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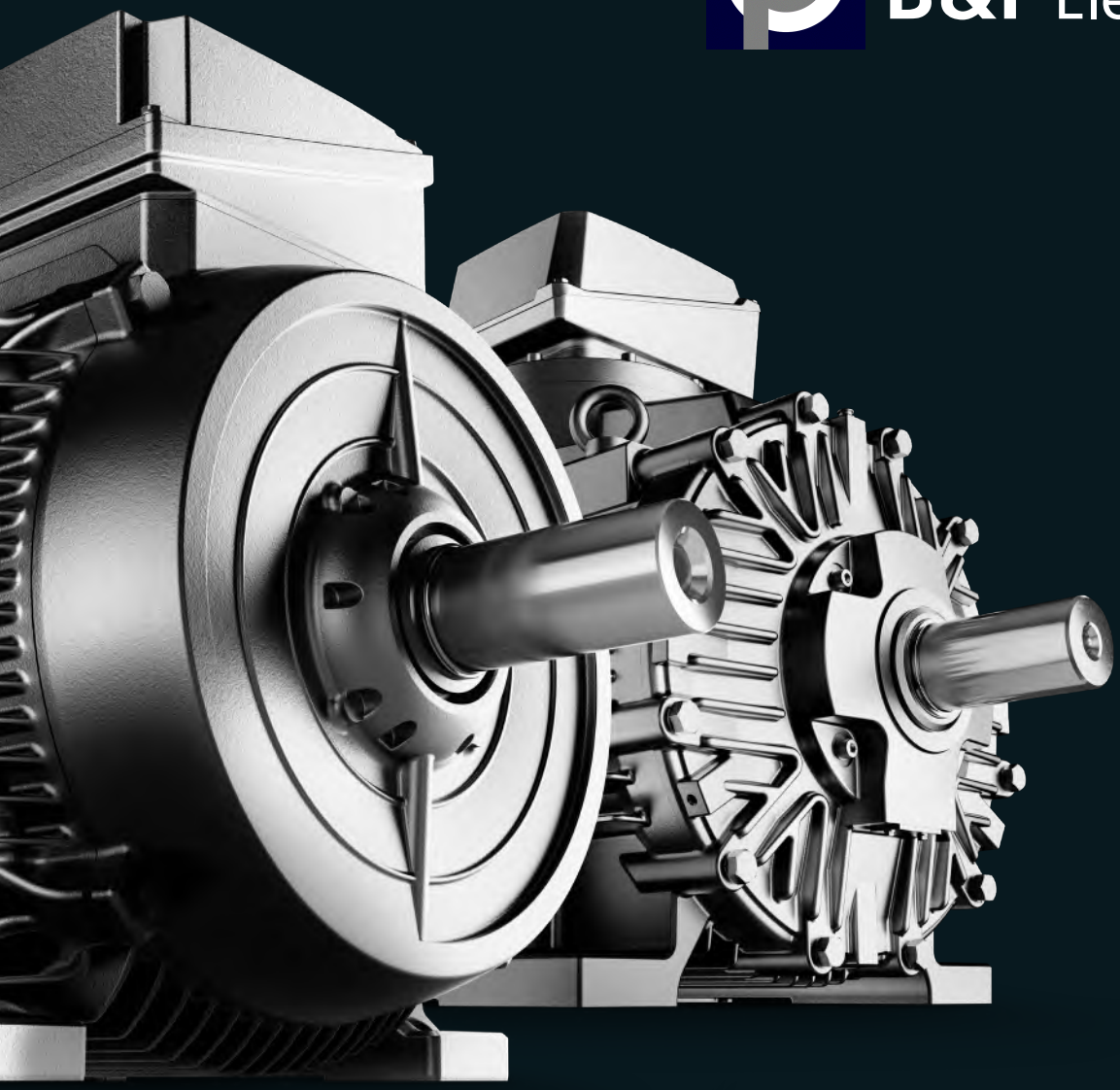
B&P Elektromotoren



INNOMOTICS

Catalog D 81.1 | Edition 04/2024

Innomotics Moves!

Low Voltage Motors GP, SD

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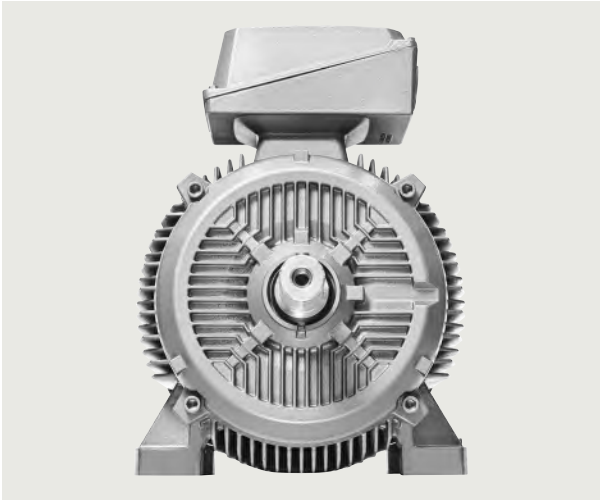
Innomotics GP, SD Low-Voltage Motors

Motors



Catalog D 81.1 · 04/2024

Supersedes:
Catalog D 81.1 · 09/2023

SIMOTICS GP and Innomotics SD standard motors 3

Innomotics SD standard motors next generation 4

Innomotics VSD motors for converter operation 5

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Independent of the order date, all ordered products or services with **delivery** dates from **April 1, 2025**, will be delivered with the product mark "Innomotics".

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INNOMOTICS

A Siemens Business

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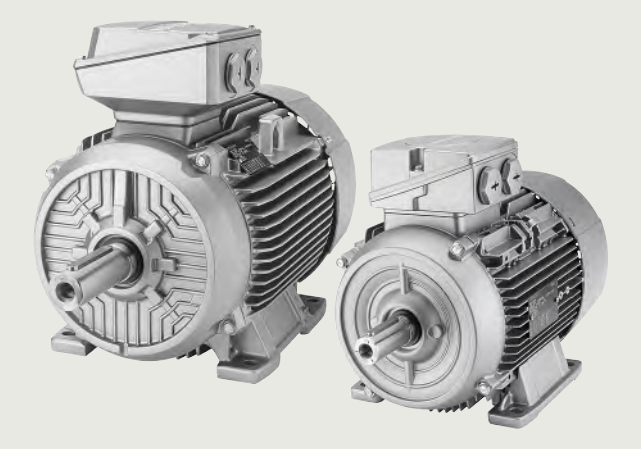
Overview



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:

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

  Innomotics GP 1LE1/1PC1 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)

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

  Innomotics 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 ... 1000 kW for all commonly used voltages
Frame sizes and types of construction:	71 ... 450 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)

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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], UKCA [4]).

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: Innomotics 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
4) UK Conformity Assessed

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Benefits

For severe duty applications:
Innomotics 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	Standard 12 months (optionally 36 months for frame sizes 180 to 315)	Standard 36 months

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 Innomotics 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.

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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	Innomotics 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 Siemens Product Configurator.

Contacts: www.siemens.com/automation/partner
Siemens Product Configurator: www.siemens.com/spc

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.

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Converter operation

Overview

Converter operation up to 480 V +10 % line voltage

See Chapter 1, page 1/27.

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 1/56).

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

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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	**1**	**L**	**E**	**1**															
	• Forced-air cooled by air flow from the fan to be driven with option extension **F90**																			
	• 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** ... **8**							
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	**1LE1003-1DB2**2-2■■■
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.

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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■-■■■■**	26	0.0054
4	**4.55**	**112 M**	2950	12.9	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	17.7	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	**1LE1004-1CA0■-■■■■**	43	0.024
7.5	**8.6**	**132 S**	2955	24	91.7	92.4	92.2	0.91	13	2.2	8.6	4.3	67	80	**1LE1004-1CA1■-■■■■**	55	0.031
11	**12.6**	**160 M**	2955	35.5	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	48.5	93.3	93.5	92.9	0.9	26	3.1	9	4.5	74	87	**1LE1004-1DA3■-■■■■**	94	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■-■■■■**	120	0.073
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	0.14
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	0.19
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																	
2.2	**2.55**	**100 L**	1465	14.3	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	19.6	90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1004-1AB5■-■■■■**	42	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■-■■■■**	49	0.02
5.5	**6.3**	**132 S**	1470	35.5	91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1004-1CB0■-■■■■**	54	0.034
7.5	**8.6**	**132 M**	1470	48.5	92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1004-1CB2■-■■■■**	64	0.046
11	**12.6**	**160 M**	1480	71	93.3	93.4	92.5	0.82	20.5	2.9	8.1	4.1	63	76	**1LE1004-1DB2■-■■■■**	100	0.085
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■-■■■■**	111	0.099
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 3/100			**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 3/106					■			. . .
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 3/119						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 3/122							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1004- . . . . ■-■■■■**					**-Z F90** + . . + . . + . .
For options, see from page 3/125			**1LE1004- . . . . ■-■■■■**					**-Z** . . + . . + . . + . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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■-■■■■**	37	0.0054
4	**4.55**	**112 M**	2950	12.9	90	90.4	89.7	0.89	7.2	2.6	8.8	4.1	68	80	**1LE1504-1BA2■-■■■■**	43	0.012
5.5	**6.3**	**132 S**	2960	17.7	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	**1LE1504-1CA0■-■■■■**	50	0.024
7.5	**8.6**	**132 S**	2955	24	91.7	92.4	92.2	0.91	13	2.2	8.6	4.3	67	80	**1LE1504-1CA1■-■■■■**	75	0.031
11	**12.6**	**160 M**	2955	35.5	92.6	92.8	92	0.9	19.1	2.8	8.6	4.2	74	87	**1LE1504-1DA2■-■■■■**	111	0.061
15	**17.3**	**160 M**	2955	48.5	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■-■■■■**	131	0.073
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■-■■■■**	220	0.14
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■-■■■■**	265	0.19
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

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 3/103			**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 3/110					■	. . .
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 3/120					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 3/123					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1504- . . . . ■-■■■■**			**-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 3/131		**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 1/54).

Further IE4 motors are available as standard Innomotics SD (1LE5) next generation motors, see page 4/9.

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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	14.3		89.5	89.6	88.3	0.79	4.5	3.3	8.5	4.7	59	71	**1LE1504-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	19.6		90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1504-1AB5■-■■■■**	52	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■-■■■■**	60	0.02
5.5	**6.3**	**132 S**	1470	35.5		91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1504-1CB0■-■■■■**	84	0.034
7.5	**8.6**	**132 M**	1470	48.5		92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1504-1CB2■-■■■■**	82	0.046
11	**12.6**	**160 M**	1480	71		93.3	93.4	92.5	0.82	20.5	2.9	8.1	4.1	63	76	**1LE1504-1DB2■-■■■■**	127	0.085
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■-■■■■**	137	0.099
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	240		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	290	IE3	95.4	95.7	95.4	0.84	81	3.4	8	3.3	69	83	**1LE1504-2BB2■-■■■■**	415	0.66

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 3/103			**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 3/110			**■**	**. . .**
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 3/120			**■**	**. . .**
Terminal box position		Version		
Terminal box at top		**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123			**■**	
Special versions				Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1504- . . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 3/131			**1LE1504- . . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE5) next generation motors, see page 4/9.

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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).

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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■-■■■■**	37	0.0054
4	**4.55**	**112 M**	2950	12.9	90	90.4	89.7	0.89	7.2	2.6	8.8	4.1	68	80	**1LE1604-1BA2■-■■■■**	43	0.012
5.5	**6.3**	**132 S**	2960	17.7	90.9	90.9	89.8	0.84	10.4	2.1	8.6	4.6	67	84	**1LE1604-1CA0■-■■■■**	50	0.024
7.5	**8.6**	**132 S**	2955	24	91.7	92.4	92.2	0.91	13	2.2	8.6	4.3	67	80	**1LE1604-1CA1■-■■■■**	75	0.031
11	**12.6**	**160 M**	2955	35.5	92.6	92.8	92	0.9	19.1	2.8	8.6	4.2	74	87	**1LE1604-1DA2■-■■■■**	111	0.061
15	**17.3**	**160 M**	2955	48.5	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■-■■■■**	131	0.073
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■-■■■■**	220	0.14
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■-■■■■**	265	0.19
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

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 3/103			**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 3/110					■	. . .
Motor protection		Version				Order code
PTC thermistor with 3 temperature sensors		**Standard**			**B**	–
For other motor protection and more information, see from page 3/120					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 3/123					■	
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1604- . . . . ■-■■■■-Z**				**F90 +. . .+. . .+. . .**
For options, see from page 3/131		**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 1/54).

Further IE4 motors are available as standard Innomotics SD (1LE5) next generation motors, see page 4/10.

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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	14.3		89.5	89.6	88.3	0.79	4.5	3.3	8.5	4.7	59	71	**1LE1604-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	19.6		90.4	91	90.5	0.81	5.9	3.5	8.8	4.2	59	71	**1LE1604-1AB5■-■■■■**	52	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■-■■■■**	60	0.02
5.5	**6.3**	**132 S**	1470	35.5		91.9	92.5	92.3	0.83	10.4	2.6	8.3	3.5	56	68	**1LE1604-1CB0■-■■■■**	84	0.034
7.5	**8.6**	**132 M**	1470	48.5		92.6	93.1	92.7	0.81	14.4	3	7.7	4	56	68	**1LE1604-1CB2■-■■■■**	82	0.046
11	**12.6**	**160 M**	1480	71		93.3	93.4	92.5	0.82	20.5	2.9	8.1	4.1	63	76	**1LE1604-1DB2■-■■■■**	127	0.085
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■-■■■■**	137	0.099
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	240		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	290	IE3	95.4	95.7	95.4	0.84	81	3.4	8	3.3	69	83	**1LE1604-2BB2■-■■■■**	415	0.66

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 3/103			**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 3/110			■	. . .

Motor protection	Version		Order code
PTC thermistor with 3 temperature sensors	**Standard**	**B**	–
For other motor protection and more information, see from page 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1604-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 3/131	**1LE1604-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE5) next generation motors, see page 4/10.

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)	▲ 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) 1.15 • 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		65.9	64.8	58.6	0.78	0.51	2.2	4.5	2.7	56	64	▲ **1LE1003-0BA2■-■■■■**	4	0.0002
0.25	**0.29**	**63 M**	2835	0.84		69.7	68.3	61.7	0.81	0.64	1.9	4.1	2.5	56	64	▲ **1LE1003-0BA3■-■■■■**	5	0.0003
0.37	**0.43**	**71 M**	2850	1.24		73.8	73.3	69.7	0.76	0.95	3.5	5.8	3.5	52	63	▲ **1LE1003-0CA2■-■■■■**	7	0.0005
0.55	**0.63**	**71 M**	2850	1.84		77.8	77.5	74.5	0.76	1.34	3.7	6.1	3.7	57	68	▲ **1LE1003-0CA3■-■■■■**	8	0.0006
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■-■■■■**	12	0.0011
1.1	**1.27**	**80 M**	2885	3.65		82.7	83.9	83.1	0.85	2.25	3	7.1	3.3	60	71	**1LE1003-0DA3■-■■■■**	13	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■-■■■■**	16	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■-■■■■**	20	0.0031
3	**3.45**	**100 L**	2910	9.8		87.1	87.7	87	0.87	5.7	4.4	9.4	4.5	72	80	**1LE1003-1AA4■-■■■■**	25	0.0041
4	**4.55**	**112 M**	2945	13		88.1	88.8	87.9	0.89	7.4	2.6	9.1	3.6	73	81	**1LE1003-1BA2■-■■■■**	32	0.0079
5.5	**6.3**	**132 S**	2945	17.8		89.2	89.5	88.6	0.88	10.1	2.5	8.9	3.8	69	77	**1LE1003-1CA0■-■■■■**	48	0.0168
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**	2955	48.5		91.9	91.9	90.8	0.86	27.5	3.5	10.2	4.4	77	85	**1LE1003-1DA3■-■■■■**	78	0.043
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■-■■■■**	129	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 3/100			**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 3/106			■	. . .

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 3/119		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 3/122		■

Special versions		Order code(s)
For options, see from page 3/125	**1LE1003- . . . . ■-■■■■**	**-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)	▲ 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 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]																		
0.12	**0.14**	**63 M**	1390	0.82		64.8	63.1	57.3	0.68	0.39	2.4	3.6	2.6	59	67	▲ **1LE1003-0BB2■-■■■■**	5	0.0005
0.18	**0.21**	**63 M**	1400	1.23		69.9	68.1	62.3	0.65	0.57	2.8	4	2.9	55	62	▲ **1LE1003-0BB3■-■■■■**	6	0.0005
0.25	**0.29**	**71 M**	1395	1.71		73.5	73.7	70.4	0.72	0.68	2.5	4.2	2.6	44	55	▲ **1LE1003-0CB2■-■■■■**	7	0.001
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	▲ **1LE1003-0CB3■-■■■■**	9	0.0014
0.55	**0.63**	**80 M**	1440	3.65		80.8	81.5	79.8	0.78	1.26	2.1	5.9	3.1	52	60	**1LE1003-0DB2■-■■■■**	11	0.0021
0.75	**0.86**	**80 M**	1450	4.95		82.5	82.3	80.1	0.75	1.75	2.7	7.1	3.9	58	66	**1LE1003-0DB3■-■■■■**	13	0.0029
1.1	**1.27**	**90 S**	1440	7.3	IE2	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	85.7	84.4	0.8	3.15	2.9	7.3	3.5	62	70	**1LE1003-0EB4■-■■■■**	20	0.0049
2.2	**2.55**	**100 L**	1455	14.4		86.7	87.2	86.3	0.82	4.45	3	8.3	3.8	67	75	**1LE1003-1AB4■-■■■■**	25	0.0101
3	**3.45**	**100 L**	1450	19.8	IE2	87.7	88.1	87.1	0.8	6.2	3.1	8	3.8	67	75	**1LE1003-1AB5■-■■■■**	26	0.01
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	35.5		89.6	90	89.4	0.82	10.8	2.9	8.5	3.7	64	76	**1LE1003-1CB0■-■■■■**	54	0.034
7.5	**8.6**	**132 M**	1465	49	IE2	90.4	90.7	90.4	0.8	15	3	8.5	3.8	72	80	**1LE1003-1CB2■-■■■■**	61	0.0334
11	**12.6**	**160 M**	1470	71		91.4	91.9	91.9	0.82	21	2.5	8	3.5	67	75	**1LE1003-1DB2■-■■■■**	78	0.0583
15	**17.3**	**160 L**	1465	98	IE2	92.1	92.7	92	0.83	28.5	2.8	7.9	3.4	58	66	**1LE1003-1DB4■-■■■■**	106	0.089
18.5	**21.3**	**180 L**	1470	120	IE2	92.6	93.1	92.9	0.82	35	2.5	7.2	3.3	66	73	**1LE1003-1EB2■-■■■■**	134	0.13
22	**25.3**	**180 L**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	68	75	**1LE1003-1EB4■-■■■■**	142	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	**1LE1003-2AB5■-■■■■**	189	0.24

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 3/100			**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 3/106			■	. . .

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 3/119		■	. . .

Terminal box position	Version	
Terminal box at top	**Standard**	**4**
For other terminal box positions and more information, see from page 3/122		■

Special versions		Order code(s)
For options, see from page 3/125	**1LE1003- . . . . ■-■■■■**	**-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)	▲ 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) 1.15 • 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	**–**	**71 M**	885	1.94		63.9	64.8	60.8	0.69	0.59	2.3	2.8	2.3	39	50	▲ **1LE1003-0CC2■-■■■■**	7	0.001
0.25	**–**	**71 M**	885	2.7		68.6	69.5	66.2	0.69	0.76	2.6	3.2	2.6	46	57	▲ **1LE1003-0CC3■-■■■■**	9	0.0014
0.37	**–**	**80 M**	940	3.75		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	**–**	**80 M**	935	5.6		77.2	77	73.9	0.67	1.53	2.5	4.5	2.8	42	53	**1LE1003-0DC3■-■■■■**	13	0.0031
0.75	**–**	**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	**–**	**90 L**	950	11.1		81	81.4	79.3	0.66	2.95	2.8	5	3	60	68	**1LE1003-0EC4■-■■■■**	19	0.0048
1.5	**–**	**100 L**	970	14.8		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	**–**	**112 M**	970	21.5		84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1003-1BC2■-■■■■**	34	0.017
3	**–**	**132 S**	975	29.5		85.6	85.8	84.3	0.73	6.9	2.3	6.6	3.2	58	66	**1LE1003-1CC0■-■■■■**	52	0.029
4	**–**	**132 M**	975	39		86.8	87.3	86.2	0.73	9.1	2.2	6.2	3	67	75	**1LE1003-1CC2■-■■■■**	61	0.037
5.5	**–**	**132 M**	975	54		88	88.1	86.9	0.72	12.5	2.7	6.8	3.4	64	72	**1LE1003-1CC3■-■■■■**	64	0.046
7.5	**–**	**160 M**	985	73		89.1	89.7	89	0.81	15	2.3	7.9	3.2	71	79	**1LE1003-1DC2■-■■■■**	93	0.098
11	**–**	**160 L**	980	107		90.3	90.7	89.8	0.8	22	2.9	6.8	2.8	66	74	**1LE1003-1DC4■-■■■■**	115	0.12
15	**–**	**180 L**	975	147		91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1003-1EC4■-■■■■**	130	0.19
18.5	**–**	**200 L**	978	181		91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1003-2AC4■-■■■■**	166	0.28
22	**–**	**200 L**	978	215		92.2	92.8	92.3	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1003-2AC5■-■■■■**	179	0.32

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 3/100			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
For options, see from page 3/125		**1LE1003- . . . . ■-■■■■**					**-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)	▲ 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) 1.15 • 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]																		
0.12	–	**71 M**	660	1.74		50.7	49.9	44.8	0.63	0.54	2.1	2.5	2.1	46	53	**1LE1003-0CD3■-■■■■**	9	0.0014
0.18	–	**80 M**	705	2.45		58.7	55.8	49.2	0.49	0.9	2.3	3	2.8	48	61.3	**1LE1003-0DD2■-■■■■**	12	0.0021
0.25	–	**80 M**	695	3.45		64.1	62.7	57.8	0.57	0.93	1.8	2.9	2.1	52	59	**1LE1003-0DD3■-■■■■**	13	0.003
0.37	–	**90 S**	685	5.2		69.3	68.3	63.7	0.68	1.13	1.7	2.9	1.8	56	53	**1LE1003-0ED0■-■■■■**	16	0.0045
0.55	–	**90 L**	695	7.6		73	71.2	66.5	0.67	1.62	2	3.5	2.3	61	68	**1LE1003-0ED4■-■■■■**	19	0.0045
0.75	–	**100 L**	710	10.1		75	75.7	73.1	0.67	2.1	1.5	3.7	2.1	61.4	69.4	**1LE1003-1AD4■-■■■■**	20	0.0096
1.1	–	**100 L**	710	14.8		77.7	76.4	75.1	0.67	3.05	1.8	4.1	2.3	61.9	69.9	**1LE1003-1AD5■-■■■■**	26	0.013
1.5	–	**112 M**	720	19.9		79.7	85.6	77.3	0.63	4.15	2.6	5.1	3.1	61.7	69.7	**1LE1003-1BD2■-■■■■**	34	0.028
2.2	–	**132 S**	725	29		81.9	82.5	80.9	0.71	5.3	1.9	5	2.5	65	73	**1LE1003-1CD0■-■■■■**	42	0.046
3	–	**132 M**	725	39.5		83.5	83.8	82.2	0.72	7.1	2	5.2	2.5	70	78	**1LE1003-1CD2■-■■■■**	58	0.061
4	–	**160 M**	730	52		84.8	86	85.5	0.74	9.1	1.6	4.7	2.1	62.5	70.5	**1LE1003-1DD2■-■■■■**	67	0.076
5.5	–	**160 M**	730	72		86.2	87	86.3	0.73	12.4	2	5.5	2.4	68	76	**1LE1003-1DD3■-■■■■**	78	0.1
7.5	–	**160 L**	730	98		87.3	87.9	86.9	0.73	16.9	2.3	5.8	2.7	70	78	**1LE1003-1DD4■-■■■■**	86	0.13
11	–	**180 L**	725	145		88.6	89.6	89	0.74	24	2.1	5.1	2.4	67	74	**1LE1003-1ED4■-■■■■**	161	0.267
15	–	**200 L**	730	196		89.6	90.1	89.4	0.73	33.5	3	6.8	3.7	57	70	**1LE1003-2AD5■-■■■■**	212	0.42

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 3/100			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
For options, see from page 3/125							**1LE1003-. . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	30.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)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and 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**	**71 M**	2835	2,55		80,7	80,7	78,1	0,78	1,72	3,5	6,4	3,4	62	70	▲ **1LE1003-0CA6■-■■■■**	9	0,0006
1.5	**1,75**	**80 M**	2865	5		84.2	84.8	84.4	0.84	3.05	3.2	8	3.7	69	77	**1LE1003-0DA6■-■■■■**	13	0.0015
3	**3,45**	**90 L**	2920	9.8	IE2	87.1	87.2	85.9	0.84	5.9	4.4	10.2	4.6	71	78	**1LE1003-0EA6■-■■■■**	20	0.00301
4	**4,55**	**100 L**	2910	13.1		88.1	88.9	87.8	0.83	7.9	3.5	8.9	4.6	77	85	**1LE1003-1AA6■-■■■■**	26	0.00462
5.5	**6,3**	**112 M**	2950	17.8		89.2	89.5	88.8	0.86	10.4	2.7	8.8	3.9	69	77	**1LE1003-1BA6■-■■■■**	36	0.00959
11	**12.6**	**132 M**	2940	35.5		91.2	92.1	92.3	0.89	19.6	2.8	9.8	4.1	68	76	**1LE1003-1CA6■-■■■■**	55	0.023
15	**17,3**	**132 M**	2960	48.5		91.9	92	91.1	0.84	28	2.9	9.1	4.4	73	81	**1LE1003-1CA7■-■■■■**	65	0.0321
22	**25.3**	**160 L**	2945	71		92.7	92.8	92.2	0.91	37.5	3.5	9.9	4.4	76	84	**1LE1003-1DA6■-■■■■**	108	0.0603
30	**33.5**	**180 L**	2950	97		93.3	93.5	93.1	0.88	53	2.6	8.6	3.9	67	80	**1LE1003-1EA6■-■■■■**	139	0.094
45	**51**	**200 L**	2950	146		94	94.5	93.9	0.87	79	2.5	7.1	3.2	77	77	**1LE1003-2AA6■-■■■■**	194	0.17
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
1.1	**1,27**	**80 M**	1445	7.3	IE2	84.1	84.6	83.6	0.78	2.4	3	7	3.5	63	70	**1LE1003-0DB6■-■■■■**	15	0.00329
4	**4,55**	**100 L**	1455	26.5		88.6	89.4	88.8	0.81	8	2.9	7.5	3.7	67	75	**1LE1003-1AB6■-■■■■**	42	0.0149
5.5	**6.3**	**112 M**	1460	36	IE2	89.6	89.9	89.4	0.8	11.1	3.2	8	4.1	67	75	**1LE1003-1BB6■-■■■■**	49	0.0186
11	**12.6**	**132 M**	1470	71		91.4	91.8	91.1	0.79	22	2.8	8.3	3.8	71	79	**1LE1003-1CB6■-■■■■**	81	0.041
18.5	**21.3**	**160 L**	1480	119	IE2	92.6	92.7	91.8	0.76	38	2.7	8.1	3.8	62	75	**1LE1003-1DB6■-■■■■**	111	0.099
30	**34.5**	**180 L**	1470	195	IE2	93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1003-1EB6■-■■■■**	158	0.173
37	**42.5**	**200 L**	1475	240	IE2	93.9	94	93.6	0.81	70	3.1	8.1	3.5	65	72	**1LE1003-2AB6■-■■■■**	205	0.275
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
3	**–**	**112 M**	965	29.5	IE2	85.6	86.8	86.6	0.74	6.8	2.3	5.8	2.7	68	76	▲ **1LE1003-1BC6■-■■■■**	45	0.0177
18.5	**–**	**180 L**	975	181		91.7	92.3	91.9	0.77	38	2.6	6.9	3.3	68	80	**1LE1003-1EC6■-■■■■**	148	0.247
30	**–**	**200 L**	978	295		92.9	93.6	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1003-2AC6■-■■■■**	220	0.421
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
18.5	**–**	**200 L**	725	245	IE2	90.1	90.5	89.5	0.71	41.5	3.1	6.7	3.7	60	68	**1LE1003-2AD6■-■■■■**	205	0.405

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 3/100			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 3/106				■	. . .
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 3/119				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		4	
For other terminal box positions and more information, see from page 3/122				■	
Special versions					Order code(s)
For options, see from page 3/125			**1LE1003-. . . . ■-■■■■-Z**		. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)		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**	2950	12.9		88.1	88.7	88.2	0.89	7.4	2.5	9.2	3.4	69	81	**1LE1083-1BA2■-■■■■**	34	0.012
5.5	**6.3**	**132 S**	2960	17.7		89.2	89.6	88.9	0.91	9.8	2.1	9.7	3.6	72	79	**1LE1083-1CA0■-■■■■**	57	0.031
7.5	**8.6**	**132 S**	2950	24.5		90.1	90.9	90.7	0.91	13.2	2.1	9	3.3	68	80	**1LE1083-1CA1■-■■■■**	57	0.031
11	**12.6**	**160 M**	2955	35.5		91.2	91.5	90.7	0.9	19.3	2.5	8.5	3.4	79	86	**1LE1083-1DA2■-■■■■**	84	0.061
15	**17.3**	**160 M**	2960	48.5		91.9	91.9	91	0.86	27.5	2.8	9.5	4	70	82	**1LE1083-1DA3■-■■■■**	84	0.061
18.5	**21.3**	**160 L**	2960	60		92.4	92.9	92.6	0.92	31.5	2.8	9.7	3.8	78	85	**1LE1083-1DA4■-■■■■**	109	0.073
22	**24.5**	**180 M**	2950	71		92.7	93	92.4	0.89	38.5	2.3	7.5	3.5	67	80	**1LE1083-1EA2■-■■■■**	129	0.08
30	**33.5**	**200 L**	2955	97		93.3	93.6	93.3	0.86	54	2.6	7.5	3.3	68	81	**1LE1083-2AA4■-■■■■**	173	0.134
37	**41.5**	**200 L**	2950	120		93.7	93.9	93.5	0.88	65	2.6	7.8	3.4	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	14.3	IE2	86.7	87	85.9	0.83	4.4	2.5	9.2	3.8	60	72	**1LE1083-1AB4■-■■■■**	30	0.014
3	**3.45**	**100 L**	1460	19.6	IE2	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	67	74	**1LE1083-1BB2■-■■■■**	49	0.02
5.5	**6.3**	**132 S**	1470	35.5		89.6	90.1	89.7	0.82	10.8	2.5	8.3	3.6	64	76	**1LE1083-1CB0■-■■■■**	64	0.034
7.5	**8.6**	**132 M**	1465	49	IE2	90.4	91.1	90.8	0.84	14.3	2.5	8.1	3.3	64	76	**1LE1083-1CB2■-■■■■**	61	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.8	91.2	0.84	20.5	2.3	7.2	3	65	77	**1LE1083-1DB2■-■■■■**	83	0.071
15	**17.3**	**160 L**	1480	97	IE2	92.1	92.4	92	0.85	27.5	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	0.82	35	2.7	8	3.5	66	73	**1LE1083-1EB2■-■■■■**	134	0.13
22	**25.3**	**180 L**	1470	143	IE2	93	93.4	93.1	0.82	41.5	2.6	7.7	3.3	62	75	**1LE1083-1EB4■-■■■■**	142	0.14
30	**34.5**	**200 L**	1470	195	IE2	93.6	94.3	94.5	0.84	55	2.6	7.3	3.1	59	72	**1LE1083-2AB5■-■■■■**	189	0.24
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
15	**18**	**180 L**	975	147	IE2	91.2	91.6	91.2	0.77	31	2.3	6.4	3	55	68	**1LE1083-1EC4■-■■■■**	130	0.19
18.5	**22**	**200 L**	978	181	IE2	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	IE1	92.2	93.3	93.5	0.79	43.5	2.5	5.6	2.6	55c	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	5.4	2.6	62	75	**1LE1083-1ED4■-■■■■**	161	0.267
15	**18**	**200 L**	730	196		89.6	89.8	89.1	0.73	33	3	6.8	3.7	57	70	**1LE1083-2AD5■-■■■■**	212	0.42

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 3/100			**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 3/106			■	. . .

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 3/119		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/122		■	

Special versions		Order code(s)
For options, see from page 3/125	**1LE1083-. . . . ■-■■■■-Z**	. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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	1.24		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	1.84		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	3.65		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	IE2	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**	2910	9.8		87.1	87.7	87	0.87	5.7	4.4	9.4	4.5	72	80	**1LE1503-1AA4■-■■■■**	37	0.0041
4	**4.55**	**112 M**	2945	13		88.1	88.8	87.9	0.89	7.4	2.6	9.1	3.6	73	81	**1LE1503-1BA2■-■■■■**	41	0.0079
5.5	**6.3**	**132 S**	2945	17.8	IE2	89.2	89.5	88.6	0.88	10.1	2.5	8.9	3.8	69	77	**1LE1503-1CA0■-■■■■**	66	0.0168
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■-■■■■**	75	0.031
11	**12.6**	**160 M**	2955	35.5	IE2	91.2	91	89.5	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1503-1DA2■-■■■■**	102	0.053
15	**17.3**	**160 M**	2955	48.5		91.9	91.9	90.8	0.86	27.5	3.5	10.2	4.4	77	85	**1LE1503-1DA3■-■■■■**	104	0.043
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■-■■■■**	123	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■-■■■■**	165	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■-■■■■**	220	0.134
37	**41.5**	**200 L**	2955	120	IE2	93.7	94.2	94	0.88	65	2.5	7.1	3.2	67	80	**1LE1503-2AA5■-■■■■**	245	0.158
45	**51**	**225 M**	2960	145		94	94.5	94.4	0.89	78	2.4	6.9	3.1	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	240	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	290	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	350		95.2	95.4	94.9	0.91	183	2.4	7.1	3.1	75	89	**1LE1503-3AA0■-■■■■**	750	1.39
132	**148**	**315 M**	2982	425		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	510	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 3/103			**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 3/110					■	. . .
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 3/120					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 3/123					■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1503- . . . . ■-■■■■**	**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1503- . . . . ■-■■■■**	**-Z . . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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	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)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
0.25	**0.29**	**71 M**	1395	1.71		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	3.65		80.8	81.5	79.8	0.78	1.26	2.1	5.9	3.1	52	60	**1LE1503-0DB2■-■■■■**	18	0.0021
0.75	**0.86**	**80 M**	1450	4.95		82.5	82.3	80.1	0.75	1.75	2.7	7.1	3.9	58	66	**1LE1503-0DB3■-■■■■**	22	0.0029
1.1	**1.27**	**90 S**	1440	7.3	IE2	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	85.7	84.4	0.8	3.15	2.9	7.3	3.5	62	70	**1LE1503-0EB4■-■■■■**	31	0.0049
2.2	**2.55**	**100 L**	1455	14.4		86.7	87.2	86.3	0.82	4.45	3	8.3	3.8	67	75	**1LE1503-1AB4■-■■■■**	40	0.0101
3	**3.45**	**100 L**	1450	19.8	IE2	87.7	88.1	87.1	0.8	6.2	3.1	8	3.8	67	75	**1LE1503-1AB5■-■■■■**	40	0.01
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	35.5		89.6	90	89.4	0.82	10.8	2.9	8.5	3.7	64	76	**1LE1503-1CB0■-■■■■**	74	0.034
7.5	**8.6**	**132 M**	1465	49	IE2	90.4	90.7	90.4	0.8	15	3	8.5	3.8	72	80	**1LE1503-1CB2■-■■■■**	80	0.0334
11	**12.6**	**160 M**	1470	71		91.4	91.9	91.9	0.82	21	2.5	8	3.5	67	75	**1LE1503-1DB2■-■■■■**	105	0.0583
15	**17.3**	**160 L**	1465	98	IE2	92.1	92.7	92	0.83	28.5	2.8	7.9	3.4	58	66	**1LE1503-1DB4■-■■■■**	133	0.089
18.5	**21.3**	**180 M**	1470	120	IE2	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	68	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	0.24
37	**42.5**	**225 S**	1478	240	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	290	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	355	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	480	IE2	95	95.3	95	0.86	133	2.5	6.9	3	69	83	**1LE1503-2DB0■-■■■■**	570	1.39
90	**104**	**280 M**	1485	580	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	710		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	850		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	1030		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	1280	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 3/103			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 3/110				■	. . .
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 3/120				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**			4
For other terminal box positions and more information, see from page 3/123					■
Special versions					Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)					**1LE1503- . . . . ■-■■■■-Z** F90+. . .+. . .+. . .
For options, see from page 3/131					**1LE1503- . . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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Cast-iron series Innomotics SD 1LE1503 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 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	**–**	**71 M**	885	1.94		63.9	64.8	60.8	0.69	0.59	2.3	2.8	2.3	39	50	**1LE1503-0CC2■-■■■■**	13	0.00098
0.25	**–**	**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	0.0014
0.37	**–**	**80 M**	940	3.75		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	**–**	**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	**–**	**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	0.004
1.1	**–**	**90 L**	950	11.1		81	81.4	79.3	0.66	2.95	2.8	5	3	60	68	**1LE1503-0EC4■-■■■■**	31	0.0048
1.5	**–**	**100 L**	970	14.8		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	**–**	**112 M**	970	21.5		84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1503-1BC2■-■■■■**	53	0.017
3	**–**	**132 S**	975	29.5		85.6	85.8	84.3	0.73	6.9	2.3	6.6	3.2	58	66	**1LE1503-1CC0■-■■■■**	60	0.029
4	**–**	**132 M**	975	39		86.8	87.3	86.2	0.73	9.1	2.2	6.2	3	67	75	**1LE1503-1CC2■-■■■■**	64	0.037
5.5	**–**	**132 M**	975	54		88	88.1	86.9	0.72	12.5	2.7	6.8	3.4	64	72	**1LE1503-1CC3■-■■■■**	76	0.046
7.5	**–**	**160 M**	985	73		89.1	89.7	89	0.81	15	2.3	7.9	3.2	71	79	**1LE1503-1DC2■-■■■■**	124	0.098
11	**–**	**160 L**	980	107		90.3	90.7	89.8	0.8	22	2.9	6.8	2.8	66	74	**1LE1503-1DC4■-■■■■**	138	0.12
15	**–**	**180 L**	975	147		91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1503-1EC4■-■■■■**	180	0.19
18.5	**–**	**200 L**	978	181		91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1503-2AC4■-■■■■**	215	0.28
22	**–**	**200 L**	978	215		92.2	92.8	92.3	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1503-2AC5■-■■■■**	230	0.32
30	**–**	**225 M**	982	290		92.9	93.6	93.5	0.83	56	2.6	6.6	3	64	77	**1LE1503-2BC2■-■■■■**	325	0.67
37	**–**	**250 M**	985	360		93.3	94	94	0.85	67	2.7	7	2.9	62	75	**1LE1503-2CC2■-■■■■**	405	1
45	**–**	**280 S**	988	435		93.7	94.3	94.2	0.85	82	3	6.8	2.8	60	74	**1LE1503-2DC0■-■■■■**	510	1.4
55	**–**	**280 M**	988	530		94.1	94.5	94.4	0.85	99	3.3	7.2	3	65	79	**1LE1503-2DC2■-■■■■**	560	1.64
75	**–**	**315 S**	990	720		94.6	94.9	94.4	0.84	136	2.6	7.5	3.1	63	78	**1LE1503-3AC0■-■■■■**	750	2.6
90	**–**	**315 M**	991	870		94.9	95.2	94.9	0.85	161	2.5	6.7	2.8	63	78	**1LE1503-3AC2■-■■■■**	890	3.1
110	**–**	**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	**–**	**315 L**	992	1270		95.4	95.7	95.4	0.82	245	3.3	8	3.3	66	81	**1LE1503-3AC5■-■■■■**	1130	4.48
160	**–**	**315 L**	992	1540		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 3/103			**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 3/110			■	. . .

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 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1503-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1503-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)																		
8-pole: 750rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
0.09	–	**71 M**	650	1.32		44.1	42.8	37.3	0.64	0.46	1.9	2.2	1.9	46	53	**1LE1503-0CD2■-■■■■**	13	0.00098
0.12	–	**71 M**	660	1.74		50.7	49.9	44.8	0.63	0.54	2.1	2.5	2.1	46	53	**1LE1503-0CD3■-■■■■**	16	0.0014
0.18	–	**80 M**	705	2.45		58.7	55.8	49.2	0.49	0.9	2.3	3	2.8	48	61.3	**1LE1503-0DD2■-■■■■**	18	0.0021
0.25	–	**80 M**	695	3.45		64.1	62.7	57.8	0.57	0.93	1.8	2.9	2.1	52	59	**1LE1503-0DD3■-■■■■**	22	0.003
0.37	–	**90 S**	685	5.2		69.3	68.3	63.7	0.68	1.13	1.7	2.9	1.8	56	53	**1LE1503-0ED0■-■■■■**	26	0.0045
0.55	–	**90 L**	695	7.6		73	71.2	66.5	0.67	1.62	2	3.5	2.3	61	68	**1LE1503-0ED4■-■■■■**	26	0.0045
0.75	–	**100 L**	710	10.1		75	75.7	73.1	0.67	2.1	1.5	3.7	2.1	61.4	69.4	**1LE1503-1AD4■-■■■■**	31	0.0096
1.1	–	**100 L**	710	14.8		77.7	76.4	75.1	0.67	3.05	1.8	4.1	2.3	61.9	69.9	**1LE1503-1AD5■-■■■■**	36	0.013
1.5	–	**1112 M**	720	19.9		79.7	85.6	77.3	0.63	4.15	2.6	5.1	3.1	61.7	69.7	**1LE1503-1BD2■-■■■■**	46	0.028

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 3/103			**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 3/110					■			. . .
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 3/120						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 3/123							■	

Special versions	Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1503- . . . . ■-■■■■-Z** **F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1503- . . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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Cast-iron series Innomotics SD 1LE1603 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	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**	2910	9.8		87.1	87.7	87	0.87	5.7	4.4	9.4	4.5	72	80	**1LE1603-1AA4■-■■■■**	37	0.0041
4	**4.55**	**112 M**	2945	13		88.1	88.8	87.9	0.89	7.4	2.6	9.1	3.6	73	81	**1LE1603-1BA2■-■■■■**	41	0.0079
5.5	**6.3**	**132 S**	2945	17.8	IE2	89.2	89.5	88.6	0.88	10.1	2.5	8.9	3.8	69	77	**1LE1603-1CA0■-■■■■**	66	0.0168
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■-■■■■**	75	0.031
11	**12.6**	**160 M**	2955	35.5	IE2	91.2	91	89.5	0.89	19.6	2.4	7.9	3.8	70	82	**1LE1603-1DA2■-■■■■**	102	0.053
15	**17.3**	**160 M**	2955	48.5		91.9	91.9	90.8	0.86	27.5	3.5	10.2	4.4	77	85	**1LE1603-1DA3■-■■■■**	104	0.043
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■-■■■■**	123	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■-■■■■**	165	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■-■■■■**	220	0.134
37	**41.5**	**200 L**	2955	120	IE2	93.7	94.2	94	0.88	65	2.5	7.1	3.2	67	80	**1LE1603-2AA5■-■■■■**	245	0.158
45	**51**	**225 M**	2960	145		94	94.5	94.4	0.89	78	2.4	6.9	3.1	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	240	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	290	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	350		95.2	95.4	94.9	0.91	183	2.4	7.1	3.1	75	89	**1LE1603-3AA0■-■■■■**	750	1.39
132	**148**	**315 M**	2982	425		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	510	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 3/103			**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 3/110					■		. . .
Motor protection	Line	Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1603-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 3/131		**1LE1603-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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**	1455	14.4		86.7	87.2	86.3	0.82	4.45	3	8.3	3.8	67	75	**1LE1603-1AB4■-■■■■**	40	0.0101
3	**3.45**	**100 L**	1450	19.8	IE2	87.7	88.1	87.1	0.8	6.2	3.1	8	3.8	67	75	**1LE1603-1AB5■-■■■■**	40	0.01
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■-■■■■**	43	0.017
5.5	**6.3**	**132 S**	1470	35.5		89.6	90	89.4	0.82	10.8	2.9	8.5	3.7	64	76	**1LE1603-1CB0■-■■■■**	67	0.034
7.5	**8.6**	**132 M**	1465	49	IE2	90.4	90.7	90.4	0.8	15	3	8.5	3.8	72	80	**1LE1603-1CB2■-■■■■**	80	0.0334
11	**12.6**	**160 M**	1470	71		91.4	91.9	91.9	0.82	21	2.5	8	3.5	67	75	**1LE1603-1DB2■-■■■■**	105	0.0583
15	**17.3**	**160 L**	1465	98	IE2	92.1	92.7	92	0.83	28.5	2.8	7.9	3.4	58	66	**1LE1603-1DB4■-■■■■**	133	0.089
18.5	**21.3**	**180 M**	1470	120	IE2	92.6	93.1	92.9	0.82	35	2.5	7.2	3.3	66	73	**1LE1603-1EB2■-■■■■**	166	0.13
22	**25.3**	**180 L**	1470	143		93	93.6	93.6	0.83	41	2.3	6.8	3.3	68	75	**1LE1603-1EB4■-■■■■**	178	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	0.24
37	**42.5**	**225 S**	1478	240	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**	1478	290	IE2	94.2	94.9	95	0.86	80	2.6	6.6	2.6	66	79	**1LE1603-2BB2■-■■■■**	340	0.52
55	**63**	**250 M**	1482	355	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	480	IE2	95	95.3	95	0.86	133	2.5	6.9	3	69	83	**1LE1603-2DB0■-■■■■**	570	1.39
90	**104**	**280 M**	1485	580	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	710		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	850		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	1030		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	1280	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 3/103			**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 3/110			■	. . .

Motor protection	Line	Version		Order code
PTC thermistor with 3 temperature sensors		**Standard**	**B**	–
For other motor protection and more information, see from page 3/120			■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1603- . . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1603- . . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product Configuratorr (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.

