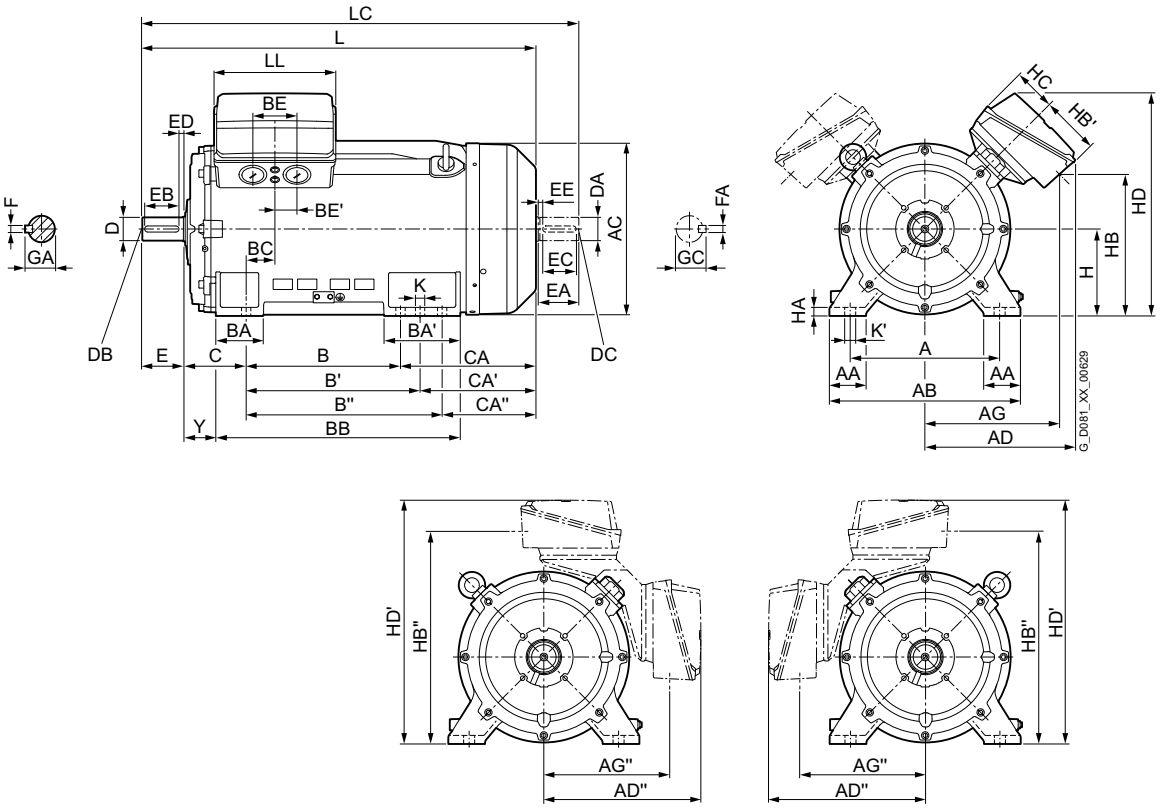
For motor			Dimension designation acc. to **IEC**								DE shaft extension								NDE shaft extension						
Frame size	Motor type 1LE1573-	No. of poles	**H**	HA	Y	HH	K	K´	**L**	LC[1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
180 M	1EB4	4	**180**	20	95	155	15	19	**698**	814	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
	1ED3	8							**668**	784															
180 L	1EC6, 1ED4, 1ED6	6, 8	**180**	20	95	155	15	19	**698**	814	164	48	M16	110	100	5	14	51.5	48	M16	110	100	5	14	51.5
200 L	2AA5, 2AB5, 2AB6, 2AC5, 2AC6, 2AD6	2, 4, 6, 8	**200**	25	108	164	19	25	**746**	860	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
	2AA4	2							**721**	835															
225 S	2BA2	2	**225**	34	124	164	19	25	**818**	933	197	55	M20	110	100	5	16	59	48	M16	110	100	5	14	51.5
	2BB2	4							**848**	963		60		140	125	10	18	64	55	M20				16	59
225 M	2BD2	8	**225**	34	124	164	19	25	**788**	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
	2BA6	2							**898**	933		55		110	100	5	16	59	48					14	51.5
	2BB6, 2BC6	4, 6							**928**	963		60		140	125	10	18	64	55					16	59
	2BD6	8							**848**																
250 M	2CA6	2	**250**	40	138	192	24	30	**957**	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
	2CB6, 2CC6	4, 6								1072		65						69	60		140	125	10	18	64
	2CD6, 2CD7	8							**887**	1032															
280 S	2DA2	2	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	2DB2	4															20	79.5	65						69
	2DC2	6							**960**	1105															
	2DC6	6							**1070**																
	2DD6	8							**960**						124										
280 M	2DA6	2	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	2DB6	4															20	79.5	65						69
	2DC7, 2DD7	6, 8								1105															