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Cast-iron series Innomotics SD 1LE1603 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	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	–	**100 L**	970	14.8		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	–	**112 M**	970	21.5		84.3	85	83.9	0.75	5	2.2	5.6	2.8	65	74	**1LE1603-1BC2■-■■■■**	46	0.017
3	–	**132 S**	975	29.5		85.6	85.8	84.3	0.73	6.9	2.3	6.6	3.2	58	66	**1LE1603-1CC0■-■■■■**	70	0.029
4	–	**132 M**	975	39		86.8	87.3	86.2	0.73	9.1	2.2	6.2	3	67	75	**1LE1603-1CC2■-■■■■**	80	0.037
5.5	–	**132 M**	975	54		88	88.1	86.9	0.72	12.5	2.7	6.8	3.4	64	72	**1LE1603-1CC3■-■■■■**	82	0.046
7.5	–	**160 M**	985	73		89.1	89.7	89	0.81	15	2.3	7.9	3.2	71	79	**1LE1603-1DC2■-■■■■**	122	0.098
11	–	**160 L**	980	107		90.3	90.7	89.8	0.8	22	2.9	6.8	2.8	66	74	**1LE1603-1DC4■-■■■■**	147	0.12
15	–	**180 L**	975	147		91.2	92	91.9	0.8	29.5	2.3	5.9	2.8	61	68	**1LE1603-1EC4■-■■■■**	180	0.19
18.5	–	**200 L**	978	181		91.7	92.5	92.4	0.79	37	2.5	5.6	2.6	64	71	**1LE1603-2AC4■-■■■■**	213	0.28
22	–	**200 L**	978	215		92.2	92.8	92.3	0.79	43.5	2.5	5.6	2.6	61	68	**1LE1603-2AC5■-■■■■**	230	0.32
30	–	**225 M**	982	290		92.9	93.6	93.5	0.83	56	2.6	6.6	3	64	77	**1LE1603-2BC2■-■■■■**	325	0.67
37	–	**250 M**	985	360		93.3	94	94	0.85	67	2.7	7	2.9	62	75	**1LE1603-2CC2■-■■■■**	405	1
45	–	**280 S**	988	435		93.7	94.3	94.2	0.85	82	3	6.8	2.8	60	74	**1LE1603-2DC0■-■■■■**	510	1.4
55	–	**280 M**	988	530		94.1	94.5	94.4	0.85	99	3.3	7.2	3	65	79	**1LE1603-2DC2■-■■■■**	560	1.64
75	–	**315 S**	990	720		94.6	94.9	94.4	0.84	136	2.6	7.5	3.1	63	78	**1LE1603-3AC0■-■■■■**	750	2.6
90	–	**315 M**	991	870		94.9	95.2	94.9	0.85	161	2.5	6.7	2.8	63	78	**1LE1603-3AC2■-■■■■**	890	3.1
110	–	**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	–	**315 L**	992	1270		95.4	95.7	95.4	0.82	245	3.3	8	3.3	66	81	**1LE1603-3AC5■-■■■■**	1130	4.48
160	–	**315 L**	992	1540		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 3/103			**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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1603-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1603-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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]																		
0.75	**–**	**100 L**	710	10.1		75	75.7	73.1	0.67	2.1	1.5	3.7	2.1	61.4	69.4	**1LE1603-1AD4■-■■■■**	31	0.0096
1.1	**–**	**100 L**	710	14.8		77.7	76.4	75.1	0.67	3.05	1.8	4.1	2.3	61.9	69.9	**1LE1603-1AD5■-■■■■**	36	0.013
1.5	**–**	**112 M**	720	19.9		79.7	85.6	77.3	0.63	4.15	2.6	5.1	3.1	61.7	69.7	**1LE1603-1BD2■-■■■■**	46	0.028
2.2	**–**	**132 S**	725	29		81.9	82.5	80.9	0.71	5.3	1.9	5	2.5	65	73	**1LE1603-1CD0■-■■■■**	60	0.046
3	**–**	**132 M**	725	39.5		83.5	83.8	82.2	0.72	7.1	2	5.2	2.5	70	78	**1LE1603-1CD2■-■■■■**	78	0.061
4	**–**	**160 M**	730	52		84.8	86	85.5	0.74	9.1	1.6	4.7	2.1	62.5	70.5	**1LE1603-1DD2■-■■■■**	98	0.076
5.5	**–**	**160 M**	730	72		86.2	87	86.3	0.73	12.4	2	5.5	2.4	68	76	**1LE1603-1DD3■-■■■■**	109	0.1
7.5	**–**	**160 L**	730	98		87.3	87.9	86.9	0.73	16.9	2.3	5.8	2.7	70	78	**1LE1603-1DD4■-■■■■**	117	0.13
11	**–**	**180 L**	725	145		88.6	89.6	89	0.74	24	2.1	5.1	2.4	67	74	**1LE1603-1ED4■-■■■■**	187	0.267
15	**–**	**200 L**	730	196		89.6	90.1	89.4	0.73	33.5	3	6.8	3.7	57	70	**1LE1603-2AD5■-■■■■**	249	0.42
18.5	**–**	**225 S**	732	240		90.1	90.6	90	0.75	39.5	2.5	5.9	3	56	70	**1LE1603-2BD0■-■■■■**	270	0.5
22	**–**	**225 M**	732	285		90.6	91.4	91.2	0.77	45.5	2.6	5.9	2.9	56	70	**1LE1603-2BD2■-■■■■**	280	0.55
30	**–**	**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	**–**	**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	**–**	**280 M**	738	580		92.2	92.8	92.6	0.8	88	2.5	5.9	2.5	65	79	**1LE1603-2DD2■-■■■■**	550	1.6
55	**–**	**315 S**	740	710		92.5	92.9	92.6	0.81	106	2.3	6	2.7	66	81	**1LE1603-3AD0■-■■■■**	650	2
75	**–**	**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	**–**	**315 L**	740	1160		93.4	94.2	94.3	0.83	168	2.2	5.8	2.5	71	85	**1LE1603-3AD4■-■■■■**	860	3.1
110	**–**	**315 L**	740	1420		93.7	94.2	94.1	0.82	205	2.7	6.7	2.9	74	88	**1LE1603-3AD5■-■■■■**	980	3.9
132	**–**	**315 L**	740	1700		94	94.4	94.1	0.81	250	2.9	7.2	3.3	76	90	**1LE1603-3AD6■-■■■■**	1160	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 3/103			**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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1603-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 3/131		**1LE1603-. . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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Cast-iron series Innomotics SD 1LE1503 Basic Line with increased power – self-ventilated

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]																		
1.5	**1,75**	**80 M**	2865	5		84.2	84.8	84.4	0.84	3.05	3.2	8	3.7	69	77	**1LE1503-0DA6■-■■■■**	22	0.0015
3	**3,45**	**90 L**	2920	9.8	IE2	87.1	87.2	85.9	0.84	5.9	4.4	10.2	4.6	71	78	**1LE1503-0EA6■-■■■■**	31	0.00301
4	**4,55**	**100 L**	2910	13.1		88.1	88.9	87.8	0.83	7.9	3.5	8.9	4.6	77	85	**1LE1503-1AA6■-■■■■**	34	0.00462
5.5	**6,3**	**112 M**	2950	17.8		89.2	89.5	88.8	0.86	10.4	2.7	8.8	3.9	69	77	**1LE1503-1BA6■-■■■■**	43	0.00959
11	**12,6**	**132 M**	2940	35.5		91.2	92.1	92.3	0.89	19.6	2.8	9.8	4.1	68	76	**1LE1503-1CA6■-■■■■**	78	0.023
15	**17,3**	**132 M**	2960	48.5		91.9	92	91.1	0.84	28	2.9	9.1	4.4	73	81	**1LE1503-1CA7■-■■■■**	83	0.0321
22	**25.3**	**160 L**	2945	71		92.7	92.8	92.2	0.91	37.5	3.5	9.9	4.4	76	84	**1LE1503-1DA6■-■■■■**	137	0.0603
30	**33.5**	**180 L**	2950	97		93.3	93.5	93.1	0.88	53	2.6	8.6	3.9	67	80	**1LE1503-1EA6■-■■■■**	175	0.094
45	**51**	**200 L**	2950	146		94	94.5	93.9	0.87	79	2.5	7.1	3.2	77	77	**1LE1503-2AA6■-■■■■**	245	0.17
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	240	IE2	94.7	94.9	94.5	0.9	127	2.2	6.8	2.9	78	92	**1LE1503-2CA6■-■■■■**	470	0.56
110	**123**	**280 M**	2975	355		95.2	95.4	95.1	0.91	183	2.5	7.7	3.2	78	92	**1LE1503-2DA6■-■■■■**	670	1.1
4-pole: 1500 rpm at 50 Hz. 1800 rpm at 60 Hz [1]																		
1.1	**1,27**	**80 M**	1445	7.3	IE2	84.1	84.6	83.6	0.78	2.4	3	7	3.5	63	70	**1LE1503-0DB6■-■■■■**	24	0.00329
4	**4,55**	**100 L**	1455	26.5		88.8	89.4	88.8	0.81	8	2.9	7.5	3.7	67	75	**1LE1503-1AB6■-■■■■**	53	0.0149
5,5	**6,3**	**112 M**	1460	36		89.6	89.9	89.4	0.8	11.1	3.2	8	4.1	67	75	**1LE1503-1BB6■-■■■■**	60	0.0186
11	**12.6**	**132 M**	1470	71		91.4	91.8	91.1	0.79	22	2.8	8.3	3.8	71	79	**1LE1503-1CB6■-■■■■**	99	0.041
18.5	**21.3**	**160 L**	1480	119	IE2	92.6	92.7	91.8	0.76	38	2.7	8.1	3.8	62	75	**1LE1503-1DB6■-■■■■**	126	0.099
30	**34.5**	**180 L**	1470	195	IE2	93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1503-1EB6■-■■■■**	191	0.173
37	**42.5**	**200 L**	1475	240	IE2	93.9	94	93.6	0.81	70	3.1	8.1	3.5	65	72	**1LE1503-2AB6■-■■■■**	258	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	480		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	710	IE2	95.4	95.5	95	0.85	196	3	8.3	3.4	73	87	**1LE1503-2DB6■-■■■■**	720	1.8

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 3/103			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 3/110				■	. . .
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 3/120					■ . . .
Terminal box position		Version			
Terminal box at top		**Standard**			4
For other terminal box positions and more information, see from page 3/123					■
Special versions					Order code(s)
For options, see from page 3/131					**1LE1503-** . . . . ■-■■■■-Z . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)	▲ 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 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]																		
3	**–**	**112 M**	965	29.5	IE2	85.6	86.8	86.6	0.74	6.8	2.3	5.8	2.7	68	76	▲ **1LE1503-1BC6■-■■■■**	55	0.0177
18.5	**–**	**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	**–**	**200 L**	978	295		92.9	93.6	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1503-2AC6■-■■■■**	264	0.434
37	**–**	**225 M**	982	360		93.3	93.9	93.7	0.81	71	3	7.1	3.2	65	79	**1LE1503-2BC6■-■■■■**	395	0.84
45	**–**	**250 M**	986	435		93.7	94.3	94.2	0.84	83	2.8	7	2.9	68	81	**1LE1503-2CC6■-■■■■**	480	1.3
75	**–**	**280 M**	988	720		94.6	95	94.8	0.83	138	3.7	8.6	3.3	68	81	**1LE1503-2DC6■-■■■■**	630	1.9
8-pole: 750 rpm at 50 Hz. 900 rpm at 60 Hz [1]																		
18,5	**–**	**200 L**	725	245		90.1	90.5	89.5	0.71	41.5	3.1	6.7	3.7	60	68	**1LE1503-2AD6■-■■■■**	256	0.405
30	**–**	**225 M**	732	390		91.3	92.1	92	0.76	62	2.8	6.1	3.1	60	74	**1LE1503-2BD6■-■■■■**	330	0.67
37	**–**	**250 M**	730	485		91.8	92.8	93.1	0.81	72	2.3	5.7	2.6	61	75	**1LE1503-2CD6■-■■■■**	405	1
55	**–**	**280 M**	736	710		92.5	93.3	92.6	0.8	107	2.5	5.9	2.5	70	81	**1LE1503-2DD6■-■■■■**	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 3/103			**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 3/110					**■**		. . .
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 3/120						**■**	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							**■**
Special versions							Order code(s)
For options, see from page 3/131		**1LE1503- . . . . ■-■■■■-Z**					. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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Cast-iron series Innomotics SD 1LE1603 Performance Line with increased power – self-ventilated

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)	▲ 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) 1.15 • 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**	2910	13.1		88.1	88.9	87.8	0.83	7.9	3.5	8.9	4.6	77	85	**1LE1603-1AA6■-■■■■**	34	0.00462
5.5	**6,3**	**112 M**	2950	17.8		89.2	89.5	88.8	0.86	10.4	2.7	8.8	3.9	69	77	**1LE1603-1BA6■-■■■■**	43	0.00959
11	**12,6**	**132 M**	2940	35.5		91.2	92.1	92.3	0.89	19.6	2.8	9.8	4.1	68	76	**1LE1603-1CA6■-■■■■**	78	0.023
15	**17,3**	**132 M**	2960	48.5		91.9	92	91.1	0.84	28	2.9	9.1	4.4	73	81	**1LE1603-1CA7■-■■■■**	83	0.0321
22	**25.3**	**160 L**	2945	71		92.7	92.8	92.2	0.91	37.5	3.5	9.9	4.4	76	84	**1LE1603-1DA6■-■■■■**	137	0.0603
30	**33.5**	**180 L**	2950	97		93.3	93.5	93.1	0.88	53	2.6	8.6	3.9	67	80	**1LE1603-1EA6■-■■■■**	175	0.094
45	**51**	**200 L**	2950	146		94	94.5	93.9	0.87	79	2.5	7.1	3.2	77	77	**1LE1603-2AA6■-■■■■**	245	0.17
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	240	IE2	94.7	94.9	94.5	0.9	127	2.2	6.8	2.9	78	92	**1LE1603-2CA6■-■■■■**	470	0.56
110	**123**	**280 M**	2975	355		95.2	95.4	95.1	0.91	183	2.5	7.7	3.2	78	92	**1LE1603-2DA6■-■■■■**	670	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz [1]																		
4	**4,55**	**100 L**	1455	26.5		88.6	89.4	88.8	0.81	8	2.9	7.5	3.7	67	75	**1LE1603-1AB6■-■■■■**	53	0.0149
5,5	**6,3**	**112 M**	1460	36	IE2	89.6	89.9	89.4	0.8	11.1	3.2	8	4.1	67	75	**1LE1603-1BB6■-■■■■**	60	0.0186
11	**12.6**	**132 M**	1470	71		91.4	91.8	91.1	0.79	22	2.8	8.3	3.8	71	79	**1LE1603-1CB6■-■■■■**	99	0.041
18.5	**21.3**	**160 L**	1480	119	IE2	92.6	92.7	91.8	0.76	38	2.7	8.1	3.8	62	75	**1LE1603-1DB6■-■■■■**	126	0.099
30	**34.5**	**180 L**	1470	195	IE2	93.6	94	93.8	0.79	59	3	8.2	3.8	66	74	**1LE1603-1EB6■-■■■■**	191	0.173
37	**42.5**	**200 L**	1475	240	IE2	93.9	94	93.6	0.81	70	3.1	8.1	3.5	65	72	**1LE1603-2AB6■-■■■■**	258	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	480		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	710	IE2	95.4	95.5	95	0.85	196	3	8.3	3.4	73	87	**1LE1603-2DB6■-■■■■**	720	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
3	**–**	**112 M**	965	29.5	IE2	85.6	86.8	86.6	0.74	6.8	2.3	5.8	2.7	68	76	▲ **1LE1603-1BC6■-■■■■**	55	0.0177
18.5	**–**	**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	**–**	**200 L**	978	295		92.9	93.6	93.7	0.79	59	2.8	6.5	2.8	61	68	**1LE1603-2AC6■-■■■■**	264	0.434
37	**–**	**225 M**	982	360		93.3	93.9	93.7	0.81	71	3	7.1	3.2	65	79	**1LE1603-2BC6■-■■■■**	395	0.84
45	**–**	**250 M**	986	435		93.7	94.3	94.2	0.84	83	2.8	7	2.9	68	81	**1LE1603-2CC6■-■■■■**	480	1.3
75	**–**	**280 M**	988	720		94.6	95	94.8	0.83	138	3.7	8.6	3.3	68	81	**1LE1603-2DC6■-■■■■**	630	1.9
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz [1]																		
18,5	**–**	**200 L**	725	245		90.1	90.5	89.5	0.71	41.5	3.1	6.7	3.7	60	68	**1LE1603-2AD6■-■■■■**	256	0.405
30	**–**	**225 M**	732	390		91.3	92.1	92	0.76	62	2.8	6.1	3.1	60	74	**1LE1603-2BD6■-■■■■**	330	0.67
37	**–**	**250 M**	730	485		91.8	92.8	93.1	0.81	72	2.3	5.7	2.6	61	75	**1LE1603-2CD6■-■■■■**	405	1
55	**–**	**280 M**	736	710		92.5	93.3	92.6	0.8	107	2.5	5.9	2.5	70	81	**1LE1603-2DD6■-■■■■**	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 3/103			**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 a60nd more information, see from page 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
For options, see from page 3/131							**1LE1603- . . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)		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) • Optional and suitable for converter operation; $U_{line} \leq 690$ V - IVIC-C premiuminsulation system																		
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**	2950	12.9		88.1	88.7	88.2	0.89	7.4	2.5	9.2	3.4	69	81	**1LE1583-1BA2■-■■■■**	43	0.012
5.5	**6.3**	**132 S**	2960	17.7		89.2	89.6	88.9	0.91	9.8	2.1	9.7	3.6	72	79	**1LE1583-1CA0■-■■■■**	75	0.031
7.5	**8.6**	**132 S**	2950	24.5		90.1	90.9	90.7	0.91	13.2	2.1	9	3.3	68	80	**1LE1583-1CA1■-■■■■**	75	0.031
11	**12.6**	**160 M**	2955	35.5		91.2	91.5	90.7	0.9	19.3	2.5	8.5	3.4	79	86	**1LE1583-1DA2■-■■■■**	111	0.061
15	**17.3**	**160 M**	2960	48.5		91.9	91.9	91	0.86	27.5	2.8	9.5	4	70	82	**1LE1583-1DA3■-■■■■**	111	0.061
18.5	**21.3**	**160 L**	2960	60		92.4	92.9	92.6	0.92	31.5	2.8	9.7	3.8	78	85	**1LE1583-1DA4■-■■■■**	131	0.073
22	**24.5**	**180 M**	2950	71		92.7	93	92.4	0.89	38.5	2.3	7.5	3.5	67	80	**1LE1583-1EA2■-■■■■**	165	0.08
30	**33.5**	**200 L**	2955	97		93.3	93.6	93.3	0.86	54	2.6	7.5	3.3	68	81	**1LE1583-2AA4■-■■■■**	220	0.134
37	**41.5**	**200 L**	2950	120		93.7	93.9	93.5	0.88	65	2.6	7.8	3.4	68	81	**1LE1583-2AA5■-■■■■**	245	0.158
45	**51**	**225 M**	2960	145		94	94.5	94.4	0.89	78	2.4	6.9	3.1	73	87	**1LE1583-2BA2■-■■■■**	315	0.265
55	**62**	**250 M**	2975	177		94.3	94.5	94	0.89	95	2.1	7	3	73	87	**1LE1583-2CA2■-■■■■**	385	0.463
75	**84**	**280 S**	2980	240		94.7	94.8	94.1	0.89	128	2.6	8.7	3.5	73	87	**1LE1583-2DA0■-■■■■**	610	0.926
90	**101**	**280 M**	2980	290		95	95.2	94.8	0.9	152	2.7	8.4	3.2	77	91	**1LE1583-2DA2■-■■■■**	620	0.934
110	**123**	**315 S**	2982	350		95.2	95.4	95	0.91	183	2.2	7.5	2.9	75	89	**1LE1583-3AA0■-■■■■**	750	1.37
132	**148**	**315 M**	2984	420		95.4	95.6	95.3	0.9	220	2.7	8.4	3	77	91	**1LE1583-3AA2■-■■■■**	980	1.9
160	**180**	**315 L**	2982	510	IE2	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	I	95.8	95.9	95.5	0.92	330	3.9	10	3.6	78	93	**1LE1583-3AA5■-■■■■**	1080	2.45

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 3/103			**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 3/110			■	. . .

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 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1583- . . . . ■-■■■■**	**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131	**1LE1583- . . . . ■-■■■■**	**-Z . . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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.

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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)		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) • Optional and suitable for converter operation; $U_{line} \leq 690$ V - IVIC-C premiuminsulation system																		
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	85.9	0.83	4.4	2.5	9.2	3.8	60	72	**1LE1583-1AB4■-■■■■**	40	0.014
3	**3.45**	**100 L**	1460	19.6	IE2	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	67	74	**1LE1583-1BB2■-■■■■**	60	0.02
5.5	**6.3**	**132 S**	1470	35.5		89.6	90.1	89.7	0.82	10.8	2.5	8.3	3.6	64	76	**1LE1583-1CB0■-■■■■**	67	0.034
7.5	**8.6**	**132 M**	1465	49	IE2	90.4	91.1	90.8	0.84	14.3	2.5	8.1	3.3	64	76	**1LE1583-1CB2■-■■■■**	82	0.046
11	**12.6**	**160 M**	1475	71		91.4	91.8	91.2	0.84	20.5	2.3	7.2	3	65	77	**1LE1583-1DB2■-■■■■**	110	0.071
15	**17.3**	**160 L**	1480	97	IE2	92.1	92.4	92	0.85	27.5	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	0.82	35	2.7	8	3.5	66	73	**1LE1583-1EB2■-■■■■**	166	0.13
22	**25.3**	**180 L**	1470	143	IE2	93	93.4	93.1	0.82	41.5	2.6	7.7	3.3	62	75	**1LE1583-1EB4■-■■■■**	178	0.14
30	**34.5**	**200 L**	1470	195	IE2	93.6	94.3	94.5	0.84	55	2.6	7.3	3.1	59	72	**1LE1583-2AB5■-■■■■**	240	0.24
37	**42.5**	**225 S**	1482	240	IE2	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	IE2	94.2	94.6	94.4	0.84	82	3.4	8.3	3.2	69	83	**1LE1583-2BB2■-■■■■**	450	0.655
55	**63**	**250 M**	1486	355	IE2	94.6	94.9	94.4	0.86	98	3	8.3	3.3	68	82	**1LE1583-2CB2■-■■■■**	525	1.07
75	**86**	**280 S**	1488	480		95	95.1	94.5	0.85	134	3.4	9.6	3.7	69	83	**1LE1583-2DB0■-■■■■**	670	2.01
90	**104**	**280 M**	1486	580	IE2	95.2	95.5	95.3	0.86	159	2.5	7.5	3	70	84	**1LE1583-2DB2■-■■■■**	705	2.01
110	**127**	**315 M [4]**	1491	700		95.4	95.6	95.3	0.86	194	3.3	9	3.2	73	87	**1LE1583-3AB0■-■■■■**	950	2.66
132	**152**	**315 M**	1491	850		95.6	95.9	95.8	0.86	230	3.3	8.6	3.3	73	87	**1LE1583-3AB2■-■■■■**	990	3.05
160	**184**	**315 L**	1490	1030		95.8	96.2	96.1	0.86	280	3.3	8.3	3	73	87	**1LE1583-3AB4■-■■■■**	990	3.07
200	**230**	**315 L**	1490	1280		96	96.2	96	0.87	345	3.8	9	3.5	76	90	**1LE1583-3AB5■-■■■■**	1300	4.2

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 3/103			**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 3/110				■	. . .
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 3/120				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		**4**	
For other terminal box positions and more information, see from page 3/123				■	
Special versions					Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1583- . . . . ■-■■■■**			**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131		**1LE1583- . . . . ■-■■■■**			**-Z . . .+. . .+. . .+. . .**

1) Operating values at rated power for 60 Hz are stored in the Siemens Product 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).

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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)		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)																		
• Optional and suitable for converter operation; $U_{line} \leq 690$ V - IVIC-C premiuminsulation system																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz [1]																		
15	18	180 L	975	147	IE2	91.2	91.6	91.2	0.77	31	2.3	6.4	3	55	68	1LE1583-1EC4■-■■■■	180	0.19
18.5	22	200 L	978	181	IE2	91.7	92.1	91.9	0.79	37	2.5	5.6	2.6	58	71	1LE1583-2AC4■-■■■■	213	0.28
22	26.5	200 L	978	215	IE1	92.2	93.3	93.5	0.79	43.5	2.5	5.6	2.6	55	68	1LE1583-2AC5■-■■■■	230	0.32
30	36	225 M	982	290	IE2	92.9	93.7	93.7	0.81	58	2.6	7	2.9	65	79	1LE1583-2BC2■-■■■■	395	0.82
37	44.5	250 M	986	360	IE2	93.3	94	94	0.84	68	2.8	7.5	2.9	68	81	1LE1583-2CC2■-■■■■	480	1.27
45	54	280 S	990	435	IE2	93.7	94.2	94.1	0.84	83	3.1	8	3	60	74	1LE1583-2DC0■-■■■■	560	2.11
55	66	280 M	988	530	IE2	94.1	94.8	94.9	0.84	100	3.2	8.6	3	68	81	1LE1583-2DC2■-■■■■	630	2.39
75	90	315 S	992	720	IE2	94.6	95	94.7	0.84	136	2.4	7.5	2.8	63	78	1LE1583-3AC0■-■■■■	890	3.05
90	108	315 M [4]	992	870	IE2	94.9	95.3	95.1	0.84	163	2.8	7.9	3	63	78	1LE1583-3AC2■-■■■■	990	3.86
110	132	315 L	993	1060	IE2	95.1	95.4	95.2	0.84	199	2.8	8.3	3.2	67	82	1LE1583-3AC4■-■■■■	1110	4.3
132	158	315 L	993	1270		95.4	95.6	95.3	0.8	250	3.2	8.8	3.6	67	82	1LE1583-3AC5■-■■■■	1110	4.53
160	192	315 L	992	1540		95.6	95.9	95.7	0.82	295	3.5	9	3.6	67	82	1LE1583-3AC6■-■■■■	1270	5.41
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	5.4	2.6	62	75	1LE1583-1ED4■-■■■■	190	0.267
15	18	200 L	730	196		89.6	89.8	89.1	0.73	33	3	6.8	3.7	57	70	1LE1583-2AD5■-■■■■	255	0.42
18.5	22	225 S	732	240	IE2	90.1	91.3	91.3	0.74	40	2.4	5.9	2.9	56	70	1LE1583-2BD0■-■■■■	270	0.502
22	26.5	225 M	732	285	IE2	90.6	91.8	92	0.77	45.5	2.4	6	2.8	56	70	1LE1583-2BD2■-■■■■	280	0.549
30	36	250 M	734	390	IE2	91.3	92	91.8	0.78	61	2.5	6.4	2.9	60	74	1LE1583-2CD2■-■■■■	370	0.851
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	1.57
45	54	280 M	738	580		92.2	93.2	93.5	0.81	87	2.4	6.2	2.4	65	79	1LE1583-2DD2■-■■■■	550	2.09
55	66	315 S	740	710		92.5	93.5	93.7	0.8	107	2.2	6.2	2.6	66	81	1LE1583-3AD0■-■■■■	650	2.08
75	90	315 M	738	970	IE2	93.1	94.1	94.4	0.8	145	2.2	6	2.6	69	84	1LE1583-3AD2■-■■■■	720	2.48
90	108	315 L	738	1160	IE2	93.4	94.4	94.9	0.83	168	2.1	6	2.5	71	85	1LE1583-3AD4■-■■■■	860	3.13
110	132	315 L	740	1420		93.7	94.5	94.9	0.8	210	2.5	6.7	2.9	74	88	1LE1583-3AD5■-■■■■	960	3.94
132	158	315 L	741	1700		94	94.6	94.8	0.79	255	3	8	3.3	76	90	1LE1583-3AD6■-■■■■	1250	5.51

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 3/103			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 3/110					■	. . .
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 3/120						■ . . .
Terminal box position		Version				
Terminal box at top		**Standard**				4
For other terminal box positions and more information, see from page 3/123						■
Special versions						Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1583- . . . . ■-■■■■ -Z				F90+. . .+. . .+. . .
For options, see from page 3/131		1LE1583- . . . . ■-■■■■ -Z				. . .+. . .+. . .+. . .

[1] Operating values at rated power for 60 Hz are stored in the Siemens Product 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).

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Aluminum series Innomotics GP 1LE1043 – self-ventilated or forced-air cooled

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	Aluminum series 1LE1043 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 • 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																		
0.12	**0.14**	**63 M**	1710	0.67		67	64	57.1	0.62	0.36	2.9	4.3	3.3	64	72	▲ **1LE1043-0BB2■-■■■■**	5	0.00045
0.18	**0.21**	**63 M**	1715	1		69.5	66.9	60.6	0.6	0.54	3.6	4.6	3.7	64	71	▲ **1LE1043-0BB3■-■■■■**	6	0.00048
0.25	**0.29**	**71 M**	1715	1.39		73.4	72.3	68	0.68	0.63	2.9	4.9	3.1	47	58	▲ **1LE1043-0CB2■-■■■■**	7	0.00095
0.37	**0.43**	**71 M**	1720	2.05		78.2	76.9	72.5	0.66	0.9	3.6	5.7	3.8	62	73	▲ **1LE1043-0CB3■-■■■■**	9	0.0014
0.75	**0.86**	**80 M**	1760	4.05		83.5	82.6	79.7	0.71	1.59	3.1	8.3	4.7	58	66	**1LE1043-0DB3■-■■■■**	13	0.0029
1.1	**1.27**	**90 S**	1750	6	IE2	86.5	86.4	84.2	0.75	2.15	3.4	8.2	4.4	58	70	**1LE1043-0EB0■-■■■■**	15	0.0036
1.5	**1.75**	**90 L**	1755	8.2		86.5	86.6	84.7	0.77	2.85	3.4	8.6	4.3	59	67	**1LE1043-0EB4■-■■■■**	20	0.0049
2.2	**2.55**	**100 L**	1760	11.9		89.5	89.5	88	0.8	3.85	3.5	9.9	4.6	70	78	**1LE1043-1AB4■-■■■■**	25	0.01
3	**3.45**	**100 L**	1760	16.3	IE2	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	**1LE1043-1AB5■-■■■■**	34	0.017
4	**4.55**	**112 M**	1770	20		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	**1LE1043-1BB2■-■■■■**	64	0.034
5.5	**6.3**	**132 S**	1775	29.5		91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	**1LE1043-1CB0■-■■■■**	61	0.0334
7.5	**8.6**	**132 M**	1770	40.5	IE2	91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	**1LE1043-1CB2■-■■■■**	78	0.0583
11	**12.6**	**160 M**	1775	59		92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	**1LE1043-1DB2■-■■■■**	106	0.089
15	**17.3**	**160 L**	1775	81	IE2	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	**1LE1043-1DB4■-■■■■**	134	0.13
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■-■■■■**	142	0.14
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■-■■■■**	189	0.24
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■-■■■■**	64	0.046

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 3/100			**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 3/106					■			. . .
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 3/119						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 3/122							■	
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 3/125		**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.

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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)	▲ 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 • 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	0.21	71 M	1110	1.55		67.5	66.3	61	0.63	0.53	2.8	3.5	2.9	42	53	▲ 1LE1043-0CC2■-■■■■	7	0.00098
0.25	0.29	71 M	1110	2.15		71.4	70.6	66.4	0.64	0.69	3.2	3.9	3.2	48	59	▲ 1LE1043-0CC3■-■■■■	9	0.0014
0.75	0.86	90 S	1155	6.2	IE2	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	IE2	87.5	87.2	84.8	0.69	2.3	2.4	6.7	3.3	62	74	1LE1043-1AC3■-■■■■	25	0.011
1.5	1.75	112 S	1175	12.2	IE2	88.5	88.3	86.2	0.73	2.9	2.2	6.9	3.2	65	77	1LE1043-1BC1■-■■■■	34	0.017
2.2	2.55	132 S	1180	17.8	IE2	89.5	89.2	87.7	0.72	4.3	2.4	7.3	3.5	63	71	1LE1043-1CC1■-■■■■	52	0.033
3	3.45	132 S	1180	24.5	IE2	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70	1LE1043-1CC0■-■■■■	52	0.037
4	4.55	132 M	1180	30	IE2	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72	1LE1043-1CC2■-■■■■	61	0.037
5.5	6.3	132 M	1180	44.5	IE2	91	90.8	89.2	0.69	11	3	7.8	4	69	77	1LE1043-1CC3■-■■■■	64	0.046
7.5	8.6	160 M	1185	60		91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83	1LE1043-1DC2■-■■■■	93	0.098
11	12.6	160 L	1185	89	IE2	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81	1LE1043-1DC4■-■■■■	115	0.12
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	IE1	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	1LE1043-2AC5■-■■■■	179	0.32
8-pole: 750 rpm at 50 Hz. 900 rpm at 60 Hz																		
0.12	0.14	71 M	830	1.38		59.5	56.9	50.3	0.56	0.45	2.6	2.9	2.7	49	56	▲ 1LE1043-0CD3■-■■■■	9	0.0014
0.09	0.11	80 M	865	1.99		64	60.6	53	0.44	0.78	2.6	3.5	3.5	54.8	68.1	1LE1043-0CD2■-■■■■	12	0.0021
0.12	0.14	80 M	855	2.8		68	65.5	59.8	0.51	0.91	2	3.3	2.6	56	64	1LE1043-0CD3■-■■■■	13	0.003
0.18	0.21	90 S	850	4.15		72	69.9	64.2	0.63	1.02	2	3.4	2.1	54	61	1LE1043-0DD2■-■■■■	16	0.0045
0.25	0.29	90 L	855	6.1		74	71.6	65.8	0.62	1.5	2.3	4	2.8	59	66	1LE1043-0DD3■-■■■■	19	0.0045
0.37	0.43	100 L	870	8.2		75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72	1LE1043-0ED0■-■■■■	20	0.0096
0.55	0.63	100 L	865	12.1		78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4	1LE1043-0ED4■-■■■■	26	0.013
0.75	0.86	112 M	875	16.4	IE2	84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73	1LE1043-1AD4■-■■■■	34	0.028

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 3/100			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 3/106					■			. . .
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 3/119						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 3/122							■	
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 3/125		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.

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Aluminum series Innomotics GP 1LE1043 with increased power – self-ventilated or forced-air cooled

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	$\cos\varphi_{rated}$, 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)	▲ 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 • 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**	**71 M**	3460	2.05		82.5	81.4	77.5	0.76	1.5	3.7	7.9	4.3	66	74	▲ **1LE1043-0CA6■-■■■■**	9	0.00058
1.5	**1.75**	**80 M**	3485	4.1		85.5	85.5	83.6	0.83	2.65	4.7	10.1	4.7	76	84	**1LE1043-0DA6■-■■■■**	13	0.0015
3	**3.45**	**90 L**	3530	8.1	IE2	88.5	88.1	86.3	0.83	5.1	4.9	12.4	5.6	76	83	**1LE1043-0EA6■-■■■■**	20	0.00301
4	**4.55**	**100 L**	3530	10		88.5	88	86.4	0.8	6.6	4.5	12.4	5.8	75	83	**1LE1043-1AA6■-■■■■**	26	0.0054
5.5	**6.3**	**112 M**	3560	14.8		89.5	89.3	88.2	0.86	9	3.1	10.4	4.7	76	84	**1LE1043-1BA6■-■■■■**	36	0.00959
11	**12.6**	**132 M**	3550	29.5		91	91.3	90.8	0.88	17.2	3.2	11.7	4.9	73	81	**1LE1043-1CA6■-■■■■**	55	0.023
15	**17.3**	**132 L**	3570	40		91	90.9	90.1	0.83	25	3.4	11.1	5.4	78	86	**1LE1043-1CA7■-■■■■**	65	0.035
22	**25.3**	**160 L**	3555	59		91.7	91.2	89.7	0.9	33.5	3.9	11	5	85	93	**1LE1043-1DA6■-■■■■**	108	0.0603
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■-■■■■**	139	0.094
45	**51**	**200 L**	3560	121		93.6	93.6	92.9	0.86	70	3	8.4	3.7	77	84	**1LE1043-2AA6■-■■■■**	–	0.17
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
1.1	**1.27**	**80 M**	1750	6	IE2	86.5	86.4	84.2	0.75	2.15	3.5	8.6	4.4	60	68	**1LE1043-0DB6■-■■■■**	15	0.00329
4	**4.55**	**100 L**	1768	20		89.5	89.5	87.7	0.77	6.7	3.8	9.5	4.8	71	79	**1LE1043-1AB6■-■■■■**	42	0.0149
11	**12.6**	**132 M**	1775	59	IE2	92.4	92	91	0.78	19.2	3.1	9.8	4.4	68	76	**1LE1043-1CB6■-■■■■**	81	0.041
18.5	**21.3**	**160 L**	1780	99		93.6	93.5	92.3	0.75	33	3	9	4.2	67	81	**1LE1043-1DB6■-■■■■**	111	0.099
30	**34.5**	**180 L**	1775	161	IE2	94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	78	86	**1LE1043-1EB6■-■■■■**	158	0.173
37	**42.5**	**200 L**	1780	198	IE2	94.5	94.6	94.2	0.8	61	3.3	9	4	70	77	**1LE1043-2AB6■-■■■■**	205	0.275
6-pole: 1000 rpm at 50 Hz, 11200 rpm at 60 Hz																		
18.5	**22**	**180 L**	1180	150	IE2	93	93.2	92.6	0.75	33.5	2.9	7.9	3.7	69	81	**1LE1043-1EC6■-■■■■**	148	0.247
30	**36**	**200 L**	1182	240	IE2	94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	**1LE1043-2AC6■-■■■■**	220	0.421
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
0,09		**0,11**	880	163		90.2	90.6	89.6	0.73	28.5	2.6	6.4	3.2	68	75	**1LE1043-2AD6■-■■■■**	155	0.256

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 3/100			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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/122							■
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 3/125			**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.

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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/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	2.05		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	4.05		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	88.2	86.7	0.85	5	4.6	11.2	5.6	75	83	**1LE1543-1AA4■-■■■■**	37	0.0041
3.7	**4.55**	**112 M**	3555	9.9		88.5	88.4	86.65	0.87	6	3.3	11.8	4.7	80	88	**1LE1543-1BA2■-■■■■**	41	0.0079
5.5	**6.3**	**132 S**	3550	14.8		89.5	89	87	0.87	8.9	3	11.1	4.6	74	82	**1LE1543-1CA0■-■■■■**	66	0.0168
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■-■■■■**	75	0.031
11	**12.6**	**160 M**	3560	29.5		91	90.4	88.3	0.88	17.2	2.8	8.5	4.3	77	89	**1LE1543-1DA2■-■■■■**	102	0.053
15	**17.3**	**160 M**	3560	40		91	90.4	88.5	0.86	24	4	11.8	5.2	81	89	**1LE1543-1DA3■-■■■■**	104	0.043
18.5	**21.3**	**160 L**	3560	49.5		91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	**1LE1543-1DA4■-■■■■**	123	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■-■■■■**	165	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■-■■■■**	220	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■-■■■■**	245	0.158
45	**51**	**225 M**	3570	120		93.6	93.7	93.1	0.88	69	2.7	7.6	3.3	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	295		95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	**1LE1543-3AA0■-■■■■**	750	1.39
132	**148**	**315 M**	3585	350		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	425	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	530		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 3/103			**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 3/110				■	. . .
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 3/120				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		**4**	
For other terminal box positions and more information, see from page 3/123				■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1543-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**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.

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Cast-iron series Innomotics SD 1LE1543 Basic Line – self-ventilated or forced-air cooled

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	4.05		83.5	82.6	79.7	0.71	1.59	3.1	8.3	4.7	58	66	1LE1543-0DB3■-■■■■	22	0.0029
1.1	1.27	90 S	1750	6	IE2	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	86.6	84.7	0.77	2.85	3.4	8.6	4.3	59	67	1LE1543-0EB4■-■■■■	31	0.0049
2.2	2.55	100 L	1760	11.9		89.5	89.5	88	0.8	3.85	3.5	9.9	4.6	70	78	1LE1543-1AB4■-■■■■	40	0.0101
3	3.45	100 L	1760	16.3	IE2	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	1LE1543-1AB5■-■■■■	40	0.01
4	4.55	112 M	1770	20		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	1LE1543-1BB2■-■■■■	43	0.017
5.5	6.3	132 S	1775	29.5		91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	1LE1543-1CB0■-■■■■	67	0.034
7.5	8.6	132 M	1770	40.5		91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	1LE1543-1CB2■-■■■■	80	0.0334
11	12.6	160 M	1775	59		92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	1LE1543-1DB2■-■■■■	105	0.0583
15	17.3	160 L	1775	81	IE2	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	1LE1543-1DB4■-■■■■	133	0.089
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■-■■■■	166	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■-■■■■	178	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	0.24
37	42.5	225 S	1782	198	IE2	94.5	94.7	94.2	0.85	58	2.8	7.5	3	68	82	1LE1543-2BB0■-■■■■	285	0.42
45	52	225 M	1782	240	IE2	95	95.3	95.1	0.85	70	3	7.7	3	67	81	1LE1543-2BB2■-■■■■	340	0.52
55	63	250 M	1786	295	IE2	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	68	82	1LE1543-2CB2■-■■■■	420	0.85
75	86	280 S	1788	400	IE2	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	1LE1543-2DB0■-■■■■	570	1.39
90	104	280 M	1788	480	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	590		95.8	95.9	95.4	0.86	168	3	7.5	3.1	74	88	1LE1543-3AB0■-■■■■	760	2.2
132	152	315 M	1790	700		96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	78	92	1LE1543-3AB2■-■■■■	960	2.9
160	184	315 L	1791	850		96.2	96.2	95.7	0.87	240	3.3	8.4	3.3	78	92	1LE1543-3AB4■-■■■■	990	3.1
200	230	315 L	1791	1070	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 3/103			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 3/110					■			. . .
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 3/120						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 3/123							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1543-. . . . ■-■■■■					-Z	F90+. . .+. . .+. . .
For options, see from page 3/131		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.

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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)																			
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																			
0.75	**0.86**	**90 S**	1155	6.2	IE2	82.5	82.4	79.9	0.65	1.76	2.4	5.3	3.1	46	58		**1LE1543-0EC0■-■■■■**	27	0.004
1.1	**1.27**	**100 L**	1180	8.9	IE2	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	12.2	IE2	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	17.8	IE2	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	24.5	IE2	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70		**1LE1543-1CC0■-■■■■**	70	0.037
4	**4.55**	**132 M**	1180	30	IE2	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72		**1LE1543-1CC2■-■■■■**	80	0.037
5.5	**6.3**	**132 M**	1180	44.5	IE2	91	90.8	89.2	0.69	11	3	7.8	4	69	77		**1LE1543-1CC3■-■■■■**	82	0.046
7.5	**8.6**	**160 M**	1185	60	IE3	91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83		**1LE1543-1DC2■-■■■■**	122	0.098
11	**12.6**	**160 L**	1185	89	IE2	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81		**1LE1543-1DC4■-■■■■**	147	0.12
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■-■■■■**	213	0.28
22	**26.5**	**200 L**	1180	178	IE1	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70		**1LE1543-2AC5■-■■■■**	230	0.32
30	**36**	**200 L**	1188	295		94.1	94.4	93.9	0.83	59	3.1	8	3.1	63	76		**1LE1543-2AC6■-■■■■**	405	1
37	**44.5**	**250 M**	1190	360	IE2	94.5	94.6	94.1	0.83	72	3.3	7.7	3.1	66	80		**1LE1543-2CC2■-■■■■**	510	1.4
45	**54**	**280 S**	1190	440	IE2	94.5	94.6	93.9	0.84	87	3.6	9.2	3.3	66	80		**1LE1543-2DC0■-■■■■**	560	1.64
55	**66**	**280 M**	1192	600	IE2	95	94.9	94.1	0.82	121	3.1	8.4	3.3	64	79		**1LE1543-2DC2■-■■■■**	750	2.6
75	**90**	**315 S**	1192	720	IE3	95	95	94.4	0.84	142	2.7	7.7	3	64	79		**1LE1543-3AC0■-■■■■**	890	3.1
90	**108**	**315 M**	1192	880	IE2	95.8	95.9	95.5	0.83	174	3.2	8.2	3.4	64	79		**1LE1543-3AC2■-■■■■**	990	3.9
110	**132**	**315 L**	1193	1060	IE2	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80		**1LE1543-3AC4■-■■■■**	1130	4.48
132	**158**	**315 L**	1193	1280	IE2	95.8	95.8	95.2	0.81	260	4	9.8	4	68	83		**1LE1543-3AC5■-■■■■**	1260	5.41
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																			
0.09	**0.11**	**71 M**	825	1.04		57.1	53.7	45.8	0.55	0.36	2.3	2.6	2.4	45	57		**1LE1543-0CD2■-■■■■**	13	0.00098
0.12	**0.14**	**71 M**	830	1.38		59.5	56.9	50.3	0.56	0.45	2.6	2.9	2.7	49	56		**1LE1543-0CD3■-■■■■**	16	0.0014
0.18	**0.21**	**80 M**	865	1.99		64	60.6	53	0.44	0.78	2.6	3.5	3.5	54.8	68.1		**1LE1543-0DD2■-■■■■**	18	0.0021
0.25	**0.29**	**80 M**	855	2.8		68	65.5	59.8	0.51	0.91	2	3.3	2.6	56	64		**1LE1543-0DD3■-■■■■**	22	0.003
0.37	**0.43**	**90 S**	850	4.15		72	69.9	64.2	0.63	1.02	2	3.4	2.1	54	61		**1LE1543-0ED0■-■■■■**	26	0.0045
0.55	**0.63**	**90 L**	855	6.1		74	71.6	65.8	0.62	1.5	2.3	4	2.8	59	66		**1LE1543-0ED4■-■■■■**	26	0.0045
0.75	**0.86**	**100 L**	870	8.2		75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72		**1LE1543-1AD4■-■■■■**	31	0.0096
1.1	**1.27**	**100 L**	865	12.1		78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4		**1LE1543-1AD5■-■■■■**	36	0.013
1.5	**1.75**	**112 M**	875	16.4	IE2	84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73		**1LE1543-1BD2■-■■■■**	46	0.028

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 3/103			**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 3/110				■	. . .
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 3/120				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		**4**	
For other terminal box positions and more information, see from page 3/123				■	
Special versions					Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE1543-. . . . ■-■■■■**		**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131			**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.

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Cast-iron series Innomotics SD 1LE1643 Performance Line – self-ventilated or forced-air cooled

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	2.05		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	81	1LE1643-0DA3■-■■■■	21	0.0013
1.5	1.75	90 S	3525	4.05		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	83	1LE1643-0EA4■-■■■■	32	0.0031
3	3.45	100 L	3525	8.1		88.5	88.2	86.7	0.85	5	4.6	11.2	5.6	75	83	1LE1643-1AA4■-■■■■	37	0.0041
3.7	4.55	112 M	3555	9.9		88.5	88.4	86.65	0.87	6	3.3	11.8	4.7	80	88	1LE1643-1BA2■-■■■■	41	0.0079
5.5	6.3	132 S	3550	14.8		89.5	89	87	0.87	8.9	3	11.1	4.6	74	82	1LE1643-1CA0■-■■■■	66	0.0168
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■-■■■■	75	0.031
11	12.6	160 M	3560	29.5		91	90.4	88.3	0.88	17.2	2.8	8.5	4.3	77	89	1LE1643-1DA2■-■■■■	102	0.053
15	17.3	160 M	3560	40		91	90.4	88.5	0.86	24	4	11.8	5.2	81	89	1LE1643-1DA3■-■■■■	104	0.043
18.5	21.3	160 L	3560	49.5		91.7	91.5	90.3	0.9	28	3.1	9.4	4.4	77	89	1LE1643-1DA4■-■■■■	123	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■-■■■■	165	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■-■■■■	220	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■-■■■■	245	0.158
45	51	225 M	3570	120		93.6	93.7	93.1	0.88	69	2.7	7.6	3.3	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	295		95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	1LE1643-3AA0■-■■■■	750	1.39
132	148	315 M	3585	350		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	425	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	530		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 3/103			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 3/110					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				B		–
For other motor protection and more information, see from page 3/120						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					4	
For other terminal box positions and more information, see from page 3/123							■	
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1643- . . . . ■-■■■■ -Z						F90+. . .+. . .+. . .
For options, see from page 3/131		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.

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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/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)																		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
																1LE1643-1AB4■-■■■■		
3	**3.45**	**100 L**	1760	16.3	IE2	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	**1LE1643-1AB5■-■■■■**	40	0.01
4	**4.55**	**112 M**	1770	20		89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	**1LE1643-1BB2■-■■■■**	43	0.017
5.5	**6.3**	**132 S**	1775	29.5		91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	**1LE1643-1CB0■-■■■■**	67	0.034
7.5	**8.6**	**132 M**	1770	40.5		91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	**1LE1643-1CB2■-■■■■**	80	0.0334
11	**12.6**	**160 M**	1775	59		92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	**1LE1643-1DB2■-■■■■**	105	0.0583
15	**17.3**	**160 L**	1775	81	IE2	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	**1LE1643-1DB4■-■■■■**	133	0.089
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■-■■■■**	166	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■-■■■■**	178	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	0.24
37	**42.5**	**225 S**	1782	198	IE2	94.5	94.7	94.2	0.85	58	2.8	7.5	3	68	82	**1LE1643-2BB0■-■■■■**	285	0.42
45	**52**	**225 M**	1782	240	IE2	95	95.3	95.1	0.85	70	3	7.7	3	67	81	**1LE1643-2BB2■-■■■■**	340	0.52
55	**63**	**250 M**	1786	295	IE2	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	68	82	**1LE1643-2CB2■-■■■■**	420	0.85
75	**86**	**280 S**	1788	400	IE2	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	**1LE1643-2DB0■-■■■■**	570	1.39
90	**104**	**280 M**	1788	480	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	590		95.8	95.9	95.4	0.86	168	3	7.5	3.1	74	88	**1LE1643-3AB0■-■■■■**	760	2.2
132	**152**	**315 M**	1790	700		96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	78	92	**1LE1643-3AB2■-■■■■**	960	2.9
160	**184**	**315 L**	1791	850		96.2	96.2	95.7	0.87	240	3.3	8.4	3.3	78	92	**1LE1643-3AB4■-■■■■**	990	3.1
200	**230**	**315 L**	1791	1070	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 3/103			**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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1643-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 3/131		**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.

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Cast-iron series Innomotics SD 1LE1643 Performance Line – self-ventilated or forced-air cooled

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)	▲ 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 • 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	IE2	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	12.2	IE2	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	17.8	IE2	89.5	89.2	87.7	0.72	4.3	2.4	7.3	3.5	63	71	**1LE1643-1CC1■-■■■■**	60	0.033
3	**3.45**	**132 S**	1180	24.5	IE2	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70	**1LE1643-1CC0■-■■■■**	70	0.037
4	**4.55**	**132 M**	1180	30	IE2	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72	**1LE1643-1CC2■-■■■■**	80	0.037
5.5	**6.3**	**132 M**	1180	44.5	IE2	91	90.8	89.2	0.69	11	3	7.8	4	69	77	**1LE1643-1CC3■-■■■■**	82	0.046
7.5	**8.6**	**160 M**	1185	60	IE3	91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83	**1LE1643-1DC2■-■■■■**	122	0.098
11	**12.6**	**160 L**	1185	89	IE2	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81	**1LE1643-1DC4■-■■■■**	147	0.12
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■-■■■■**	213	0.28
22	**26.5**	**200 L**	1180	178	IE1	93	93.5	93.4	0.79	37.5	2.6	6.3	2.8	63	70	**1LE1643-2AC5■-■■■■**	230	0.32
30	**36**	**200 L**	1182	240		94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	**1LE1643-2AC6■-■■■■**	264	0.434
37	**44.5**	**250 M**	1188	295	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	360	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	440	IE2	94.5	94.6	93.9	0.84	87	3.6	9.2	3.3	66	80	**1LE1643-2DC2■-■■■■**	560	1.64
75	**90**	**315 S**	1192	600	IE3	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	720	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	880	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	1060	IE2	95.8	95.9	95.4	0.81	215	3.7	9.6	3.7	65	80	**1LE1643-3AC5■-■■■■**	1130	4.48
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
0.75	**0,86**	**100 L**	870	8.2		75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72	**1LE1643-1AD4■-■■■■**	31	0.0096
1.1	**1,27**	**100 L**	865	12.1		78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4	**1LE1643-1AD5■-■■■■**	36	0.013
1.5	**1,75**	**112 M**	875	16.4	IE2	84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73	**1LE1643-1BD2■-■■■■**	46	0.028

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 3/103			**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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1643-. . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options, see from page 3/131		**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.

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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/ 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																		
1.5	**1.75**	**80 M**	3485	4.1		85.5	85.5	83.6	0.83	2.65	4.7	10.1	4.7	76	84	**1LE1543-0DA6■-■■■■**	22	0.0015
3	**3.45**	**90 L**	3530	8.1	IE2	88.5	88.1	86.3	0.83	5.1	4.9	12.4	5.6	76	83	**1LE1543-0EA6■-■■■■**	31	0.00301
4	**4.55**	**100 L**	3530	10		88.5	88	86.4	0.8	6.6	4.5	12.4	5.8	75	83	**1LE1543-1AA6■-■■■■**	34	0.0054
5.5	**6.3**	**112 M**	3560	14.8		89.5	89.3	88.2	0.86	9	3.1	10.4	4.7	76	84	**1LE1543-1BA6■-■■■■**	43	0.00959
11	**12.6**	**132 M**	3550	29.5		91	91.3	90.8	0.88	17.2	3.2	11.7	4.9	73	81	**1LE1543-1CA6■-■■■■**	78	0.023
15	**17.3**	**132 M**	3570	40		91	90.9	90.1	0.83	25	3.4	11.1	5.4	78	86	**1LE1543-1CA7■-■■■■**	85	0.035
22	**25.3**	**160 L**	3555	59		91.7	91.2	89.7	0.9	33.5	3.9	11	5	85	93	**1LE1543-1DA6■-■■■■**	137	0.0603
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■-■■■■**	175	0.094
45	**51**	**200 L**	3560	121		93.6	93.6	92.9	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	75	88	**1LE1543-2BA6■-■■■■**	370	0.31
75	**84**	**250 M**	3575	200	IE2	94.1	93.9	92.9	0.9	111	2.5	7.5	3.2	81	95	**1LE1543-2CA6■-■■■■**	455	0.56
110	**123**	**280 M**	3578	295		95	94.8	94	0.91	160	2.9	8.5	3.5	81	95	**1LE1543-2DA6■-■■■■**	670	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
1.1	**1.27**	**80 M**	1750	6	IE2	86.5	86.4	84.2	0.75	2.15	3.5	8.6	4.4	60	68	**1LE1543-0DB6■-■■■■**	24	0.00329
4	**4.55**	**100 L**	1768	20		89.5	89.5	87.7	0.77	6.7	3.8	9.5	4.8	71	79	**1LE1543-1AB6■-■■■■**	53	0.0149
11	**12.6**	**132 M**	1775	59	IE2	92.4	92	91	0.78	19.2	3.1	9.8	4.4	68	76	**1LE1543-1CB6■-■■■■**	99	0.041
18.5	**21.3**	**160 L**	1780	99		93.6	93.5	92.3	0.75	33	3	9	4.2	67	81	**1LE1543-1DB6■-■■■■**	126	0.099
30	**34.5**	**180 L**	1775	161	IE2	94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	78	86	**1LE1543-1EB6■-■■■■**	191	0.173
37	**42.5**	**200 L**	1780	198	IE2	94.5	94.6	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	74	88	**1LE1543-2BB6■-■■■■**	405	0.65
75	**86**	**250 M**	1788	400		95.4	95.4	94.8	0.84	117	3.4	8.8	3.8	74	88	**1LE1543-2CB6■-■■■■**	510	1.1
110	**127**	**280 M**	1788	590	IE2	95.8	95.7	94.9	0.85	170	3.4	9.2	3.7	81	95	**1LE1543-2DB6■-■■■■**	710	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 3/103			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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
For options, see from page 3/131			**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.

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Cast-iron series Innomotics SD 1LE1543 Basic Line with increased power – self-ventilated

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)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
18.5	**22**	**180 L**	1180	150	IE2	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	240	IE2	94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	**1LE1543-2AC6■-■■■■**	264	0.421
37	**44.5**	**225 M**	1186	300	IE2	94.1	94.3	93.7	0.8	62	3.3	8.2	3.5	70	84	**1LE1543-2BC6■-■■■■**	395	0.84
45	**54**	**250 M**	1188	360	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	600		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	1280	IE2	95.8	95.8	95.2	0.81	260	4	9.8	4	68	83	**1LE1543-3AC6■-■■■■**	1260	5.41
8-pole: 750 rpm at 50 Hz. 900 rpm at 60 Hz																		
18.5	**22**	**200 L**	880	200	IE2	90.2	90.2	89	0.69	37.5	3.5	7.7	4.3	66	74	**1LE1543-2AD6■-■■■■**	256	0.405
37	**44.5**	**250 M**	884	400	IE2	92.4	92.9	92.6	0.8	63	2.7	6.5	2.9	64	78	**1LE1543-2CD6■-■■■■**	405	1
55	**66**	**280 M**	890	590	IE2	93.6	93.9	93.4	0.79	93	2.8	6.5	2.8	72	83	**1LE1543-2DD6■-■■■■**	550	1.6

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 3/103			**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 3/110			■	. . .