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

2

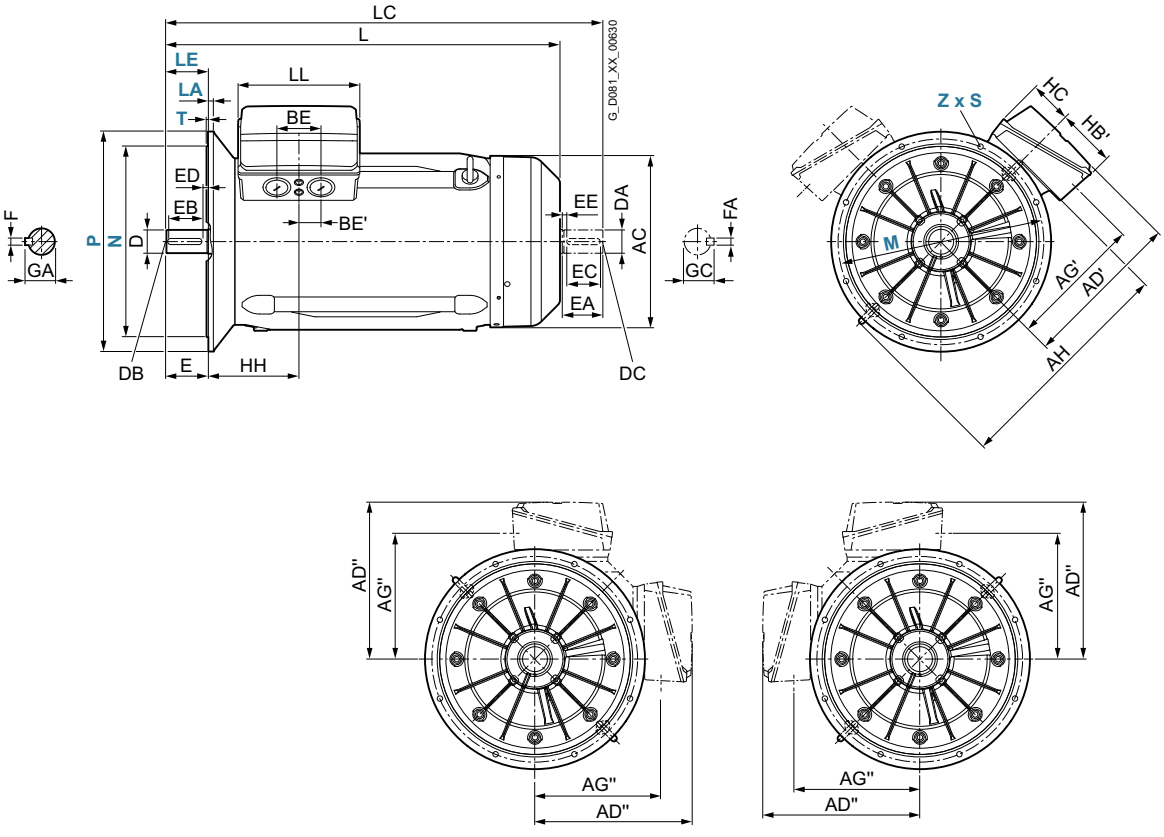
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