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 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
For options, see from page 3/131	**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.

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Cast-iron series Innomotics SD 1LE1643 Performance Line with increased power – self-ventilated

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)																		
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																		
4	**4.55**	**100 L**	3530	10		88.5	88	86.4	0.8	6.6	4.5	12.4	5.8	75	83	**1LE1643-1AA6■-■■■■**	37	0.0054
11	**12.6**	**132 M**	3560	14.8		89.5	89.3	88.2	0.86	9	3.1	10.4	4.7	76	84	**1LE1643-1CA6■-■■■■**	75	0.031
15	**17.3**	**132 M**	3550	29.5		91	91.3	90.8	0.88	17.2	3.2	11.7	4.9	73	81	**1LE1643-1CA7■-■■■■**	85	0.035
22	**25.3**	**160 L**	3570	40		91	90.9	90.1	0.83	25	3.4	11.1	5.4	78	86	**1LE1643-1DA6■-■■■■**	149	0.073
30	**33.5**	**180 L**	3555	59		91.7	91.2	89.7	0.9	33.5	3.9	11	5	85	93	**1LE1643-1EA6■-■■■■**	175	0.094
45	**51**	**200 L**	3560	80		92.4	92.6	92.1	0.87	47	2.9	8.8	4.5	77	89	**1LE1643-2AA6■-■■■■**	245	0.17
55	**62**	**225 M**	3560	121		93.6	93.6	92.9	0.86	70	3	8.4	3.7	77	84	**1LE1643-2BA6■-■■■■**	370	0.31
75	**84**	**250 M**	3570	147	IE2	93.6	93.6	92.8	0.88	84	3.2	8.9	4	75	88	**1LE1643-2CA6■-■■■■**	455	0.56
110	**123**	**280 M**	3575	200		94.1	93.9	92.9	0.9	111	2.5	7.5	3.2	81	95	**1LE1643-2DA6■-■■■■**	670	1.1
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																		
																1LE1643-1AB6■-■■■■		
11	**12.6**	**132 M**	1775	59	IE2	92.4	92	91	0.78	19.2	3.1	9.8	4.4	68	76	**1LE1643-1CB6■-■■■■**	99	0.041
18.5	**21.3**	**160 L**	1780	99		93.6	93.5	92.3	0.75	33	3	9	4.2	67	81	**1LE1643-1DB6■-■■■■**	126	0.099
30	**34.5**	**180 L**	1775	161	IE2	94.1	94.2	93.5	0.78	51	3.3	9.5	4.3	78	86	**1LE1643-1EB6■-■■■■**	191	0.173
37	**42.5**	**200 L**	1780	198	IE2	94.5	94.6	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	74	88	**1LE1643-2BB6■-■■■■**	405	0.65
75	**86**	**250 M**	1788	400		95.4	95.4	94.8	0.84	117	3.4	8.8	3.8	74	88	**1LE1643-2CB6■-■■■■**	510	1.1
110	**127**	**280 M**	1788	590	IE2	95.8	95.7	94.9	0.85	170	3.4	9.2	3.7	81	95	**1LE1643-2DB6■-■■■■**	720	1.8
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
18.5	**22**	**180 L**	1180	150	IE2	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	240	IE2	94.1	94.5	94.2	0.77	52	3.2	7.6	3.2	63	70	**1LE1643-2AC6■-■■■■**	264	TBD
37	**44.5**	**225 M**	1186	300	IE2	94.1	94.3	93.7	0.8	62	3.3	8.2	3.5	70	84	**1LE1643-2BC6■-■■■■**	395	0.84
45	**54**	**250 M**	1188	360	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	600		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	1280	IE2	95.8	95.8	95.2	0.81	260	4	9.8	4	68	83	**1LE1643-3AC6■-■■■■**	1260	5.4
8-pole: 750 rpm at 50 Hz. 900 rpm at 60 Hz																		
18.5	**22**	**200 L**	880	200	IE2	90.2	90.2	89	0.69	37.5	3.5	7.7	4.3	66	74	**1LE1643-2AD6■-■■■■**	256	0.405
37	**44.5**	**250 M**	884	400	IE2	92.4	92.9	92.6	0.8	63	2.7	6.5	2.9	64	78	**1LE1643-2CD6■-■■■■**	405	1
55	**66**	**280 M**	890	590	IE2	93.6	93.9	93.4	0.79	93	2.8	6.5	2.8	72	83	**1LE1643-2DD6■-■■■■**	550	1.6

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 3/103			**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 3/110					■	. . .
Motor protection		Version				Order code
PTC thermistor with 3 temperature sensors		**Standard**			**B**	–
For other motor protection and more information, see from page 3/120					■	. . .
Terminal box position		Version				
Terminal box at top		**Standard**			**4**	
For other terminal box positions and more information, see from page 3/123					■	
Special versions						Order code(s)
For options, see from page 3/131			**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.

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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/ 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 ■-■■■■**	16	0.0021
4	**4.55**	**112 M**	3555	9.9	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	14.8	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	29.5	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	49.5	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	77.3	74.4	0.72	1.68	2.5	6.8	3.8	60	68	**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 ■-■■■■**	15	0.0036
2.2	**2.55**	**100 L**	1760	11.9	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	29.5	89.5	89.6	88.1	0.78	9.9	2.6	8	3.3	68	80	**1LE1041-1CB0 ■-■■■■**	42	0.022
7.5	**8.6**	**132 M**	1770	40.5	89.5	90	89.3	0.82	12.8	2.7	8	3.4	68	80	**1LE1041-1CB2 ■-■■■■**	49	0.028
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	0.055
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	0.071

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 3/100			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1041-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/125	**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.

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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/ 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 ■-■■■■**	16	0.003
1.5	**1.75**	**100 L**	1175	12.2	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	85.9	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	44.5	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 3/100			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1041- . . . . ■-■■■■ -Z**					**F90+. . .+. . .+. . .**
For options, see from page 3/125		**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.

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Aluminum series Innomotics GP 1LE1041 with increased power – self-ventilated or forced-air cooled

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	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	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 • 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	14.8		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	29.5		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	40.5		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	0.085
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	90.3	89.2	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 3/100			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1041-. . . . ■-■■■■**	**-Z F90+. . .+. . .+. . .**
For options, see from page 3/125	**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.

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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/ 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	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 • 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■-■■■■**	205	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	295		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	350		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	425		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	530		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■-■■■■**	168	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■-■■■■**	220	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	240		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	295		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	400		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	480		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	590		95	94.8	93.8	0.86	169	3.1	8	3.3	79	94	**1LE1541-3AB0■-■■■■**	740	2
132	**152**	**315 M**	1790	700		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	850		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	1070		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 3/103			**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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				**4**	
For other terminal box positions and more information, see from page 3/123						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1541-. . . . ■-■■■■-Z**					**F90 +. . .+. . .+. . .**
For options, see from page 3/131		**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.

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Cast-iron series Innomotics SD 1LE1541 Basic Line – self-ventilated or forced-air cooled

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	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	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 • 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■-■■■■**	153	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■-■■■■**	198	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	240	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	300	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	360	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	440	IE1	93.6	93.9	93.4	0.85	87	3.1	7.2	2.9	67	81	**1LE1541-2DC2■-■■■■**	510	1.37
75	**90**	**315 S**	1190	600	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	720	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	880	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	1060		95	95	94.4	0.85	205	3.7	9.2	3.6	69	84	**1LE1541-3AC5■-■■■■**	990	4.02
160	**192**	**315 L**	1192	1280		95	94.9	94.2	0.85	250	3.8	9.3	3.4	71	85	**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 3/103			**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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1541-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 3/131	**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.

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

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power												Cast-iron series 1LE1541 – *Basic 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	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: 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	91.7	90.6	0.89	46	2.5	8.5	3.7	81	83	**1LE1541-1EA6■-■■■■**	175	0.094
45	**51**	**200 L**	3560	121		93	93	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	78	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	0.463
110	**123**	**280 M**	3582	295		94.5	94.4	93.5	0.9	162	3.5	9.6	3.9	84	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■-■■■■**	184	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	400		94.5	94.6	94	0.85	117	2.6	7.1	3.1	78	91	**1LE1541-2CB6■-■■■■**	440	0.85
110	**127**	**280 M**	1786	590		95	95.1	94.5	0.86	169	2.9	7.9	3.3	82	96	**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■-■■■■**	166	0.206
30	**34.5**	**200 L**	1180	245		93	93.4	93	0.77	53	2.9	7.4	3.1	71	78	**1LE1541-2AC6■-■■■■**	243	0.381
37	**44.5**	**225 M**	1182	300	IE1	93	93.3	92.8	0.82	61	2.8	7.3	3.2	67	80	**1LE1541-2BC6■-■■■■**	325	0.67
45	**54**	**250 M**	1186	360	IE1	93.6	93.9	93.4	0.84	72	2.7	7.8	3	71	85	**1LE1541-2CC6■-■■■■**	410	1
75	**90**	**280 M**	1188	600		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 3/103			**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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**				**4**	
For other terminal box positions and more information, see from page 3/123						■	
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1541-....** ■-■■■■					**-Z F90** +. . .+. . .+. . .
For options, see from page 3/131		**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.

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Aluminum series Innomotics GP 1LE1073 – self-ventilated or forced-air cooled

Selection and ordering data

Technical specifications at 60 Hz/P50 power rating

			Operating values at rated power												Aluminum series 1LE1073 Article No.		
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		$m_{IM\ B3}$	J
kW	CV (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 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	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	0.85	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	0.9	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	4.9	75	83	1LE1073-1AA6■-■■■■	26	0.0054
4.5	6	112 M	3550	12.1	88.5	89.2	87.9	0.9	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	10.2	3.8	75	83	1LE1073-1CA1■-■■■■	57	0.0031
9.2	12.5	132 M	3550	24.5	91	91.5	91.5	0.92	14.4	2	8.8	3.3	76	84	1LE1073-1CA5■-■■■■	62	0.0031
11	15	132 M	3555	29.5	91	91.8	91.8	0.9	17.6	2.1	9.6	4.5	76	84	1LE1073-1CA6■-■■■■	62	0.0031
15	20	160 M	3560	40	91	90.9	89.6	0.9	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	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	81.6	77.8	0.7	1.69	3.2	7.8	4.2	58	66	1LE1073-0DB3■-■■■■	13	0.0029
1.1	1.5	80 M	1750	6	84	84.4	83.1	0.78	2.2	3.1	8	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	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	65	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	91.2	90.5	0.8	9.9	3	9.8	4.2	71	79	1LE1073-1BB6■-■■■■	39	0.02
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	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

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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)		kg	kgm²
• 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	82.4	79.8	0.7	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	7	3.9	62	70	1LE1073-1AC3■-■■■■	28	0.014
1.5	2	112 M	1175	12.2	88.5	88.2	86.2	0.7	3.2	3.5	9	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	0.7	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	0.71	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	0.7	9	2.7	7.1	3.6	67	75	1LE1073-1CC4■-■■■■	47	0.037
5.5	7.5	132 M	1175	44.5	91	91	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	91.5	91.2	0.69	15.7	3.2	7.7	4	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	0.8	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	66.6	61	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	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	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	0.7	1.86	1.6	4	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	88.8	0.72	15.3	2.4	6.3	2.8	70	78	1LE1073-1DD4■-■■■■	78	0.131

		Version					Order code
Voltages							
50 Hz 220 VΔΔ/380 VYY/440 VΔ; 12 cables protruding without terminal board		**Standard**	6	4			–
For other voltages and more information, see from page 3/105			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 3/115					■		. . .
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 3/121						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/124							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			1LE1073- . . . . ■-■■■■				-Z F90 +. . .+. . .+. . .
For options, see from page 3/139			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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Cast-iron series Innomotics SD 1LE1573, 1LE5773 – self-ventilated or forced-air cooled

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)		kg	kgm²
• 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	76	84	**1LE1573-2AA4■-■■■■**	220	0.134
37	**50**	**200 L**	3560	99	93	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	93.8	0.88	88	2.2	6.6	2.8	76	89	**1LE1573-2BA6■-■■■■**	385	0.315
75	**100**	**250 M**	3570	200	94.1	94.1	93.3	0.9	116	2.1	6.6	2.7	82	96	**1LE1573-2CA6■-■■■■**	475	0.564
90	**125**	**280 S**	3575	240	95	95	94.2	0.9	138	2.2	7	2.7	78	92	**1LE1573-2DA2■-■■■■**	610	0.934
110	**150**	**280 M**	3570	295	95	95	94.3	0.91	167	2.3	7	2.8	82	96	**1LE1573-2DA6■-■■■■**	680	1.08
132	**175**	**315 S**	3575	355	95.4	95.3	94.3	0.88	205	1.7	6.1	2.3	84	99	**1LE5773-3AA2■-■■■■**	1030	2
150	**200**	**315 M**	3582	400	95.4	95.1	94	0.9	230	2.4	8	3.1	84	99	**1LE5773-3AA4■-■■■■**	1190	2
185	**250**	**315 M**	3578	495	95.8	95.9	95.4	0.9	280	1.5	6.1	2.2	82	96	**1LE5773-3AA5■-■■■■**	1280	2.38
220	**300**	**315 L**	3582	590	95.8	95.8	95.2	0.91	330	2.2	8	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	240	95	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	7.8	2.9	75	89	**1LE1573-2BB6■-■■■■**	420	0.655
75	**100**	**250 M**	1780	400	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	480	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	590	95.8	96	95.7	0.9	167	2.5	7.2	2.7	82	96	**1LE1573-2DB6■-■■■■**	740	1.67
132	**175**	**315 S**	1790	700	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	990	96.2	96.3	95.8	0.9	280	2.3	8	2.8	82	96	**1LE5773-3AB5■-■■■■**	1210	3.64
220	**300**	**315 L**	1790	1170	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	1600	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; 12 cables protruding without terminal board		**Standard**	**6**	**4**	–
For other voltages and more information, see from page 3/105			**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 3/115				■	. . .
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 3/121				■	. . .
Terminal box position		Version			
Terminal box at top		**Standard**		**4**	
For other terminal box positions and more information, see from page 3/124				■	
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 3/139			**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.

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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	Cast-iron series 1LE1573/1LE5773 Article No.	$m_{IM\ B3}$	J
kW	CV (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 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	93.3	92.8	0.75	35	2.9	7.9	3.7	73	81	**1LE1573-1EC6■-■■■■**	185	4.36
22	**30**	**200 L**	1180	178	93	93.4	93.3	0.78	40	2.6	6.5	2.8	62	70	**1LE1573-2AC5■-■■■■**	230	4.99
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	5.56
37	**50**	**225 M**	1186	300	94.1	94.5	94.2	0.81	64	3	7.7	3.1	71	85	**1LE1573-2BC6■-■■■■**	320	6.06
45	**60**	**250 S**	1186	360	94.5	95	94.7	0.84	74	2.8	7.7	2.9	69	83	**1LE1573-2CC6■-■■■■**	500	3.74
55	**75**	**280 S**	1186	445	94.5	95	94.8	0.85	90	2.5	6.8	2.3	66	80	**1LE1573-2DC2■-■■■■**	580	4.48
75	**100**	**280 S**	1186	600	95	95.7	95.9	0.84	123	3.2	7.4	2.7	70	84	**1LE1573-2DC6■-■■■■**	650	5.36
90	**125**	**280 M**	1186	720	95	95.7	95.8	0.85	146	3.2	7.9	2.7	71	85	**1LE1573-2DC7■-■■■■**	760	6.76
110	**150**	**315 M**	1190	880	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	1060	95.8	96.5	96.6	0.85	215	2	6.5	2.6	68	82	**1LE5773-3AC5■-■■■■**	1160	4.99
150	**200**	**315 M**	1191	1200	95.8	96.1	96	0.83	250	2.3	7.3	2.8	69	83	**1LE5773-3AC6■-■■■■**	1250	5.56
185	**250**	**315 L**	1191	1480	95.8	96.2	96.2	0.83	305	2.3	7	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	3.74
11	**15**	**180 L**	875	120	89.5	90.1	89.7	0.74	22	2.3	5.8	2.7	68	76	**1LE1573-1ED4■-■■■■**	190	4.48
15	**20**	**180 L**	875	164	90.2	91.4	91.6	0.75	29	2.1	5.4	2.5	69	77	**1LE1573-1ED6■-■■■■**	187	5.36
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	6.76
22	**30**	**225 S**	882	240	91.7	92.2	91.8	0.78	40.5	2.6	6.4	3	60	74	**1LE1573-2BD2■-■■■■**	315	8.4
30	**40**	**225 M**	886	325	91.7	92.4	92.1	0.76	56	2.8	6.4	3.2	66	79	**1LE1573-2BD6■-■■■■**	335	0.672
37	**50**	**250 M**	886	400	92.4	92.5	91.6	0.78	67	2.8	7	3	65	79	**1LE1573-2CD6■-■■■■**	425	1.02
45	**60**	**250 M**	882	485	92.4	93.2	93.2	0.82	78	2.4	6.3	2.7	66	80	**1LE1573-2CD7■-■■■■**	435	1.02
55	**75**	**280 S**	888	590	93.6	94.1	93.8	0.79	98	2.5	6.1	2.5	70	81	**1LE1573-2DD6■-■■■■**	580	1.62
75	**100**	**280 M**	888	810	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	960	94.1	94.4	94	0.82	153	2.5	7	2.6	74	88	**1LE5773-3AD4■-■■■■**	1000	3.74
110	**150**	**315 M**	891	1180	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	1420	94.5	95	94.9	0.84	220	2.1	6	2.3	82	97	**1LE5773-3AD6■-■■■■**	1150	5.36
150	**200**	**315 L**	890	1610	94.5	95.3	95.5	0.8	260	2.1	5.9	2.1	76	90	**1LE5773-3AD7■-■■■■**	1420	6.76
185	**250**	**315 L**	893	1980	95	95.3	95	0.78	330	2.8	7.3	2.8	76	90	**1LE5773-3AD8■-■■■■**	1660	8.4

Voltages	Version	Order code
50 Hz 220 VΔΔ/380 VYY/440 VΔ; 12 cables protruding without terminal board	**Standard**	–
For other voltages and more information, see from page 3/105		. . .

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 3/115			. . .

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 3/121		. . .

Terminal box position	Version
Terminal box at top	**Standard**
For other terminal box positions and more information, see from page 3/124	

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 3/139	**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.

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Aluminum series Innomotics 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)	▲ New	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 and Canada, NOM-certification is required 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																		
0.18	**0.25**	**63 M**	3475	0.495		65.6	62.3	56	0.72	0.48	2.7	5.3	3.6	59	67	▲ **1LE1023-0BA2■-■■■■**	4	0.00022
0.25	**0.33**	**63 M**	3465	0.69		69.5	66.6	59.3	0.76	0.59	2.4	5.2	3.1	56	64	▲ **1LE1023-0BA3■-■■■■**	5	0.00026
0.37	**0.5**	**71 M**	3470	1.02		73.4	71.7	67	0.73	0.87	4.2	6.8	4.2	57	68	▲ **1LE1023-0CA2■-■■■■**	7	0.00045
0.55	**0.75**	**71 M**	3470	1.51		76.8	75.3	71	0.73	1.23	4.5	7.2	4.5	62	73	▲ **1LE1023-0CA3■-■■■■**	8	0.00056
0.75	**1**	**80 M**	3480	2.05	✓	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	4.05	✓	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	88.2	86.7	0.85	5	4.6	11.2	5.6	75	83	**1LE1023-1AA4■-■■■■**	25	0.0041
3.7	**5**	**112 M**	3555	9.9	✓	88.5	88.4	86.65	0.87	6	3.3	11.8	4.7	80	88	**1LE1023-1BA2■-■■■■**	32	0.0079
5.5	**7.5**	**132 S**	3550	14.8	✓	89.5	89	87	0.87	8.9	3	11.1	4.6	74	82	**1LE1023-1CA0■-■■■■**	48	0.0168
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	29.5	✓	91	90.4	88.3	0.88	17.2	2.8	8.5	4.3	77	89	**1LE1023-1DA2■-■■■■**	75	0.053
15	**20**	**160 M**	3560	40	✓	91	90.4	88.5	0.86	24	4	11.8	5.2	81	89	**1LE1023-1DA3■-■■■■**	78	0.043
18.5	**25**	**160 L**	3560	49.5	✓	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

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 3/100			**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 3/106						■		. . .
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 3/119							■	. . .
Terminal box position		Version						
Terminal box at top		**Standard**						**4**
For other terminal box positions and more information, see from page 3/122								■
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1023-. . . . ■–■■■■**						**-Z F90 +. . .+. . .+. . .**
For options, see from page 3/125		**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.

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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)	▲ New	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 and Canada, NOM-certification is required 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																		
0.12	0.16	63 M	1710	0.67	–	67	64	57.1	0.62	0.36	2.9	4.3	3.3	64	72	▲ 1LE1023-0BB2■-■■■■	5	0.00045
0.18	0.25	63 M	1715	1		69.5	66.9	60.6	0.6	0.54	3.6	4.6	3.7	64	71	▲ 1LE1023-0BB3■-■■■■	6	0.00048
0.25	0.33	71 M	1715	1.39		73.4	72.3	68	0.68	0.63	2.9	4.9	3.1	47	58	▲ 1LE1023-0CB2■-■■■■	7	0.00095
0.37	0.5	71 M	1720	2.05		78.2	76.9	72.5	0.66	0.9	3.6	5.7	3.8	62	73	▲ 1LE1023-0CB3■-■■■■	9	0.0014
0.55	0.75	80 M	1750	3	–	81.1	80.9	78.6	0.74	1.15	2.7	6.9	3.8	53	61	1LE1023-0DB2■-■■■■	11	0.0021
0.75	1	80 M	1760	4.05	✓	83.5	82.6	79.7	0.71	1.59	3.1	8.3	4.7	58	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	86.6	84.7	0.77	2.85	3.4	8.6	4.3	59	67	1LE1023-0EB4■-■■■■	19	0.0049
2.2	3	100 L	1760	11.9	✓	89.5	89.5	88	0.8	3.85	3.5	9.9	4.6	70	78	1LE1023-1AB4■-■■■■	25	0.0101
3	4	100 L	1760	16.3	✓	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	1LE1023-1AB5■-■■■■	30	0.01
3.7	5	112 M	1770	20	✓	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	29.5	✓	91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	1LE1023-1CB0■-■■■■	61	0.034
7.5	10	132 M	1770	40.5	✓	91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	1LE1023-1CB2■-■■■■	78	0.0334
11	15	160 M	1775	59	✓	92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	1LE1023-1DB2■-■■■■	106	0.0583
15	20	160 L	1775	81	✓	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	1LE1023-1DB4■-■■■■	134	0.089
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■-■■■■	142	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■-■■■■	189	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	0.24

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 3/100			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 3/106						■		. . .
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 3/119							■	. . .
Terminal box position		Version						
Terminal box at top		**Standard**						4
For other terminal box positions and more information, see from page 3/122								■
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1023-. . . . ■–■■■■						-Z F90 +. . .+. . .+. . .
For options, see from page 3/125		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.

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Aluminum series Innomotics 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)	▲ New	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 and Canada, NOM-certification is required 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)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.18	0.25	71 M	1110	1.55		67.5	66.3	61	0.63	0.53	2.8	3.5	2.9	42	53	▲ 1LE1023-0CC2■-■■■■	7	0.00098
0.25	0.33	71 M	1110	2.15		71.4	70.6	66.4	0.64	0.69	3.2	3.9	3.2	48	59	▲ 1LE1023-0CC3■-■■■■	9	0.0014
0.37	0.5	80 M	1150	3.05	–	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	0.011
3	4	132 S	1180	24.5	✓	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70	1LE1023-1CC0■-■■■■	42	0.037
3.7	5	132 M	1180	30	✓	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72	1LE1023-1CC2■-■■■■	46	0.037
5.5	7.5	132 M	1180	44.5	✓	91	90.8	89.2	0.69	11	3	7.8	4	69	77	1LE1023-1CC3■-■■■■	58	0.046
7.5	10	160 M	1185	60	✓	91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83	1LE1023-1DC2■-■■■■	95	0.098
11	15	160 L	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81	1LE1023-1DC4■-■■■■	106	0.12
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																		
0.12	0.16	71 M	830	1.38		59.5	56.9	50.3	0.56	0.45	2.6	2.9	2.7	49	56	▲ 1LE1023-0CD3■-■■■■	9	0.0014
0.18	0.24	80 M	865	1.99		64	60.6	53	0.44	0.78	2.6	3.5	3.5	54.8	68.1	1LE1023-0DD2■-■■■■	12	0.0021
0.25	0.33	80 M	855	2.8		68	65.5	59.8	0.51	0.91	2	3.3	2.6	56	64	1LE1023-0DD3■-■■■■	13	0.003
0.37	0.5	90 S	850	4.15		72	69.9	64.2	0.63	1.02	2	3.4	2.1	54	61	1LE1023-0ED0■-■■■■	16	0.0045
0.55	0.75	90 L	855	6.1		74	71.6	65.8	0.62	1.5	2.3	4	2.8	59	66	1LE1023-0ED4■-■■■■	19	0.0045
0.75	1	100 L	870	8.2		75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72	1LE1023-1AD4■-■■■■	20	0.0096
1.1	1.5	100 L	865	12.1		78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4	1LE1023-1AD5■-■■■■	26	0.013
1.5	2	112 M	875	16.4		84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73	1LE1023-1BD2■-■■■■	34	0.028
2.2	3	132 S	880	24		85.5	85.2	82.9	0.68	4.75	2.3	5.8	3	65	73	1LE1023-1CD0■-■■■■	42	0.046
2.2	3	132 S	880	24	✓	85.5	85.2	82.9	0.68	4.75	2.3	5.8	3	65	73	1LE1023-1CD0■-■■■■	42	0.046
3	4	132 M	880	32.5	✓	86.5	85.9	83.5	0.69	6.3	2.2	6	3	67	80	1LE1023-1CD2■-■■■■	58	0.061
3.7	5	160 M	885	40	✓	86.5	86.7	85.3	0.71	7.5	2	5.8	2.6	69.3	77.3	1LE1023-1DD2■-■■■■	67	0.076
5.5	7.5	160 M	885	59	✓	86.5	86.7	85.5	0.72	10.8	2.3	6.3	2.8	66	79	1LE1023-1DD3■-■■■■	78	0.1
7.5	10	160 L	885	81	✓	89.5	89.5	88.1	0.71	14.8	2.6	6.7	2.6	66	79	1LE1023-1DD4■-■■■■	86	0.13
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	0.42

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 3/100			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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		1LE1023-. . . . ■–■■■■ -Z F90 +. . .+. . .+. . .					
For options, see from page 3/125		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.

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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 and Canada, NOM-certification is required 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**	3470	1.02	–	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**	3480	1.51	–	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	2.05	✓	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	4.05	✓	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	88.2	86.7	0.85	5	4.6	11.2	5.6	75	83	**1LE1523-1AA4■-■■■■**	37	0.0041
3.7	**5**	**112 M**	3555	9.9	✓	88.5	88.4	86.65	0.87	6	3.3	11.8	4.7	80	88	**1LE1523-1BA2■-■■■■**	41	0.0079
5.5	**7.5**	**132 S**	3550	14.8	✓	89.5	89	87	0.87	8.9	3	11.1	4.6	74	82	**1LE1523-1CA0■-■■■■**	66	0.0168
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	29.5	✓	91	90.4	88.3	0.88	17.2	2.8	8.5	4.3	77	89	**1LE1523-1DA2■-■■■■**	100	0.053
15	**20**	**160 M**	3560	40	✓	91	90.4	88.5	0.86	24	4	11.8	5.2	81	89	**1LE1523-1DA3■-■■■■**	104	0.043
18.5	**25**	**160 L**	3560	49.5	✓	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	3.3	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	295	✓	95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	**1LE1523-3AA0■-■■■■**	750	1.39
132	**175**	**315 M**	3585	350	✓	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	400	✓	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	495	✓	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 3/103			**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 3/110			■	. . .

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 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1523-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**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.

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Cast-iron series Innomotics 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 and Canada, NOM-certification is required 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																		
0.25	0.33	71 M	1715	1.39	–	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	2.05	–	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	80.9	78.6	0.74	1.15	2.7	6.9	3.8	53	61	1LE1523-0DB2■-■■■■	19	0.0021
0.75	1	80 M	1760	4.05	✓	83.5	82.6	79.7	0.71	1.59	3.1	8.3	4.7	58	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	86.6	84.7	0.77	2.85	3.4	8.6	4.3	59	67	1LE1523-0EB4■-■■■■	31	0.0049
2.2	3	100 L	1760	11.9	✓	89.5	89.5	88	0.8	3.85	3.5	9.9	4.6	70	78	1LE1523-1AB4■-■■■■	31	0.0101
3	4	100 L	1760	16.3	✓	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	1LE1523-1AB5■-■■■■	40	0.01
3.7	5	112 M	1770	20	✓	89.5	89.4	87.7	0.8	6.5	2.9	8.2	4.3	62	74	1LE1523-1BB2■-■■■■	40	0.017
5.5	7.5	132 S	1775	29.5	✓	91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	1LE1523-1CB0■-■■■■	74	0.034
7.5	10	132 M	1770	40.5	✓	91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	1LE1523-1CB2■-■■■■	80	0.0334
11	15	160 M	1775	59	✓	92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	1LE1523-1DB2■-■■■■	105	0.0583
15	20	160 L	1775	81	✓	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	1LE1523-1DB4■-■■■■	133	0.089
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	0.24
37	50	225 S	1782	198	✓	94.5	94.7	94.2	0.85	58	2.8	7.5	3	68	82	1LE1523-2BB0■-■■■■	285	0.42
45	60	225 M	1782	240	✓	95	95.3	95.1	0.85	70	3	7.7	3	67	81	1LE1523-2BB2■-■■■■	340	0.52
55	75	250 M	1786	295	✓	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	68	82	1LE1523-2CB2■-■■■■	420	0.85
75	100	280 S	1788	400	✓	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	1LE1523-2DB0■-■■■■	570	1.39
90	125	280 M	1788	480	✓	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	590	✓	95.8	95.9	95.4	0.86	168	3	7.5	3.1	74	88	1LE1523-3AB0■-■■■■	760	2.2
132	175	315 M	1790	700	✓	96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	78	92	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	78	92	1LE1523-3AB4■-■■■■	990	3.1
185	250	315 L	1791	990	✓	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 3/103			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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			1LE1523-. . . . ■-■■■■				-Z F90+. . .+. . .+. . .
For options, see from page 3/131			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.

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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 and Canada, NOM-certification is required 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)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.18	**0.25**	**71 M**	1110	1.55	–	67.5	66.3	61	0.63	0.53	2.8	3.5	2.9	42	53	**1LE1523-0CC2■-■■■■**	13	0.00098
0.25	**0.33**	**71 M**	1110	2.15	–	71.4	70.6	66.4	0.64	0.69	3.2	3.9	3.2	48	59	**1LE1523-0CC3■-■■■■**	16	0.0014
0.37	**0.5**	**80 M**	1150	3.05	–	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	0.004
3	**4**	**132 S**	1180	24.5	✓	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70	**1LE1523-1CC0■-■■■■**	60	0.037
3.7	**5**	**132 M**	1180	30	✓	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72	**1LE1523-1CC2■-■■■■**	64	0.037
5.5	**7.5**	**132 M**	1180	44.5	✓	91	90.8	89.2	0.69	11	3	7.8	4	69	77	**1LE1523-1CC3■-■■■■**	76	0.046
7.5	**10**	**160 M**	1185	60	✓	91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83	**1LE1523-1DC2■-■■■■**	124	0.098
11	**15**	**160 L**	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81	**1LE1523-1DC4■-■■■■**	138	0.12
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	240	✓	94.1	94.4	94.1	0.82	49	2.9	7.6	3.3	66	80	**1LE1523-2BC2■-■■■■**	325	0.67
37	**50**	**250 M**	1188	295	✓	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	360	✓	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	440	✓	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	600	✓	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	720	✓	95	95	94.4	0.84	142	2.7	7.7	3	64	79	**1LE1523-3AC2■-■■■■**	890	3.1
110	**150**	**315 L**	1192	880	✓	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	1060	✓	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	0.8	245	4.3	10.5	4.3	68	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 3/103			**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 3/110			■	. . .

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 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1523-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**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.

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Cast-iron series Innomotics 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	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 and Canada, NOM-certification is required 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)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
0.09	**0.12**	**71 M**	825	1.04	–	57.1	53.7	45.8	0.55	0.36	2.3	2.6	2.4	45	57	**1LE1523-0CD2■-■■■■**	13	0.00098
0.12	**0.17**	**71 M**	830	1.38	–	59.5	56.9	50.3	0.56	0.45	2.6	2.9	2.7	49	56	**1LE1523-0CD3■-■■■■**	16	0.0014
0.18	**0.24**	**80 M**	865	1.99	–	64	60.6	53	0.44	0.78	2.6	3.5	3.5	54.8	68.1	**1LE1523-0DD2■-■■■■**	18	0.0021
0.25	**0.33**	**80 M**	855	2.8	–	68	65.5	59.8	0.51	0.91	2	3.3	2.6	56	64	**1LE1523-0DD3■-■■■■**	22	0.003
0.37	**0.5**	**90 S**	850	4.15	–	72	69.9	64.2	0.63	1.02	2	3.4	2.1	54	61	**1LE1523-0ED0■-■■■■**	26	0.0045
0.55	**0.75**	**90 L**	855	6.1	–	74	71.6	65.8	0.62	1.5	2.3	4	2.8	59	66	**1LE1523-0ED4■-■■■■**	26	0.0045
0.75	**1**	**100 L**	870	8.2	–	75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72	**1LE1523-1AD4■-■■■■**	31	0.0096
1.1	**1.5**	**100 L**	865	12.1	–	78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4	**1LE1523-1AD5■-■■■■**	36	0.013
1.5	**2**	**112 M**	875	16.4	–	84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73	**1LE1523-1BD2■-■■■■**	46	0.028

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 3/103			**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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1523-. . . . ■-■■■■**					**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131		**1LE1523-. . . . ■-■■■■**					**-Z . . .+. . .+. . .+. . .**

–Not required

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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 and Canada, NOM-certification is required 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																		
3	**4**	**100 L**	3525	8.1	✓	88.5	88.2	86.7	0.85	5	4.6	11.2	5.6	75	83	**1LE1623-1AA4■-■■■■**	37	0.0041
3.7	**5**	**112 M**	3555	9.9	✓	88.5	88.4	86.65	0.87	6	3.3	11.8	4.7	80	88	**1LE1623-1BA2■-■■■■**	41	0.0079
5.5	**7.5**	**132 S**	3550	14.8	✓	89.5	89	87	0.87	8.9	3	11.1	4.6	74	82	**1LE1623-1CA0■-■■■■**	66	0.0168
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	29.5	✓	91	90.4	88.3	0.88	17.2	2.8	8.5	4.3	77	89	**1LE1623-1DA2■-■■■■**	100	0.053
15	**20**	**160 M**	3560	40	✓	91	90.4	88.5	0.86	24	4	11.8	5.2	81	89	**1LE1623-1DA3■-■■■■**	104	0.043
18.5	**25**	**160 L**	3560	49.5	✓	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	3.3	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	295	✓	95	94.8	93.8	0.91	160	2.6	8	3.3	79	93	**1LE1623-3AA0■-■■■■**	750	1.39
132	**175**	**315 M**	3585	350	✓	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	400	✓	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	495	✓	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 3/103			**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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE1623-. . . . ■-■■■■**					**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131		**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.

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Cast-iron series Innomotics 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 and Canada, NOM-certification is required 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																		
2.2	3	100 L	1760	11.9	✓	89.5	89.5	88	0.8	3.85	3.5	9.9	4.6	70	78	1LE1623-1AB4■-■■■■	40	0.0101
3	4	100 L	1760	16.3	✓	89.5	89.4	88	0.78	5.4	3.5	9.9	4.7	70	78	1LE1623-1AB5■-■■■■	40	0.01
3.7	5	112 M	1770	20	✓	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	29.5	✓	91.7	91.6	90.5	0.81	9.3	3.1	10	4.2	68	80	1LE1623-1CB0■-■■■■	74	0.034
7.5	10	132 M	1770	40.5	✓	91.7	91.6	90.6	0.79	13	3.4	9.8	4.3	68	76	1LE1623-1CB2■-■■■■	80	0.0334
11	15	160 M	1775	59	✓	92.4	92.6	92	0.81	18.4	3.8	9	4	70	78	1LE1623-1DB2■-■■■■	105	0.0583
15	20	160 L	1775	81	✓	93	92.9	92.1	0.81	25	3.1	8.9	3.8	66	74	1LE1623-1DB4■-■■■■	133	0.089
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	0.24
37	50	225 S	1782	198	✓	94.5	94.7	94.2	0.85	58	2.8	7.5	3	68	82	1LE1623-2BB0■-■■■■	285	0.42
45	60	225 M	1782	240	✓	95	95.3	95.1	0.85	70	3	7.7	3	67	81	1LE1623-2BB2■-■■■■	340	0.52
55	75	250 M	1786	295	✓	95.4	95.6	95.1	0.86	84	2.8	7.6	3.2	68	82	1LE1623-2CB2■-■■■■	420	0.85
75	100	280 S	1788	400	✓	95.4	95.3	94.5	0.85	116	2.8	7.7	3.3	77	91	1LE1623-2DB0■-■■■■	570	1.39
90	125	280 M	1788	480	✓	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	590	✓	95.8	95.9	95.4	0.86	168	3	7.5	3.1	74	88	1LE1623-3AB0■-■■■■	760	2.2
132	175	315 M	1790	700	✓	96.2	96.3	95.8	0.87	198	3.1	8.2	3.2	78	92	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	78	92	1LE1623-3AB4■-■■■■	990	3.1
185	250	315 L	1791	990	✓	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 3/103			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 3/110			■	. . .

Motor protection	Version		Order code
PTC thermistor with 3 temperature sensors	**Standard**	B	–
For other motor protection and more information, see from page 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	4	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	1LE1623-. . . . ■-■■■■ -Z	F90+. . .+. . .+. . .
For options, see from page 3/131	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.

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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 and Canada, NOM-certification is required 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)																		
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
3	**4**	**132 S**	1180	24.5	✓	89.5	89.5	87.9	0.7	6	2.6	7.6	3.8	62	70	**1LE1623-1CC0■-■■■■**	60	0.037
3.7	**5**	**132 M**	1180	30	✓	89.5	89.2	87.5	0.69	7.5	2.8	7.5	3.8	64	72	**1LE1623-1CC2■-■■■■**	64	0.037
5.5	**7.5**	**132 M**	1180	44.5	✓	91	90.8	89.2	0.69	11	3	7.8	4	69	77	**1LE1623-1CC3■-■■■■**	76	0.046
7.5	**10**	**160 M**	1185	60	✓	91	90.8	89.4	0.8	12.9	2.7	9.3	3.7	75	83	**1LE1623-1DC2■-■■■■**	124	0.098
11	**15**	**160 L**	1185	89	✓	91.7	91.7	90.5	0.78	19.3	3.4	8	3.2	73	81	**1LE1623-1DC4■-■■■■**	138	0.12
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	240	✓	94.1	94.4	94.1	0.82	49	2.9	7.6	3.3	66	80	**1LE1623-2BC2■-■■■■**	325	0.67
37	**50**	**250 M**	1188	295	✓	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	360	✓	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	440	✓	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	600	✓	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	720	✓	95	95	94.4	0.84	142	2.7	7.7	3	64	79	**1LE1623-3AC2■-■■■■**	890	3.1
110	**150**	**315 L**	1192	880	✓	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	1060	✓	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	0.8	245	4.3	10.5	4.3	68	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 3/103			**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 3/110			■	. . .

Motor protection	Version		Order code
PTC thermistor with 3 temperature sensors	**Standard**	**B**	–
For other motor protection and more information, see from page 3/120		■	. . .

Terminal box position	Version		
Terminal box at top	**Standard**	**4**	
For other terminal box positions and more information, see from page 3/123		■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1623-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 3/131	**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.

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

Selection and ordering data

			Operating values at rated power													Cast-iron series 1LE1623 – Performance Line 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	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 and Canada, NOM-certification is required 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)																		
8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz																		
0.75	1	100 L	870	8.2	–	75.5	74.9	71.7	0.62	1.87	1.9	4.4	2.5	64	72	1LE1623-1AD4■-■■■■	31	0.0096
1.1	1.5	100 L	865	12.1	–	78.5	78	75.7	0.62	2.7	2.3	4.8	3	65.4	73.4	1LE1623-1AD5■-■■■■	36	0.013
1.5	2	112 M	875	16.4	–	84	83.1	80	0.59	3.75	2.9	5.8	3.6	65	73	1LE1623-1BD2■-■■■■	46	0.028
2.2	3	132 S	880	24	✓	85.5	85.2	82.9	0.68	4.75	2.3	5.8	3	65	73	1LE1623-1CD0■-■■■■	60	0.046
3	4	132 M	880	32.5	✓	86.5	85.9	83.5	0.69	6.3	2.2	6	3	67	80	1LE1623-1CD2■-■■■■	78	0.061
3.7	5	160 M	885	40	✓	86.5	86.7	85.3	0.71	7.5	2	5.8	2.6	69.3	77.3	1LE1623-1DD2■-■■■■	98	0.076
5.5	7.5	160 M	885	59	✓	86.5	86.7	85.5	0.72	10.8	2.3	6.3	2.8	66	79	1LE1623-1DD3■-■■■■	109	0.1
7.5	10	160 L	885	81	✓	89.5	89.5	88.1	0.71	14.8	2.6	6.7	2.6	66	79	1LE1623-1DD4■-■■■■	117	0.13
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	0.42
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	0.5
22	30	225 M	886	235	✓	91.7	91.8	90.8	0.76	39.5	2.9	6.8	3.3	62	75	1LE1623-2BD2■-■■■■	280	0.55
30	40	250 M	888	325	✓	91.7	91.9	91.1	0.77	53	2.9	7	3.3	65	79	1LE1623-2CD2■-■■■■	370	0.86
37	50	280 S	890	395	✓	92.4	92.6	91.9	0.77	65	2.5	6.1	2.6	65	79	1LE1623-2DD0■-■■■■	460	1.1
45	60	280 M	890	485	✓	92.4	92.5	91.9	0.79	77	2.7	6.8	2.7	66	80	1LE1623-2DD2■-■■■■	550	1.6
55	75	315 S	891	590	✓	93.6	93.6	92.9	0.79	93	2.6	6.8	3	73	87	1LE1623-3AD0■-■■■■	650	2
75	100	315 M	890	800	✓	93.6	93.7	93	0.8	126	2.5	6.7	3	73	88	1LE1623-3AD2■-■■■■	720	2.5
90	125	315 L	890	970	✓	94.1	94.4	94.1	0.81	148	2.4	6.5	2.8	76	90	1LE1623-3AD4■-■■■■	860	3.1
110	150	315 L	891	1180	✓	94.1	94.2	93.7	0.81	181	2.8	7.2	3.2	76	90	1LE1623-3AD5■-■■■■	980	3.9
132	175	315 L	892	1410	✓	94.5	94.5	93.9	0.8	220	3.2	7.9	3.7	81	95	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 3/103			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 3/110					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				B	–
For other motor protection and more information, see from page 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					4
For other terminal box positions and more information, see from page 3/123							■
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							1LE1623-. . . . ■-■■■■-Z F90+. . .+. . .+. . .
For options, see from page 3/131							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.

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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, NOM-certification is required 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**	1145	4.6	–	68	67.4	63.7	0.61	1.66	2.9	5.2	3.6	45	56	**1LE1021-0DC3■-■■■■**	12	0.0025
8-pole: 750 rpm at 50 Hz. 900 rpm at 60 Hz																		
0.18	**0.25**	**80 M**	855	2	–	46	43.5	37	0.53	0.93	2	2.5	2.6	55	66	**1LE1021-0DD2■-■■■■**	9	0.0017
0.25	**0.33**	**80 M**	860	2.8	–	52	49	43	0.51	1.21	2.2	2.9	3	55	66	**1LE1021-0DD3■-■■■■**	13	0.0024
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	**1LE1021-0ED0■-■■■■**	11	0.0019
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	**1LE1021-0ED4■-■■■■**	13	0.0026

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 3/100			**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 3/106					■			. . .
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 3/119						■		. . .
Terminal box position		Version						
Terminal box at top		**Standard**					**4**	
For other terminal box positions and more information, see from page 3/122							■	

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1021-. . . . ■-■■■■-Z**	**F90 +. . .+. . .+. . .**
For options, see from page 3/125	**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.

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Cast-iron series Innomotics SD 1LE1521 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 1LE1521 – *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 Energy Efficient, UL, CSA, and service factor (SF) 1.15 – for operation in the USA and Canada, NOM-certification is required 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	1.04	–	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	1.54	–	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	1.39	–	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	2.05	–	72	71.2	66.9	0.67	0.96	3	5	3.2	59	67	**1LE1521-0CB3■-■■■■**	13	0.00095
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	**1LE1521-0DB2■-■■■■**	17	0.0017
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																		
0.18	**0.25**	**71 M**	1105	1.56	–	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	2.15	–	59.5	58.9	54.7	0.64	0.82	2.7	3	2.7	49	60	**1LE1521-0CC3■-■■■■**	13	0.00098
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**	1145	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	1.05	-	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	1.41	-	40	38	33	0.57	0.66	2.3	2.1	2.4	52	63	**1LE1521-0CD3■-■■■■**	13	0.00100
0.18	**0.25**	**80 M**	855	2	-	46	43.5	37	0.53	0.93	2	2.5	2.6	55	66	**1LE1521-0DD2■-■■■■**	17	0.0017
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 3/103			**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 3/110					■		. . .
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 3/120						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/123							■

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE1521-. . . . ■-■■■■**	**-Z F90+. . .+. . .+. . .**
For options, see from page 3/131	**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.

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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 3/102			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
For options, see from page 3/125		**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 1/54).

[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.

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Aluminum series Innomotics 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* **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 3/102		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 3/106				■	. . .
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 3/119					. . .
Terminal box position	Version				
Terminal box at top	**Standard**				4
For other terminal box positions and more information, see from page 3/122					
Special versions					Order code(s)
For options, see from page 3/125					**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 1/54).

[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.

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Aluminum series Innomotics 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 3/102			**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 3/106					■		. . .
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 3/119						■	. . .
Terminal box position		Version					
Terminal box at top		**Standard**					**4**
For other terminal box positions and more information, see from page 3/122							■
Special versions							Order code(s)
For options, see from page 3/125			**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 1/54).

[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.

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Aluminum series Innomotics GP 1LE10

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 Siemens Product Configurator																
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 frame size100 ... 160	
50 Hz 500 VΔ 60 Hz 575 VΔ	4	0	–	○	○	–	–	○	○	○	○	○	○	Not for:	IEC IE4 ① frame size100 ... 160	
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] 60 Hz 440 VΔ				–	–	✓	✓	✓	✓	✓	✓	✓	✓	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	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
60 Hz 230 VΔ/400 VY	1	8	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
60 Hz 380 VΔ/660 VY [1]	3	0	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
60 Hz 380 VΔ [1]			–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
60 Hz 400 VΔ/690 VY [1]	3	1	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
60 Hz 400 VΔ [1]			–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE3	
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:	Eagle Line IEC IE3	⑧, ⑨ ③
380 VΔ; 50 Hz power [1]				–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	APAC Line Eagle Line	⑥, ⑦ ⑧, ⑨
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

For legends and footnotes, see page 3/101.

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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)																
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.

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Aluminum series Innomotics GP 1LE1011, 1LE1012 – pole-changing

Selection and ordering data

Voltages	Article No. supplement			Frame size						Motor version
	Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	100	112	132	160	180	200	
				1LE1011						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.

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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												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
			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 60 Hz 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] 60 Hz 440 VΔ				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	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**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
60 Hz 230 VΔ/400 VY	**1**	**8**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
60 Hz 380 VΔ/660 VY [1]	**3**	**0**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
60 Hz 380 VΔ [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
60 Hz 400 VΔ/690 VY [1]	**3**	**1**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
60 Hz 400 VΔ [1]				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	IEC IE1 IEC IE2	
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 3/104.

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

Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.	Article No. supplement: Additional identification code with order code and plain text if required	Frame size													Motor version		
			71	80	90	100	112	132	160	180	200	225	250	280	315			
			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.

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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.

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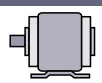
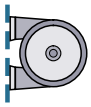
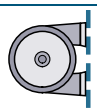
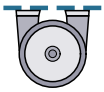
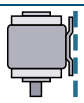
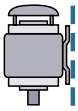
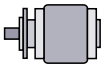
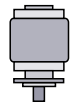
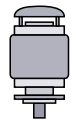
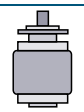
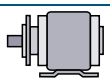
Aluminum series Innomotics GP 1LE10

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 3/109.

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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**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3 ③	
IM V1 without protective cover [2]	**G**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3 ③	
IM V1 with protective cover [2] [4] [5] [6]	**G**	**P02+H00**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	Combination with order code F90 IEC IE3 ③	
IM V3 [4]	**H**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	IEC IE3 ③	
IM B35 [3]	**J**	**P02**	✓	✓	✓	–	✓	✓	✓	✓	✓	✓	Not for:	APAC Line IE2 ⑦ Eagle Line NEE ⑨	

For legends and footnotes, see page 3/109.

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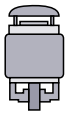
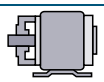
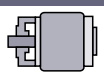
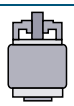
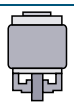
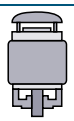
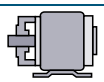
Aluminum series Innomotics GP 1LE10

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 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	**EN 50347**		**FT75**	**FT85**	**FT100**	**FT115**	**FT130**	**FT130**	**FT165**	**FT215**	**–**	**–**			
	DIN 42948		**C 90**	**C 105**	**C 120**	**C 140**	**C 160**	**C 160**	**C 200**	**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**		**FT100**	**FT115**	**FT130**	**FT130**	**FT165**	**FT165**	**FT215**	**–**	**–**	**–**			
	DIN 42948		**C 120**	**C 140**	**C 160**	**C 160**	**C 200**	**C 200**	**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 3/109.

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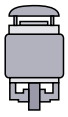
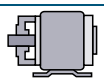
Types of construction	Article No. supplement: Type of construction code letter 14th position of the Article No.	Article No. supplement: For types of construction with order code(s) Article No. with additional identification code **-Z**	Frame size: 63	71	80	90	100	112	132	160	180	200	Motor version		
							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 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**.

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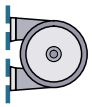
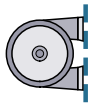
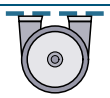
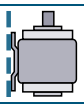
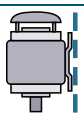
Cast-iron series Innomotics SD 1LE15 Basic Line, 1LE16 Performance Line

Selection and ordering data

Types of construction	Article No. supplement		Frame size														Motor version		
			71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4- 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
		Article No. with additional identification code **-Z**				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 3/114.

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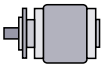
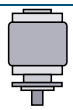
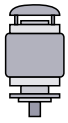
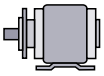
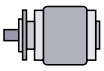
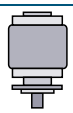
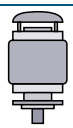
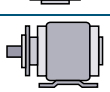
Cast-iron series Innomotics SD 1LE15 Basic Line, 1LE16 Performance Line

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)	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			
		Article No. with additional identification code **-Z**				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	**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**	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3 ⑤	
IM V1 without protective cover 2) 	**G**	**P01**	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3 ⑤	
IM V1 with protective cover 2) 4) 5) 	**G**	**P01+ H00**	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3 ⑤	
IM V3 5)	**H**	**P01**	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	IEC IE3 ⑤	
IM B35 3) 	**J**	**P01**	–	–	✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	Not for:	⑪, ⑭ 2, 4, 6-pole ≤ 200 hp; ⑫, ⑬ 8-pole ≤ 200 hp IEC IE3 ⑤	

For legends and footnotes, see page 3/114.

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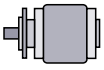
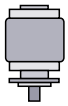
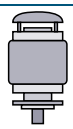
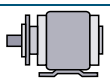
Cast-iron series Innomotics SD 1LE15 Basic Line, 1LE16 Performance Line

Types of construction	Article No. supplement		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		
	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
		Article No. with additional identification code **-Z**				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 3/114.

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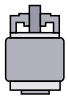
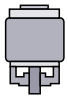
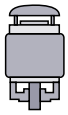
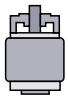
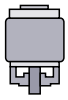
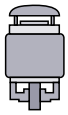
Cast-iron series Innomotics SD 1LE15 Basic Line, 1LE16 Performance Line

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 / Order code	Frame size															Motor version		
			71	80	90	100	112	132	160	180	200	225	250	280	315 S/M	315 L 2-pole	315 L 4- to 8-pole			
						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)					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 3/114.

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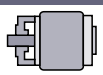
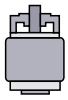
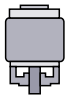
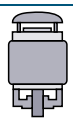
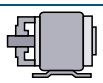
Cast-iron series Innomotics SD 1LE15 Basic Line, 1LE16 Performance Line

Types of construction	Article No. supplement		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	
	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.

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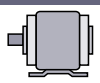
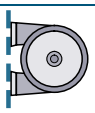
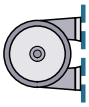
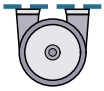
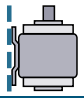
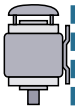
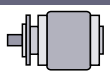
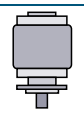
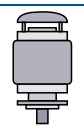
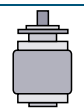
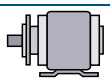
Aluminum series Innomotics GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

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: 80	90	100	112	132	160	180	200	225	250	280	315	Motor version: IEC	IE3
				1LE1073													
										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 3/118.

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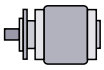
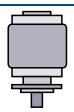
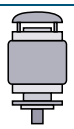
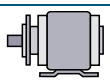
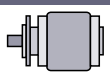
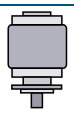
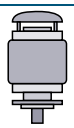
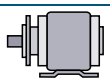
Aluminum series Innomotics GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Types of construction		Article No. supplement: Type of construction code letter 14th position of the Article No.	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 DIN 42948**		– –	FF215 A 250	FF265 A 300	FF265 A 300	FF300 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 DIN 42948**		FF130 A 160	– –	FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF265 A 300	FF300 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 3/118.

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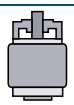
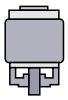
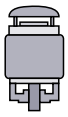
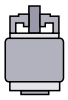
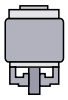
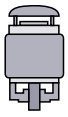
Aluminum series Innomotics GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

Types of construction	Article No. supplement: Type of construction code letter 14th position of the Article No.	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	**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 3/118.

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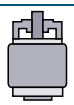
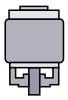
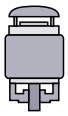
Aluminum series Innomotics GP 1LE1073 and cast-iron series SIMOTICS SD 1LE1573, 1LE5773

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**.

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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**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers (6 terminals) [1]	**H**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers (12 terminals)	**J**		–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	IEC IE3 ③	
1 Pt1000 resistance thermometer (2 terminals)	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt1000 resistance thermometers (4 terminals)	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer (2 terminals)	**P**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – (9 terminals)	**Q**	**–**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – (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.

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

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	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
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**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers (6 terminals)	**H**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers (12 terminals)	**J**	**–**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
1 Pt1000 resistance thermometers (2 terminals)	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt1000 resistance thermometers (4 terminals)	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer (2 terminals)	**P**	**–**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers – (9 terminals)	**Q**	**–**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers – (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 3/131.

[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.

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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		
			1LE1073												IEC	IE3
									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**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (6 terminals)	**H**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (12 terminals)	**J**	**–**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometer (2 terminals)	**K**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 Pt1000 resistance thermometers (4 terminals)	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer (2 terminals)	**P**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers – (9 terminals)	**Q**	**–**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers – (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 3/131.

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

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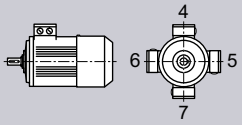
Aluminum series Innomotics GP 1LE10

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.

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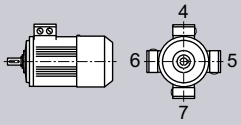
Selection and ordering data

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.

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

Selection and ordering data

Terminal box position	Article No. supplement: Terminal box position code 16th position of the Article No.	Article No. supplement: 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														
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.

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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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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 thermometers (4 terminals)	**Q36**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers (6 terminals)	**Q60**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers 12 terminals)	**Q61**	–	–	–	–	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer (2 terminals)	**Q62**	–	–	–	–	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers (9 terminals)	**Q63**	–	–	–	–	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers (18 terminals)	**Q64**	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers in basic configuration for bearings (4 terminals)	**Q72**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓			
2 Pt100 resistance thermometers i for bearing (6 terminals)	**Q78**	–	–	–	–	O. R.	O. R.	O. R.	O. R.	✓	✓			
2 Pt100 double resistance thermometers 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	**H08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from DE	**R10**	○	○	○	○	○	○	○	○	✓	✓			
Rotation of the terminal box through 90°, entry from NDE	**R11**	○	○	○	○	○	○	○	○	✓	✓			
Rotation of the terminal box through 180°	**R12**	○	○	○	○	○	○	○	○	✓	✓			
Terminal box in position 0°, connection from right	**R13**	○	○	○	○	○	○	○	–	–	–			
One metal cable gland	**R15**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 cables protruding, 0.5 m long	**R20**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	Not for:	⑩, ⑪	
3 cables protruding, 1.5 m long	**R21**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	Not for:	⑩, ⑪	
6 cables protruding, 0.5 m long	**R22**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
6 cables protruding, 1.5 m long	**R23**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
6 cables protruding, 3 m long	**R24**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.			

For legends, see page 3/130.

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Aluminum series Innomotics 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
Motor connection and terminal box (continued)														
Reduction piece for M cable gland in accordance with British Standard, mounted on both cable entries	**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	**R70**	✓	✓	✓	✓	✓	✓	✓	–	–	–			
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY	**R71**	✓	✓	✓	✓	✓	✓	✓	–	–	–			
Small motor connector CQ12 with EMC	**R72**	–	–	✓	✓	–	–	–	–	–	–	Not for:	③	
Small motor connector CQ12 without EMC	**R73**	–	–	✓	✓	–	–	–	–	–	–	Not for:	③	
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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)	**N10**	✓	✓	✓	✓	O. R.	O. R.	–	–	–	–	Not for:	①, ③, ⑥, ⑦, ⑨, ⑪	
Temperature class 180 (H) at rated power and max. CT 60 °C	**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 •** CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	**Y52 •** CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	③	
Temperature class 180 (H), utilized according to 155 (F)	**Y75 •** CT .. °C or IA .... m above sea level	–	–	–	–	O. R.	O. R.	O. R.	O. R.	–	–	Not for:	①, ③	
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends, see page 3/130.

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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 (continued)														
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Internal coating	**S05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Top coat polyurethane	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Paint finish in other standard RAL colors: RAL 1015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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….	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66 •** and paint finish	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Modular technology – Basic versions														
Mounting of holding brake (standard assignment)	**F01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of PRECIMA-brake	**F04**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of separately driven fan	**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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Brake supply voltage 205 V DC	**F18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special technology														
Mounting of HOG 86E rotary pulse encoder	**G03**					✓	✓	✓	✓	✓	✓			
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 D 1024 I rotary pulse encoder	**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	
Mounting of rotary pulse encoder XSI 850 Overspeed	**G93**	–	–	–	–	–	–	–	–	✓	✓			
Mounting of rotary pulse encoder XHI 861 Overspeed	**G94**	–	–	–	–	–	–	–	–	✓	✓			

For legends, see page 3/130.

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Innomotics GP and Innomotics SD standard motors

Article No. supplements and special versions · Options

Aluminum series Innomotics 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
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	**G40**	–	–	✓	✓	✓	✓	✓	✓	□	□			
Prepared for mountings with shaft D12	**G41**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Prepared for mountings with shaft D16	**G42**	–	–	O. R.	O. R.	✓	✓	✓	✓	✓	✓			
Mechanical protection for encoder	**G43**	O. R.	O. R.	✓	✓	✓	✓	✓	✓	✓	✓			
Protective cover	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Screwed-on (instead of cast) feet	**H01**	–	–	✓	✓	✓	✓	✓	✓	□	□			
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Condensation drainage holes	**H03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Housing with screw mounting	**H10**	–	–	✓	✓	–	–	–	–	✓	✓	Only for:	②, ④, ⑥, ⑦ (frame sizes 80, 90), ⑧, ⑨	
Degree of protection IP66	**H19**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP65	**H20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP56	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar	**H23**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature and installation altitude														
Coolant temperature –40 to +40 °C	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Versions in accordance with standards and specifications														
VIK version	**C02**	–	–	✓	✓	✓	✓	✓	✓	–	–	Only for:	②	
CCC China Compulsory Certification	**D01**	✓	✓	✓	✓	–	–	–	–	–	–			
Motor without CE marking for export outside EEA (see EU Directive 2019/1781)	**D22**	–	○	○	○	○	○	○	○	○	○			
Motor exclusively according to the Energy-related Products Law, Article 1dated 27.2.2008, motor to be used in means of transport for persons and goods	**D23**	–	○	○	○	○	○	○	○	○	○	Only for:	④, ⑤, ⑦, ⑨, ⑩, ⑪	
Electrical according to NEMA MG1-12	**D30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧, ⑨	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
Design according to UL with "Recognition Mark"	**D31**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧, ⑨	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
KEA 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	**D34**	–	–	○	○	○	○	○	○	○	○	Not for:	④, ⑤, ⑦, ⑩, ⑪	
		–	–	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③	
Canadian regulations (CSA)	**D40**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤, ⑧, ⑨, ⑩, ⑪	
	–	–	–	□	□	□	□	□	□	□	□	Only for:	⑧, ⑨	
NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-12, 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	**D47**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MEPS Australia	**D70**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	②, ③, ⑥, ⑧	
BIS India (Indian standard IS 12615:2018)	**D72**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for: Not for:	②, ③, ⑥, ⑧ 8-pole motors	
SASO EER	**D73**	–	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	②, ③, ⑥, ⑦	
UKCA-marking		□	□	□	□	□	□	□	□	□	□			

For legends, see page 3/130.

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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
Versions in accordance with standards and specifications (continued)														
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 meta l	**L91**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	
Version suitable for railways IC418, EN IEC 60349, without EN 45545, with external fan and fan cover	**L92**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	①, ③	
Bearings and lubrication														
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	**L19**	–	–	–	–	–	–	–	–	✓	✓			
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Located bearing NDE	**L21**	✓	✓	✓	✓	✓	✓	✓	□	□	□			
Bearing design for increased cantilever forces	**L22**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors of frame sizes 80 and 90	
Regreasing device	**L23**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	Motors of frame sizes 80 and 90	
Bearings for high axial tension forces	**L34**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Bearing insulation NDE	**L51**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Measuring nipple for SPM shock pulse measurement for bearing inspection	**Q01**	–	–	–	–	✓	✓	✓	✓	✓	✓			
Special version with higher speeds	**Y37**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
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	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard cylindrical shaft extension, NDE	**Y59** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Heating and ventilation														
Sheet metal fan cover	**F74**	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
Fan cover for textile industry	**F75**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Metal external fan	**F76**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Without external fan and without fan cover	**F90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑩, ⑪	

For legends, see page 3/130.

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Aluminum series Innomotics 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
Heating and ventilation (continued)														
Anti-condensation heating for 230 V (2 terminals)	**Q02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Anti-condensation heating for 115 V (2 terminals)	**Q03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rating plate and additional rating plates														
Additional rating plate for voltage tolerance	**B07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑩, ⑪	
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														
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	**B01**	○	○	○	○	○	○	○	○	○	○			
Inspection certificate 3.1 according to EN 10204	**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**	○	○	○	○	○	○	○	○	○	○			

- ◘ 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

Note:
The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size													Motor version		
		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**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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 thermometers (4 terminals)	**Q36**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers -wire input (6 terminals)	**Q60**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers (12 terminals)	**Q61**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1 Pt100 resistance thermometer (2 terminals)	**Q62**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
3 Pt100 resistance thermometers (9 terminals)	**Q63**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6 Pt100 resistance thermometers (18 terminals)	**Q64**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers in basic configuration for bearing (4 terminals)	**Q72**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 resistance thermometers for bearing (6 terminals)	**Q78**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
2 Pt100 double resistance thermometers for bearing (12 terminals)	**Q79**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Motor connection and terminal box																	
External grounding	**H04**	✓	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□			
Terminal box on NDE	**H08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Second external grounding	**H70**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from DE	**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**	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	–			

For legends, see page 3/138.

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Cast-iron series Innomotics 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)																	
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)	**R62**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓			
		–	–	–	✓	✓	✓	–	–	–	–	–	–	–			
2 small cast-iron auxiliary terminal boxes	**R67**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard threaded through hole (metric, 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	**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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude	**Y50** • CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends, see page 3/138.

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Cast-iron series Innomotics 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 155 (F), other requirements	**Y52** • CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑤	
Temperature class 180 (H), utilized according to 155 (F)	**Y75** • 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	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
C5mid Special paint system with durability "medium"	**S08**				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
CX Special paint system for offshore with durability "high"	**S09**				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Paint finish in other standard RAL colors: RAL 1015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66**• and paint finish	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Modular technology – Basic versions																	
Mounting of holding brake (standard assignment)	**F01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	④ frame sizes ≥ 160	
Mounting of PRECIMA brake	**F04**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of separately driven fan	**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**	–	–	–	✓	✓	✓	✓	✓	✓	✓	–	–	–			

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Cast-iron series Innomotics 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 (continued)																	
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																	
Mounting of HOG 86E rotary pulse encoder	**G03**				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of HOG 10 D 1024 I rotary pulse encoder	**G06**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake)	**G07**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake)	**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 rotary pulse encoder XSI 850 Overspeed	**G93**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Mounting of rotary pulse encoder XHI 861 Overspeed	**G94**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
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.			
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	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			

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Cast-iron series Innomotics 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**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓			
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	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Screwed-on (instead of cast) feet	**H01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Condensation drainage holes	**H03**	✓	✓	✓	□	□	□	□	□	□	□	□	□	□			
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP66	**H19**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP65	**H20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Degree of protection IP54	**H21**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓			
Degree of protection IP56	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar	**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	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Versions in accordance with standards and specifications																	
VIK version	**C02**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for: ③, ④ Not for: ⑤		
Version Chemstar chemical industry	**C03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Version Chemstar oil & gas industry	**C04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
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 2019/1781)	**D22**	○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	①, ②	
Motor exclusively according to the Energy-related Products Law, Article 1dated 27.2.2008, motor to be used in means of transport for persons and goods	**D23**	○	○	○	○	○	○	○	○	○	○	○	○	○	Only for:	⑥, ⑦, ⑧, ⑪	
Electrical according to NEMA MG1-12	**D30**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	
Design according to UL with "Recognition Mark"	**D31**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	
KEA Korea Energy Efficiency Label	**D33**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑨, ⑩, ⑪	
		–	–	–	0. R.	0. R.	0. R.	0. R.	✓	✓	✓	0. R.	0. R.	0. R.	Only for:	⑤	
China Energy Efficiency Label	**D34**	○	○	○	○	○	○	○	○	○	○	○	○	○	Not for:	⑥, ⑦, ⑧, ⑪, ⑭ and motors with increased power	
		–	–	–	○	○	○	○	○	○	–	–	–	–	Only for:	⑤	

For legends, see page 3/138.

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Cast-iron series Innomotics 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)																	
Canadian regulations (CSA)	**D40**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑫, ⑬, ⑭	
	–	□	□	□	□	□	□	□	□	□	□	□	□	□	Only for:	⑫, ⑬, ⑭	
NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-12, incl. UL and CSA	**D41**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	⑤	
TR CU product safety certificate EAC for Eurasian Customs Union	**D47**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
MEPS Australia	**D70**	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	③, ④, ⑤, ⑨, ⑩, ⑫, ⑬	
BIS India (Indian standard IS 12615:2018)	**D72**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	⑧ and 8-pole motors	
SASO EER	**D73**	–	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	Only for:	③, ④, ⑤, ⑨, ⑩	
UKCA-marking		□	□	□	□	□	□	□	□	□	□	□	□	□			
Bearings and lubrication																	
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	**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	**L22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Not for:	②, ④, ⑦, ⑩, ⑬	
		✓	✓	✓	□	□	□	□	✓	✓	✓	✓	✓	✓	Only for:	②, ④, ⑦, ⑩, ⑬	
Regreasing device	**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	**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**	–	–	–	–	–	–	–	✓	✓	✓	✓	–	–			
Bearings for high axial tension forces	**L34**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	–	–			
Bearing insulation DE	**L50**	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
Bearing insulation NDE	**L51**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Measuring nipple for SPM shock pulse measurement for bearing inspection	**Q01**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Special version with higher speeds	**Y37**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.			
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

For legends, see page 3/138.

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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
Shaft and rotor (continued)																	
Non-standard cylindrical shaft extension, DE	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Non-standard cylindrical shaft extension, NDE	**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.			
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	**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	**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:	②, ④, ⑦, ⑩, ⑬	
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	**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	**Q82**	–	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for:	①, ③, ⑤, ⑥, ⑧, ⑨, ⑪, ⑫, ⑭	
	–	–	–	–	□	□	□	□	□	□	□	□	□	□	Only for:	②, ④, ⑦, ⑩, ⑬	

For legends, see page 3/138.

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Cast-iron series Innomotics 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
Packaging, safety notes, documentation and test certificates																	
Inspection certificate 3.1 according to EN 10204	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Standard test (routine test) with acceptance	**B65**	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Remote acceptance	**B77**	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
Hybrid acceptance	**B78**	–	–	–	–	–	–	–	–	–	✓	✓	✓	✓			
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

- ◘ 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

Note:
The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
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 (6 terminals)	**Q60**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (12 terminals)	**Q61**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer (2 terminals)	**Q62**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (9 terminals)	**Q63**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (18 terminals)	**Q64**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers in basic configuration for bearing (4 terminals)	**Q72**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers for bearing (6 terminals)	**Q78**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
2 Pt100 double resistance thermometers for bearing (12 terminals)	**Q79**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Motor connection and terminal box															
External grounding	**H04**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□		
Terminal box on NDE	**H08**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	✓	✓	✓	✓		
Second external grounding	**H70**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Rotation of the terminal box through 90°, entry from DE	**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.		
12 cables protruding with cable lugs		□	□	□	□	□	□	□	□	□	□	□	□		
Larger terminal box	**R50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminal box without cable entry opening	**R51**	–	–	–	–	–	–	○	○	○	○	○	○		

For legends, see page 3/144.

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Aluminum series Innomotics 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
		1LE1073												IEC IE3
								1LE1573						
											1LE5773			
1LE1 . . . - . . . . . - . . . . -Z	Order code													
Motor connection and terminal box (continued)														
Drilled removable entry plate	**R52**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
Undrilled removable entry plate	**R53**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
Cast-iron auxiliary terminal box (small)	**R62**	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Cast-iron auxiliary terminal box (large)	**R63**	–	–	–	–	–	–	–	–	–	–	–	✓	
2 small cast-iron auxiliary terminal boxes	**R67**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard threaded through hole (metric, 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	**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** • CT .. °C or IA .... m above sea level	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	**Y52** • CT .. °C or IA .... m above sea level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Temperature class 180 (H), utilized according to 155 (F)	**Y75** • 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**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
Internal coating	**S05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Top coat polyurethane	**S06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
C5mid Special paint system with durability "medium"	**S08**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
CX Special paint system for offshore with durability "high"	**S09**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	

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Aluminum series Innomotics 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)															
Paint finish in other standard RAL colors: RAL 1015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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….	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66 •** and paint finish	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Modular technology – Basic versions															
Mounting of holding brake (standard assignment)	**F01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of PRECIMA brake	**F04**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	–		
Mounting of separately driven fan	**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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–		
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															
Mounting of HOG 86E rotary pulse encoder	**G03**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of HOG 10 D 1024 I rotary pulse encoder	**G06**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake)	**G07**	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓		
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake)	**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 HOG 100S–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 XSI 850 Overspeed	**G93**							✓	✓	✓	✓	✓	✓		

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Aluminum series Innomotics 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
		1LE1073												IEC IE3
								1LE1573						
											1LE5773			
1LE1 . . . - . . . . . - . . . . -Z	Order code													
Special technology (continued)														
Mounting of rotary pulse encoder XHI 861 Overspeed	**G94**							✓	✓	✓	✓	✓	✓	
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	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	
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	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Screwed-on (instead of cast) feet	**H01**	□	□	□	□	□	□	□	□	□	□	□	–	
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	**H02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Condensation drainage holes	**H03**	✓	✓	✓	✓	✓	✓	□	□	□	□	□	□	
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Degree of protection IP66	**H19**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Degree of protection IP56	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar	**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	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Bearings and lubrication														
Regreasing device with M10 × 1 grease nipple according to DIN 71412-A	**L19**	–	–	–	–	–	–	✓	✓	✓	✓	○	○	
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Located bearing NDE	**L21**	✓	✓	✓	✓	✓	□	□	□	□	□	□	□	
Bearing design for increased cantilever forces	**L22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Regreasing device	**L23**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	□	□	
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	□	□	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	–	–	–	–	–	–	✓	✓	✓	✓	–	–	
Bearings for high axial tension forces	**L34**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	–	–	
Bearing insulation DE	**L50**	–	–	–	–	–	–	–	–	✓	✓	✓	✓	
Bearing insulation NDE	**L51**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Measuring nipple for SPM shock pulse measurement for bearing inspection	**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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

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Aluminum series Innomotics 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	**Y58** • and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, NDE	**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	**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	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Standard test (routine test) with acceptance	**B65**	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Remote acceptance	**B77**	–	–	–	–	–	–	–	–	✓	✓	✓	✓		
Hybrid acceptance	**B78**	–	–	–	–	–	–	–	–	✓	✓	✓	✓		
Type test with heat run for horizontal motors, without acceptance	**B82**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

For legends, see page 3/144.

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Aluminum series Innomotics 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														
Packaging, safety notes, documentation and test certificates (continued)															
Type test with heat run for horizontal motors, with acceptance	**B83**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		

- ◘ 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

3

Note:
The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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Overview

Couplings

The motor from Innomotics 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, Innomotics 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, Innomotics 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, Innomotics 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

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Notes on the dimensions

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
S	flange (FF)	H17

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

  Dimension K: nominal dimension according IEC 60072-1, negative deviation of tolerance H17 possible

- 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.
- The overall width of the motor is identical to the "AC" dimension.

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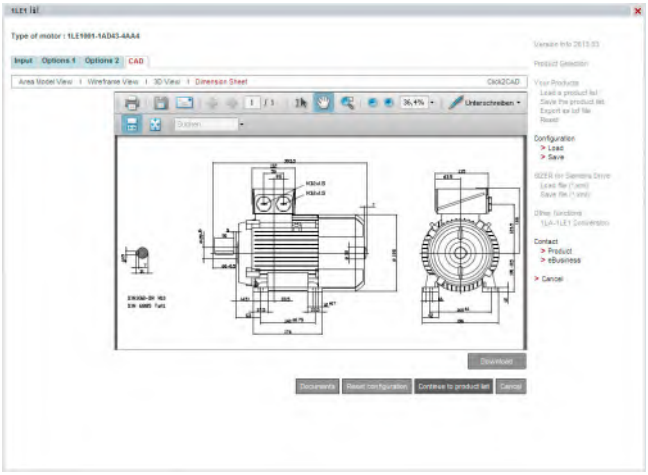
Overview

A dimensional drawing can be created in the "Siemens Product 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 Siemens Product Configuratorr is integrated into the Siemens Industry Mall and can be used on the Internet without installation.
German: www.siemens.de/spc
English: www.siemens.com/spc

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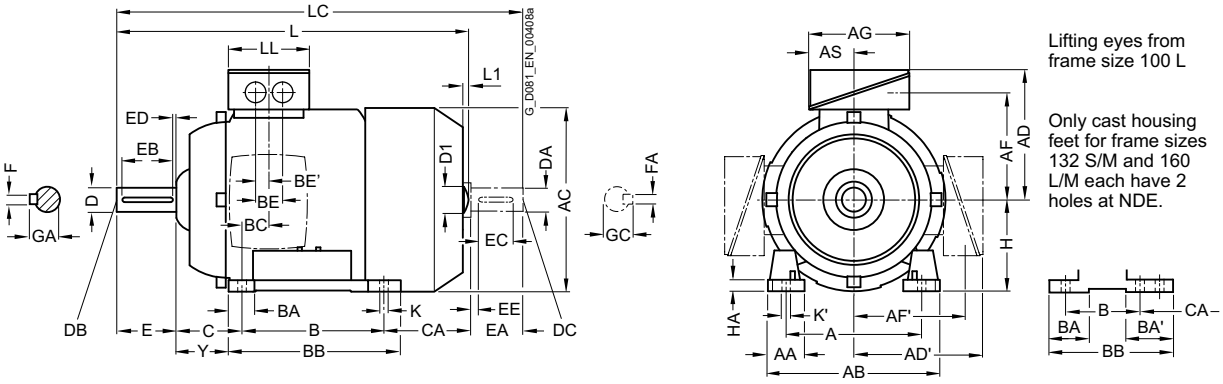
3

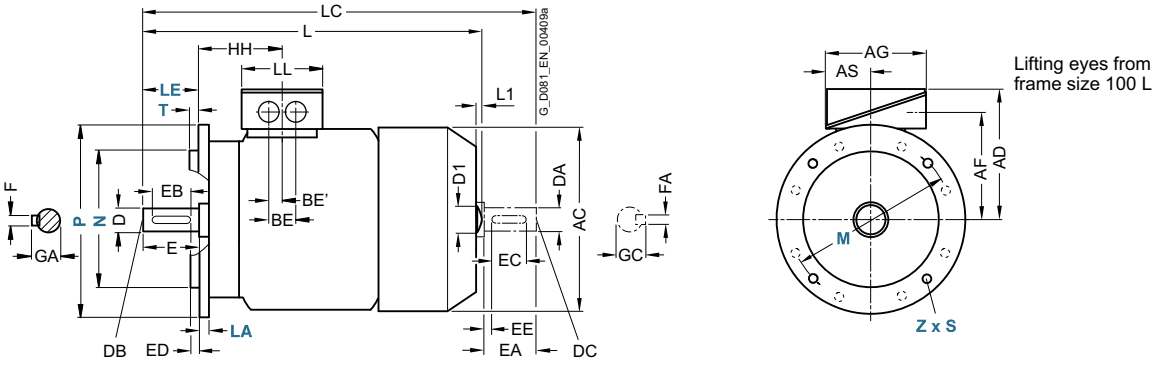
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



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	176 216	**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	155 200	**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	166.5 216.5	**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	192 252	**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.

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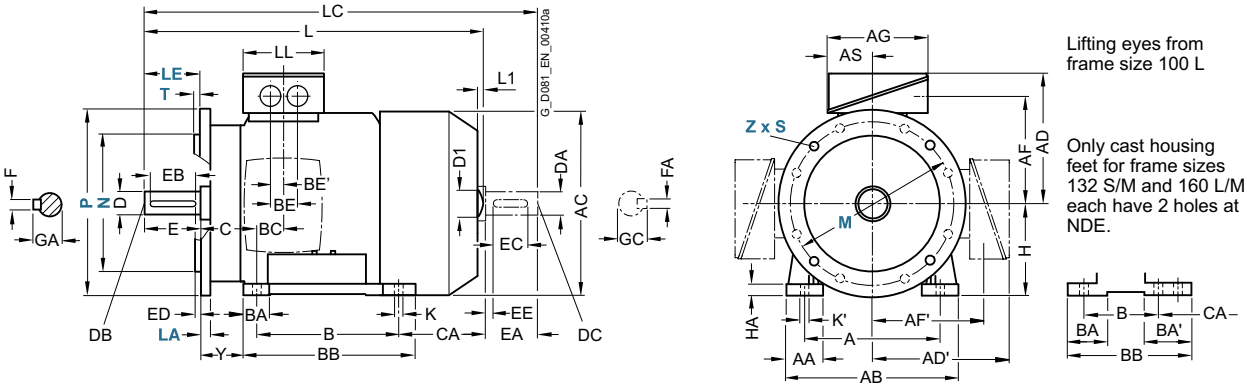
Dimensional drawings

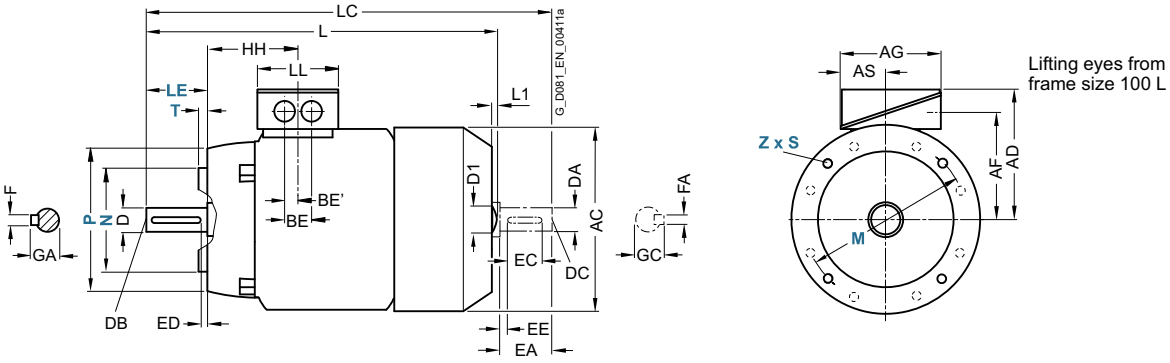
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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	730 790	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.

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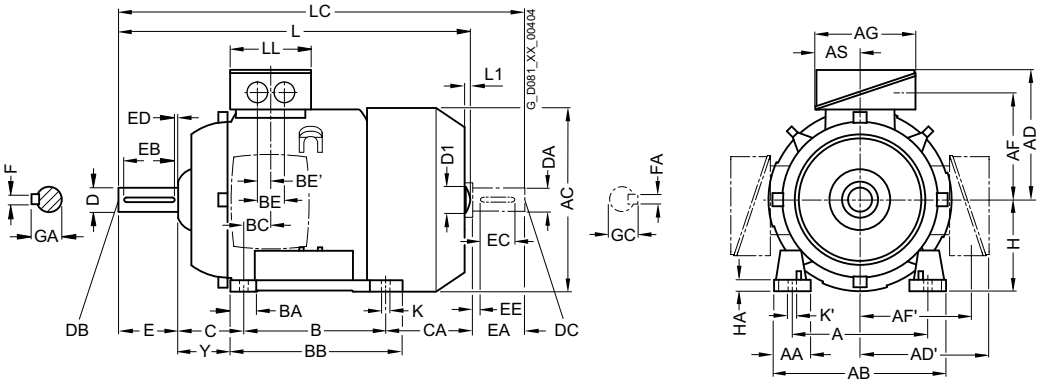
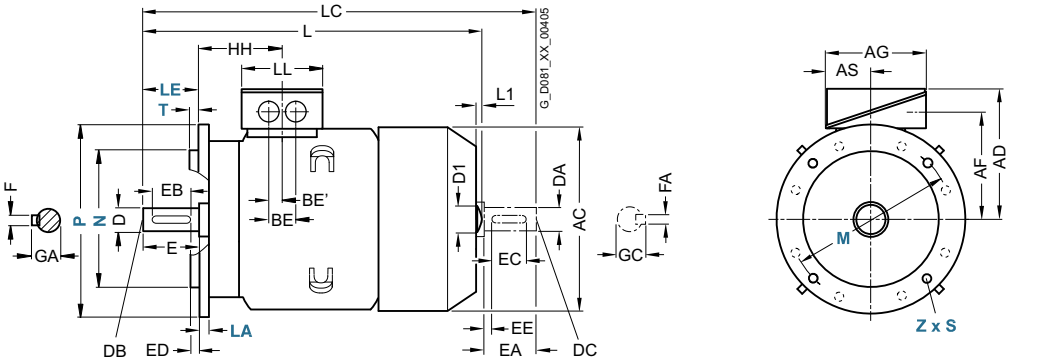
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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
63 M	1LE1003, 1LE1043 -0BA2, -0BA3 -0BB2, -0BB3	2, 4	100	27	**120**	124	**101**	101	77,5	77,5	75	37,5	80	27	96	29,5	32	14	40	66 92	**63**	7	32
71 M	1LE1003, 1LE1043 -0CA2, -0CB2 -0CC2, -0CA3, -0CB3, -0CC3, -0CD3	2, 4, 6, 8	112	30,5	**132**	145	**111**	111	87,5	87,5	75	37,5	90	27	106	18,5	32	14	45	83 123	**71**	7	40
							109,5	109,5	86	86													
80 M	1LE1003, 1LE1043 -0DA2, -0DB2, -0DC2, -0DD2, -0DA3, -0DB3, -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	–[1]	18[1]	50	113 148	**80**	8	41
	1LE1023-0DA2, -0DB2, -0DC2 , -0DD2 -0DA3, -0DB3, -0DC3, -0DD3						**149,5**	149,5	112	112	119,5	61,5					50	25		113 148			
90 S	1LE1003, 1IE1043 -0EA0, -0EB0, -0EC0, -0ED0	2, 4, 6, 8	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
	1LE1023-0EA0, -0EB0, -0EC0, -0ED0						**154,5**		117,5	117	119,5	61,5											
90 L	1LE1003, 1LE1043 -0EA4, -0EB4 -0EC4 -0ED4	2, 4, 6, 8	140	30,5	**165**	178	**126**	126	101,5	101,5	93	43	125	33	143	22,5	–[1]	18[1]	56	174 134	**90**	10	47
	1LE1023-0EA4, -0EB4, -0ED4						**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.

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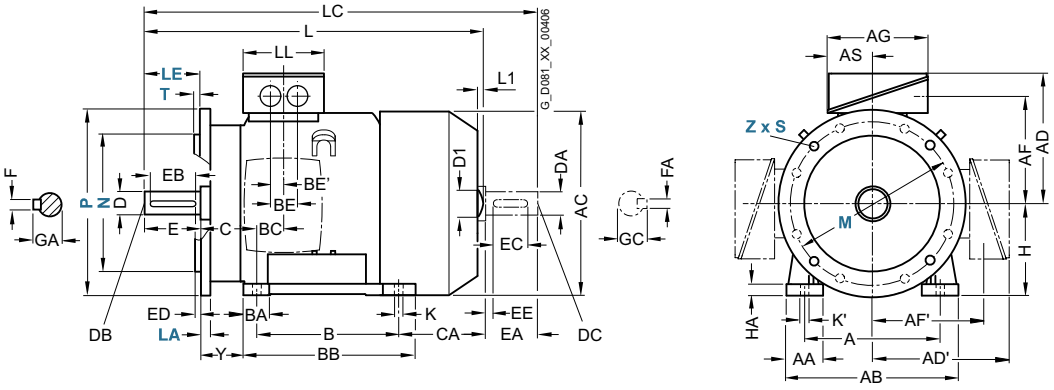
Dimensional drawings

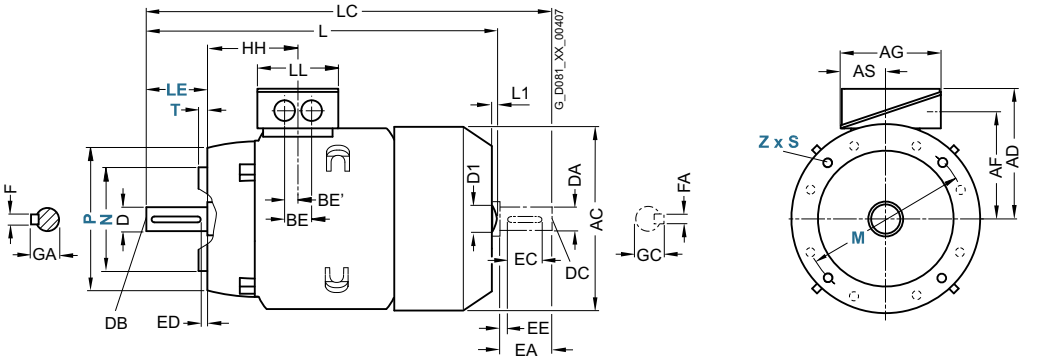
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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
63 M	1LE1003, 1LE1043 -0BA2, -0BA3, --0BB2, -0BB3	2, 4		7	10	**202,5**			232	75	11	M4	23	16	3,5	4	12,5	11	M4	23	16	3,5	4	12,5
						228,5			258															
71 M	1LE1003, 1LE1043 -0CA2, -0CB2 -0CC2, -0CA3, -0CB3, -0CC3, -0CD3	2, 4, 6, 8		7	10	**240**			278	75	14	M5	30	22	4	5	16	14	M5	30	22	4	5	16
						280			318															
80 M	1LE1003, 1LE1043 -0DA2, -0DB2, -0DC2, -0DD2, -0DA3, -0DB3, -0DC3, -0DD3	2, 4, 6, 8	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															
	1LE1023-0DA2, -0DB2, -0DC2 , -0DD2 -0DA3, -0DB3, -0DC3, -0DD3					**292**			343	123														
						327			378															
90 S	1LE1003, 1IE1043 -0EA0, -0EB0, -0EC0, -0ED0	2, 4, 6, 8	78,5	10	14	**347**	–	–	405	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21,5
	1LE1023-0EA0, -0EB0, -0EC0, -0ED0									123														
90 L	1LE1003, 1LE1043 -0EA4, -0EB4 -0EC4 -0ED4	2, 4, 6, 8	78,5	10	14	**387**	–	–	445	79	24	M8	50	40	5	8	27	19	M6	40	32	4	6	21,5
						347			405															
	1LE1023-0EA4, -0EB4, -0ED4									123														

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

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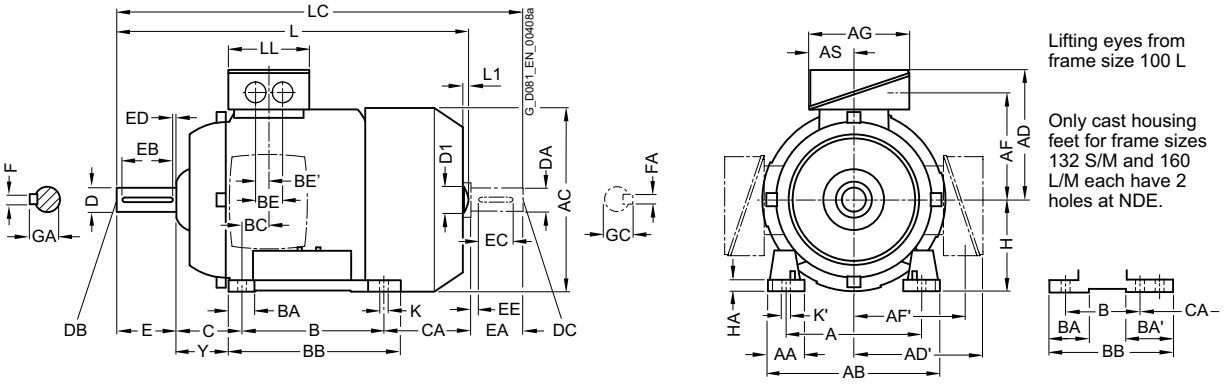
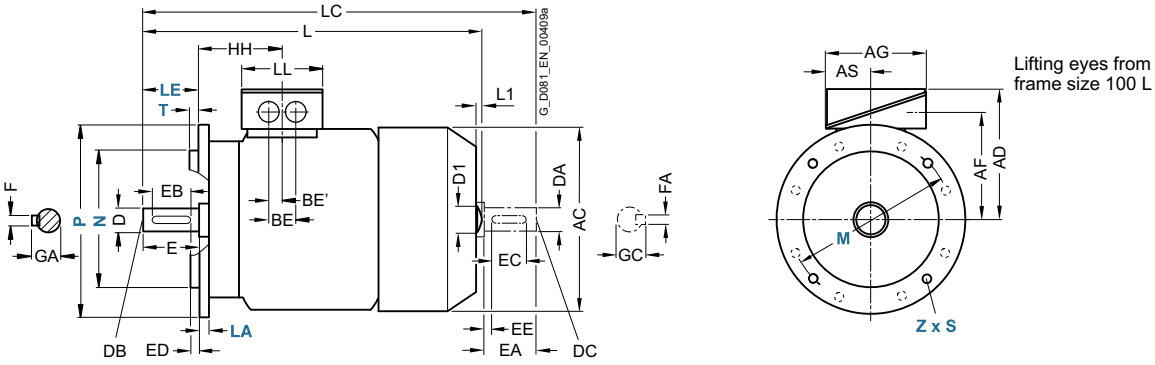
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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, 1AC3, 1AD5 1AC4, 1AD4	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	176 141	**100**	12	45
112 M	1BA2, 1BB2, 1BC1, 1BC2, 1BD1	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, 1CC1, 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	208 148	**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.
[5] Only one termination hole available except for 1LE1023. Here the dimension BE 32 mm.

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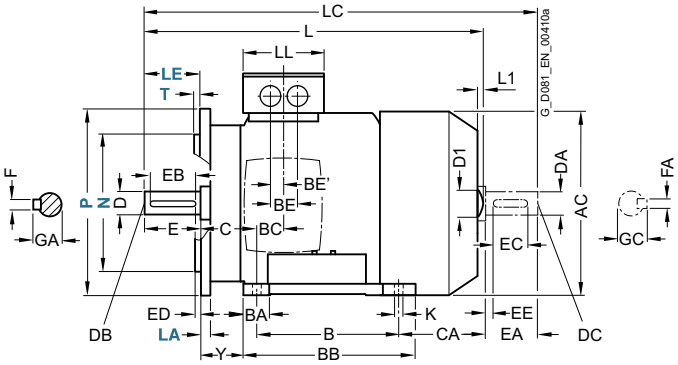
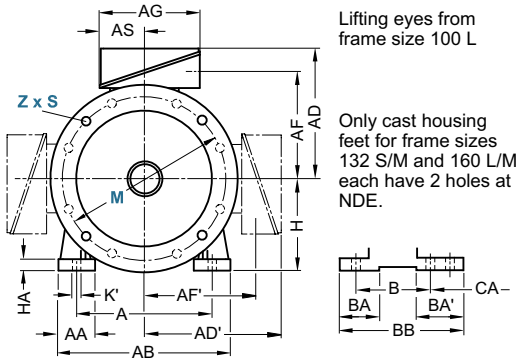
Dimensional drawings

Type of construction IM B35

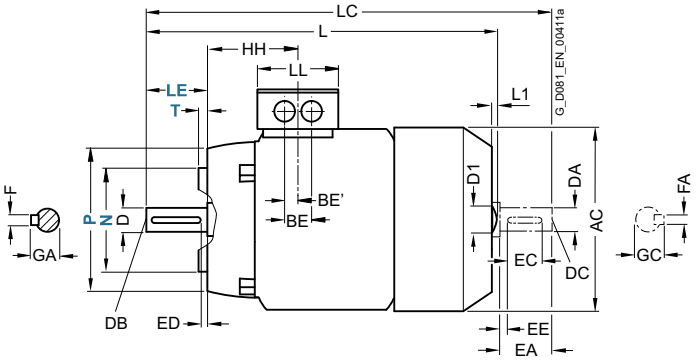
For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)

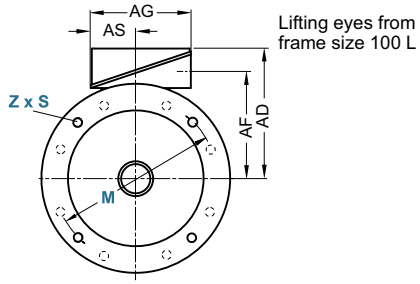




Type of construction IM B14

For flange dimensions, see page 1/50 (**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, 1AC3, 1AD5 1AC4, 1AD4	2, 4, 6, 8	96.5	12	16	**430.5 395,5**	7	32	489 454	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
112 M	1BA2, 1BB2, 1BC1, 1BC2, 1BD2	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, 1CC1, 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	**664 604**	10	45	790 730	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.

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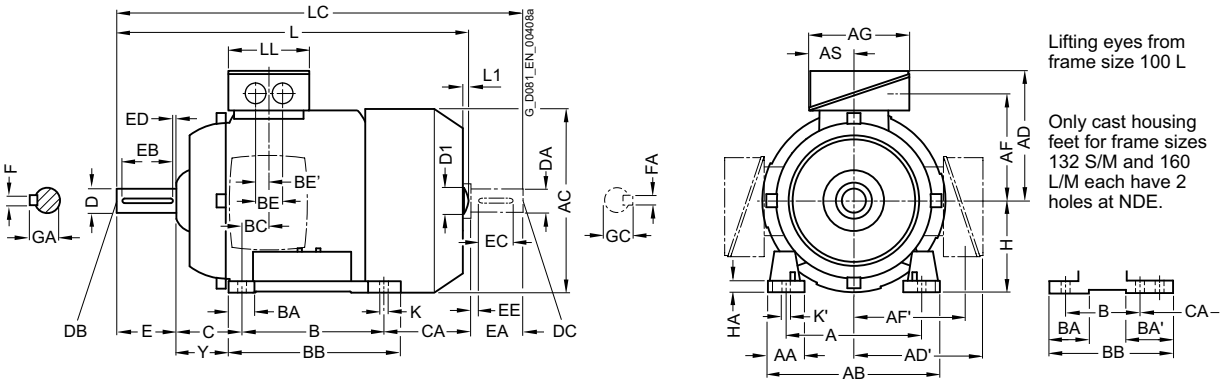
Dimensional drawings

Type of construction IM B3

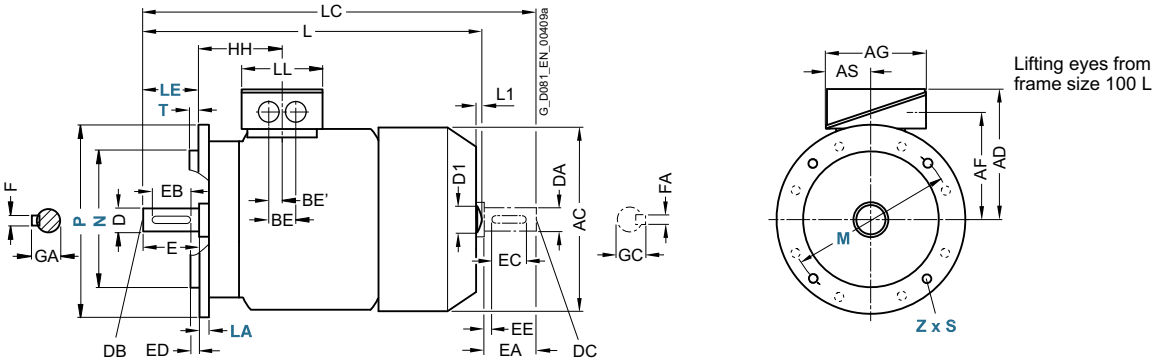


Lifting eyes from frame size 100 L

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 1/50 (**Z** = the number of retaining holes)



Lifting eyes from frame size 100 L

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
80 M	1LE1003-0DA6, -0DB6 1LE1043-0DA6, -0DB6	2, 4	125	30.5	**150**	159	**121.5**	121.5	96.5	96.5	93	43	100	32	32	118	23	–	18	50	148	**80**	8	41
90 L	1LE1003-0EA6, 1LE1043-0EA6,	2	140	30.5	**165**	178	**126**	101.5	101.5	101.5	93	43	125	33	54	143	22.5	–	18	56	174	**90**	10	47
100 L	1LE1003-1AA6, -1AB6 1LE1043-1AA6, -1AB6	2, 4	160	42	**196**	198	**166**	125.5	125.5	125.5	135	63.5	140	37.5	37.5	176	33.5	50	25	63	176 216 176 216	**100**	12	45
112 M	1LE1003-1BA6, -1BB6 1LE1043-1BA6,	2, 4	190	46	**226**	22	**177**	136.5	136.5	136.5	135	63.5	140	37.5	37.5	176	26	50	25	70	155 200 155	**112**	12	52
132 M	1LE1003, 1LE1043 -1CA6, -1CA7 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 1LE1043-1EC6	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, -2AD6 1LE1043-2AC6, -2AD6	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

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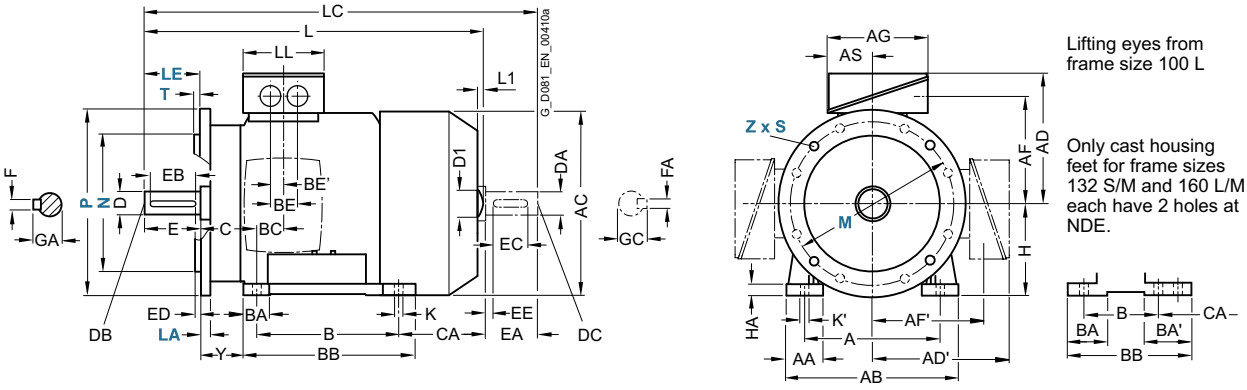
Dimensional drawings

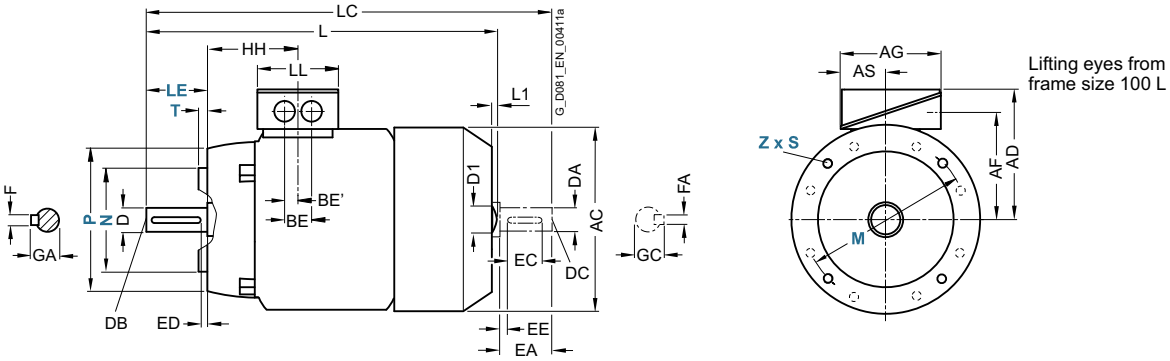
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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	1LE1003-0DA6, -0DB6 1LE1043-0DA6, -0DB6	2, 4	73	9,5	13,5	**327**	–	–	378	79	19	M6	6	32	4	6	21,5	19	M6	40	32	4	6	21,5
90 L	1LE1003-0EA6, 1LE1043-0EA6	2	78,5	10	14	**387**	–	–	445	79	24	M8	8	40	5	8	27	19	M6	40	32	4	6	21,5
100 L	1LE1003-1AA6, -1AB6 1LE1043-1AA6, -1AB6	2, 4	96,5	12	16	**430,5** **480,5** **430,5** **480,5**	7	32	489 529 489 529	112	28	M10	8	50	5	8	31	24	M8	50	40	5	8	27
112 M	1LE1003-1BA6, -1BB6 1LE1043-1BA6	2	96	12	16	**414** **464** **414**	7	32	475 520 475	112	28	M10	8	50	5	8	31	24	M8	50	40	5	8	27
132 M	1LE1003, 1LE1043 -1CA6, -1CA7 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 1LE1043-1EC6	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, -2AD6 1LE1043-2AC6, -2AD6	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.