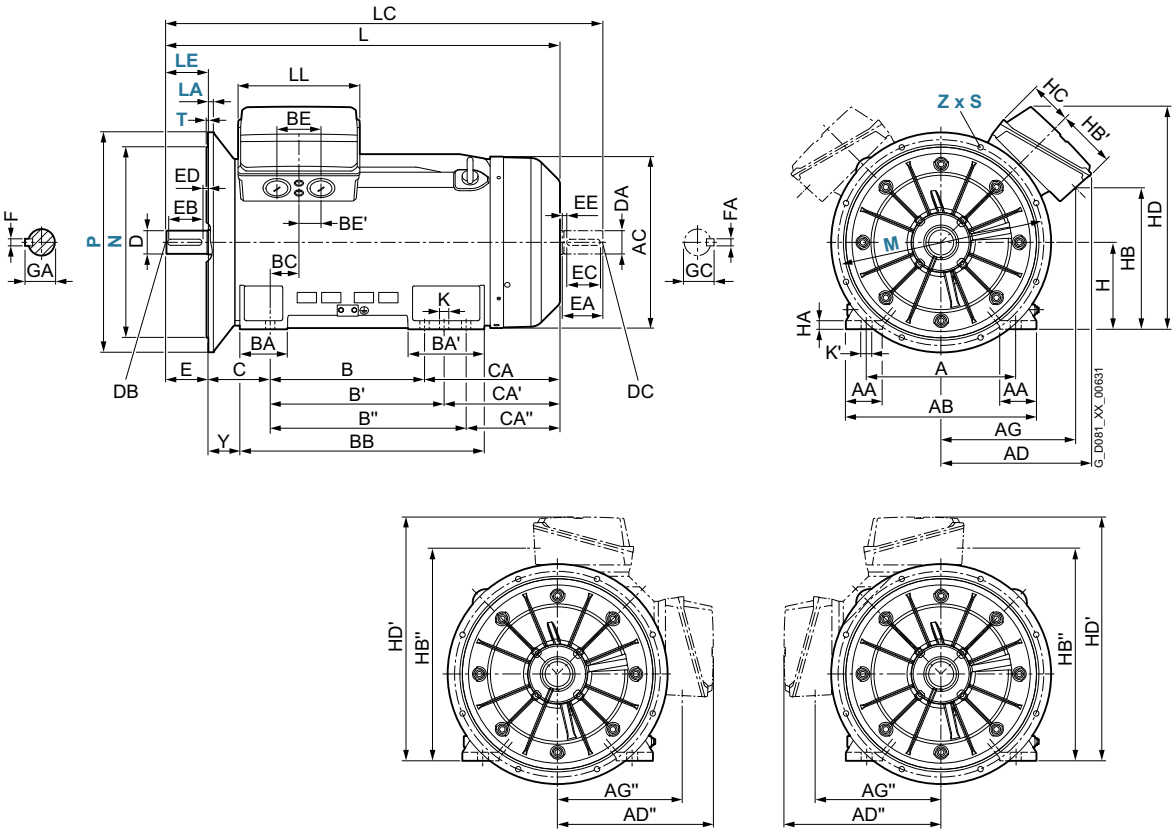
For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/47 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																										
Frame size	Motor type 1LE5773-	No. of poles	A	AA	**AB**	AC	**AD**	AD´	AD´´	AG	AG´	AG´´	AH	B	B´	B´´	BA	BA´	BB	BC	BE	BE´	C	CA	CA´	CA´´	**H**	HA	HB
315 S	3AA2	2	508	120	**610**	624	**544**	565	540	554	459	444	680	457	508	–	176	227	648	139	120	60	216	469	418	–	**315**	50	413
	3AB2	4								491	480	434									135	67.5							491
315 M	3AA4	2	508	120	**610**	624	**544**	565	540	554	459	444	680	457	508	–	176	227	648	139	120	60	216	469	418	–	**315**	50	413
	3AA5	2																											
	3AB4, 3AB5, 3AC4, 3AC5, 3AC6, 3AD4, 3AD5	4, 6, 8								491	480	434									135	67.5							491
315 L	3AB6	4	508	120	**610**	624	**544**	565	540	553	459	434	805	508	560	630	176	299	770	139	120	60	216	528	476	406	**315**	50	413
	3AB7	4								554		446												618	566	496			497
	3AC7, 3AD7	6, 8								491	470	421									135	67.5		528	476	406			491
	3AD8	8								554	459	446												618	566	496			497
	3AA6	2										434	805	457	508	–	176	227	648	139	120	60		469	418	-			413
	3AD6	8								491	480		680			–					135	67.5							491

For motor			Dimension designation acc. to **IEC**										DE shaft extension								NDE shaft extension							
Frame size	Motor type 1LE5773-	No. of poles	HB´	HB´´	HC	HD	HD´	HH	Y	K	K´	**L**	LC[1]	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
315 S	3AA2	2	336	759	167	800	855	355	146	28	35	**1132**	1427	327	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB2	4	226	761								**1312**	1457		85		170	140	25	22	90	70					20	74.5
315 M	3AA4	2	336	759	167	800	855	355	146	28	35	**1132**	1427	327	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AA5	2		749								**1282**																
	3AB4, 3AB5, 3AC4, 3AC5, 3AC6, 3AD4, 3AD5	4, 6, 8	226	761	167	800	855	355	146	28	35	**1312**	1457	327	85	M20	170	140	25	22	90	70	M20	140	125	10	20	74.5
315 L	3AB6	4	336	749	167	800	855	355	146	28	35	**1422**	1567	327	85	M20	170	140	25	22	90	70	M20	140	125	10	20	74.5
	3AB7	4	336	749		885						**1512**	1657															
	3AC7, 3AD7	6, 8	226	763		800						**1422**	1567															
	3AD8	8	336	749								**1512**	1657															
	3AA6	2										**1282**	1427		65		140	125	10	18	69	60					18	64
	3AD6	8	226	761								**1312**	1457		85		170	140	25	22	90	70					20	74.5

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

Notes