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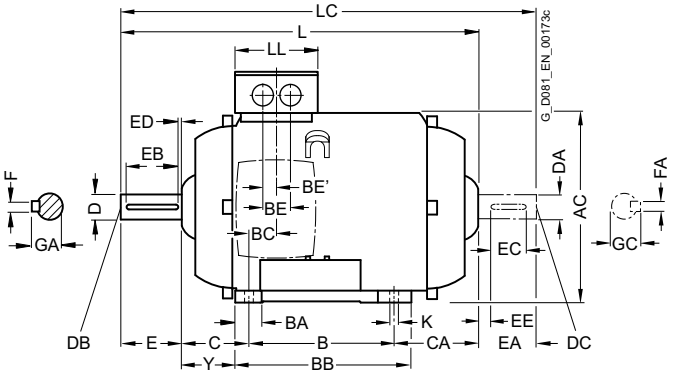
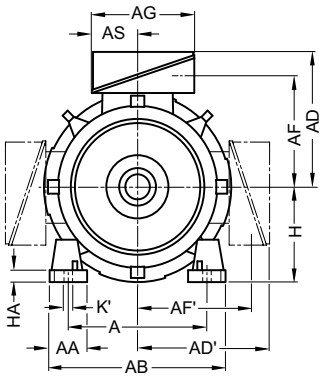
Dimensional drawings

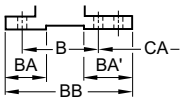
Type of construction IM B3





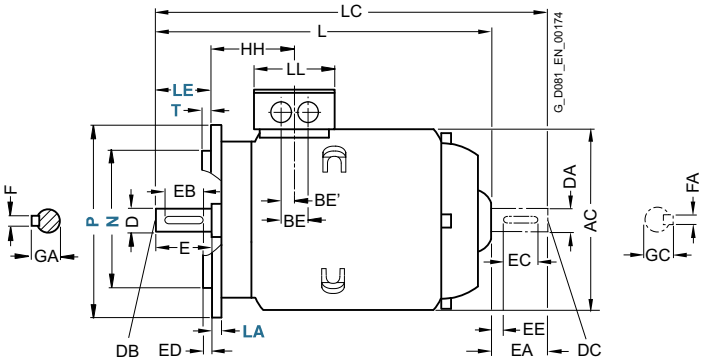
Lifting eyes from frame size 100 L

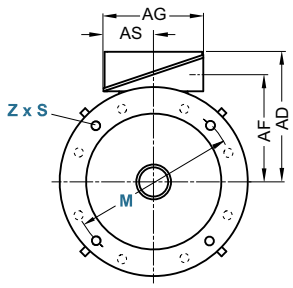
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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
63 M	0BA2, 0BA3, 0BB2, -0BB3	2, 4	100	27	**120**	124	**101**	101	77.5	77.5	75	37.5	80	27	27	96	29.5	32	14	40		**63**	7	32
71 M	0CA2, 0CB2, 0CC2, 0CA3, 0CB3, 0CC3, 0CD3	2, 4, 6, 8	112	30.5	**132**	145	**111**	111	87.5	87.5	75	37.5	90	27	27	106	18.5	32	14	45		**71**	7	40
							109.5	109.5	86	86														
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	130	**90**	10	47
90 L	0EA4, 0EB4, 0EC4	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	118	**90**	10	47

[1)] Only one termination hole available.

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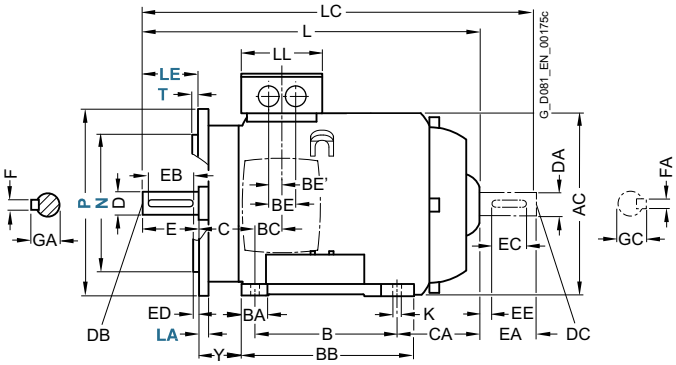
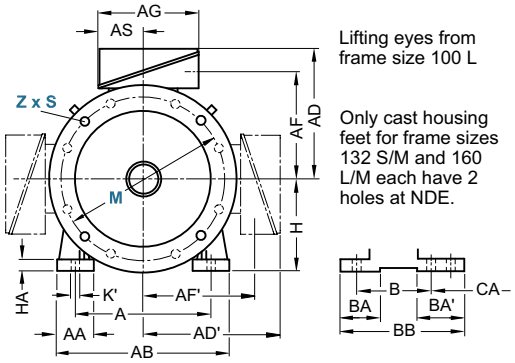
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



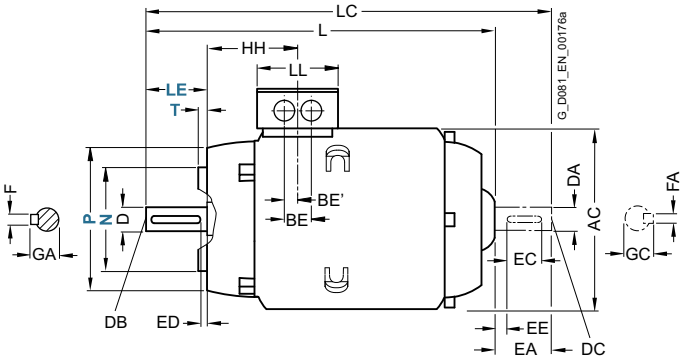


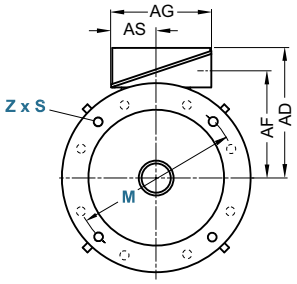
Lifting eyes from frame size 100 L

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 1/50 (**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
63 M	0BA2, 0BA3, 0BB2, 0BB3	2, 4		7	10	**202.5** **228.5**		75	11	M4	23	16	3.5	4	12.5							
71 M	0CA2, 0CB2, 0CC2, 0CA3, 0CB3, 0CC3, 0CD3	2, 4, 6, 8		7	10	**240** **280**		75	14	M5	30	22	4	5	16							
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

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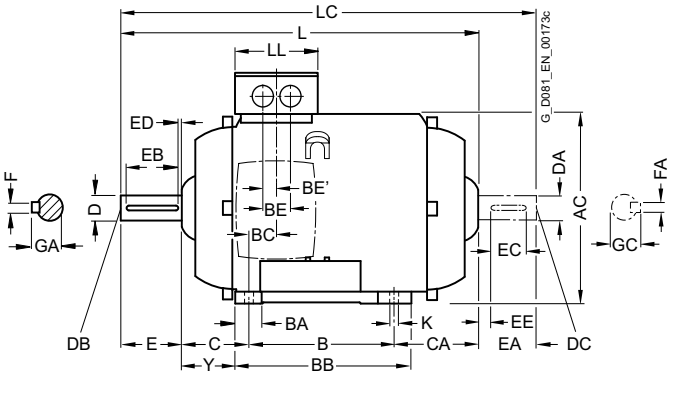
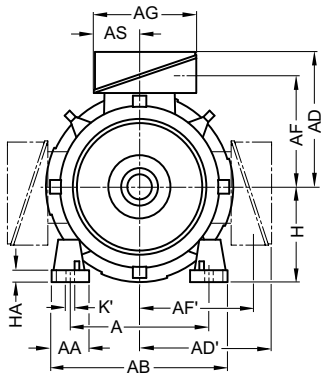
IE3 – forced-air cooled · Frame sizes 100 L to 200 L

Dimensional drawings

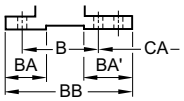
Type of construction IM B3





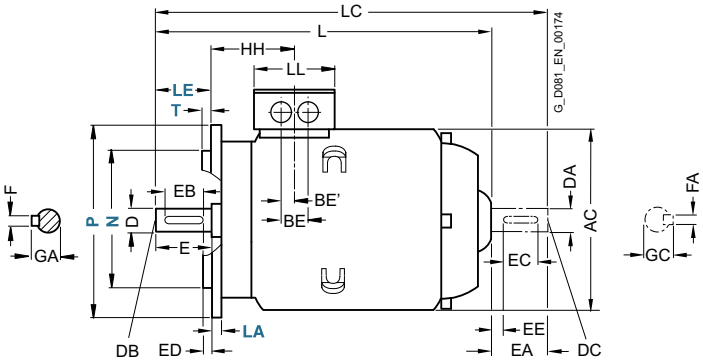
Lifting eyes from frame size 100 L

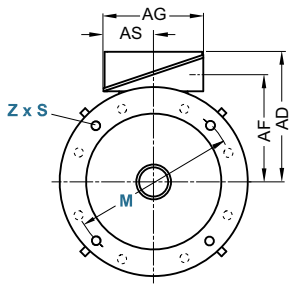
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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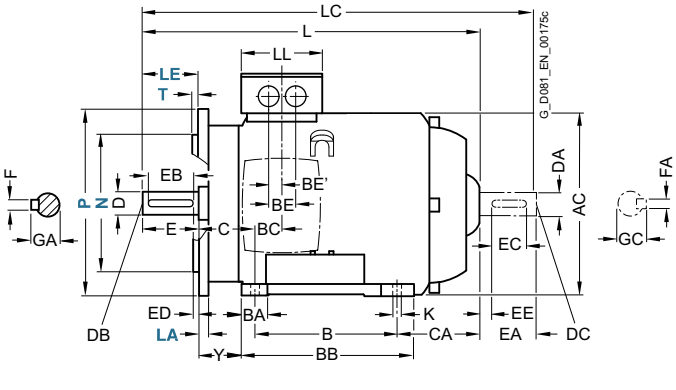
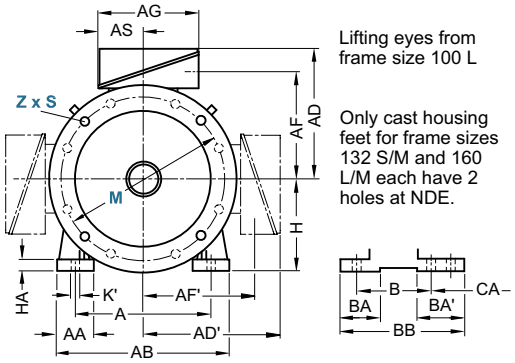
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



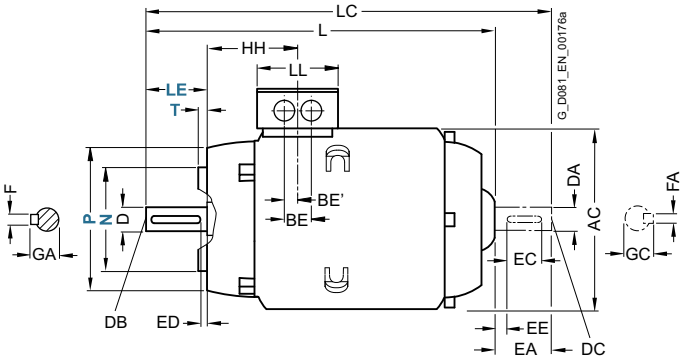


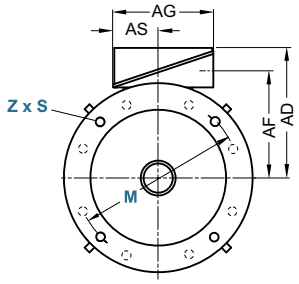
Lifting eyes from frame size 100 L

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 1/50 (**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	2, 4	96.5	12	16	**356.5**	411	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
	1AC3	6																				
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	**592**	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	**592**	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	**642**	772	185	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59

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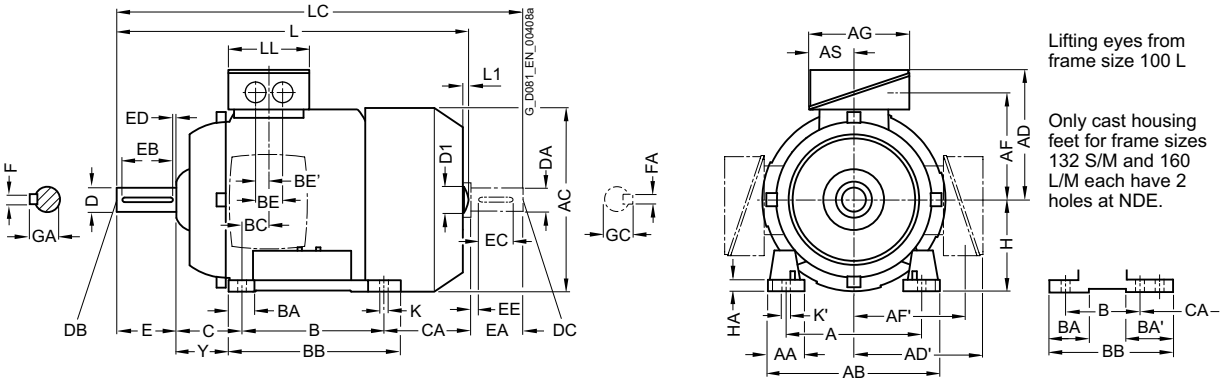
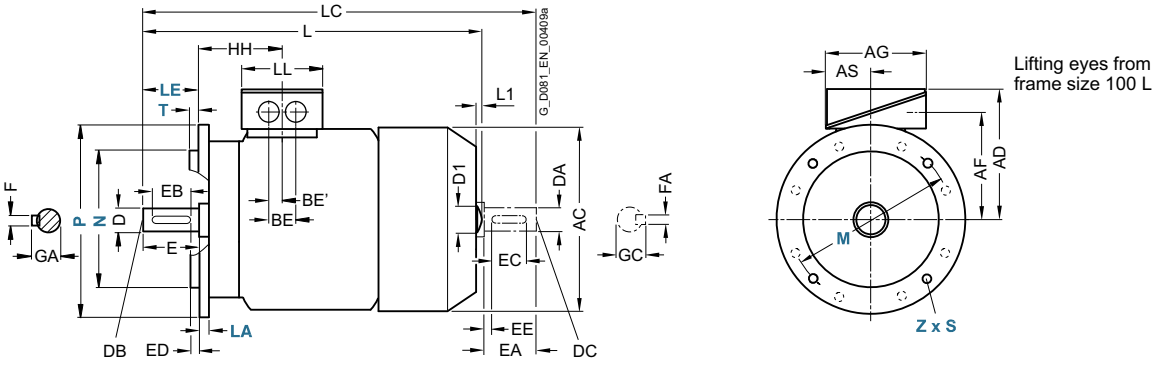
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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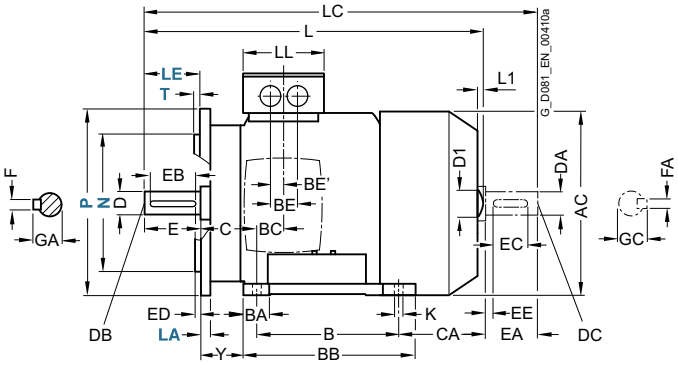
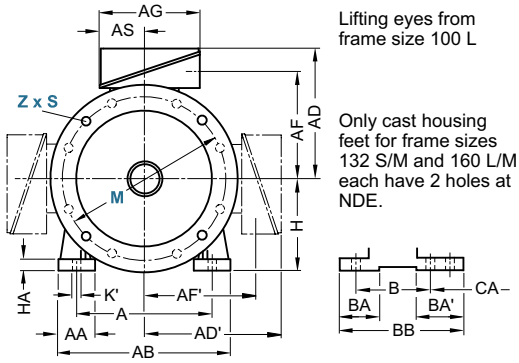
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



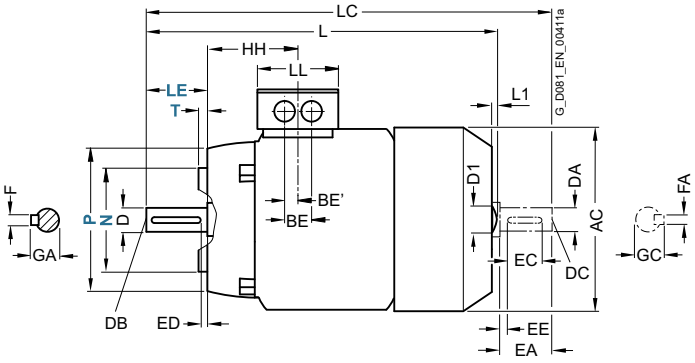


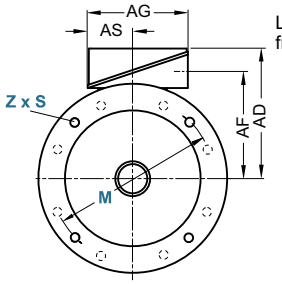
Lifting eyes from frame size 100 L

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 1/50 (**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.

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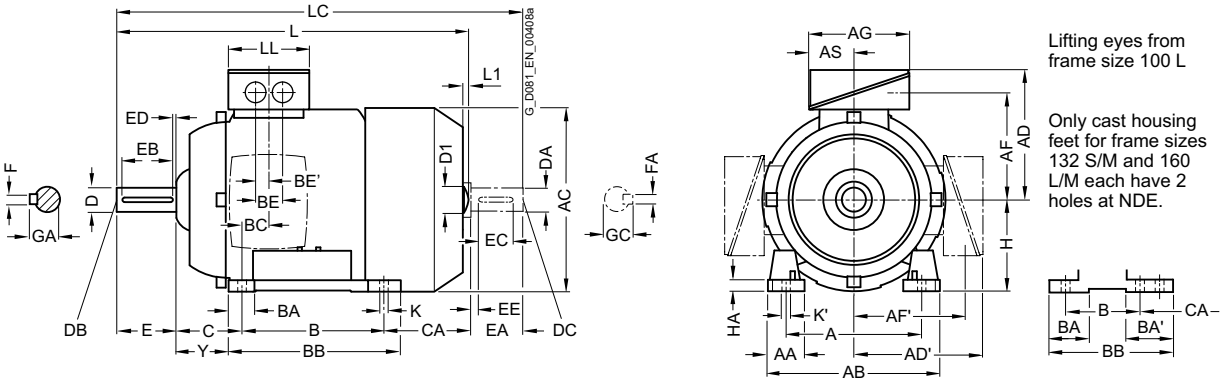
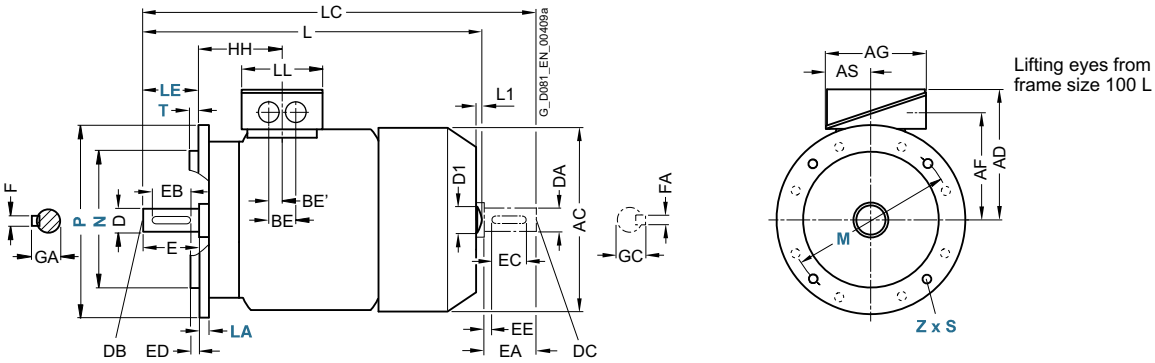
Dimensional drawings

ype of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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

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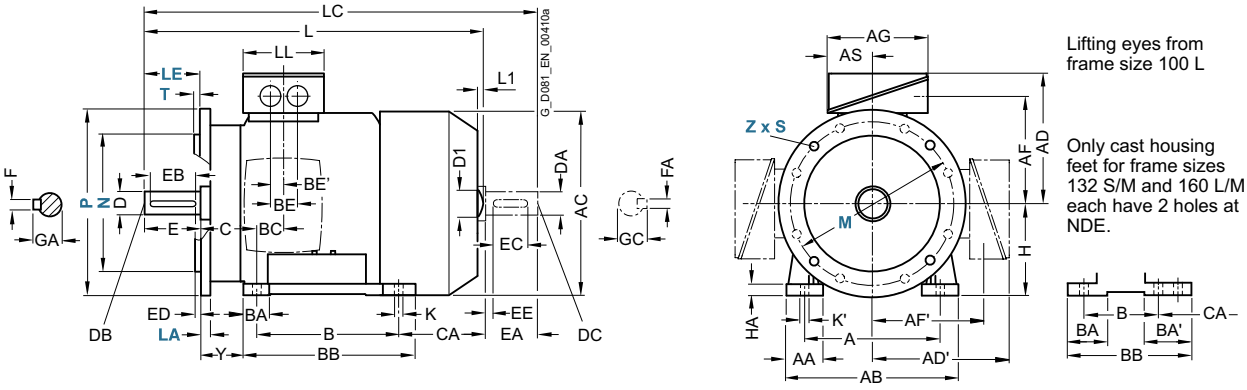
Dimensional drawings

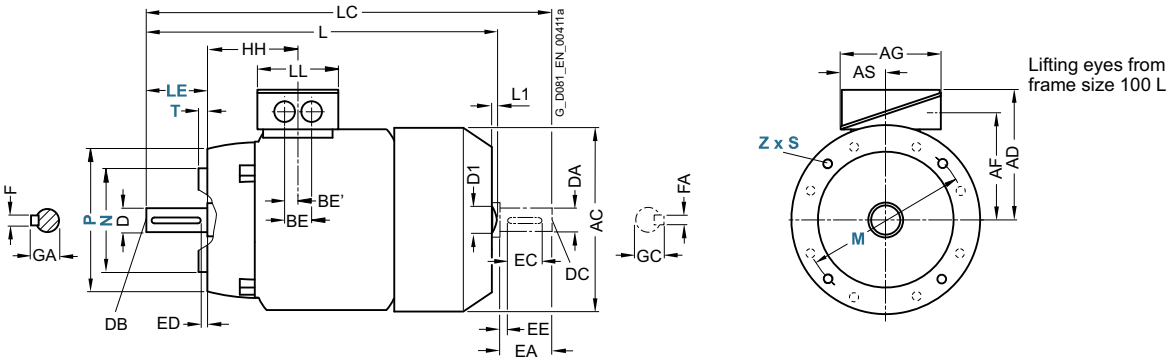
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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.

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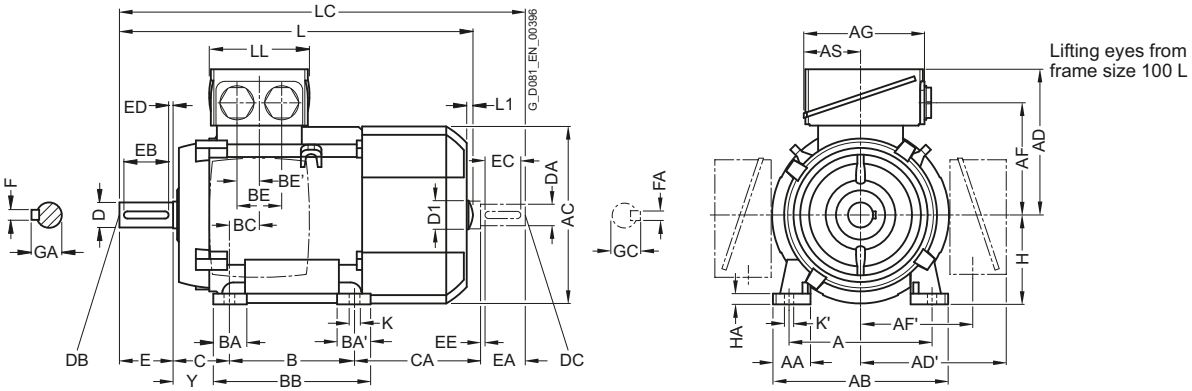
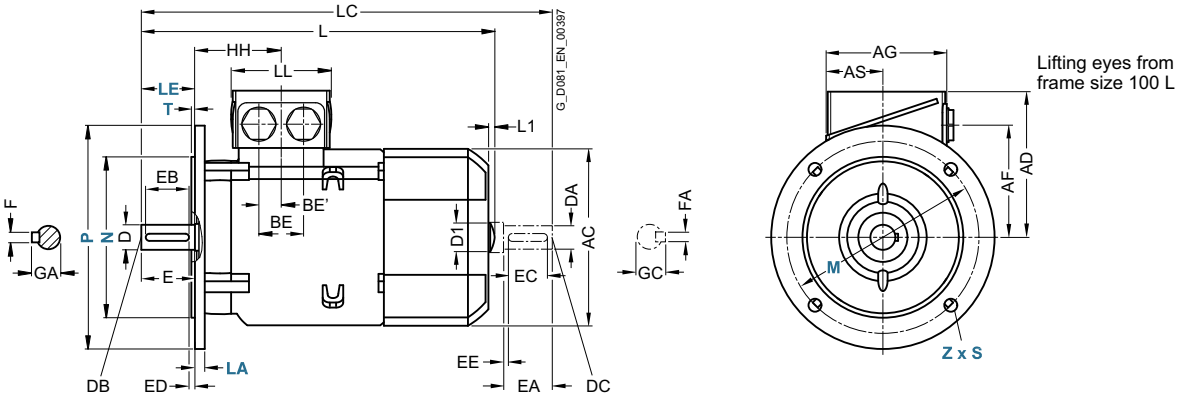
TDimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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	32
	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	40
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.

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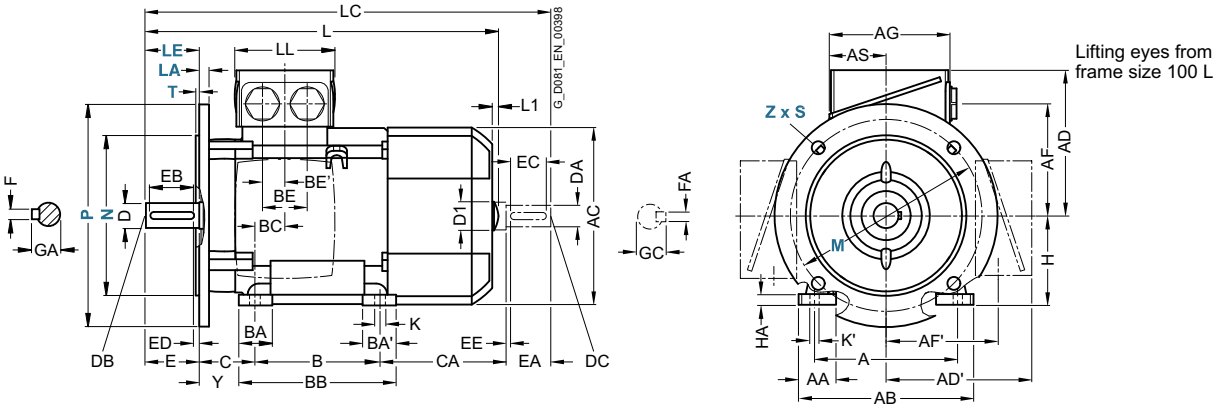
Dimensional drawings

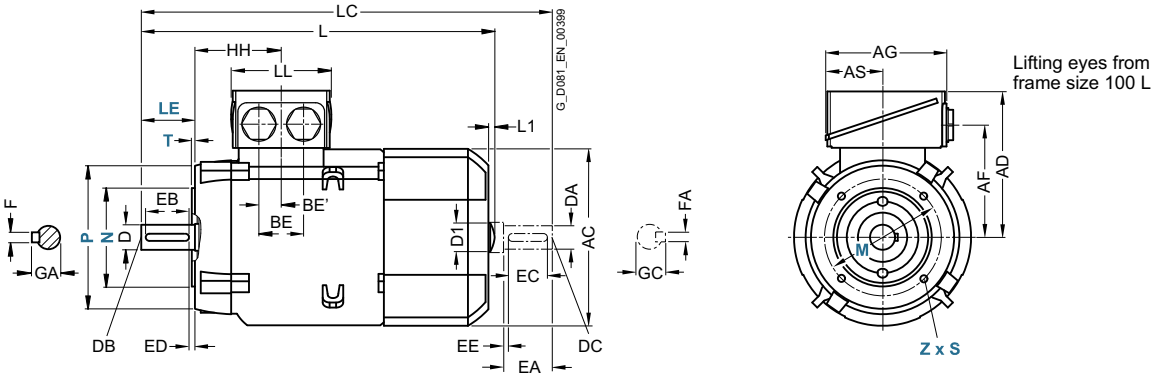
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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.

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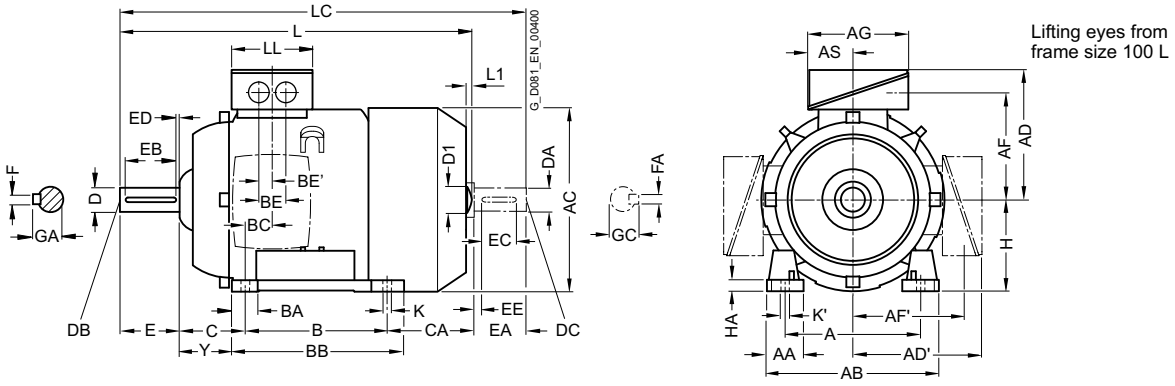
IE1, IE2 – self-ventilated with increased power · Frame sizes 80 M to 200 L

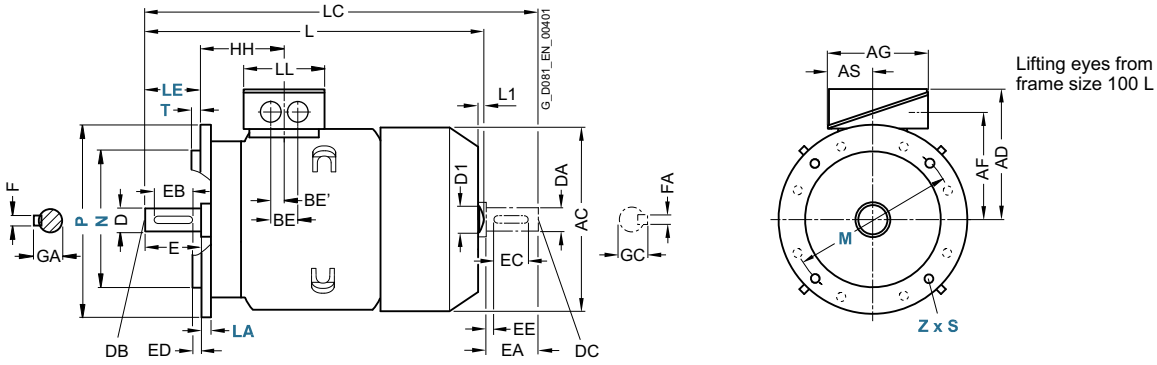
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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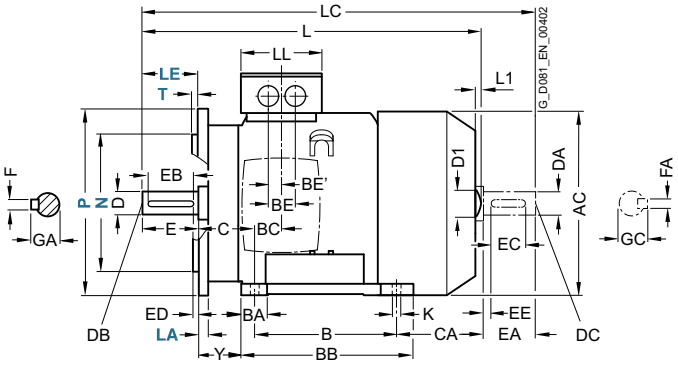
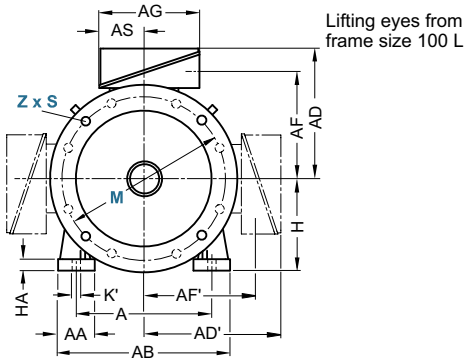
Dimensional drawings

Type of construction IM B35

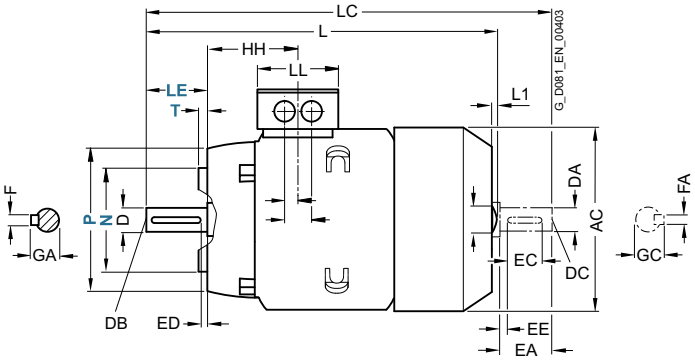
For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)

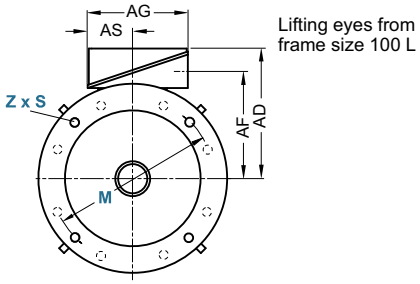




Type of construction IM B14

For flange dimensions, see page 1/50 (**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.

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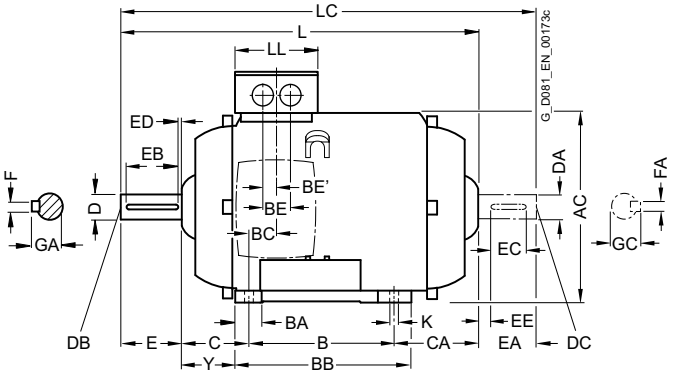
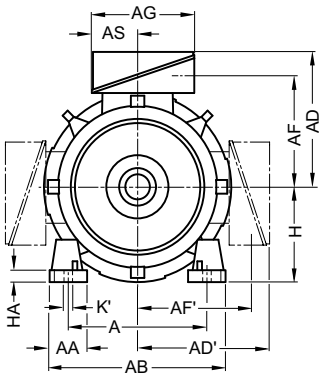
Dimensional drawings

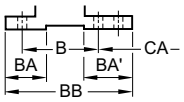
Type of construction IM B3





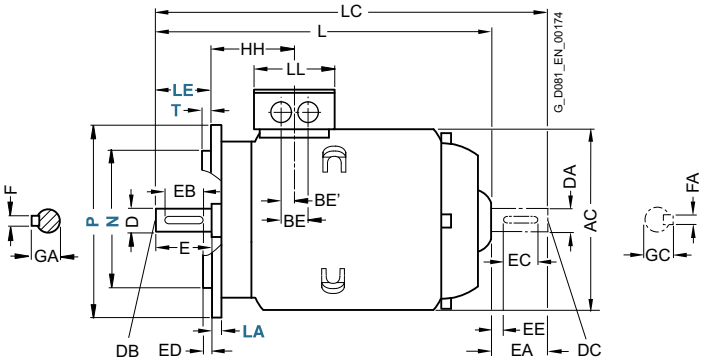
Lifting eyes from frame size 100 L

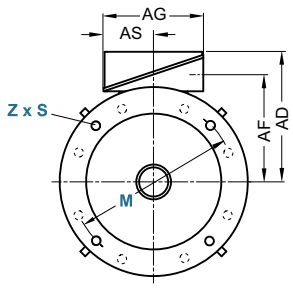
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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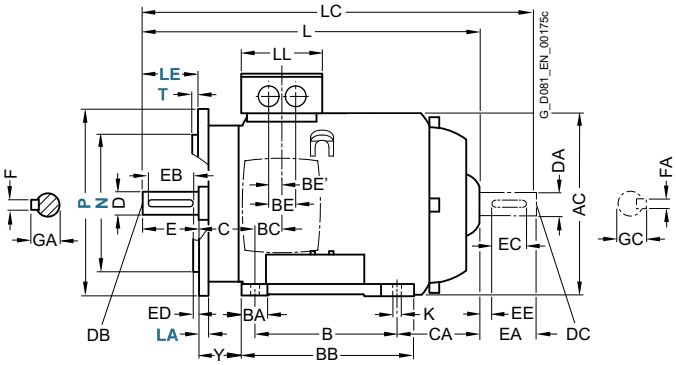
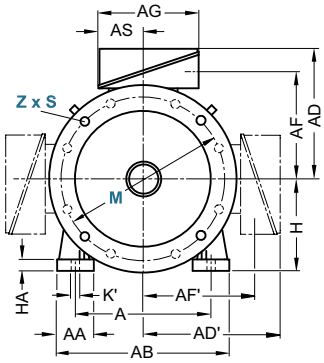
Dimensional drawings

Type of construction IM B35

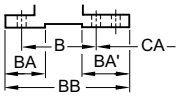
For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)





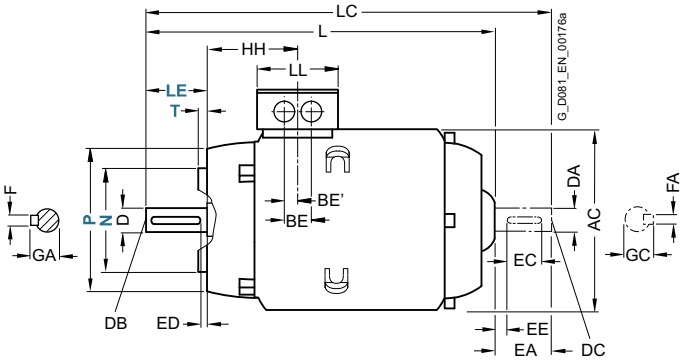
Lifting eyes from frame size 100 L

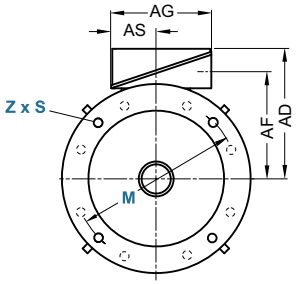
Only cast housing feet for frame sizes 132 S/M and 160 L/M each have 2 holes at NDE.



Type of construction IM B14

For flange dimensions, see page 1/50 (**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

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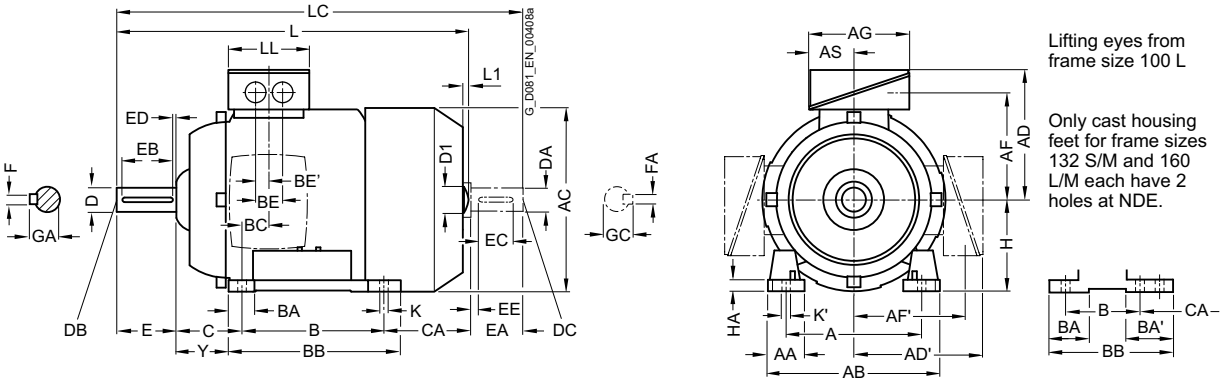
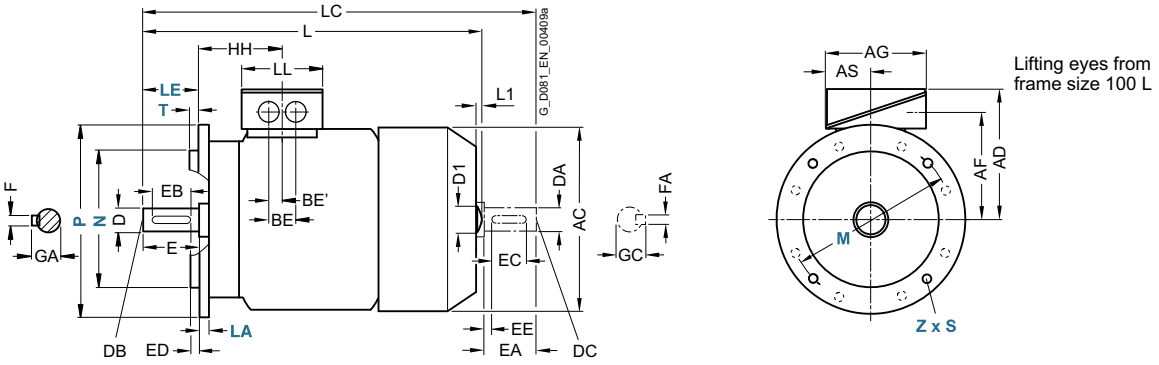
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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	**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.

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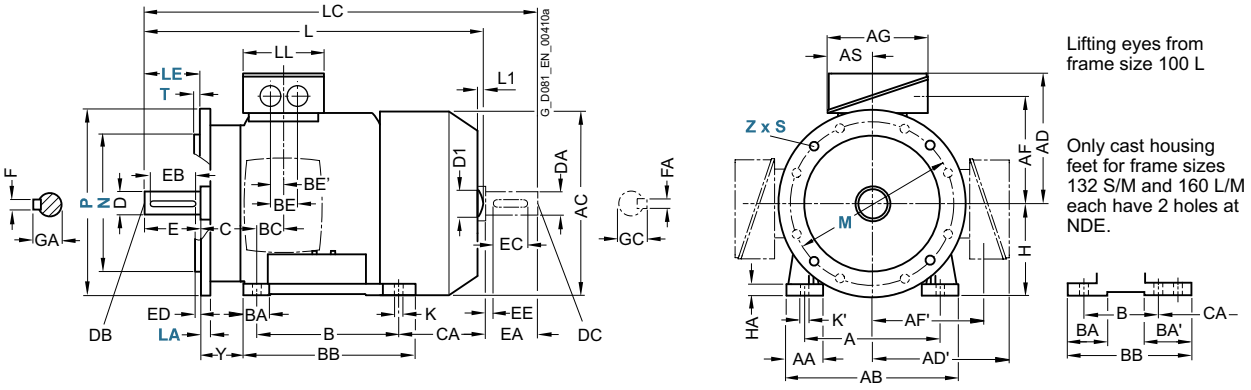
Dimensional drawings

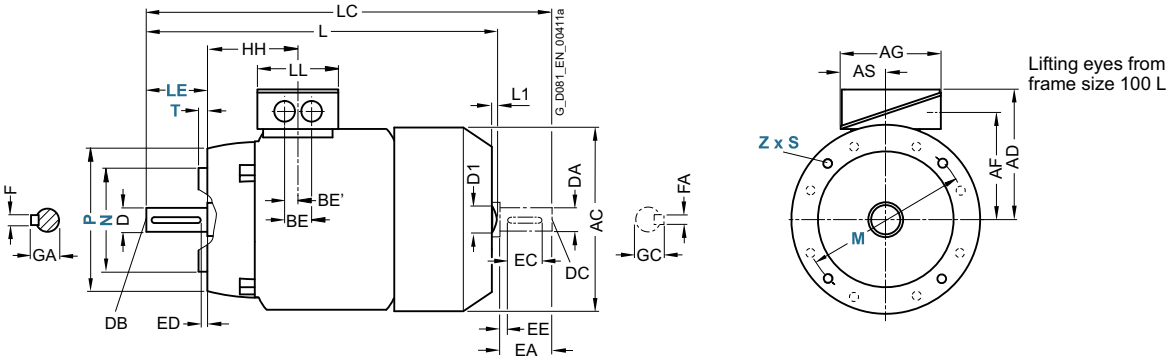
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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.

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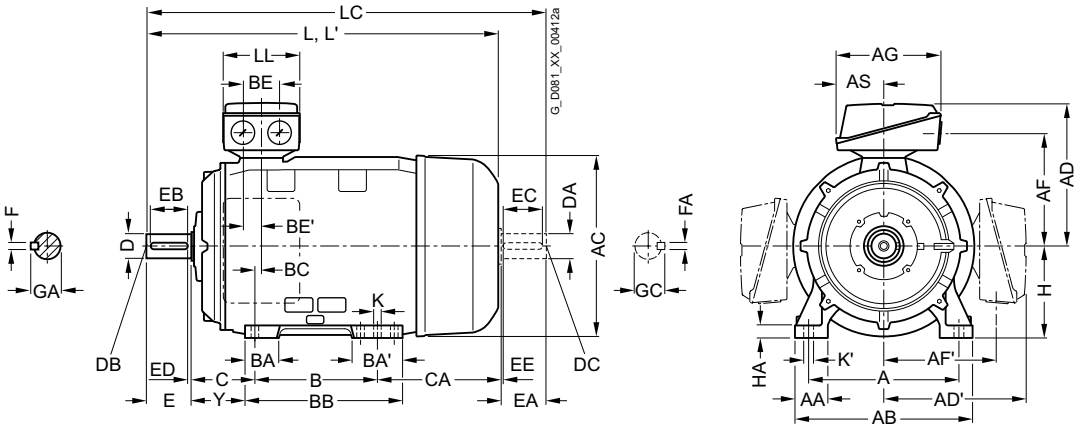
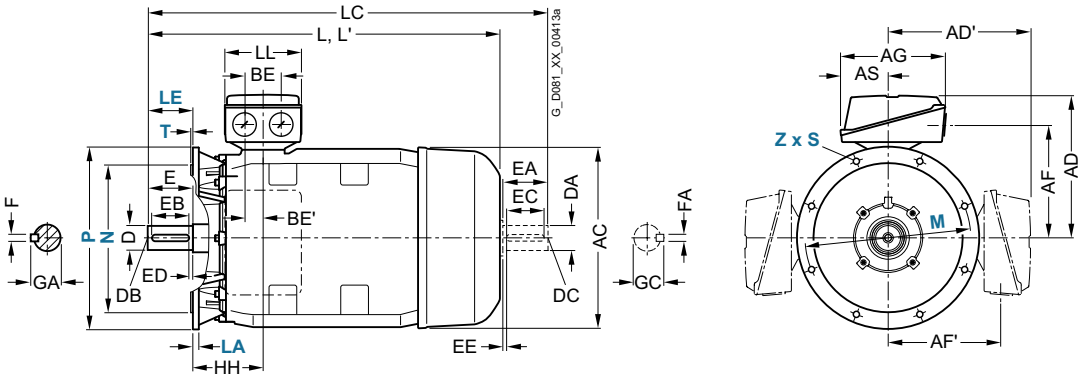
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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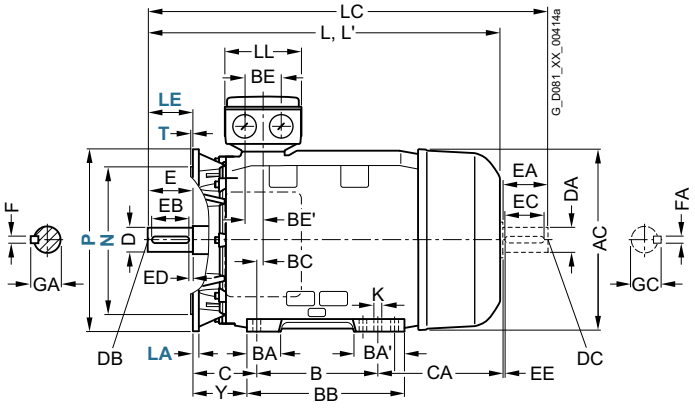
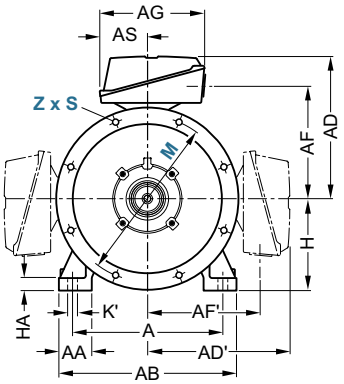
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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								784															
1EB4	4								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.

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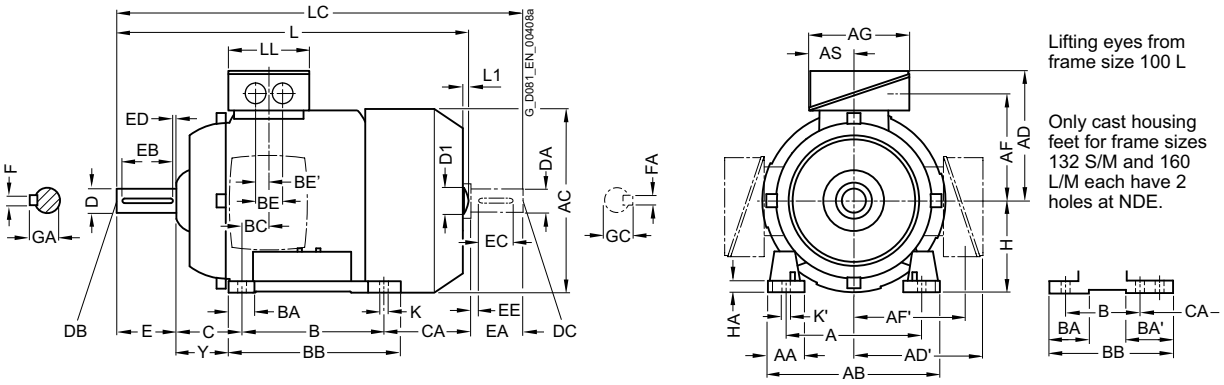
Dimensional drawings

Type of construction IM B3

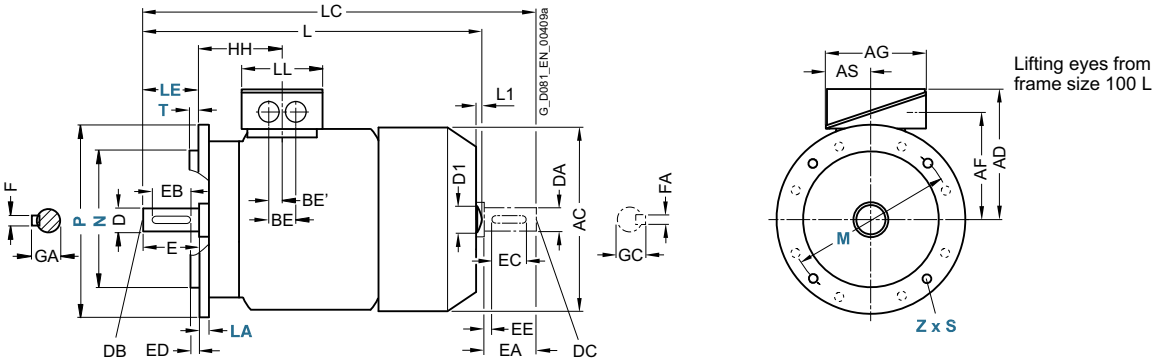


Lifting eyes from frame size 100 L

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 1/50 (**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, 0..6	2, 4, 6	125	30,5	**150**	162	**159**	159	122	122	126	62	100	32	32	118	22,5	36	18	50	112,5 148	**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	1LE15.3-0..6	2, 4, 6	140	30,5	**165**	180	**164**	164	127	127	126	62	125	33	54	143	24,5	36	18	56	174	**90**	11	47
100 L	1AA4, 1AA6, 1AB4, 1AB5, 1AB6	2, 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
	1AC4	6																			216 176			
112 M	1BA2, 1BA6, 1BB2, 1BC2, 1BD2 1BB6	2, 4, 6	190	46	**226**	239	**195**	195	150	150	163	80,5	140	48	48	176	30	48	24	70	155 200	**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, 1CA6, 1CA7, 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 1CB6	4, 6, 8 4													–						178,5			
160 M	alle	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	alle	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.

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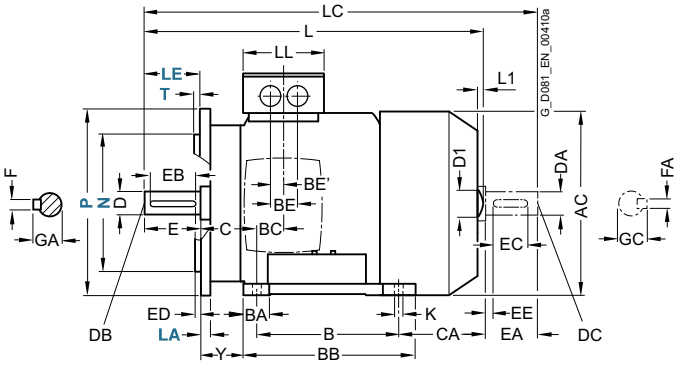
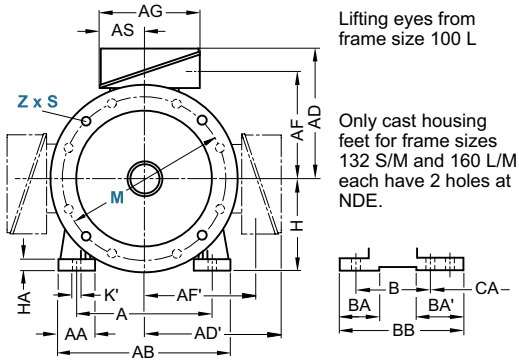
Dimensional drawings

Type of construction IM B35

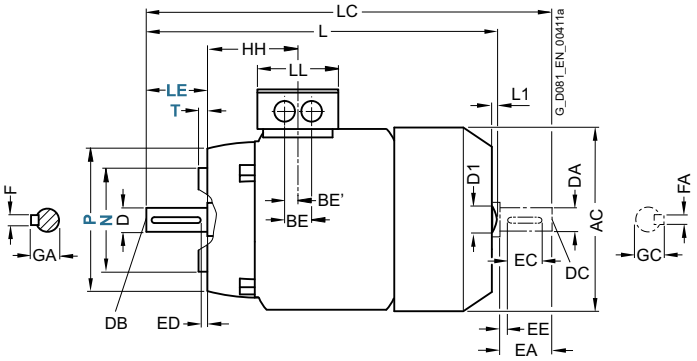
For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)

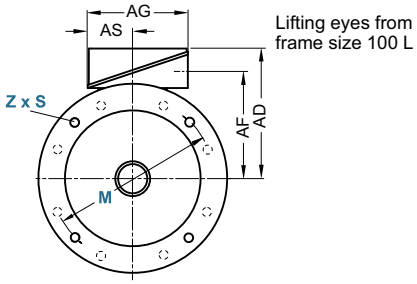




Type of construction IM B14

For flange dimensions, see page 1/50 (**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	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
	0..3					**280**			318															
80 M	1LE15.3- 0..0, 0..2	2, 4, 6	71.5	10	10	**292**	–	–	343	102	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5
	0..3, 0..6					**327**			378															
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	1LE15.3-0..6	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, 1AA6, 1AB4, 1AB5, 1AB6,	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	1BA2, 1BA6, 1BB2, 1BC2, 1BD2	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
	1BB6					**465,5**			520															
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, 1CA6, 1CA7, 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.

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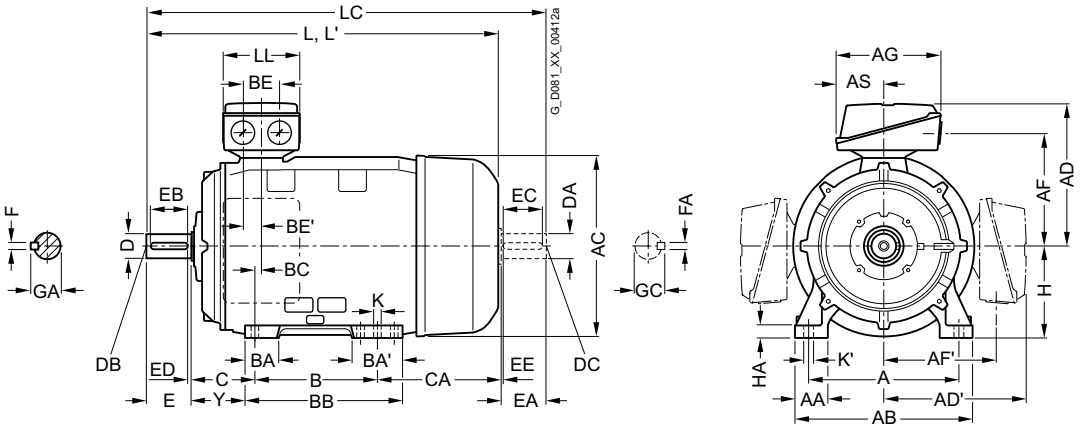
3

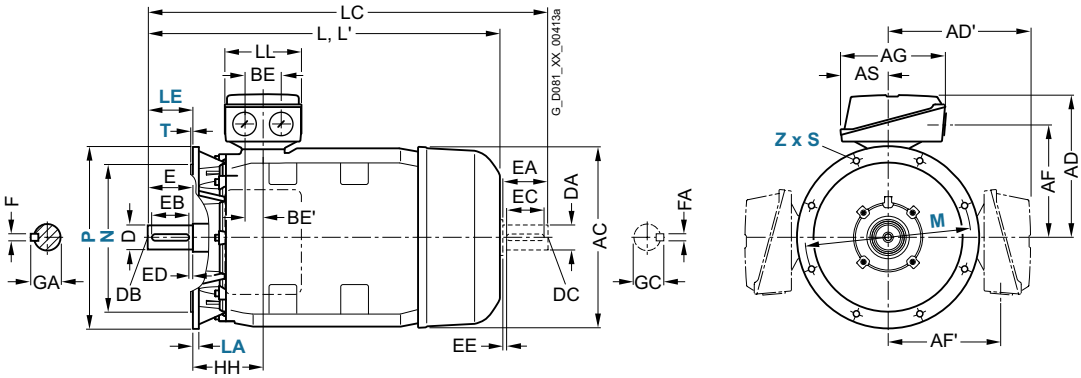
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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, 2AD6	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	177 202
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	2	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
	2BB2, 2BC2, 2BD2	4, 6, 8																			
250 M	2CA2	2	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	230
	2CB2, 2CC2, 2CD2, 2CD6	4, 6, 8																			
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																			
280 M	2DC2, 2DD2, 2DD6	6, 8	457	100	**540**	551	**433**	433	345	345	319	145	419	101	152	479	20	110	55	190	326
	2DA2	2																			
	2DB2	4																			
315 S	3AA0	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[1)]	3AA2	2	508	120	**610**	616	**515**	515	404	404	374	164	457	113	170	578	22	110	55	216	409
	3AB2, 3AC2, 3AD2	4, 6, 8																			
315 L[1)]	3AA4	2	508	120	**610**	616	**515**	515	404	404	374	164	508	113	170	578	22	110	55	216	358
	3AB4, 3AC4, 3AD4	4, 6, 8																			
	3AA5	2												176	227	648					513
	3AB5, 3AC5, 3AC6, 3AD5, 3AD6	4, 6, 8																			

[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.

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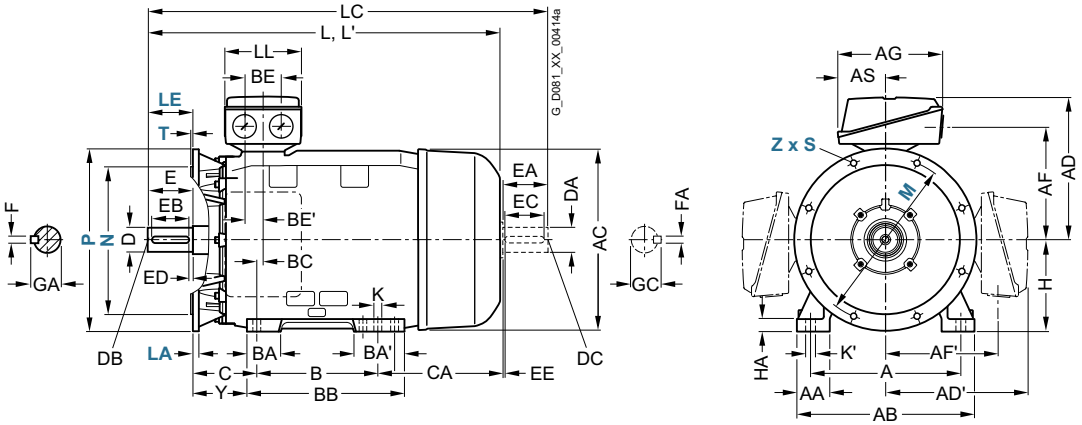
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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, 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
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, 2CD6								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, 2DD6							**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.

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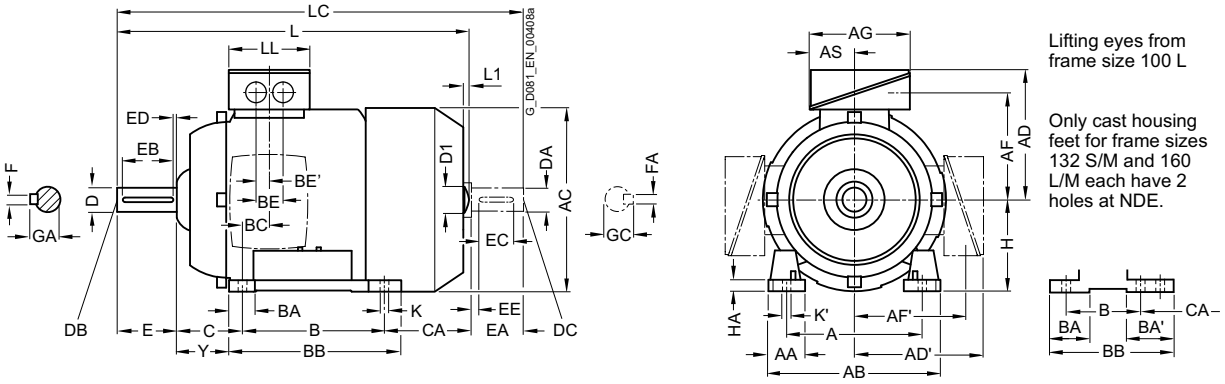
IE3 – 1LE1583 self-ventilated · Frame sizes 100 L to 200 L

Dimensional drawings

Type of construction IM B3

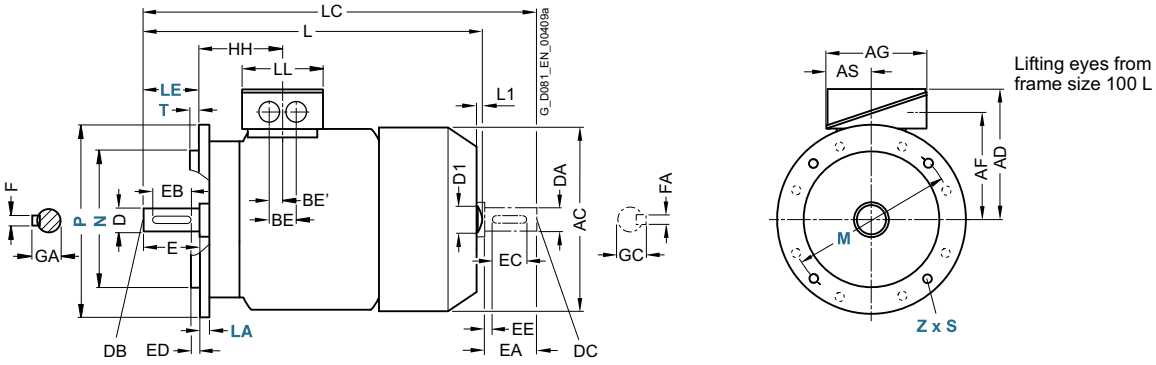


Lifting eyes from frame size 100 L

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 1/50 (**Z** = the number of retaining holes)



Lifting eyes from frame size 100 L

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.

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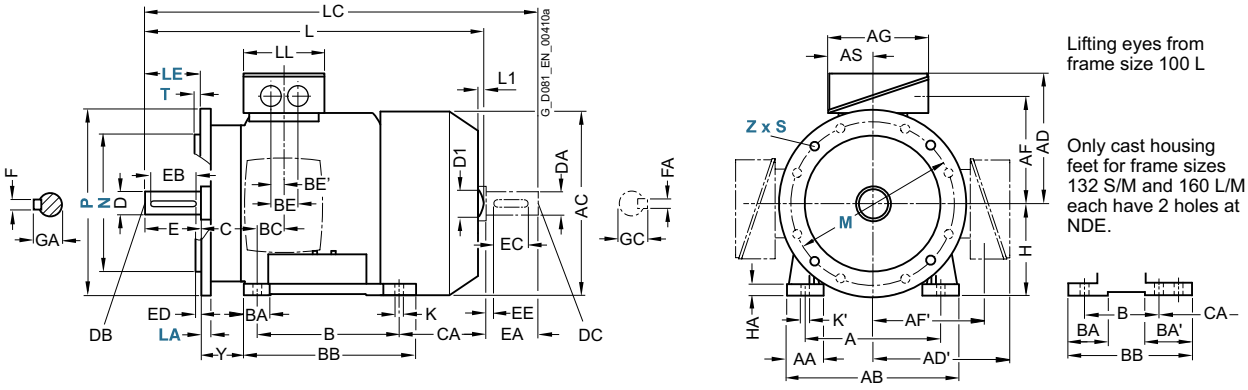
Dimensional drawings

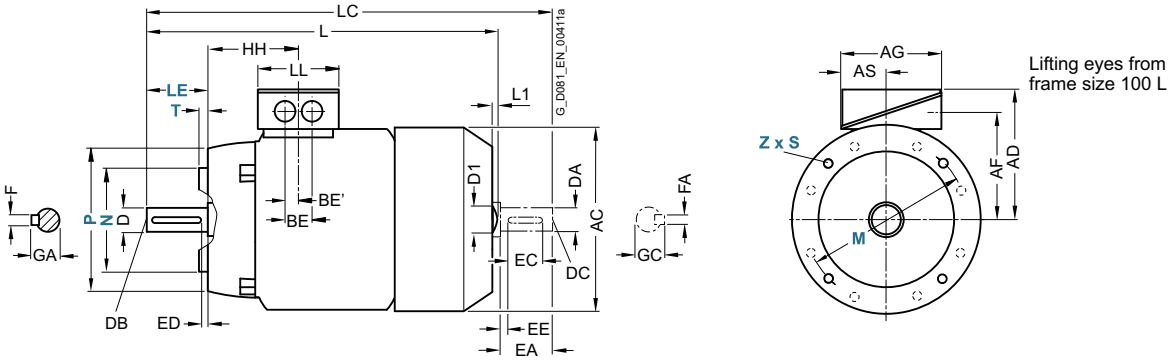
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**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	1EB2, 1EC4 1EA2, 1EB4	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.

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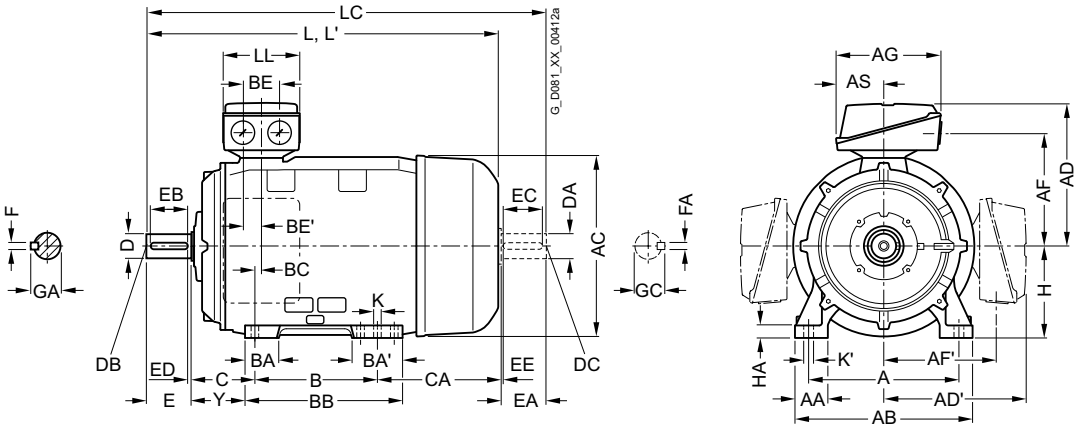
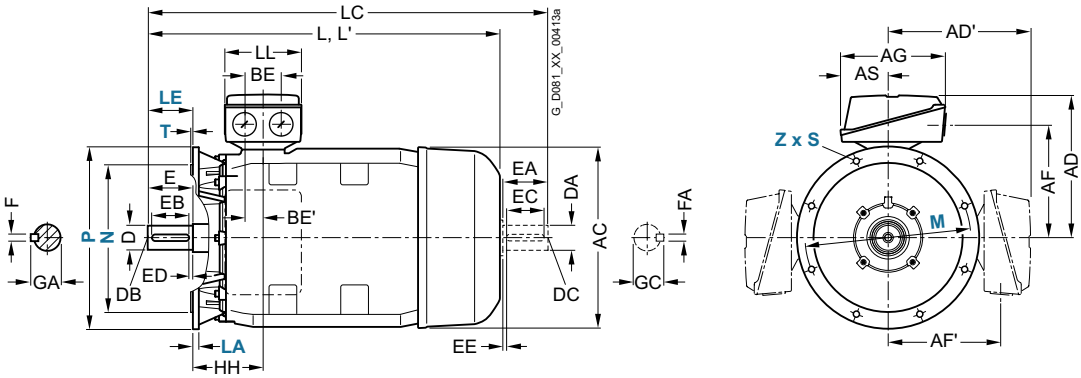
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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
315 M	3AA2[1], 3AB0, 3AB2[1], 3AC0, 3AC2	2, 4, 6	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, 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.

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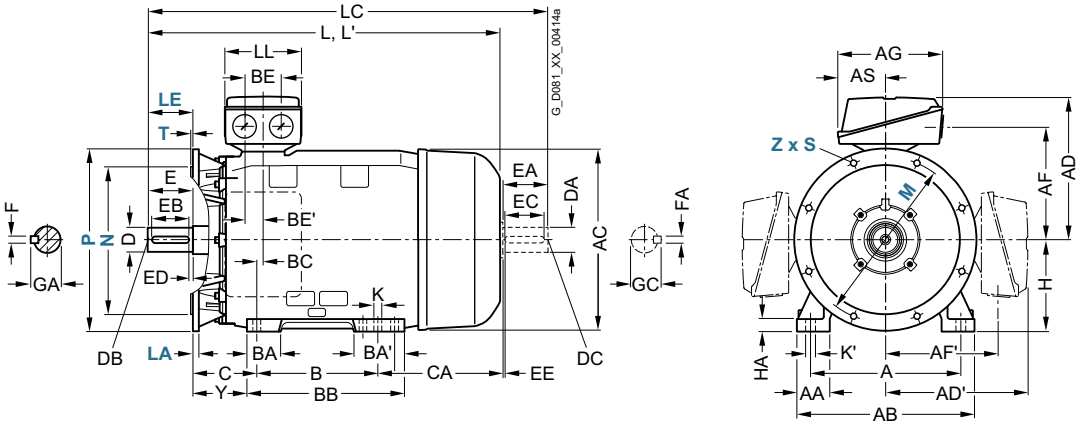
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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,	**280**	40	160	210	24	30	**1070**	1215	233	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
2DB2, 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
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, 3AC0, 3AC2							**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, 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.

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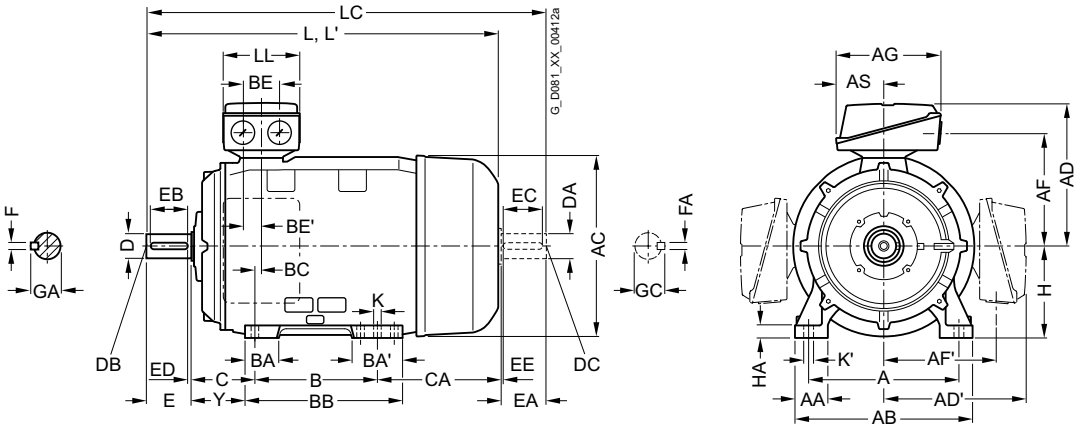
3

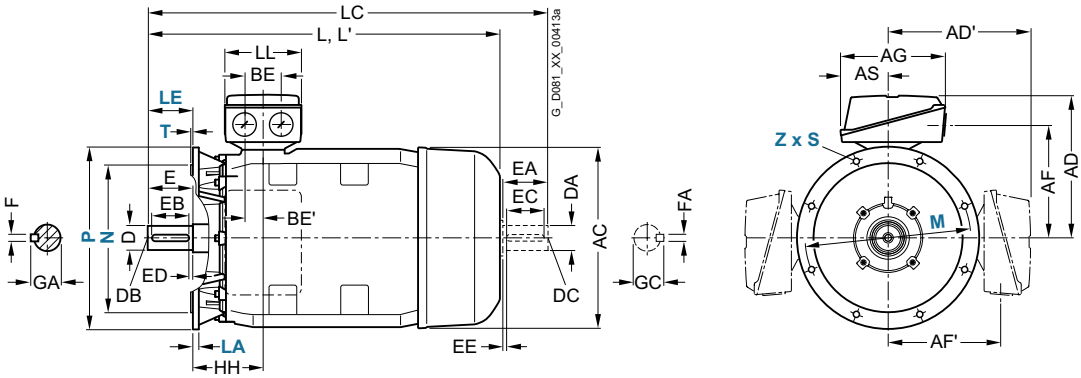
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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

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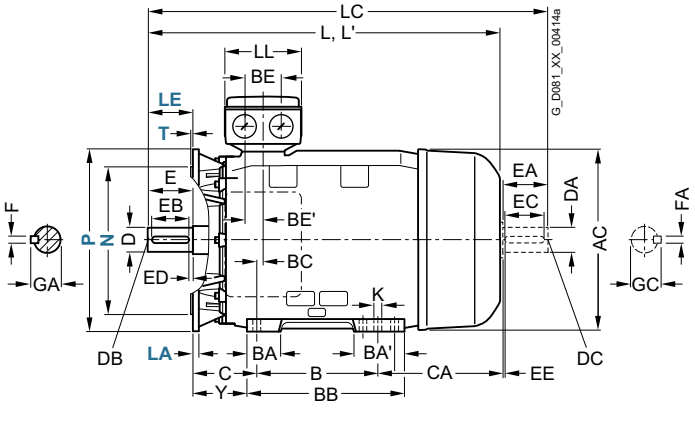
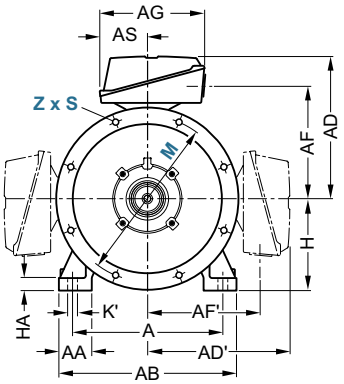
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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.

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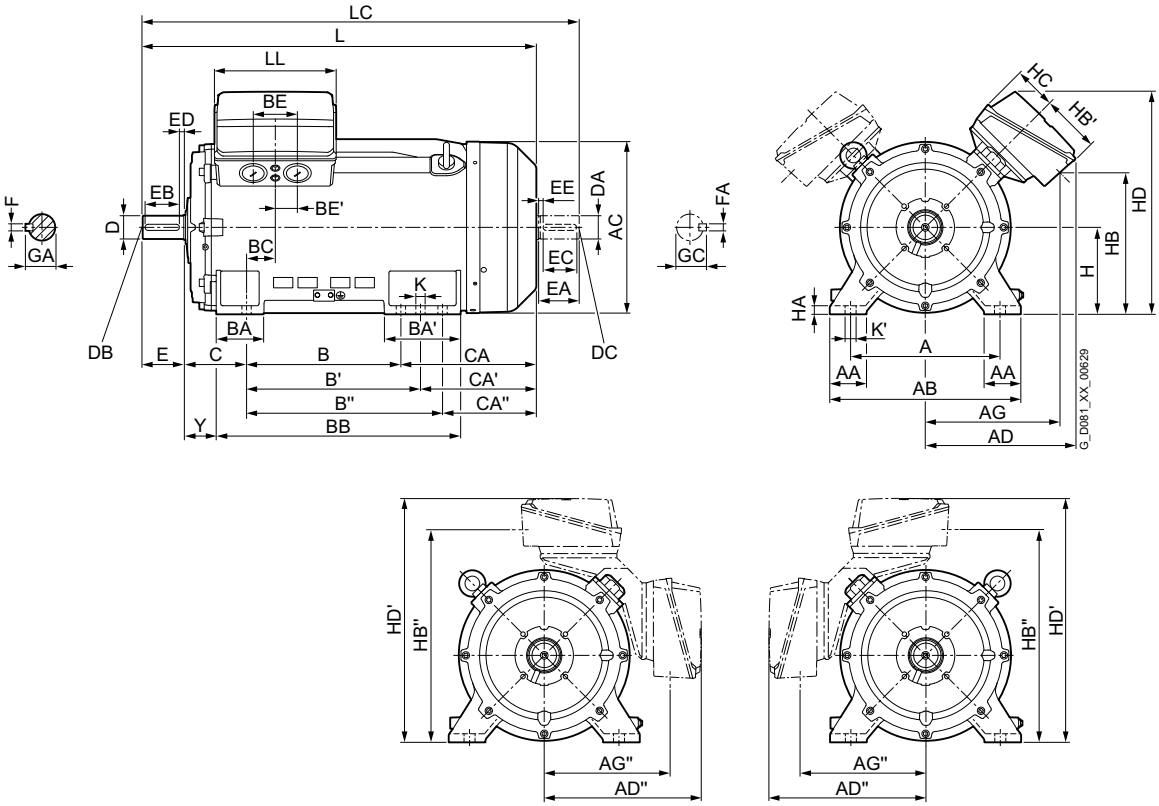
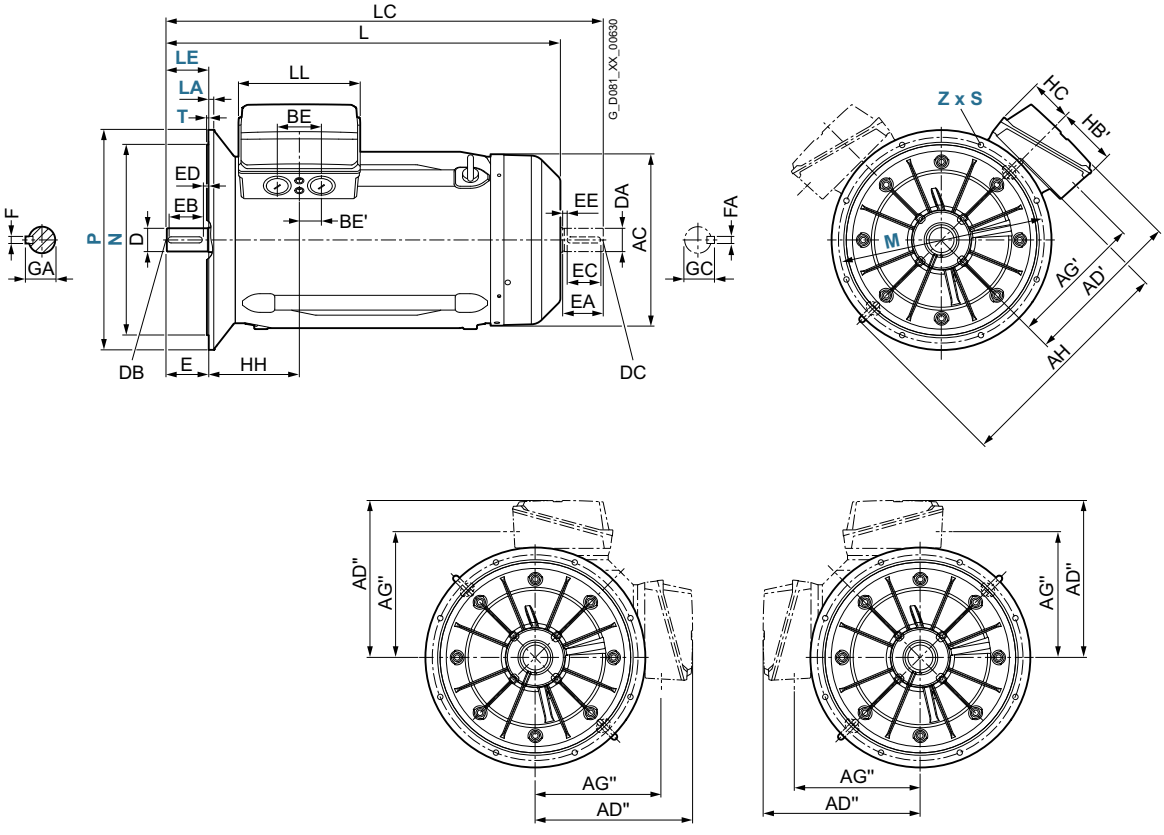
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



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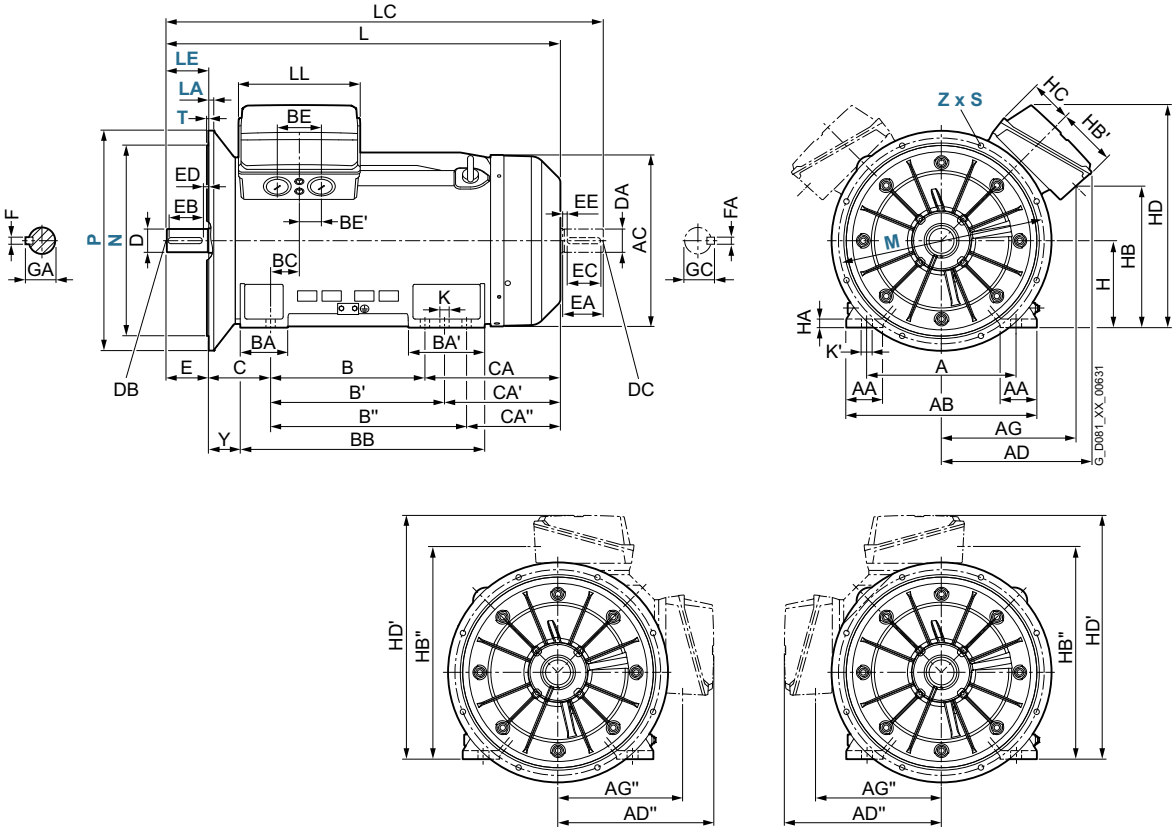
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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.

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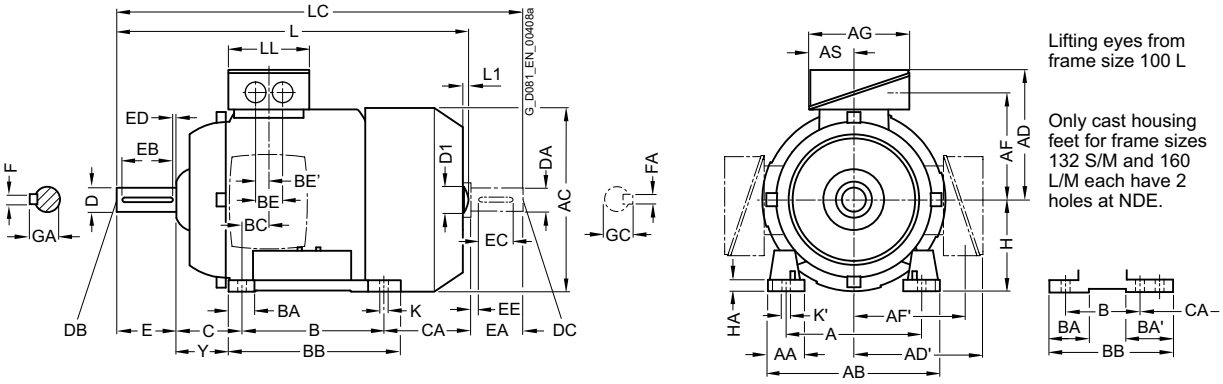
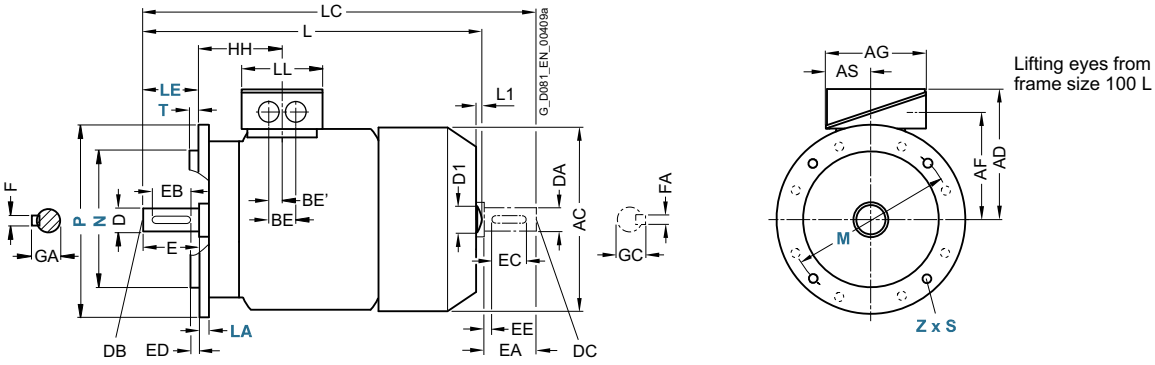
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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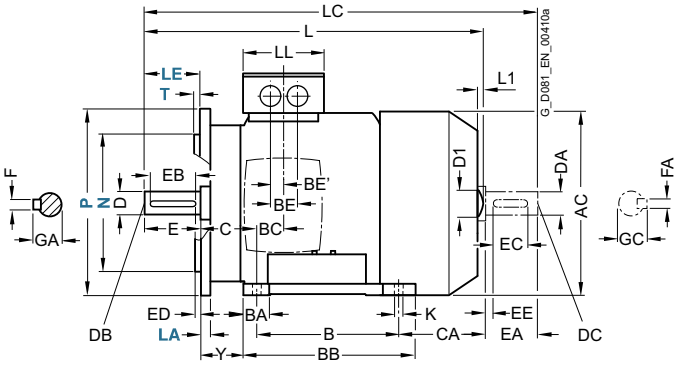
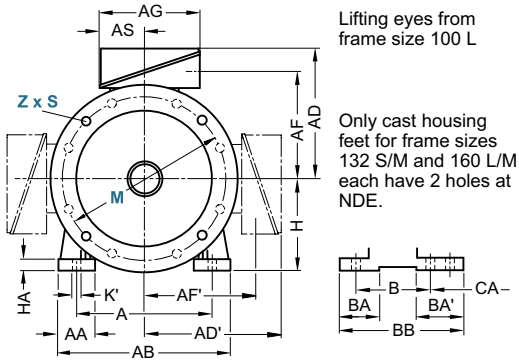
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



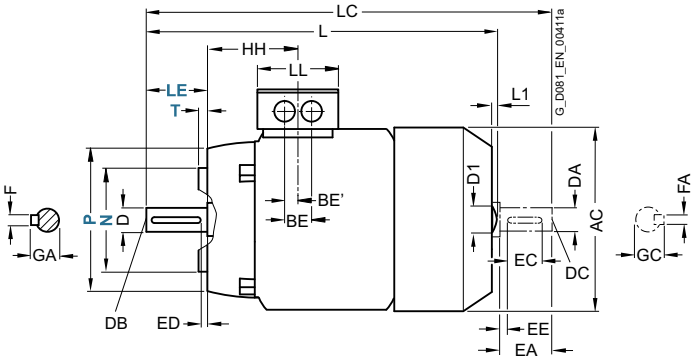


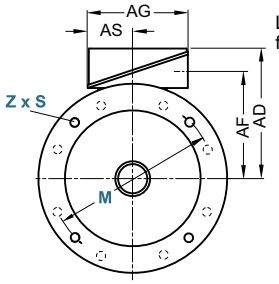
Lifting eyes from frame size 100 L

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 1/50 (**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 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.

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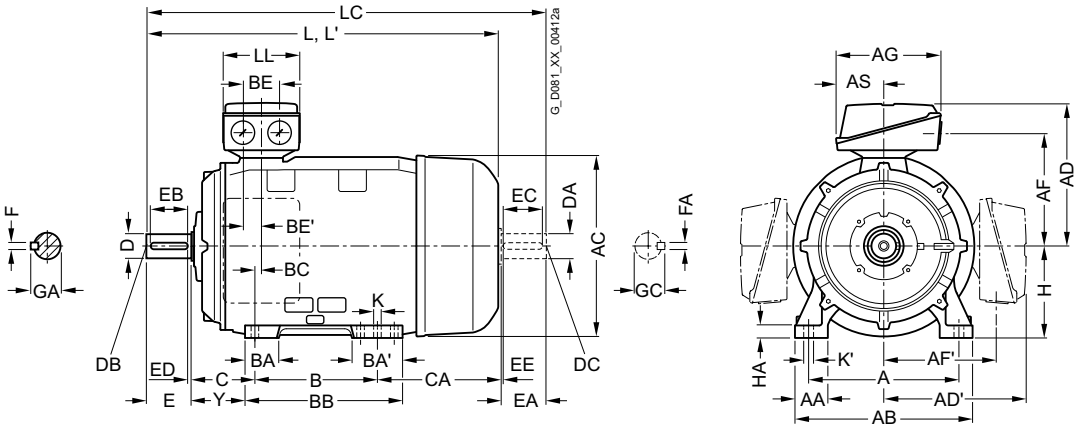
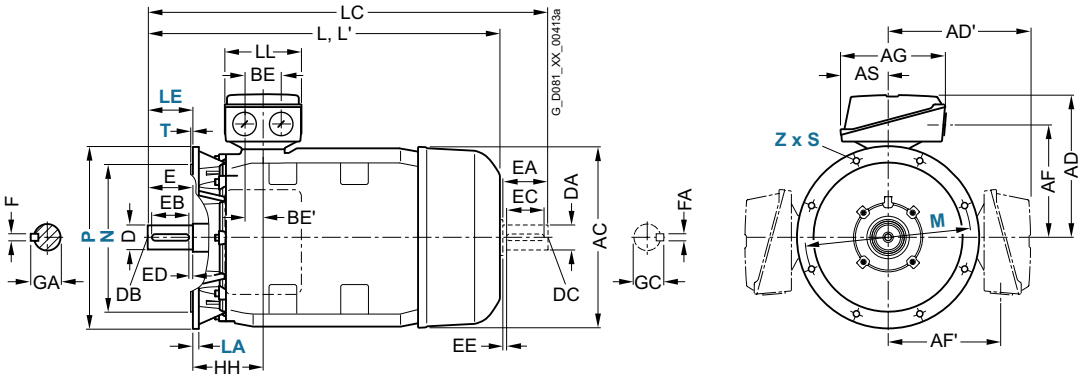
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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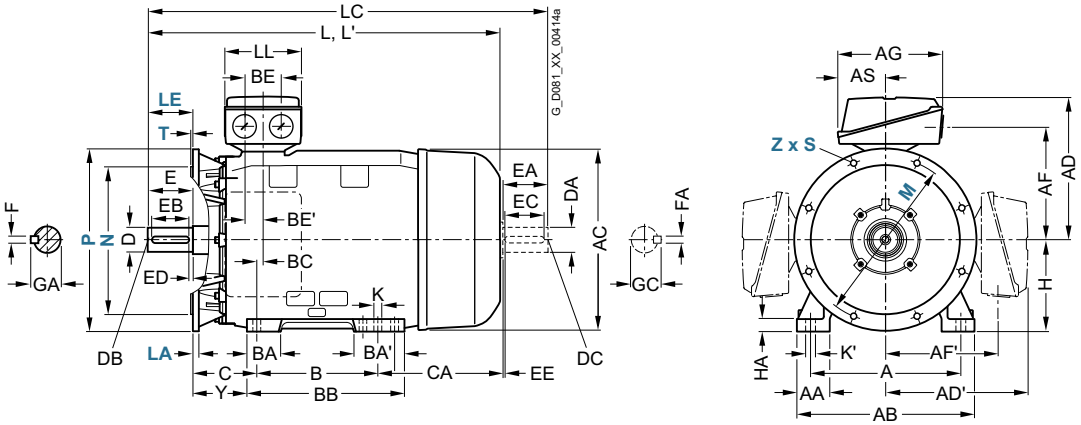
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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.

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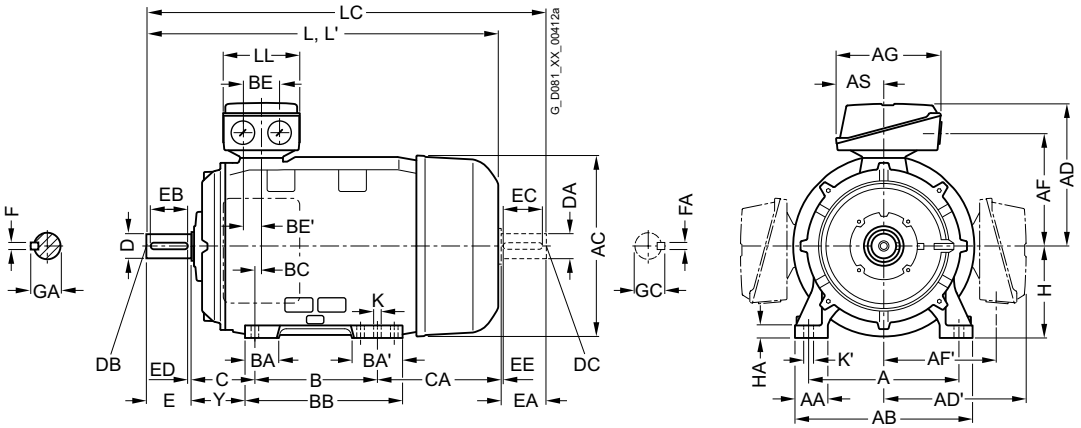
3

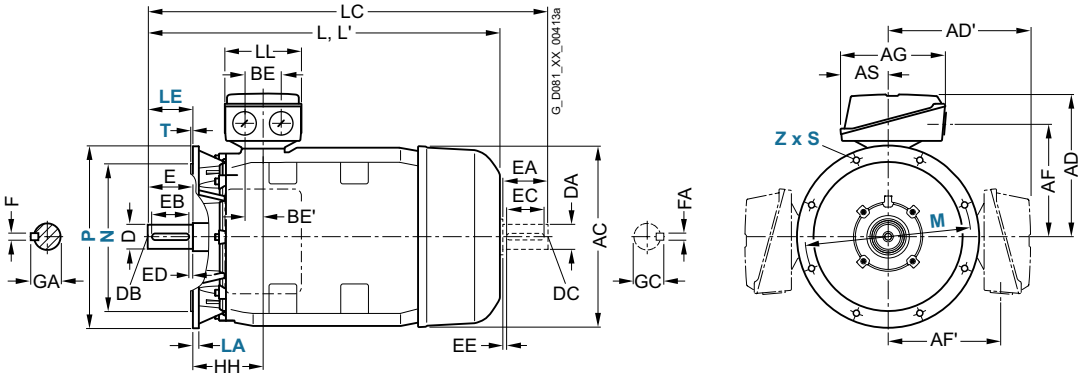
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**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.

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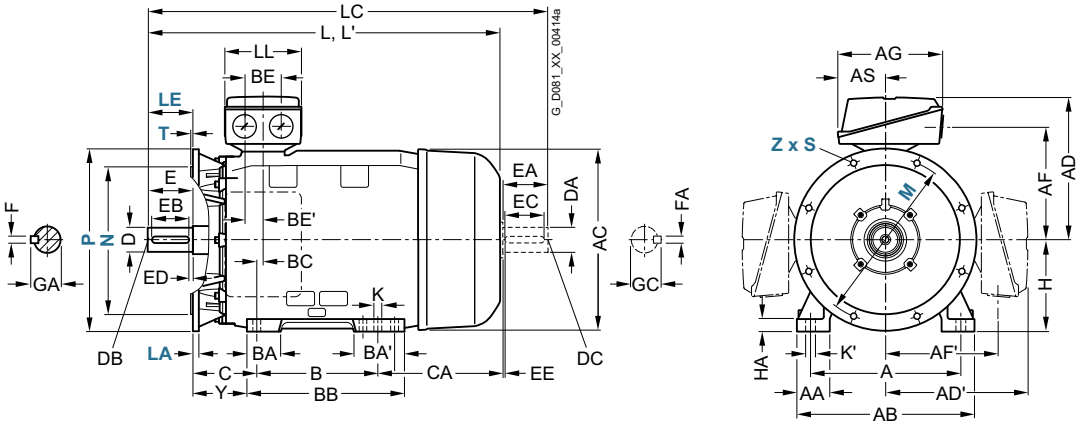
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**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.

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4/2 **Orientation**
4/9 Article number code

4/11 **IE4 Super Premium Efficiency**
Cast-iron series Innomotics SD
4/11 • 1LE5504 Basic Line
4/13 • 1LE5504 Basic Line with increased power
4/14 • 1LE5604 Performance Line
Cast-iron series Innomotics SD Add
4/15 • 1LE5534 Basic Line
4/17 • 1LE5634 Performance Line
Cast-iron series Innomotics SD Pro
4/18 • 1LE5584 Basic Line

4/19 **IE3 Premium Efficiency**
Cast-iron series Innomotics SD
4/19 • 1LE5503 Basic Line
4/20 • 1LE5603 Performance Line
Cast-iron series Innomotics SD Add
4/21 • 1LE5533 Basic Line
4/23 • 1LE5633 Performance Line
Cast-iron series Innomotics SD Pro
4/24 • 1LE5583 Basic Line
4/25 • 1LE5683 Performance Line

4/26 **Article No. supplements and special versions**
Voltages
4/26 • Cast-iron series Innomotics SD 1LE55, 1LE56
Types of construction
4/28 • Cast-iron series Innomotics SD 1LE55, 1LE56
Motor protection
4/31 • Cast-iron series Innomotics SD 1LE55, 1LE56
Terminal box position
4/32 • Cast-iron series Innomotics SD 1LE55, 1LE56
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4/40 Accessories

4/42 **Dimensions**
4/42 Notes on the dimensions
4/42 Dimension sheet generator
4/43 Cast-iron series Innomotics SD, SD Add and SD pro
Cast-iron series Innomotics SD
4/44 • IE4 – Frame sizes 280 S to 315 L
Cast-iron series Innomotics SD Add
4/45 • IE4 – Frame sizes 315 S to 315 L
Cast-iron series Innomotics SD Pro
4/46 • IE4 – Frame sizes 280 S to 315 L
4/47 Cast-iron series Innomotics SD, SD Add and SD pro
Cast-iron series Innomotics SD
4/47 • IE4, IE3 – Frame sizes 315 L to 355 L
Cast-iron series Innomotics SD Add
4/50 • IE4, IE3 – Frame sizes 315 L to 450
Cast-iron series Innomotics SD Pro
4/51 • IE4, IE3 – Frame sizes 315 L to 450

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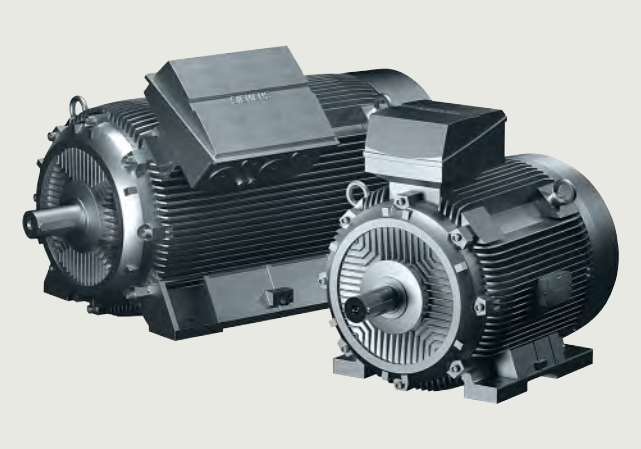
Overview



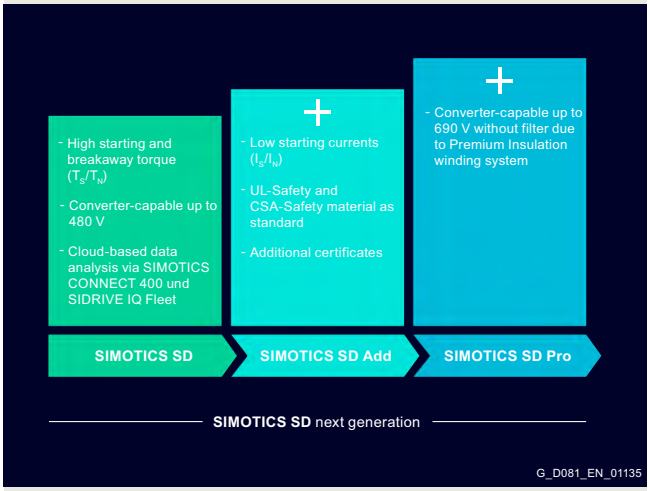
The Innomotics SD next generation is a new scalable generation of low-voltage motors. With their impressive performance and the additional versatility in their range of applications, this new motor series offers entry into a future-proof drive technology.

In addition to the future topics of digitalization and energy efficiency, this motor generation was developed with the focus on design optimization, which has resulted in a very compact motor design with a high power density. A standardized option range and the variable terminal box concept also enable flexible use of the motors in different system configurations and applications. The fact that the motors can either be operated on the line supply or with a converter is part of their versatility.

The following versions are available in the new 1LE5 motor series, differentiated by their performance features and functionality:

- **Innomotics SD**
  These motors are characterized by reliable and powerful performance even in the toughest environmental conditions. The characteristics with higher torques ensure that higher starting and breakaway torques are available.
  Innomotics SD can be used as standard in the European Economic Area and have the CE-mark and UKCA-marking. The required minimum efficiency levels have to be considered when selecting the motor.
- **Innomotics SD Add**
  The characteristic product feature of the Innomotics SD Add are the low starting currents. These not only meet industry-specific specifications, above all, in process industries, but also have a positive impact on the operating quality (higher power system stability, lower thermal load, increased motor lifetime).
  Innomotics SD Add can be used as standard in the European Economic Area and North America. The required minimum efficiency levels have to be considered when selecting the motor. These motors have in addition to the CE-mark and UKCA-marking also approvals for USA (UL safety and DoE listing) as well as approvals for Canada (CSA safety and CSA Energy Efficiency Verification). They are supplied with the electrical values stamped on the rating plate in accordance with IEC and EISA requirements. In addition, many other certificates are optionally available.
- **Innomotics SD Pro**
  The Innomotics SD Pro range is characterized by its extremely flexible concept, which makes it universally deployable, in any plant, in any country in the world. The Premium winding insulation system of these motors is designed such that converter operation is possible at voltages up to 690 V, which does not require any dv/dt or sinewave filter at the converter output.
  The permissible peak-peak voltages are:
  $\hat{U}_{phase\text{-}to\text{-}phase} \leq 4400$ V and $\hat{U}_{phase\text{-}to\text{-}ground} \leq 3000$ V
  Innomotics SD Pro can be used as standard in the European Economic Area and North America. The required minimum efficiency levels have to be considered when selecting the motor. These motors have in addition to the CE-mark and UKCA-marking also approvals for USA (UL safety and DoE listing) as well as approvals for Canada (CSA safety and CSA Energy Efficiency Verification). They are supplied with the electrical values stamped on the rating plate in accordance with IEC and EISA requirements. In addition, many other certificates are optionally available.

Innomotics SD variants



Benefits

- Rugged design in the cast-iron housing increases reliability and availability.
- Compact dimensions/high power density enable use even in confined space conditions.
- High energy efficiency in line (IE3, IE4) and converter operation (IES2) enable energy-saving operation.
- A standardized range of options and a variable terminal box concept increase the flexible adaptation to the requirements of the application.
- Support of line and converter operation reduces the variety.
- Provision of comprehensive CAD data simplifies the design and engineering phase.

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Application

Innomotics SD motors are ideal for use in a large number of standard applications, such as

- Pumps, fans, compressors
- Conveyors
- Winders
- Mixers
- Extruders
- Cranes

They are preferably used in industries such as

- Mining, cement
- Chemical industry
- Oil and gas
- Steel industry
- Water, waste water
- Heating, ventilation and air conditioning (HVAC)
- Pulp and paper industry
- Marine engineering

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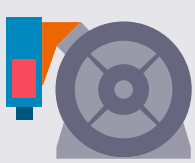
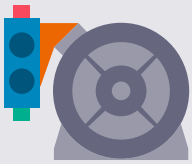
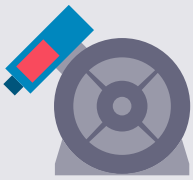
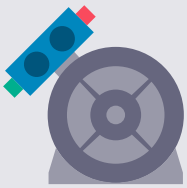
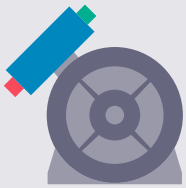
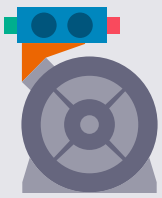
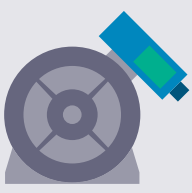
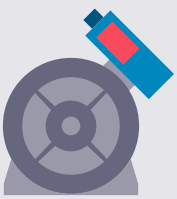
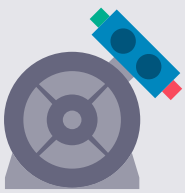
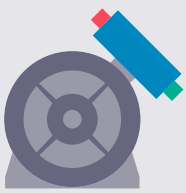
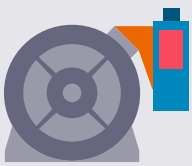
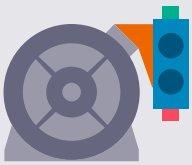
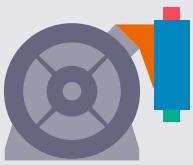
Configuration

Terminal box positions

Standard [2]	Rotated 180° [2]	Rotated 90°, cable entry DE [2]	Rotated 90°, cable entry NDE [2]
1LE5...-.....-...■	**1LE5...-.....-...■ -Z ■■■**	**1LE5...-.....-...■ -Z ■■■**	**1LE5...-.....-...■ -Z ■■■**
Frame size 315 extended power output; Frame size 355, 400, 450			
 6	6 R12	 6 R10	6 R11
 2	2 R12	 2 R10	 2 R11
0	0 R12	 0 R10	0 R11
1	1 R12	1 R10	1 R11
 3	 3 R12	 3 R10	 3 R11
5	 5 R12	 5 R10	 5 R11

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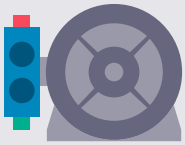
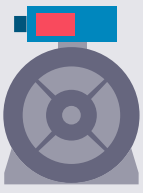
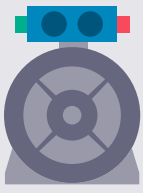
Configuration

Terminal box positions for flanged types of construction only

Standard **1LE5...-.....-...■**	Rotated 180° **1LE5...-.....-...■ ■■■**	**1LE5...-.....-...■ ■■■**	**1LE5...-.....-...■ ■■■**
Frame size 315 extended power output; Frame size 355, 400, 450			
Terminal box left 6 →	Terminal box right 9 R6R	Terminal box bottom 9 R7L	Terminal box bottom 9 R7R
Terminal box right 5 →	Terminal box left 9 R5L		

Standard [1] **1LE5...-.....-...■**	Rotated 180° [1] **1LE5...-.....-...■ ■■■**	Rotated 90°, cable entry DE [1] **1LE5...-.....-...■ ■■■**	Rotated 90°, cable entry NDE [1] **1LE5...-.....-...■ ■■■**
Frame size 315 standard power output; Frame size 280			
6 →	6 R12	 6 R10	6 R11
5 →	5 R12	5 R10	5 R11
4 →	 4 R12	 4 R10	4 R11
7 →	7 R12	7 R10	7 R11

4

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Types of construction

IM B3

IM B5

Legend

- Auxiliary terminal box 1 (3)
- Auxiliary terminal box 2 (4)
- Terminal box
- Adapter
- Cable entry

[1] Only for frame size 280 (for all motor types).
Only for frame size 315 if 11th position of Article No. for all poles **0**, **2**, **4**, **5**; for 6-, 8-pole motors **6**.

[2] Only for frame size 315 if 11th position of Article No. for 2-, 4-pole motors **6**, **7**, for 6-, 8-pole motors **7**, **8**.

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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	Innomotics SD 1LE5 IEC Low-Voltage Motors
Connection types	Star/delta connection The connection type to be used can be taken from the Article No. supplements for the required motor.
Number of poles	2, 4, 6, 8
Frame sizes	280 S ... 450
Rated power	37 ... 1000 kW
Frequencies	50 Hz and 60 Hz
Versions	• IE3 (Premium Efficiency) • IE4 (Super Premium Efficiency)
Marking	IEC 60034-30-1 IE3, IE4: 2, 4, 6 and 8-pole
Rated speed (synchronous speed)	750 … 3600 rpm
Rated torque	240 ... 8100 Nm
Insulation of the stator winding in accordance with EN 60034-1 (IEC 60034-1)	• SD and SD Add: Temperature class 155 (F), utilized to temperature class 130 (B) DURIGNIT IR 2000 insulation system • SD Pro: Temperature class 155 (F), utilized to temperature class 155 (F) DURIGNIT IR 2000 insulation system
Degree of protection according to EN 60034-5 (IEC 60034-5)	IP55 as standard
Cooling in accordance with EN 60034-6 (IEC 60034-6)	• Self-ventilated (IC411) • Forced-air cooled motors w/o ext. fan/fan cover (IC418) • Forced-air cooled (IC416)
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: 400 V, 500 V, 690 V The voltage 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, IM V6 • With flange: IM B5, IM V1, IM V3, IM B35
Paint finish	Standard: color RAL 7030 stone gray
Suitability of paint finish for climate group according to IEC 60721, Part 2-1	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 sound pressure level is listed in the selection and ordering data for the required motor.
Weights	The 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	• Terminal box diagonally split - and can be optionally rotated through 4 x 90° • Bearings at DE and NDE are of identical design, reinforced bearings available as an option
Options	See "Article No. supplements and special versions"

Converter operation

The motors are suitable for line operation and optionally for converter operation (bearing insulation NDE, order code **L51**). The values specified in the selection tables apply for pure sinusoidal supplies.

Rated voltage

The tolerance for the rated voltage is in accordance with EN 60034-1 in all cases, a rated voltage range is not specified.

Motor protection

A motor protection function can be implemented using the I2t sensing circuit implemented in the converter software.

If required, more precise motor protection can be provided by directly measuring the temperature using KTY84 sensors, Pt100 / Pt1000 resistance thermometers or PTC thermistors 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.

Bearings

To avoid damage caused by bearing currents, insulated bearings (L51) must be ordered.

When operating multiphase induction motors with a converter, the bearings are electrically stressed as a result of a capacitively induced voltage across the bearing lubricating film (as a result of the inherent principle of operation). The physical cause of this is the common-mode voltage at the converter output that is inherent in the control method for a converter: The sum of the three phase voltages is – in contrast to pure line operation – not equal to zero at every point in time. The high-frequency, pulsed common-mode voltage results in a residual current that flows back to the converter DC link via the internal capacitances of the motor, the motor housing and the grounding circuit. The machine's internal capacitances include the main insulation winding capacitance, the geometric capacitance between the rotor and stator, the lubricating film capacitance and the capacitance of any bearing insulation that may be present. The current flowing through the internal capacitances is proportional to the gradient, i.e. the voltage change of the common-mode voltage ($i(t) = C \cdot du/dt$).

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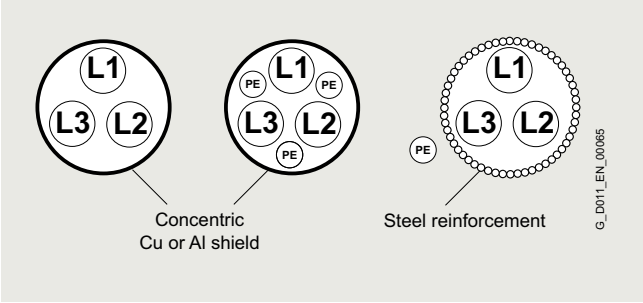
Technical specifications

In order to apply currents to the motor which are sinusoidal as far as possible (smooth running, oscillation torques, stray losses), a high clock frequency is required for the converter's output voltage. The related (very steep) switching edges of the converter output voltage (and also, therefore, of the common-mode voltage) cause correspondingly high capacitive currents and voltages on the machine's internal capacitances.

In the worst-case scenario, the capacitive voltage induced via the bearing can lead to random arcing through the bearing lubricating film, thus causing premature bearing aging or damage. (The current pulses caused by the arcing across the lubricating film are referred to as EDM (Electrostatic Discharge Machining) currents in the literature.)

This physical effect, which occurs in isolated cases, has mostly been observed in connection with larger motors. EMC-compliant installation of the drive system is a basic prerequisite for preventing premature bearing damage via bearing currents. The most important measures for reducing damage to bearings.

- Insulated bearing at the non-drive end (NDE) (order code **L51**)
- Use cables with a symmetrical cable cross-section

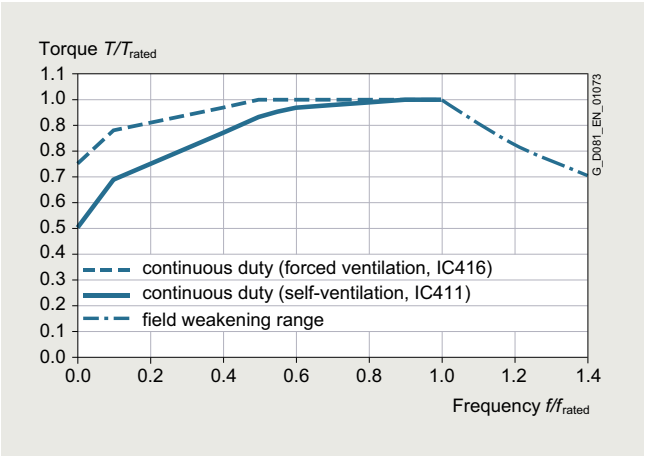


- Preference given to a supply with insulated neutral point (IT system)
- Using grounding cables with low impedance over a wide frequency range (DC up to approximately 70 MHz): for example, plaited copper ribbon cables, HF litz wires
- Separate HF equipotential-bonding cable between motor housing and driven machine
- Separate HF equipotential-bonding cable between motor housing and converter PE busbar
- 360° HF contacting of the cable shield on the motor housing and the converter PE busbar. This can be achieved using EMC screwed glands on the motor end and EMC shield clips at the converter, for example
- Using motor reactors at the converter
- Common-mode filters at the converter output.

Thermal torque limits

In the case of self-ventilated motors, the thermally admissible load torques are reduced for continuous operation for speeds below the rated speed. This must be taken into account for applications, especially those that do not have a square law load torque. Also in the case of forced-air cooled motors (order code F70), the maximum load torques are reduced slightly for high speed ranges.

When motors are operated at speeds above their rated speed (in the field-weakening range), the maximum load torque is also reduced.



1LE5 motors of frame size 280 to 450
The current data can be obtained in the SIZER (www.siemens.com/sizer) configuration tool.

More information

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

Contacts: www.siemens.com/automation/partner

Siemens Product Configurator: www.siemens.com/spc

Here, you can find out about certain technologies through Siemens contact partners worldwide.

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

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

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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.:
1LE5504-3AA63-4AA2-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**	**5**															
5th position: Digit	Cast-iron housing Basic Line					**5**														
	Cast-iron housing Performance Line					**6**														
6th to 7th position: 2 digits	Innomotics SD motors with IE4 Super Premium Efficiency						**0**	**4**												
	Innomotics SD Add motors with IE4 Super Premium Efficiency						**3**	**4**												
	Innomotics SD Pro motors with IE4 Super Premium Efficiency						**8**	**4**												
	Innomotics SD motors with IE3 Premium Efficiency						**0**	**3**												
	Innomotics SD Add motors with IE3 Premium Efficiency						**3**	**4**												
	Innomotics SD Pro motors with IE3 Premium Efficiency						**8**	**3**												
8th, 9th and 11th position: Digit, letter, digit	**Motor frame size** (frame size as a combination of shaft height and overall length, encoded)									**2** ... **4**	**D** ... **B**		**0** ... **8**							
10th position: Letter	**No. of poles** A: 2-pole B: 4-pole C: 6-pole D: 8-pole											**A** **B** **C** **D**								
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** ... **7**				
14th position: Letter	**Type of construction** (encoded with A ... Y)																**A** ... **Y**			
15th position: Letter	**Motor protection** (encoded with A ... Z; Z requires order code Q.. (e.g. Q3A))																	**A** ... **Z**		
16th position: Digit	**Terminal box position** Terminal box base left with terminal box at the top [1] Terminal box base right with terminal box at the top [1] Terminal box base left with terminal box 45° [1] Terminal box base right with terminal box 45° [1] Terminal box at the top [2] Terminal box on right-hand side Terminal box on left-hand side Terminal box at the bottom Special mounted components																		**0** **1** **2** **3** **4** **5** **6** **7** **9**	
	Special order versions: encoded – additional order code required not encoded – additional plain text required																			- **Z**

Technical data and rated voltage:

The technical data usually refer to a rated voltage of 400 V and 50 Hz which is related to position 12 and 13 = 34 (voltage code). This voltage code also defines the rated voltage for 60 Hz which is 460 V. From shaft (frame size) 400 upwards, the standard voltage code changes for some variants (marked with a footnote). In this case, the technical data refer to a rated voltage of:

- 690 V and 50 Hz (position 12 and 14 = 47), or
- 575 V and 60 Hz (position 12 and 14 = 40)

[1] Only for frame size 315 if 11th position of Article No. for 2-, 4-pole motors **6**, **7**, for 6-, 8-pole motors **7**, **8** and for frame size 355 to450.

[2] Only for frame size 280 and 315 if 11th position of Article No. for all poles **0**, **2**, **4**, **5**; for 6-, 8-pole motors **6**.

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Article number code

Selection and ordering data

Ordering example

Selection criteria	Requirement	Structure of the Article No.
Motor type 1LE5	Standard motor with IE4 Super Premium Efficiency, self-ventilated, IP55 degree of protection, cast-iron version, Performance Line	**1LE5604-■■■■■-■■■■**
Motor frame size/No. of poles/Speed	315 L/2-pole/3000 rpm	**1LE5604-3AA6■-■■■■**
Rated power	250 kW	
Voltage and frequency	400 VΔ/690 VY, 50 Hz	**1LE5604-3AA63-4■■■**
Type of construction with special version	IM V5 with protective cover [1]	**1LE5604-3AA63-4C■■-Z H00**
Motor protection	1 or 3 PTC thermistors – for tripping (2 terminals)	**1LE5604-3AA63-4CB■-Z H00**
Terminal box position	Terminal box base left with terminal box 45°	**1LE5604-3AA63-4CB2-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.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5504 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
55	**250 M**	2982	176		95.3	95.5	95	0.89	94	2.7	8.4	3.1	74	88	▲ **1LE5504-2CA2■-■■■■**	450	0.767
75	**280 S**	2978	240		95.6	95.8	95.6	0.9	126	2.8	8.5	3.2	73	87	**1LE5504-2DA0■-■■■■**	556	0.797
90	**280 M**	2980	290		95.8	96.1	95.8	0.9	151	2.7	8.5	3	73	87	**1LE5504-2DA2■-■■■■**	600	0.895
110	**315 S**	2988	350		96	95.9	95.1	0.9	184	2.5	9.1	3.7	72	86	**1LE5504-3AA0■-■■■■**	916	1.84
132	**315 M**	2988	420		96.2	96.2	95.6	0.9	220	2.6	9.8	3.9	73	88	**1LE5504-3AA2■-■■■■**	1010	2.08
160	**315 L**	2986	510		96.3	96.3	95.8	0.9	265	2.5	9.6	3.9	75	89	**1LE5504-3AA4■-■■■■**	1050	2.25
200	**315 L**	2986	640		96.5	96.6	96.2	0.91	330	2.7	9.7	3.7	74	89	**1LE5504-3AA5■-■■■■**	1240	2.75
250	**315 L**	2986	800		96.5	96.4	95.7	0.88	425	3	9.3	4.2	80	94	**1LE5504-3AA6■-■■■■**	1340	2.82
315	**315 L**	2986	1010		96.5	96.3	95.5	0.87	540	3.5	9.9	4.2	81	96	**1LE5504-3AA7■-■■■■**	1520	3.27
4-pole: 1500 rpm at 50 Hz																	
55	**250 M**	1488	355		95.7	96	95.8	0.86	96	2.5	8.4	3	62	76	▲ **1LE5504-2CB2■-■■■■**	488	1.33
75	**280 S**	1490	480		96	96.2	96	0.87	130	2.8	8.5	3.4	64	78	**1LE5504-2DB0■-■■■■**	610	1.74
90	**280 M**	1488	580		96.1	96.4	96.3	0.88	154	2.8	8.5	3.4	67	81	**1LE5504-2DB2■-■■■■**	681	2.03
110	**315 S**	1491	700		96.3	96.4	96	0.86	192	3.3	8.6	3.3	66	80	**1LE5504-3AB0■-■■■■**	922	2.74
132	**315 M**	1490	850		96.4	96.6	96.3	0.85	235	3.3	8.2	3.2	67	81	**1LE5504-3AB2■-■■■■**	942	2.91
160	**315 L**	1490	1030		96.6	96.8	96.6	0.85	280	3.3	7.9	3.1	68	83	**1LE5504-3AB4■-■■■■**	1200	3.79
200	**315 L**	1490	1280		96.7	96.9	96.8	0.85	350	3.4	7.8	3.1	69	83	**1LE5504-3AB5■-■■■■**	1290	4.37
250	**315 L**	1490	1600		96.7	96.8	96.5	0.86	435	2.8	7.9	3.2	75	90	**1LE5504-3AB6■-■■■■**	1500	4.98
315	**315 L**	1490	2000		96.7	96.7	96.3	0.83	570	3.2	8.5	3.5	75	90	**1LE5504-3AB7■-■■■■**	1560	5.39

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			■	■			. . .
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					■		. . .
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 4/31						■	. . .
Terminal box position		Version					Order code
Terminal box base right with terminal box 45° [2] [3]		**Standard**					**3** –
Terminal box top [2] [4]		**Standard**					**4** –
For other terminal box positions and more information, see from page 4/32							■ . . .
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)			**1LE5504- . . . . ■-■■■■**				**-Z F90+. . .+. . .+. . .**
For options, see from page 4/33			**1LE5504- . . . . ■-■■■■**				**-Z . . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE15) motors, see page 3/9 and 3/10.

For legends and foot notes, see page 4/13.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5504 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
37	**250 M**	988	360		94.5	95	95	0.83	68	2.5	8.1	3	59	73	▲ **1LE5504-2CC2■-■■■■**	456	1.51
45	**280 S**	992	435		94.8	95.2	94.6	0.83	83	3.3	8	3.5	57	71	**1LE5504-2DC0■-■■■■**	550	1.88
55	**280 M**	991	530		95.1	95.4	94.9	0.84	99	3.3	8.5	3.3	60	74	**1LE5504-2DC2■-■■■■**	538	2.09
75	**315 S**	992	720		95.4	95.6	95.2	0.84	135	2.7	8.2	3.5	63	77	**1LE5504-3AC0■-■■■■**	830	3.18
90	**315 M**	992	870		95.6	95.9	95.7	0.85	160	2.8	8.2	3.5	62	76	**1LE5504-3AC2■-■■■■**	900	3.77
110	**315 L**	992	1060		95.8	96.1	96	0.86	193	2.8	8.3	3.5	63	78	**1LE5504-3AC4■-■■■■**	1020	4.49
132	**315 L**	992	1270		96	96.3	96.3	0.87	230	2.8	8.4	3.5	64	79	**1LE5504-3AC5■-■■■■**	1130	5.32
160	**315 L**	993	1540		96.2	96.4	96.1	0.82	295	2.9	8	3.1	70	85	**1LE5504-3AC6■-■■■■**	1260	5.67
200	**315 L**	992	1930		96.3	96.4	96.1	0.82	365	3	7.5	3.2	68	83	**1LE5504-3AC7■-■■■■**	1410	6.28
250	**315 L**	992	2400		96.5	96.6	96.3	0.81	460	3.2	8.2	3.3	69	84	**1LE5504-3AC8■-■■■■**	1700	8
8-pole: 750 rpm at 50 Hz																	
30	**250 M**	739	390		92.7	93.2	92.9	0.77	61	2.3	6.8	2.5	58	72	▲ **1LE5504-2CD2■-■■■■**	398	1.15
37	**280 S**	740	475		93.1	93.8	93.7	0.78	74	2.4	6.8	2.6	55	69	**1LE5504-2DD0■-■■■■**	483	1.54
45	**280 M**	740	580		93.4	94.1	94.2	0.8	87	2.5	6.8	2.6	57	71	**1LE5504-2DD2■-■■■■**	538	1.9
55	**315 S**	743	710		93.7	93.9	93.4	0.8	106	2.3	6.1	2.5	58	73	**1LE5504-3AD0■-■■■■**	762	2.53
75	**315 M**	742	970		94.2	94.5	94.1	0.81	142	2.4	6.3	2.6	58	72	**1LE5504-3AD2■-■■■■**	834	3.13
90	**315 L**	742	1160		94.4	94.7	94.4	0.82	168	2.5	6.1	2.5	58	73	**1LE5504-3AD4■-■■■■**	943	3.73
110	**315 L**	742	1420		94.7	95.1	94.9	0.82	205	2.4	6.3	2.6	61	75	**1LE5504-3AD5■-■■■■**	1030	4.44
132	**315 L**	741	1700		94.9	95.3	95.1	0.82	245	2.4	6.1	2.5	65	80	**1LE5504-3AD6■-■■■■**	1110	5.09
160	**315 L**	741	2050		95.1	95.5	95.5	0.79	305	2.5	6.3	2.5	67	82	**1LE5504-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		95.4	95.6	95.4	0.78	390	2.9	6.7	2.8	72	86	**1LE5504-3AD8■-■■■■**	1660	8.5

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			■	■			. . .
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					■		. . .
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 4/31						■	. . .
Terminal box position		Version					Order code
Terminal box base right with terminal box 45° [2] [3]		**Standard**					**3** –
Terminal box top [2] [4]		**Standard**					**4** –
For other terminal box positions and more information, see from page 4/32							■ . . .
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE5504- . . . . ■-■■■■-Z** **F90+. . .+. . .+. . .**
For options, see from page 4/33							**1LE5504- . . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE15) motors, see page 3/9 and 3/10.

For legends and foot notes, see page 4/13.

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Cast-iron series Innomotics SD 1LE5504 Basic Line with increased power – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5504 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
75	**250 M**	2982	240		95.6	95.7	95.3	0.89	127	2.7	9	3	74	88	▲ **1LE5504-2CA6■-■■■■**	463	0.811
110	**280 M**	2980	350		96	96.3	96.1	0.9	184	2.8	9.1	3.5	77	91	**1LE5504-2DA6■-■■■■**	680	1.07
4-pole: 1500 rpm at 50 Hz																	
75	**250M**	1488	480		96	96.3	96.1	0.85	133	2.8	8.7	3.2	65	79	▲ **1LE5504-2CB6■-■■■■**	583	1.72
110	**280 M**	1490	700		96.3	96.6	96.5	0.88	187	2.9	9.5	3.5	69	84	**1LE5504-2DB6■-■■■■**	808	2.55
6-pole: 1000 rpm at 50 Hz																	
45	**250 M**	990	435		94.8	95.2	95.2	0.84	82	2.5	8.4	3.4	62	76	▲ **1LE5504-2CC6■-■■■■**	507	1.8
75	**280 M**	991	720		95.4	95.7	95.4	0.85	133	3.6	9	3.7	60	74	**1LE5504-2DC6■-■■■■**	666	2.63
8-pole: 750 rpm at 50 Hz																	
37	**250 M**	738	480		93.1	93.7	93.5	0.79	73	2.6	6.5	2.9	58	73	▲ **1LE5504-2CD6■-■■■■**	447	1.44
55	**280 M**	740	710		93.7	94.2	94	0.78	109	3	7.2	3	58	72	**1LE5504-2DD6■-■■■■**	567	2.08

Voltages [1]		Version						Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
50 Hz 690 VΔ		With additional charge	**4**	**7**				–
For other voltages [1] and more information, see from page 4/26			**■**	**■**				. . .
Types of construction		Version						Order code
Without flange	IM B3	**Standard**			**A**			–
With flange	IM B5	With additional charge			**F**			–
For other types of construction and more information, see from page 4/28					**■**			. . .
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 4/31						**■**		. . .
Terminal box position		Version						Order code
Terminal box base right with terminal box 45° [2] [3]		**Standard**					**3**	–
Terminal box top [2] [4]		**Standard**					**4**	–
For other terminal box positions and more information, see from page 4/32							**■**	. . .
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE5504- . . . . ■-■■■■-Z**						**F90+. . .+. . .+. . .**
For options, see from page 4/33		**1LE5504- . . . . ■-■■■■-Z**						**. . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE15) motors, see page 3/9 and 3/10.

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

[3] Only for frame size 315 if 11th position of Article No. for 2-, 4-pole motors **6**, **7**, for 6-, 8-pole motors **7**, **8** and for frame size 355 to 450.

[4] Only for frame size 280 (all motor types).
Only for frame size 315 if 11th position of Article No. for all poles **0**, **2**, **4**, **5**; for 6-, 8-pole motors **6**.

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Cast-iron series Innomotics SD 1LE5604 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5604 Performance Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
250	**315 L**	2986	800		96.5	96.4	95.7	0.88	425	3	9.3	4.2	80	94	**1LE5604-3AA6■-■■■■**	1340	2.82
315	**315 L**	2986	1010		96.5	96.3	95.5	0.87	540	3.5	9.9	4.2	81	96	**1LE5604-3AA7■-■■■■**	1520	3.27
355	**355 L**	2988	1130		96.5	96.3	95.5	0.89	600	2.6	8.9	4	84	99	**1LE5604-3BA3■-■■■■**	2100	4.74
400	**355 L**	2986	1280		96.5	96.4	95.9	0.92	650	2.6	8.5	3.4	83	98	**1LE5604-3BA4■-■■■■**	2240	5.36
500	**355 L**	2988	1600		96.5	96.4	95.8	0.89	840	3	8.9	3.8	84	98	**1LE5604-3BA5■-■■■■**	2340	5.76
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1490	1600		96.7	96.8	96.5	0.86	435	2.8	7.9	3.2	75	90	**1LE5604-3AB6■-■■■■**	1500	4.98
315	**315 L**	1490	2000		96.7	96.7	96.3	0.83	570	3.2	8.5	3.5	75	90	**1LE5604-3AB7■-■■■■**	1560	5.39
355	**355 L**	1492	2250		96.7	96.7	96.2	0.83	640	2.8	7.9	2.8	81	96	**1LE5604-3BB3■-■■■■**	2050	6.76
400	**355 L**	1492	2550		96.7	96.7	96.2	0.82	730	3.2	7.9	2.9	81	96	**1LE5604-3BB4■-■■■■**	2080	7.16
500	**355 L**	1491	3200		96.7	96.8	96.6	0.86	870	3.1	8.1	3.3	80	96	**1LE5604-3BB5■-■■■■**	2290	8.36
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	992	1930		96.3	96.4	96.1	0.82	365	3	7.5	3.2	68	83	**1LE5604-3AC7■-■■■■**	1410	6.28
250	**315 L**	992	2400		96.5	96.6	96.3	0.81	460	3.2	8.2	3.3	69	84	**1LE5604-3AC8■-■■■■**	1700	8
315	**355 L**	993	3050		96.6	96.8	96.5	0.84	560	2.8	7.8	3.2	73	89	**1LE5604-3BC2■-■■■■**	2110	12.3
355	**355 L**	993	3400		96.6	96.7	96.3	0.83	640	2.9	8.4	3.3	74	89	**1LE5604-3BC3■-■■■■**	2250	13.7
400	**355 L**	993	3850		96.6	96.7	96.5	0.84	710	2.8	8.1	3	75	90	**1LE5604-3BC4■-■■■■**	2240	13.4
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		95.1	95.5	95.5	0.79	305	2.5	6.3	2.5	67	82	**1LE5604-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		95.4	95.6	95.4	0.78	390	2.9	6.7	2.8	72	86	**1LE5604-3AD8■-■■■■**	1660	8.5
250	**355 L**	744	3200		95.4	95.8	95.8	0.8	475	2.4	7.1	2.7	73	88	**1LE5604-3BD1■-■■■■**	2280	13.3
315	**355 L**	744	4050		95.4	95.7	95.4	0.8	600	2.5	7.3	3	73	88	**1LE5604-3BD2■-■■■■**	2310	14

Voltages [1]	Version	Order code
50 Hz 400 VΔ/690 VY 60 Hz [1] 460 VΔ	**Standard**	**3 4** –
50 Hz 500 VΔ	Without additional charge	**4 0** –
50 Hz 690 VΔ	With additional charge	**4 7** –
For other voltages [1] and more information, see from page 4/26		**■ ■** . . .

Types of construction		Version	Order code
Without flange	IM B3	**Standard**	**A** –
With flange	IM B5	With additional charge	**F** –
For other types of construction and more information, see from page 4/28			**■** . . .

Motor protection	Version	Order code
PTC thermistor with 3 temperature sensors	**Standard**	**B** –
For other motor protection and more information, see from page 4/31		**■** . . .

Terminal box position	Version	Order code
Terminal box base right with terminal box 45° [2] [3]	**Standard**	**3** –
Terminal box top [2] [4]	**Standard**	**4** –
For other terminal box positions and more information, see from page 4/32		**■** . . .

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE5604- . . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options, see from page 4/33	**1LE5604- . . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

Note:

Further IE4 motors are available as standard Innomotics SD (1LE15) motors, see page 3/9 and 3/10.

1) Parallel supply lines are required, except in the case of connection to 690 V.

2) For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

3) Only for frame size 315 if 11th position of Article No. for 2-, 4-pole motors **6**, **7**, for 6-, 8-pole motors **7**, **8** and for frame size 355 to 450.

4) Only for frame size 315 if 11th position of Article No. for all poles **0**, **2**, **4**, **5**; for 6-, 8-pole motors **6**.

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Cast-iron series Innomotics SD Add 1LE5534 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5534 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
110	**315 S**	2982	350		96	95.9	95.2	0.91	182	2.1	6.5	2.7	74	89	**1LE5534-3AA0■-■■■■**	898	1.67
132	**315 M**	2984	420		96.2	96.1	95.5	0.91	220	2.4	7.2	3	75	89	**1LE5534-3AA2■-■■■■**	1010	1.97
160	**315 L**	2982	510		96.3	96.3	95.7	0.92	260	2.4	7.1	2.8	75	90	**1LE5534-3AA4■-■■■■**	1090	2.25
200	**315 L**	2980	640		96.5	96.7	96.5	0.92	325	2.3	6.6	2.7	74	88	**1LE5534-3AA5■-■■■■**	1280	2.65
250	**315 L**	2982	800		96.5	96.6	96.4	0.91	410	2.6	7.5	3	80	95	**1LE5534-3AA6■-■■■■**	1340	2.82
315	**315 L**	2980	1010		96.5	96.7	96.5	0.91	520	2.4	7.5	2.9	81	96	**1LE5534-3AA7■-■■■■**	1490	3.11
560 [1) 2)]	**400**	2988	1790		97	96.9	96.5	0.9	740	1.7	7.4	3.2	74	90	**1LE5534-4AA3■-■■■■**	2900	8.9
630 [1) 2)]	**400**	2986	2000		96.9	97.1	96.8	0.9	830	1.4	6.9	2.8	74	90	**1LE5534-4AA5■-■■■■**	3000	9.8
710 [3)]	**400**	2990	2250		97.2	97.3	96.9	0.89	950	2	7.8	3.1	74	90	**1LE5534-4AA7■-■■■■**	3200	10.8
800 [1) 2) 3) 4)]	**450**	2991	2550		97.5	97.4	97.1	0.87	1090	1.6	8	4	75	91	**1LE5534-4BA3■-■■■■**	4000	12.3
900 [1) 2) 3) 4)]	**450**	2988	2900		97.5	97.6	97.4	0.88	1210	1.9	7.8	3.8	75	91	**1LE5534-4BA5■-■■■■**	4300	13.5
1000 [1) 2) 3) 4)]	**450**	2988	3200		97.5	97.7	97.6	0.89	1330	1.7	6.8	3.3	75	91	**1LE5534-4BA7■-■■■■**	4500	14.7
4-pole: 1500 rpm at 50 Hz																	
110	**315 S**	1490	700		96.3	96.5	96.2	0.85	194	2.2	6.9	2.7	68	83	**1LE5534-3AB0■-■■■■**	920	2.64
132	**315 M**	1490	850		96.4	96.6	96.5	0.86	230	2.2	6.9	2.6	67	81	**1LE5534-3AB2■-■■■■**	1080	3.38
160	**315 L**	1490	1030		96.6	96.8	96.7	0.86	280	2.3	7.2	2.7	70	85	**1LE5534-3AB4■-■■■■**	1240	3.91
200	**315 L**	1490	1280		96.7	97	97	0.87	345	2.6	7	2.5	74	88	**1LE5534-3AB5■-■■■■**	1350	4.62
250	**315 L**	1488	1600		96.7	97	97	0.86	435	2.3	6.5	2.6	75	90	**1LE5534-3AB6■-■■■■**	1520	5.09
315	**315 L**	1488	2000		96.7	96.9	96.8	0.85	550	2.2	7.2	2.8	75	90	**1LE5534-3AB7■-■■■■**	1530	5.28
560 [1) 2)]	**400**	1492	3600		96.8	97	96.7	0.87	770	2	6.8	2.8	72	88	**1LE5534-4AB3■-■■■■**	3100	14.9
630 [1) 2)]	**400**	1492	4050		96.9	97	96.6	0.87	860	2.2	7.3	3	74	90	**1LE5534-4AB5■-■■■■**	3200	15.6
710 [3)]	**400**	1491	4550		96.9	97	96.9	0.88	960	2	6.4	2.6	74	90	**1LE5534-4AB7■-■■■■**	3300	16.9
800 [3)]	**450**	1492	5100		96.9	97.1	96.9	0.87	1100	1.5	6.5	2.4	79	95	**1LE5534-4BB3■-■■■■**	4000	24
900 [3)]	**450**	1493	5800		97.1	97.2	96.9	0.87	1230	1.7	7.2	2.7	79	95	**1LE5534-4BB5■-■■■■**	4200	25.4
1000 [1) 3)]	**450**	1492	6400		97.1	97.2	97.1	0.88	1350	1.8	6.8	2.5	79	95	**1LE5534-4BB7■-■■■■**	4400	28

Voltages [6)]		Version							Order code
50 Hz 400 VΔ/690 VY	60 Hz [6)] 460 VΔ	**Standard**	**3**	**4**					–
50 Hz 500 VΔ	60 Hz 575 VΔ	Without additional charge	**4**	**0**					–
50 Hz 690 VΔ		With additional charge	**4**	**7**					–
For other voltages [5)] and more information, see from page 4/26			■	■					. . .
Types of construction		Version							Order code
Without flange	IM B3	**Standard**			**A**				–
With flange	IM B5	With additional charge			**F**				–
For other types of construction and more information, see from page 4/28					■				. . .
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 4/31						■			. . .
Terminal box position		Version							Order code
Terminal box base right with terminal box 45° [3) 7)]		**Standard**					**3**		–
Terminal box top [4) 7)]		**Standard**					**4**		–
For other terminal box positions and more information, see from page 4/32							■		. . .
Special versions									Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE5534-. . . .**	■	■	■	■	■	**-Z**	**F90+. . .+. . .+. . .**
For options and information, see from page 4/33		**1LE5534-. . . .**	■	■	■	■	■	**-Z**	**. . .+. . .+. . .+. . .**

For legends and foot notes, see page 4/16.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5534 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
75	**315 S**	993	720		95.4	95.5	95.1	0.82	138	2.3	7	2.8	63	77	**1LE5534-3AC0■-■■■■**	831	3.02
90	**315 M**	993	870		95.6	95.7	95.2	0.83	164	2.4	7	2.8	62	77	**1LE5534-3AC2■-■■■■**	903	3.57
110	**315 L**	992	1060		95.8	96	95.8	0.83	200	2.4	7	2.8	65	79	**1LE5534-3AC4■-■■■■**	1020	4.25
132	**315 L**	993	1270		96	96.1	95.6	0.83	240	2.7	7.6	3	64	79	**1LE5534-3AC5■-■■■■**	1100	4.86
160	**315 L**	992	1540		96.2	96.4	96.2	0.82	295	2.5	7.1	3	66	81	**1LE5534-3AC6■-■■■■**	1260	5.73
200	**315 L**	992	1930		96.3	96.5	96.3	0.81	370	2.8	7	3	68	83	**1LE5534-3AC7■-■■■■**	1410	6.39
250	**315 L**	992	2400		96.5	96.6	96.3	0.81	460	2.9	7.3	3	68	83	**1LE5534-3AC8■-■■■■**	1640	8.1
450	**400**	994	4300		96.6	96.8	96.5	0.84	640	2.2	6.9	3	70	86	**1LE5534-4AC3■-■■■■**	3100	25.5
500 [1]	**400**	994	4800		96.7	96.8	96.5	0.83	720	2.3	7.4	3.2	70	86	**1LE5534-4AC5■-■■■■**	3300	27.4
560	**400**	994	5400		96.6	96.8	96.4	0.83	810	2.5	7.2	3.4	70	86	**1LE5534-4AC7■-■■■■**	3300	28.6
630 [1 2]	**450**	995	6000		96.7	97	96.7	0.84	900	2	6.7	2.7	72	88	**1LE5534-4BC3■-■■■■**	4100	38.6
710 [3]	**450**	994	6800		96.8	97	96.9	0.84	1010	1.7	6.4	2.4	72	88	**1LE5534-4BC5■-■■■■**	4200	41
800 [1 3]	**450**	994	7700		96.8	97	96.8	0.84	1140	1.9	6.8	2.5	74	90	**1LE5534-4BC7■-■■■■**	4300	43.3
8-pole: 750 rpm at 50 Hz																	
55	**315 S**	743	710		93.7	93.9	93.4	0.8	106	2.3	6.1	2.5	58	73	**1LE5534-3AD0■-■■■■**	762	2.53
75	**315 M**	742	970		94.2	94.5	94.1	0.81	142	2.4	6.3	2.6	58	72	**1LE5534-3AD2■-■■■■**	834	3.13
90	**315 L**	742	1160		94.4	94.7	94.4	0.82	168	2.5	6.1	2.5	58	73	**1LE5534-3AD4■-■■■■**	943	3.73
110	**315 L**	742	1420		94.7	95.1	94.9	0.82	205	2.4	6.3	2.6	61	75	**1LE5534-3AD5■-■■■■**	1030	4.44
132	**315 L**	741	1700		94.9	95.3	95.1	0.82	245	2.4	6.1	2.5	65	80	**1LE5534-3AD6■-■■■■**	1110	5.09
160	**315 L**	741	2050		95.1	95.5	95.5	0.79	305	2.4	6.2	2.4	67	82	**1LE5534-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		95.4	95.6	95.4	0.78	390	2.9	6.7	2.8	72	86	**1LE5534-3AD8■-■■■■**	1660	8.5
355	**400**	744	4550		95.8	96.1	95.8	0.8	530	2	6.5	2.6	64	80	**1LE5534-4AD3■-■■■■**	2900	21.9
400	**400**	744	5100		96	96.2	96	0.81	590	2	6.5	2.5	64	80	**1LE5534-4AD5■-■■■■**	3100	24.5
450	**400**	744	5800		95.9	96.2	95.9	0.8	680	2.4	7	2.8	64	80	**1LE5534-4AD7■-■■■■**	3300	27.5
500 [5]	**450**	744	6400		96.1	96.4	96.2	0.8	750	2	6.5	2.4	67	83	**1LE5534-4BD3■-■■■■**	3800	34
560 [5]	**450**	745	7200		96.3	96.5	96.2	0.8	840	1.9	6.7	2.5	67	83	**1LE5534-4BD5■-■■■■**	4000	38
630 [1 5]	**450**	745	8100		96.4	96.6	96.3	0.79	960	1.9	7	2.5	67	83	**1LE5534-4BD7■-■■■■**	4300	42.5

Voltages [6]		Version			Order code
50 Hz 400 VΔ/690 VY	60 Hz [6] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VΔ	60 Hz 575 VΔ	Without additional charge	**4**	**0**	–
50 Hz 690 VΔ		With additional charge	**4**	**7**	–
For other voltages [6] and more information, see from page 4/26			■	■	. . .

Types of construction		Version		Order code
Without flange	IM B3	**Standard**	**A**	–
With flange	IM B5	With additional charge	**F**	–
For other types of construction and more information, see from page 4/28			■	. . .

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 4/31		■	. . .

Terminal box position	Version		Order code
Terminal box base right with terminal box 45° [7 8]	**Standard**	**3**	–
Terminal box top [7 9]	**Standard**	**4**	–
For other terminal box positions and more information, see from page 4/32		■	. . .

Special versions			Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE5534-. . . .**	**■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options and information, see from page 4/33	**1LE5534-. . . .**	**■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Terminal box 1XB1631.

2) Terminal box position NDE can only be ordered using order code **H09** (2 × terminal box TB3R61). Order code **H08** not available.

3) The standard version is 50 Hz 690 VΔ (voltage code **4**-**7**) or 60 Hz 575 VΔ (voltage code **4**-**0**).

4) In the series version, the maximum speed is n_{max} = 3000 rpm. Operation up to 3600 rpm at higher speeds on request for an additional charge.

5) Utilization with sinusoidal supply in accordance with thermal class 155 (temperature class F).

6) For frame size 315, parallel supply lines are required, except in the case of connection to 690 V.

7) For frame size 315 with power rating 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

8) Only for frame size 315 if 11th position of Article No. for 2-, 4-pole motors **6**, **7**, for 6-, 8-pole motors **7**, **8** and for frame size 355 to 450.

9) Only for frame size 315 if 11th position of Article No. for all poles **0**, **2**, **4**, **5**; for 6-, 8-pole motors **6**.

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Cast-iron series Innomotics SD Add 1LE5634 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5634 Performance Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super 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																	
250	**315 L**	2982	800		96.5	96.6	96.4	0.91	410	2.6	7.5	3	80	95	**1LE5634-3AA6■-■■■■**	1340	2.82
315	**315 L**	2980	1010		96.5	96.7	96.5	0.91	520	2.4	7.5	2.9	81	96	**1LE5634-3AA7■-■■■■**	1490	3.11
355	**355 L**	2984	1140		96.5	96.4	95.9	0.9	590	2.3	8.4	3.1	83	98	**1LE5634-3BA3■-■■■■**	2170	5.09
400	**355 L**	2986	1280		96.5	96.5	96	0.91	660	2.3	7.7	3.1	83	98	**1LE5634-3BA4■-■■■■**	2240	5.46
500	**355 L**	2988	1600		96.5	96.4	95.8	0.89	840	2.8	8.5	3.7	83	98	**1LE5634-3BA5■-■■■■**	2340	5.76
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1488	1600		96.7	97	97	0.86	435	2.3	6.5	2.6	75	90	**1LE5634-3AB6■-■■■■**	1520	5.09
315	**315 L**	1488	2000		96.7	96.9	96.8	0.85	550	2.2	7.2	2.8	75	90	**1LE5634-3AB7■-■■■■**	1530	5.28
355	**355 L**	1491	2250		96.7	96.8	96.5	0.85	620	2.2	7.5	3.2	78	93	**1LE5634-3BB3■-■■■■**	1960	6.26
400	**355 L**	1491	2550		96.7	96.9	96.6	0.85	700	2.3	7.3	3.2	79	95	**1LE5634-3BB4■-■■■■**	2080	7.06
500	**355 L**	1491	3200		96.7	96.8	96.6	0.86	870	3.1	7.9	3.3	80	96	**1LE5634-3BB5■-■■■■**	2290	8.36
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	992	1930		96.3	96.5	96.3	0.81	370	2.8	7	3	68	83	**1LE5634-3AC7■-■■■■**	1410	6.39
250	**315 L**	992	2400		96.5	96.6	96.3	0.81	460	2.9	7.3	3	68	83	**1LE5634-3AC8■-■■■■**	1640	8.1
315	**355 L**	992	3050		96.6	96.9	96.9	0.86	550	2.4	6.8	2.8	75	90	**1LE5634-3BC2■-■■■■**	2150	12.9
355	**355 L**	993	3400		96.6	96.7	96.4	0.84	630	2.6	7.4	3.2	76	91	**1LE5634-3BC3■-■■■■**	2250	13.8
400	**355 L**	994	3850		96.6	96.7	96.5	0.84	710	2.7	7.7	2.9	75	90	**1LE5634-3BC4■-■■■■**	2240	13.4
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		95.1	95.5	95.5	0.79	305	2.4	6.2	2.4	67	82	**1LE5634-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		95.4	95.6	95.4	0.78	390	2.9	6.7	2.8	72	86	**1LE5634-3AD8■-■■■■**	1660	8.5
250	**355 L**	744	3200		95.4	95.8	95.8	0.8	475	2.4	7.1	2.7	73	88	**1LE5634-3BD1■-■■■■**	2280	13.3
315	**355 L**	744	4050		95.4	95.7	95.4	0.8	600	2.4	7	2.9	73	88	**1LE5634-3BD2■-■■■■**	2310	14

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			■	■			. . .
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 4/31						■	. . .
Terminal box position		Version					Order code
Terminal box base left with terminal box 45° [2]		Without additional charge					**2** –
Terminal box base right with terminal box 45° [2]		**Standard**					**3** –
For other terminal box positions and more information, see from page 4/32							■ . . .
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE5634- . . . . ■-■■■■-Z**					**F90+. . .+. . .+. . .**
For options and information, see from page 4/33		**1LE5634- . . . . ■-■■■■-Z**					**. . .+. . .+. . .+. . .**

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Cast-iron series Innomotics SD Pro 1LE5584 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5584 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)	▲ New	kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE4 Super Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, with sinusoidal supply or converter operation, utilization in accordance with thermal class 130 (temperature class B) • Optional and suitable for converter operation; $U_{line} \leq 690$ V - IVIC-C premiuminsulation system																	
2-pole: 3000 rpm at 50 Hz																	
75	**280 S**	2982	240		95.6	95.6	95.1	0.9	126	3.2	9.2	3.7	75	90	▲ **1LE5584-2DA0■-■■■■**	549	0.797
90	**280 M**	2982	290		95.8	95.9	95.5	0.9	151	3.1	9.5	3.9	73	87	▲ **1LE5584-2DA2■-■■■■**	593	0.895
110	**315 S**	2984	350		96	95.8	95	0.9	184	2.3	7.8	3.1	74	88	▲ **1LE5584-3AA0■-■■■■**	894	1.67
132	**315 M**	2986	420		96.2	96.1	95.4	0.91	220	2.8	8.9	3.5	74	89	▲ **1LE5584-3AA2■-■■■■**	1020	2.09
160	**315 L**	2982	510		96.3	96.4	96.1	0.92	260	2.3	7.1	2.9	75	89	▲ **1LE5584-3AA4■-■■■■**	1060	2.25
200	**315 L**	2984	640		96.5	96.6	96.3	0.91	330	2.9	8.5	3.4	73	87	▲ **1LE5584-3AA5■-■■■■**	1300	2.75
4-pole: 1500 rpm at 50 Hz																	
75	**280 S**	1490	480	IE3	96	96.3	96.1	0.88	128	2.7	8.5	3.2	70	85	▲ **1LE5584-2DB0■-■■■■**	688	2.03
90	**280 M**	1490	580	IE3	96.1	96.4	96.3	0.89	152	2.87	8.5	3.2	73	88	▲ **1LE5584-2DB2■-■■■■**	792	2.44
110	**315 S**	1492	700		96.3	96.4	96	0.84	196	2.6	8.2	3.2	66	81	▲ **1LE5584-3AB0■-■■■■**	945	2.8
132	**315 M**	1492	840		96.4	96.5	96.3	0.85	235	2.6	7.9	3	69	83	▲ **1LE5584-3AB2■-■■■■**	1080	3.38
160	**315 L**	1492	1020		96.6	96.7	96.4	0.85	280	2.8	8.3	3.2	69	84	▲ **1LE5584-3AB4■-■■■■**	1230	3.9
200	**315 L**	1492	1280		96.7	96.8	96.5	0.84	355	3.7	8.7	3.3	69	84	▲ **1LE5584-3AB5■-■■■■**	1350	4.62
6-pole: 1000 rpm at 50 Hz																	
45	**280 S**	991	435	IE3	94.8	95.1	94.9	0.85	81	3.1	8.5	3.4	63	77	▲ **1LE5584-2DC0■-■■■■**	547	1.88
55	**280 M**	990	530	IE3	95.1	95.4	95.1	0.84	99	3	9	3.7	61	75	▲ **1LE5584-2DC2■-■■■■**	576	2.09
75	**315 S**	993	720		95.4	95.5	95	0.81	140	2.4	7	2.8	61	75	▲ **1LE5584-3AC0■-■■■■**	832	3.02
90	**315 M**	993	870	IE3	95.6	95.7	95.2	0.83	164	2.4	7.1	2.8	61	75	▲ **1LE5584-3AC2■-■■■■**	908	3.57
110	**315 L**	993	1060		95.8	95.9	95.6	0.82	200	2.7	7.5	3	62	77	▲ **1LE5584-3AC4■-■■■■**	1020	4.25
132	**315 L**	993	1270		96	96.1	95.8	0.82	240	2.7	7.6	3	62	76	▲ **1LE5584-3AC5■-■■■■**	1090	4.86
160	**315 L**	993	1540		96.2	96.3	95.9	0.81	295	2.8	7.6	3.1	67	82	▲ **1LE5584-3AC6■-■■■■**	1260	5.72
200	**315 L**	993	1920		96.3	96.4	96.1	0.82	365	3.2	8.6	3.3	68	83	▲ **1LE5584-3AC7■-■■■■**	1480	6.89
8-pole: 750 rpm at 50 Hz																	
37	**280 M**	740	475	IE3	93.1	93.6	93.4	0.8	72	2.8	7	2.8	60	74	▲ **1LE5584-2DD0■-■■■■**	558	1.9
45	**280 M**	741	580	IE3	93.4	93.9	93.8	0.79	88	2.6	7	2.9	60	75	▲ **1LE5584-2DD2■-■■■■**	562	2.08
55	**315 S**	742	710		93.7	94	93.7	0.79	107	2.2	6.1	2.4	57	72	▲ **1LE5584-3AD0■-■■■■**	752	2.53
75	**315 M**	742	970		94.2	94.6	94.3	0.79	145	2.3	6.2	2.5	58	72	▲ **1LE5584-3AD2■-■■■■**	825	3.13
90	**315 L**	742	1160		94.4	94.9	94.7	0.81	170	2.3	6.2	2.4	61	75	▲ **1LE5584-3AD4■-■■■■**	933	3.72
110	**315 L**	742	1420	IE3	94.7	95	94.7	0.78	215	2.5	6.9	2.8	61	75	▲ **1LE5584-3AD5■-■■■■**	1020	4.44
132	**315 L**	742	1700		94.9	95.2	94.8	0.78	255	2.8	6.7	2.8	64	78	▲ **1LE5584-3AD6■-■■■■**	1100	5.27

Voltages [1]	Version						Order code
50 Hz 400 VΔ/690 VY 60 Hz [4] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VΔ	Without additional charge	**4**	**0**				–
50 Hz 690 VΔ	With additional charge	**4**	**7**				–
For other voltages and more information, see from page 4/26		■	■				. . .
Types of construction	Version						Order code
Without flange IM B3	**Standard**			**A**			–
With flange IM B5	With additional charge			**F**			–
For other types of construction and more information, see from page 4/28				■			. . .
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 4/31					■		. . .
Terminal box position	Version						Order code
Terminal box base left with terminal box 45°	Without additional charge					**2**	–
Terminal box base right with terminal box 45° [2]	**Standard**					**3**	–
Terminal box at top	**Standard**					**4**	
For other terminal box positions and more information, see from page 4/32						■	. . .
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE5584- . . . . ■-■■■■-Z**						**F90+. . .+. . .+. . .**
For options and information, see from page 4/33	**1LE5584- . . . . ■-■■■■-Z**						**. . .+. . .+. . .+. . .**

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] Only for 6-pole motors with power rating of 200 kW.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5503 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • 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																	
250	**315 L**	2986	800		95.8	95.7	95	0.88	430	3	9.3	4.2	80	94	**1LE5503-3AA6■-■■■■**	1340	2.82
315	**315 L**	2986	1010		95.8	95.6	94.8	0.87	550	3.5	9.9	4.2	81	96	**1LE5503-3AA7■-■■■■**	1520	3.27
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1490	1600		96	96.1	95.7	0.85	440	2.8	7.9	3.2	75	91	**1LE5503-3AB6■-■■■■**	1290	4.27
315	**315 L**	1490	2000		96	96	95.6	0.83	570	3.2	8.5	3.5	75	90	**1LE5503-3AB7■-■■■■**	1560	5.39
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	992	1930		95.8	95.9	95.6	0.82	365	3	7.5	3.2	68	83	**1LE5503-3AC7■-■■■■**	1410	6.32
250	**315 L**	992	2400		95.8	95.9	95.6	0.81	465	3.2	8.2	3.3	69	84	**1LE5503-3AC8■-■■■■**	1700	8
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		94.3	94.7	94.7	0.79	310	2.5	6.3	2.5	67	82	**1LE5503-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		94.6	94.8	94.6	0.78	390	2.9	6.7	2.8	72	86	**1LE5503-3AD8■-■■■■**	1660	8.5

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			**■**	**■**			**. . .**
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					**■**		**. . .**
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 4/31						**■**	**. . .**
Terminal box position		Version					Order code
Terminal box base left with terminal box 45° [2]		Without additional charge					**2** –
Terminal box base right with terminal box 45° [2]		**Standard**					**3** –
For other terminal box positions and more information, see from page 4/32							**■** **. . .**
Special versions							Order code(s)
For options, see from page 4/33							**1LE5503- . . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5603 Performance Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • 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																	
250	**315 L**	2986	800		95.8	95.7	95	0.88	430	3	9.3	4.2	80	94	**1LE5603-3AA6■-■■■■**	1340	2.82
315	**315 L**	2986	1010		95.8	95.6	94.8	0.87	550	3.5	9.9	4.2	81	96	**1LE5603-3AA7■-■■■■**	1520	3.27
355	**355 L**	2988	1130		95.8	95.6	94.8	0.89	600	2.6	8.9	4	84	99	**1LE5603-3BA3■-■■■■**	2100	4.74
400	**355 L**	2986	1280		95.8	95.7	95.2	0.92	660	2.6	8.5	3.4	83	98	**1LE5603-3BA4■-■■■■**	2240	5.4
500	**355 L**	2988	1600		95.8	95.7	95.1	0.89	850	3	8.9	3.8	84	98	**1LE5603-3BA5■-■■■■**	2340	5.76
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1490	1600		96	96.1	95.7	0.85	440	2.8	7.9	3.2	75	91	**1LE5603-3AB6■-■■■■**	1290	4.27
315	**315 L**	1490	2000		96	96	95.6	0.83	570	3.2	8.5	3.5	75	90	**1LE5603-3AB7■-■■■■**	1560	5.39
355	**355 L**	1492	2250		96	96	95.4	0.86	620	2.9	7.9	2.8	81	96	**1LE5603-3BB3■-■■■■**	2020	6.76
400	**355 L**	1492	2550		96	96	95.5	0.84	720	3.4	8.4	3	81	96	**1LE5603-3BB4■-■■■■**	2110	7.16
500	**355 L**	1491	3200		96	96.1	95.9	0.86	870	3.1	8.1	3.3	80	96	**1LE5603-3BB5■-■■■■**	2290	8.36
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	992	1930		95.8	95.9	95.6	0.82	365	3	7.5	3.2	68	83	**1LE5603-3AC7■-■■■■**	1410	6.28
250	**315 L**	992	2400		95.8	95.9	95.6	0.81	465	3.2	8.2	3.3	69	84	**1LE5603-3AC8■-■■■■**	1700	8
315	**355 L**	993	3050		95.8	95.8	95.3	0.82	580	2.9	7.8	3.2	75	90	**1LE5603-3BC2■-■■■■**	2040	11.6
355	**355 L**	993	3400		95.8	95.9	95.5	0.83	640	2.9	8.4	3.3	74	89	**1LE5603-3BC3■-■■■■**	2250	13.7
400	**355 L**	994	3850		95.8	96	95.8	0.84	720	2.8	8.1	3	75	90	**1LE5603-3BC4■-■■■■**	2240	13.4
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		94.3	94.7	94.7	0.79	310	2.5	6.3	2.5	67	82	**1LE5603-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		94.6	94.8	94.6	0.78	390	2.9	6.7	2.8	72	86	**1LE5603-3AD8■-■■■■**	1660	8.5
250	**355 L**	744	3200		94.6	95	95	0.8	475	2.4	7.1	2.7	73	88	**1LE5603-3BD1■-■■■■**	2280	13.3
315	**355 L**	744	4050		94.6	94.9	94.6	0.8	600	2.5	7.3	3	73	88	**1LE5603-3BD2■-■■■■**	2310	14

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			■	■			. . .
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 4/31						■	. . .
Terminal box position		Version					Order code
Terminal box base left with terminal box 45° [2]		Without additional charge				**2**	–
Terminal box base right with terminal box 45° [2]		**Standard**				**3**	–
For other terminal box positions and more information, see from page 4/32						■	. . .
Special versions							Order code(s)
For options, see from page 4/33							**1LE5603-. . . . ■-■■■■-Z** . . .+. . .+. . .+. . .

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5533 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • 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																	
250	**315 L**	2982	800		95.8	95.9	95.6	0.91	415	2.8	7.2	3	80	94	**1LE5533-3AA6■-■■■■**	1340	2.82
315	**315 L**	2980	1010		95.8	96	95.8	0.91	520	2.4	7.5	2.9	81	96	**1LE5533-3AA7■-■■■■**	1490	3.11
560 [1) 2)]	**400**	2986	1790		96.6	96.7	96.3	0.91	740	1.7	7.1	3.2	74	90	**1LE5533-4AA3■-■■■■**	2900	8.9
630 [1) 2)]	**400**	2984	2000		96.5	96.7	96.6	0.91	830	1.4	6.6	2.8	74	90	**1LE5533-4AA5■-■■■■**	3000	9.8
710 [3)]	**400**	2988	2250		96.9	97	96.7	0.9	940	2	7.4	3.1	74	90	**1LE5533-4AA7■-■■■■**	3200	10.8
800 [1) 2) 3) 4)]	**450**	2990	2550		97	96.9	96.6	0.88	1080	1.5	7.6	3.8	75	91	**1LE5533-4BA3■-■■■■**	4000	12.3
900 [1) 2) 3) 4)]	**450**	2986	2900		97	97.1	96.9	0.89	1200	1.7	7.4	3.6	75	91	**1LE5533-4BA5■-■■■■**	4300	13.5
1000 [1) 2) 3) 4)]	**450**	2984	3200		97	97.2	97.1	0.9	1320	1.6	6.4	3.1	75	91	**1LE5533-4BA7■-■■■■**	4500	14.7
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1490	1600		96	96.2	95.9	0.87	430	2.1	7.2	2.8	75	91	**1LE5533-3AB6■-■■■■**	1400	4.55
315	**315 L**	1488	2000		96	96.2	96.1	0.85	560	2.2	7.2	2.8	75	90	**1LE5533-3AB7■-■■■■**	1530	5.28
560	**400**	1492	3600		96.1	96.3	95.8	0.87	770	1.8	6.3	2.6	78	94	**1LE5533-4AB3■-■■■■**	2800	12.8
630 [1) 2)]	**400**	1491	4050		96.3	96.5	96	0.88	860	1.7	6.2	2.4	78	94	**1LE5533-4AB5■-■■■■**	3000	14.4
710 [3)]	**400**	1492	4550		96.6	96.7	96.3	0.88	960	1.8	6.9	2.7	78	94	**1LE5533-4AB7■-■■■■**	3200	16.5
800 [3)]	**450**	1491	5100		96.5	96.6	96.2	0.87	1100	1.6	6.4	2.5	81	97	**1LE5533-4BB3■-■■■■**	3900	22.2
900 [3)]	**450**	1492	5800		96.6	96.7	96.2	0.87	1240	1.6	6.9	2.7	81	97	**1LE5533-4BB5■-■■■■**	4100	24.8
1000 [1) 3)]	**450**	1491	6400		96.6	96.7	96.4	0.88	1360	1.9	6.5	2.5	81	97	**1LE5533-4BB7■-■■■■**	4300	27.4

Voltages [6)]		Version						Order code
50 Hz 400 VΔ/690 VY	60 Hz [6)] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VΔ	60 Hz 575 VΔ	Without additional charge	**4**	**0**				–
50 Hz 690 VΔ		With additional charge	**4**	**7**				–
For other voltages [6)] and more information, see from page 4/26			■	■				. . .
Types of construction		Version						Order code
Without flange	IM B3	**Standard**			**A**			–
With flange	IM B5	With additional charge			**F**			–
For other types of construction and more information, see from page 4/28					■			. . .
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 4/31						■		. . .
Terminal box position		Version						Order code
Terminal box base left with terminal box 45° [7)]		Without additional charge					**2**	–
Terminal box base right with terminal box 45° [7)]		**Standard**					**3**	–
For other terminal box positions and more information, see from page 4/32							■	. . .
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE5533-. . . .**	■	■	■	■	**-Z**	**F90+. . .+. . .+. . .**
For options and information, see from page 4/33		**1LE5533-. . . .**	■	■	■	■	**-Z**	**. . .+. . .+. . .+. . .**

For legends and foot notes, see page 4/22.

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Selection and ordering data

P_{rated}, 50 Hz/P50	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 1LE5533 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • 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																	
200	**315 L**	992	1930		95.8	96	95.8	0.81	370	2.8	7	3	68	83	**1LE5533-3AC7■-■■■■**	1410	6.39
250	**315 L**	992	2400		95.8	95.9	95.6	0.81	465	2.9	7.2	3	68	83	**1LE5533-3AC8■-■■■■**	1640	8.1
450	**400**	992	4350		96	96	95.7	0.85	640	2.2	6.7	2.9	72	88	**1LE5533-4AC3■-■■■■**	2900	22
500	**400**	992	4800		96.1	96.1	95.8	0.85	710	2.1	6.9	2.8	72	88	**1LE5533-4AC5■-■■■■**	3100	24.7
560 [1]	**400**	992	5400		96.2	96.3	96	0.86	780	2	6.6	2.8	72	88	**1LE5533-4AC7■-■■■■**	3300	27.8
630 [1]	**450**	993	6100		96.3	96.4	96.2	0.83	910	1.9	6.6	2.6	74	90	**1LE5533-4BC3■-■■■■**	3800	34.4
710 [3]	**450**	993	6800		96.3	96.4	96.3	0.85	1000	2.1	6.2	2.6	74	90	**1LE5533-4BC5■-■■■■**	4100	38.5
800 [1] [3]	**450**	993	7700		96.5	96.7	96.5	0.85	1130	2.1	6.7	2.6	74	90	**1LE5533-4BC7■-■■■■**	4300	43.1
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		94.3	94.7	94.7	0.79	310	2.4	6.2	2.4	67	82	**1LE5533-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		94.6	94.8	94.6	0.78	390	2.9	6.7	2.8	72	86	**1LE5533-3AD8■-■■■■**	1660	8.5
355	**400**	742	4550		95.6	95.7	95.5	0.81	530	1.9	6.2	2.5	64	80	**1LE5533-4AD3■-■■■■**	2900	21.9
400	**400**	742	5100		95.7	95.8	95.6	0.82	590	1.9	6.2	2.4	64	80	**1LE5533-4AD5■-■■■■**	3100	24.5
450	**400**	742	5800		95.7	95.8	95.7	0.81	670	2.2	6.6	2.7	64	80	**1LE5533-4AD7■-■■■■**	3300	27.5
500 [5]	**450**	744	6400		95.8	96	95.8	0.81	740	1.9	6.2	2.3	67	83	**1LE5533-4BD3■-■■■■**	3800	34
560 [5]	**450**	744	7200		96	96.1	95.9	0.81	830	1.8	6.3	2.3	67	83	**1LE5533-4BD5■-■■■■**	4000	38
630 [1] [5]	**450**	744	8100		96.1	96.2	95.9	0.8	950	1.8	6.6	2.4	67	83	**1LE5533-4BD7■-■■■■**	4300	42.5

Voltages [6]		Version			Order code
50 Hz 400 VΔ/690 VY	60 Hz [6] 460 VΔ	**Standard**	**3**	**4**	–
50 Hz 500 VΔ	60 Hz 575 VΔ	Without additional charge	**4**	**0**	–
50 Hz 690 VΔ		With additional charge	**4**	**7**	–
For other voltages [6] and more information, see from page 4/26			■	■	. . .

Types of construction		Version		Order code
Without flange	IM B3	**Standard**	**A**	–
With flange	IM B5	With additional charge	**F**	–
For other types of construction and more information, see from page 4/28			■	. . .

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 4/31		■	. . .

Terminal box position	Version		Order code
Terminal box base left with terminal box 45° [7]	Without additional charge	**2**	–
Terminal box base right with terminal box 45° [7]	**Standard**	**3**	–
For other terminal box positions and more information, see from page 4/32		■	. . .

Special versions			Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE5533-. . . .**	**■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options and information, see from page 4/33	**1LE5533-. . . .**	**■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Terminal box 1XB1631.

2) Terminal box position NDE can only be ordered using order code **H09** (2 × terminal box TB3R61). Order code **H08** not available.

3) The standard version is 50 Hz 690 VΔ (voltage code **4**-**7**) or 60 Hz 575 VΔ (voltage code **4**-**0**).

4) In the series version, the maximum speed is n_{max} = 3000 rpm. Operation up to 3600 rpm on request for an additional charge.

5) Utilization with sinusoidal supply in accordance with thermal class 155 (temperature class F).

6) For frame size 315, parallel supply lines are required, except in the case of connection to 690 V.

7) For frame size 315 with power rating 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions

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Cast-iron series Innomotics SD Add 1LE5633 Performance Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5633 Performance Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • 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																	
250	**315 L**	2982	800		95.8	95.9	95.6	0.91	415	2.8	7.2	3	80	94	**1LE5633-3AA6■-■■■■**	1340	2.82
315	**315 L**	2980	1010		95.8	96	95.8	0.91	520	2.4	7.5	2.9	81	96	**1LE5633-3AA7■-■■■■**	1490	3.11
355	**355 L**	2984	1140		95.8	95.7	95.2	0.9	590	2.3	8.4	3.1	83	98	**1LE5633-3BA3■-■■■■**	2170	5.09
400	**355 L**	2986	1280		95.8	95.8	95.3	0.91	660	2.3	7.7	3.1	83	98	**1LE5633-3BA4■-■■■■**	2240	5.46
500	**355 L**	2988	1600		95.8	95.7	95.1	0.89	850	2.8	8.5	3.7	83	98	**1LE5633-3BA5■-■■■■**	2340	5.76
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1490	1600		96	96.2	95.9	0.87	430	2.1	7.2	2.8	75	91	**1LE5633-3AB6■-■■■■**	1400	4.55
315	**315 L**	1488	2000		96	96.2	96.1	0.85	560	2.2	7.2	2.8	75	90	**1LE5633-3AB7■-■■■■**	1530	5.28
355	**355 L**	1491	2250		96	96.1	95.8	0.88	610	2.2	7.5	3.1	81	95	**1LE5633-3BB3■-■■■■**	2070	6.36
400	**355 L**	1491	2550		96	96.1	95.9	0.87	690	2.1	7.3	3	80	95	**1LE5633-3BB4■-■■■■**	2100	7.06
500	**355 L**	1491	3200		96	96.1	95.9	0.86	870	3.1	7.9	3.3	80	96	**1LE5633-3BB5■-■■■■**	2290	8.36
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	992	1930		95.8	96	95.8	0.81	370	2.8	7	3	68	83	**1LE5633-3AC7■-■■■■**	1410	6.39
250	**315 L**	992	2400		95.8	95.9	95.6	0.81	465	2.9	7.2	3	68	83	**1LE5633-3AC8■-■■■■**	1640	8.1
315	**355 L**	992	3050		95.8	96.1	96.1	0.86	550	2.4	6.8	2.8	75	90	**1LE5633-3BC2■-■■■■**	2150	12.9
355	**355 L**	993	3400		95.8	95.9	95.6	0.84	640	2.6	7.4	3.2	76	91	**1LE5633-3BC3■-■■■■**	2250	13.8
400	**355 L**	994	3850		95.8	96	95.8	0.84	720	2.7	7.7	2.9	75	90	**1LE5633-3BC4■-■■■■**	2240	13.4
8-pole: 750 rpm at 50 Hz																	
160	**315 L**	741	2050		94.3	94.7	94.7	0.79	310	2.4	6.2	2.4	67	82	**1LE5633-3AD7■-■■■■**	1420	6.78
200	**315 L**	742	2550		94.6	94.8	94.6	0.78	390	2.9	6.7	2.8	72	86	**1LE5633-3AD8■-■■■■**	1660	8.5
250	**355 L**	744	3200		94.6	95	95	0.8	475	2.4	7.1	2.7	73	88	**1LE5633-3BD1■-■■■■**	2280	13.3
315	**355 L**	744	4050		94.6	94.9	94.6	0.8	600	2.4	7	2.9	73	88	**1LE5633-3BD2■-■■■■**	2310	14

Voltages [1]		Version					Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**			–
50 Hz 500 VΔ		Without additional charge	**4**	**0**			–
50 Hz 690 VΔ		With additional charge	**4**	**7**			–
For other voltages [1] and more information, see from page 4/26			■	■			. . .
Types of construction		Version					Order code
Without flange	IM B3	**Standard**			**A**		–
With flange	IM B5	With additional charge			**F**		–
For other types of construction and more information, see from page 4/28					■		. . .
Motor protection		Version					Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**	–
For other motor protection and more information, see from page 4/31						■	. . .
Terminal box position		Version					Order code
Terminal box base left with terminal box 45° [2]		Without additional charge				**2**	–
Terminal box base right with terminal box 45° [2]		**Standard**				**3**	–
For other terminal box positions and more information, see from page 4/32						■	. . .
Special versions							Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)							**1LE5633- . . . . ■-■■■■-Z** **F90+. . .+. . .+. . .**
For options and information, see from page 4/33							**1LE5633- . . . . ■-■■■■-Z** **. . .+. . .+. . .+. . .**

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Cast-iron series Innomotics SD Pro 1LE5583 Basic Line – self-ventilated or forced-air cooled

Selection and ordering data

P_{rated}, 50 Hz/P50	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 1LE5583 Basic Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, with sinusoidal supply or converter operation, utilization in accordance with thermal class 155 (temperature class F) • Optional and suitable for converter operation; $U_{line} \leq 690$ V - IVIC-C premiuminsulation system																	
2-pole: 3000 rpm at 50 Hz																	
250	**315 L**	2986	800		95.8	95.7	95	0.88	430	3	9.4	3.8	81	94	**1LE5583-3AA6■-■■■■**	1340	2.82
315	**315 L**	2988	1010		95.8	95.6	94.7	0.87	550	3.7	10	4.3	82	96	**1LE5583-3AA7■-■■■■**	1510	3.27
545 [1]	**400**	2988	1740		96.5	96.6	96.2	0.91	720	1.7	7.4	3.3	74	90	**1LE5583-4AA3■-■■■■**	2900	8.9
610 [1]	**400**	2986	1950		96.4	96.6	96.5	0.91	800	1.4	6.9	2.9	74	90	**1LE5583-4AA5■-■■■■**	3000	9.8
680 [2]	**400**	2990	2150		96.8	96.8	96.5	0.9	900	2.6	8.7	3.7	74	90	**1LE5583-4AA7■-■■■■**	3200	10.8
775 [1] [2] [3]	**450**	2992	2450		96.9	96.8	96.4	0.87	1060	1.9	8.9	4.4	75	91	**1LE5583-4BA3■-■■■■**	4000	12.3
875 [1] [2] [3]	**450**	2988	2800		96.9	97	96.7	0.89	1170	1.8	7.6	3.7	75	91	**1LE5583-4BA5■-■■■■**	4300	13.5
970 [1] [2] [3]	**450**	2986	3100		97	97.1	97	0.9	1280	1.6	6.6	3.2	75	91	**1LE5583-4BA7■-■■■■**	4500	14.7
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1491	1600		96	96	95.6	0.84	445	3.2	8.1	3	75	90	**1LE5583-3AB6■-■■■■**	1450	4.6
315	**315 L**	1490	2000		96	96.1	95.8	0.82	580	3	8.4	3.1	80	95	**1LE5583-3AB7■-■■■■**	1600	5.39
545	**400**	1492	3500		96	96.2	95.7	0.87	750	1.8	6.5	2.6	78	94	**1LE5583-4AB3■-■■■■**	2800	12.8
615	**400**	1491	3950		96.2	96.4	96	0.88	840	1.7	6.2	2.5	78	94	**1LE5583-4AB5■-■■■■**	3000	14.4
690 [2]	**400**	1492	4400		96.5	96.6	96.3	0.88	940	1.9	7.1	2.7	78	94	**1LE5583-4AB7■-■■■■**	3200	16.5
785 [2]	**450**	1491	5000		96.4	96.6	96.1	0.87	1080	1.7	6.6	2.5	81	97	**1LE5583-4BB3■-■■■■**	3900	22.2
880 [2]	**450**	1492	5600		96.5	96.6	96.1	0.87	1210	1.7	7.1	2.8	81	97	**1LE5583-4BB5■-■■■■**	4100	24.8
980 [2]	**450**	1491	6300		96.5	96.6	96.3	0.88	1330	1.8	6.6	2.6	81	97	**1LE5583-4BB7■-■■■■**	4300	27.4
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	993	1920		95.8	95.9	95.5	0.83	365	3.1	8.9	3.3	70	85	**1LE5583-3AC7■-■■■■**	1500	6.89
250	**315 L**	993	2400		95.8	95.9	95.6	0.81	465	3.4	8.8	3.3	70	84	**1LE5583-3AC8■-■■■■**	1630	8
435	**400**	993	4200		95.8	95.9	95.6	0.85	620	2.3	6.9	2.9	72	88	**1LE5583-4AC3■-■■■■**	2900	22
485	**400**	994	4650		96.1	96.1	95.7	0.85	690	2.1	7.1	2.8	72	88	**1LE5583-4AC5■-■■■■**	3100	24.7
545 [1]	**400**	993	5200		96.1	96.2	95.9	0.85	770	2	6.8	2.9	72	88	**1LE5583-4AC7■-■■■■**	3300	27.8
615 [1]	**450**	993	5900		96.3	96.5	96.2	0.83	890	2	6.7	2.7	74	90	**1LE5583-4BC3■-■■■■**	3800	34.4
690 [2]	**450**	993	6600		96.5	96.6	96.4	0.85	970	2.1	6.4	2.6	74	90	**1LE5583-4BC5■-■■■■**	4100	38.5
780 [2]	**450**	993	7500		96.6	96.7	96.5	0.85	1100	2.1	6.9	2.7	74	90	**1LE5583-4BC7■-■■■■**	4300	43.1
8-pole: 750 rpm at 50 Hz																	
335	**400**	744	4300		95.5	95.6	95.3	0.8	510	2	6.9	2.6	64	80	**1LE5583-4AD3■-■■■■**	2900	21.9
375	**400**	744	4800		95.5	95.7	95.6	0.81	560	2	6.8	2.6	64	80	**1LE5583-4AD5■-■■■■**	3100	24.5
425	**400**	744	5500		95.6	95.7	95.4	0.8	640	2.3	7.3	2.8	64	80	**1LE5583-4AD7■-■■■■**	3300	27.5
485	**450**	745	6200		95.7	95.9	95.7	0.81	720	2	6.7	2.4	67	83	**1LE5583-4BD3■-■■■■**	3800	34
545	**450**	745	7000		95.9	96	95.8	0.8	820	1.9	6.8	2.5	67	83	**1LE5583-4BD5■-■■■■**	4000	38
600 [1]	**450**	745	7700		96	96.1	95.7	0.79	910	2	7.4	2.6	67	83	**1LE5583-4BD7■-■■■■**	4300	42.5

Voltages [4]		Version				Order code
50 Hz 400 VΔ/690 VY	60 Hz [4] 460 VΔ	**Standard**	3	4		–
50 Hz 500 VΔ	60 Hz 575 VΔ	Without additional charge	4	0		–
50 Hz 690 VΔ		With additional charge	4	7		–
For other voltages [4] and more information, see from page 4/26			■	■		. . .

Types of construction		Version				Order code
Without flange	IM B3	**Standard**			A	–
With flange	IM B5	With additional charge			F	–
For other types of construction and more information, see from page 4/28					■	. . .

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 4/32				■	. . .

Terminal box position	Version				Order code
Terminal box base left with terminal box 45° [5]	Without additional charge			2	–
Terminal box base right with terminal box 45° [5]	**Standard**			3	–
For other terminal box positions and more information, see from page 4/32				■	. . .

Special versions		Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)	**1LE5583-. . . . ■-■■■■-Z**	**F90+. . .+. . .+. . .**
For options and information, see from page 4/33	**1LE5583-. . . . ■-■■■■-Z**	**. . .+. . .+. . .+. . .**

1) Terminal box 1XB1631.

2) The standard version is 50 Hz 690 VΔ (voltage code **4**-**7**) or 60 Hz 575 VΔ (voltage code **4**-**0**).

3) In the series version, the maximum speed is n_{max} = 3000 rpm. Operation up to 3600 rpm on request.

4) Parallel supply lines are required, except in the case of connection to 690 V.

5) For frame size 315 with power rating 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Selection and ordering data

P_{rated}, 50 Hz/ P50	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 1LE5683 Performance Line Article No.	$m_{IM\ B3}$	J
kW	FS	rpm	Nm		%	%	%		A				dB(A)	dB(A)		kg	kgm²
• Cooling: Self-ventilated (IC411) • Efficiency according to IEC 60034-30-1: IE3 Premium Efficiency • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, with sinusoidal supply or converter operation, utilization in accordance with thermal class 155 (temperature class F																	
2-pole: 3000 rpm at 50 Hz																	
250	**315 L**	2986	800		95.8	95.7	95	0.88	430	3	9.4	3.8	81	94	**1LE5683-3AA6■-■■■■**	1340	2.82
315	**315 L**	2988	1010		95.8	95.6	94.7	0.87	550	3.7	10	4.3	82	96	**1LE5683-3AA7■-■■■■**	1510	3.27
355	**355 L**	2988	1130		95.8	95.6	94.8	0.89	600	2.5	10	3.8	83	99	**1LE5683-3BA3■-■■■■**	2070	4.74
400	**355 L**	2986	1280		95.8	95.7	95.2	0.92	660	2.6	8.7	3.3	83	98	**1LE5683-3BA4■-■■■■**	2220	5.36
500	**355 L**	2988	1600		95.8	95.8	95.3	0.89	850	2.8	9.1	3.8	81	96	**1LE5683-3BA5■-■■■■**	2330	5.76
4-pole: 1500 rpm at 50 Hz																	
250	**315 L**	1491	1600		96	96	95.6	0.84	445	3.2	8.1	3	75	90	**1LE5683-3AB6■-■■■■**	1450	4.6
315	**315 L**	1490	2000		96	96.1	95.8	0.82	580	3	8.4	3.1	80	95	**1LE5683-3AB7■-■■■■**	1600	5.39
355	**355 L**	1492	2250		96	96	95.5	0.86	620	2.7	8.8	3.4	80	95	**1LE5683-3BB3■-■■■■**	2010	6.76
400	**355 L**	1490	2550		96	96.2	95.9	0.87	690	2.5	7.7	2.9	80	95	**1LE5683-3BB4■-■■■■**	2080	7.06
500	**355 L**	1491	3200		96	96.1	95.8	0.85	880	2.9	8.2	3.2	81	96	**1LE5683-3BB5■-■■■■**	2310	8.36
6-pole: 1000 rpm at 50 Hz																	
200	**315 L**	993	1920		95.8	95.9	95.5	0.83	365	3.1	8.9	3.3	70	85	**1LE5683-3AC7■-■■■■**	1500	6.89
250	**315 L**	993	2400		95.8	95.9	95.6	0.81	465	3.4	8.8	3.3	70	84	**1LE5683-3AC8■-■■■■**	1630	8
315	**355 L**	994	3050		95.8	95.8	95.1	0.81	590	2.9	8.2	3.2	75	90	**1LE5683-3BC2■-■■■■**	2020	11.4
355	**355 L**	994	3400		95.8	96	95.7	0.85	630	2.5	8.2	3.1	75	90	**1LE5683-3BC3■-■■■■**	2230	13.4
400	**355 L**	993	3850		95.8	96	95.7	0.84	720	2.7	8	2.9	77	92	**1LE5683-3BC4■-■■■■**	2260	13.4

Voltages [1]		Version						Order code
50 Hz 400 VΔ/690 VY	60 Hz [1] 460 VΔ	**Standard**	**3**	**4**				–
50 Hz 500 VΔ		Without additional charge	**4**	**0**				–
50 Hz 690 VΔ		With additional charge	**4**	**7**				–
For other voltages [1] and more information, see from page 4/26			■	■				. . .
Types of construction		Version						Order code
Without flange	IM B3	**Standard**			**A**			–
With flange	IM B5	With additional charge			**F**			–
For other types of construction and more information, see from page 4/28					■			. . .
Motor protection		Version						Order code
PTC thermistor with 3 temperature sensors		**Standard**				**B**		–
For other motor protection and more information, see from page 4/31						■		. . .
Terminal box position		Version						Order code
Terminal box base left with terminal box 45° [2]		Without additional charge					**2**	–
Terminal box base right with terminal box 45° [2]		**Standard**					**3**	–
For other terminal box positions and more information, see from page 4/32							■	. . .
Special versions								Order code(s)
Forced-air cooled motors w/o ext. fan/fan cover (IC418)		**1LE5683- . . . . ■-■■■■-Z**						**F90+. . .+. . .+. . .**
For options and information, see from page 4/33		**1LE5683- . . . . ■-■■■■-Z**						**. . .+. . .+. . .+. . .**

[1] Parallel supply lines are required, except in the case of connection to 690 V.

[2] For a power rating of 315 kW, 2-pole, 60 Hz and 315 kW, 4-pole, 50 Hz, a larger terminal box can be used (order code **R50**) due to the magnitude of the current.
Order code **R50** alters the motor dimensions.

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Cast-iron series Innomotics SD 1LE55, 1LE56

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: 250	280	315	355	400		450					Motor version: IEC	IE4	IE3
				1LE55.4 Basic Line				1LE5534									
								-4AA3 -4AA5	-4AB3 -4AB5 -4AC3 -4AC5 -4AC7 -4AD3 -4AD5 -4AD7	-4AA7	-4AB7	-4BA3 -4BA5 -4BA7	-4BB3 -4BB5 -4BB7 -4BC5 -4BC7	-4BC3 -4BD3 -4BD5 -4BD7			
						1LE56.4 Performance Line											
						1LE55.3 Basic Line		1LE55.3									
								-4AA3 -4AA5	-4AB3 -4AB5 -4AC3 -4AC5 -4AC7 -4AD3 -4AD5 -4AD7	-4AA7	-4AB7	-4BA3 -4BA5 -4BA7	-4BB3 -4BB5 -4BB7 -4BC5 -4BC7	-4BC3 -4BD3 -4BD5 -4BD7			
1LE5 . . . - . . . . ■ - ■ . . .			Order code			1LE56.3 Performance Line											
Voltage at 50 Hz or 60 Hz																	
50 Hz 230 VΔ/400 VY; 60 Hz 460 VY [6]	**2**	**2**	**–**	□	□	□	–	–	–	–	–	–	–	–			
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ [1]	**3**	**4**	**–**	□	□	□	□	□	□	O. R.	O. R.	O. R.	O. R.	□			
50 Hz 400 VΔ [4] [6]	**0**	**4**	**–**	□	□	–	–	–	–	–	–	–	–	–			
50 Hz 500 VY [6]	**2**	**7**	**–**	○	○	○	–	–	–	–	–	–	–	–			
50 Hz 500 VΔ	**4**	**0**	**–**	○	○	○	○	○	○	○	○	○	○	○			
60 Hz 575 VΔ				–	–	–	–	○	○	□	□	O. R.	□	○			
50 Hz 690 VΔ	**4**	**7**	**–**	✓	✓	✓	✓	○	○	□	□	□	□	○			
50 Hz 220 VΔ/380 VY; 60 Hz 440 VY [6]	**2**	**1**	**–**	✓	✓	O. R.	–	–	–	–	–	–	–	–			
50 Hz 380 VΔ/660 VY, 60 Hz 440 VΔ [1]	**3**	**3**	**–**	✓	✓	✓	✓	O. R.	✓	O. R.	O. R.	O. R.	O. R.	✓			
50 Hz 240 VΔ/415 VY; 60 Hz 480 VY [5]	**2**	**3**	**–**	✓	✓	✓	–	–	–	–	–	–	–	–			
50 Hz 415 VΔ, 60 Hz 480 VΔ	**3**	**5**	**–**	✓	✓	✓	✓	O. R.	✓	O. R.	O. R.	O. R.	O. R.	✓			
60 Hz 380 VΔ/660 VY [1]	**3**	**0**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	Not for:	frame size 355 1LE55..-3BA5 and 3BB5	
60 Hz 400 VΔ/690 VY [1]	**3**	**1**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	Not for:	frame size 355 1LE55..-3BA5 and 3BB5	
60 Hz 220 VΔ/380 VY	**1**	**7**		✓	✓	O. R.	–	–	–	–	–	–	–	–			
60 Hz 230 VΔ/400 VY	**1**	**8**		✓	✓	O. R.	–	–	–	–	–	–	–	–			
Voltage at 60 Hz and required power																	
220 VΔ/380 VY; 50 Hz power [6]	**9**	**0**	**M2A**	✓	✓	O. R.	–	–	–	–	–	–	–	–			
220 VΔ/380 VY; 60 Hz power [6]	**9**	**0**	**M1A**	✓	✓	O. R.	–	–	–	–	–	–	–	–			
380 VΔ/660 VY; 50 Hz power	**9**	**0**	**M2B**	✓	✓	✓	✓	–	–	–	–	–	–	–	Not for:	frame size 355 1LE55..-3BA5 and 3BB5	
380 VΔ; 50 Hz power				✓	✓	✓	✓	–	–	–	–	–	–	–			
380 VΔ/660 VY 60Hz; 60 Hz power	**9**	**0**	**M1B**	✓	✓	✓	–	–	–	–	–	–	–	–	Not for:	frame size 355 1LE55..-3BA5 and 3BB5	
440 VY; 50 Hz power [6]	**9**	**0**	**M2C**	✓	✓	O. R.	–	–	–	–	–	–	–	–			
440 VY; 60 Hz power [6]	**9**	**0**	**M1C**	✓	✓	O. R.	–	–	–	–	–	–	–	–			
440 VΔ; 50 Hz power	**9**	**0**	**M2D**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	✓			
440 VΔ; 60 Hz power	**9**	**0**	**M1D**	✓	✓	✓	–	✓	✓	O. R.	O. R.	O. R.	O. R.	✓			
460 VY; 50 Hz power [6]	**9**	**0**	**M2E**	✓	✓	✓	–	–	–	–	–	–	–	–			
460 VY; 60 Hz power [6]	**9**	**0**	**M1E**	○	○	○	–	–	–	–	–	–	–	–			
460 VΔ; 50 Hz power	**9**	**0**	**M2F**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	✓			
460 VΔ; 60 Hz power	**9**	**0**	**M1F**	○	○	○	–	✓	✓	O. R.	O. R.	O. R.	O. R.	✓			
575 VY; 50 Hz power [6]	**9**	**0**	**M2G**	✓	✓	✓	–	–	–	–	–	–	–	–			
575 VY; 60 Hz power [6]	**9**	**0**	**M1G**	✓	✓	✓	–	–	–	–	–	–	–	–			
575 VΔ; 50 Hz power	**9**	**0**	**M2H**	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	✓	✓			
575 VΔ; 60 Hz power	**9**	**0**	**M1H**	✓	✓	✓	–	✓	✓	✓	✓	O. R.	✓	✓			

For legends and footnotes, see page 4/27.

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Voltages	Article No. supplement: Voltage code 12th and 13th position of the Article No.		Article No. supplement: Additional identification code with order code and plain text, if required	Frame size: 250	280	315	355	400	450					Motor version
				1LE55.4 Basic Line				1LE5534						IEC IE4
								-4AA3 -4AA5	-4AB3 -4AB5 -4AC3 -4AC5 -4AC7 -4AD3 -4AD5 -4AD7	-4AA7	-4AB7	-4BA3 -4BA5 -4BA7	-4BB3 -4BB5 -4BB7 -4BC5 -4BC7	-4BC3 -4BD3 -4BD5 -4BD7
						1LE56.4 Performance Line								
						1LE55.3 Basic Line		1LE55.3						IE3
								-4AA3 -4AA5	-4AB3 -4AB5 -4AC3 -4AC5 -4AC7 -4AD3 -4AD5 -4AD7	-4AA7	-4AB7	-4BA3 -4BA5 -4BA7	-4BB3 -4BB5 -4BB7 -4BC5 -4BC7	-4BC3 -4BD3 -4BD5 -4BD7
1LE5 . . . - . . . . ■ - ■ . . .			Order code			1LE56.3 Performance Line								
Voltage at 60 Hz and required power (continued)														
400 VΔ/690 VY; 50 Hz power	**9**	**0**	**M2J**	✓	✓	✓	✓	O. R.	✓	O. R.	O. R.	O. R.	O. R.	✓	Not for: frame size 355 1LE55..-3BA5 and 3BB5
400 VΔ; 50 Hz power				✓	✓	✓	✓	–	–	–	–	–	–	–	
400 VΔ/690 VY; 60 Hz power	**9**	**0**	**M1J**	✓	✓	✓	–	O. R.	✓	O. R.	O. R.	O. R.	O. R.	✓	Not for: frame size 355 1LE55..-3BA5 and 3BB5
480 VY; 50 Hz power [6]	**9**	**0**	**M2K**	✓	✓	✓	–	–	–	–	–	–	–	–	
480 VY; 60 Hz power [6]	**9**	**0**	**M1K**	✓	✓	✓	–	–	–	–	–	–	–	–	
480 VΔ; 50 Hz power	**9**	**0**	**M2L**	✓	✓	✓	✓	✓	✓	O. R.	O. R.	O. R.	O. R.	✓	
480 VΔ; 60 Hz power	**9**	**0**	**M1L**	✓	✓	✓	–	✓	✓	O. R.	O. R.	O. R.	O. R.	✓	
230 VΔ/400 VY; 50 Hz power [6]	**9**	**0**	**M2M**	✓	✓	O. R.	–	–	–	–	–	–	–	–	
230 VΔ/400 VY; 60 Hz power [6]	**9**	**0**	**M1M**	✓	✓	O. R.	–	–	–	–	–	–	–	–	
Voltage at 87 Hz and 87-Hz-power														
400 VΔ [6]	**9**	**0**	**M3A**	✓	✓	✓	✓	–	–	–	–	–	–	–	Not for: frame size 280 2-pole motors
Non-standard voltage and/or frequencies														
Non-standard winding [2] [3]	**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.
O. R. Possible on request
✓ With additional charge

[1] Without additional measures not possible for converter operation at 690 VY and 660 VΔ (valid for 1LE5504, 1LE5604, 1LE5534, 1LE5634, 1LE5503, 1LE5603, 1LE5533 and 1LE5633).

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

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

[4] Possible up to 160 kW, over 200 kW not possible

[5] Not for frame size 315 and 355, 11th position of Article No. 0, 2, 4, 5 (2- ... 8-pole) 6 (6- and 8-pole)

[6] Not for frame size 315 and 355, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors)

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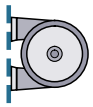
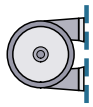
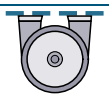
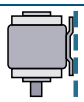
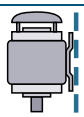
4/26Selection and ordering data

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**	**250**	**280**	**315**	**355**	**400**	**450**		
				1LE55.4 Basic Line				**1LE5534**		IEC	IE4
						1LE56.4 Performance Line					
						1LE55.3 Basic Line		**1LE55.3**			IE3
						1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . ■ . . (-Z)		■	Order code								
Without flange											
IM B3 [1) 2)]		**A**	**–**	□	□	□	□	□	□		
IM B6 [2)]		**T**	**–**	○	○	○	○	–	–		
IM B7 [2)]		**U**	**–**	○	○	○	○	–	–		
IM B8 [2)]		**V**	**–**	○	○	○	○	–	–		
IM V6 [2)]		**D**	**–**	○	○	○	○	O. R. [7)]	O. R. [7)]		
IM V5 without protective cover [2)]		**C**	**–**	○	○	○	○	O. R. [7)]	O. R. [7)]		
IM V5 with protective cover [2) 3) 4)]		**C**	**H00**	✓	✓	✓	✓	O. R. [7)]	O. R. [7)]		

For legends and footnotes, see page 4/30.

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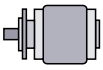
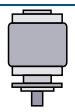
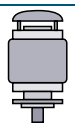
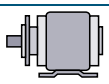
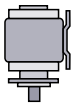
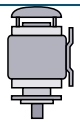
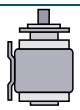
Types of construction		Article No. supplement		Frame size						Motor version	
		Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**250**	**280**	**315**	**355**	**400**	**450**		
				1LE55.4 Basic Line				**1LE5534**		IEC	IE4
						1LE56.4 Performance Line					
						1LE55.3 Basic Line		**1LE55.3**			IE3
						1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . ■ . . (-Z)			Order code								
With flange		**EN 50347**		**FF500**	**FF500/**	**FF600/ FF740**	**FF840** [8]	**FF940**	**FF1080**		
		DIN 42948		**A550**	**A550**	**A 660/ A 800**				I	
IM B5 [2) 5) 6)]		**F**	**–**	✓	✓	✓	✓	✓	✓	Only for FF600:	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2-, 4-, 6- and 8-pole motors) 6 (6- and 8-pole motors)
IM V1 without protective cover [2)]		**G**	**–**	✓	✓	✓	✓	✓ [7)]	✓ [7)]		
IM V1 with protective cover [2) 3) 4)]		**G**	**H00**	✓	✓	✓	✓	✓ [7)]	✓ [7)]	Only for FF740	frame size 315, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors)
IM V3 [4)]		**H**	**–**	✓	✓	✓	✓	–	–		
IM B35 [3) 8)]		**J**	**–**	✓	✓	✓	✓	✓	✓		
IM V15 without protective cover		**W**		✓	✓	✓	–	–	–		
IM V15 with protective cover		**W**	**H00**	✓	✓	✓	–	–	–		
IM V35		**Y**		✓	✓	✓	–	–	–		

For legends and footnotes, see page 4/30.

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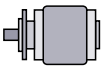
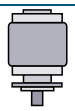
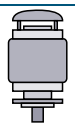
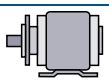
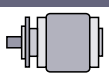
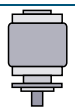
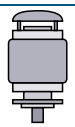
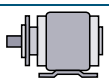
Innomotics SD standard motors next generation

Article No. supplements and special versions · Types of construction

Cast-iron series Innomotics SD 1LE55, 1LE56

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 250	280	315	355	400	450	Motor version: IEC	IE4 / IE3
				1LE55.4 Basic Line				**1LE5534**			IE4
						1LE56.4 Performance Line					
						1LE55.3 Basic Line		**1LE55.3**			IE3
						1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . ■ . . (-Z)			Order code								
With flange next larges		**EN 50347 DIN 42948**			**FF600 A 660**	**FF740 A 800**					
IM B5 [2) 6)]		**F**	**P01**	–	O. R.	✓	–	–	–	Only for:	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2-, 4-, 6- and 8-pole motors) 6 (6- and 8-pole motors)
IM V1 without protective cover [2)]		**G**	**P01**	–	O. R.	✓	–	–	–		
IM V1 with protective cover [2) 4) 5)]		**G**	**P01+H00**	–	O. R.	✓	–	–	–		
IM V3 [5)]		**H**	**P01**	–	O. R.	✓	–	–	–		
IM B35 [3)]		**J**	**P01**	–	O. R.	✓	–	–	–		
With flange next smallest		**EN 50347 DIN 42948**			**FF400 A 450**	**FF500/ FF600 A 550 A 660**					
IM B5 [2) 6)]		**F**	**P02**	–	O. R.	✓	–	–	–	Only for FF500:	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2-, 4-, 6- and 8-pole motors) 6 (6- and 8-pole motors)
IM V1 without protective cover [2)]		**G**	**P02**	–	O. R.	✓	–	–	–		
IM V1 with protective cover [2) 4) 5)]		**G**	**P02+H00**	–	O. R.	✓	–	–	–	Only for FF600:	frame size 315, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors)
IM V3 [5)]		**H**	**P02**	–	O. R.	✓	–	–	–	Only for FF400:	max. speed 3000 rpm
IM B35 [3)]		**J**	**P02**	–	O. R.	✓	–	–	–		

■ Standard version
○ Without additional charge
✓ With additional charge

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

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

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

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

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

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

7) Not possible for 2-pole 1LE55..-4BA motors.

8) Motor installation only permitted as foot mounting. Flange must not be used as a motor supporting element.

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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	250	280	315	355	400	450	IEC	IE4
			1LE55.4 Basic Line				1LE5534			
					1LE56.4 Performance Line					
					1LE55.3 Basic Line		1LE55.3			IE3
					1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . ■ .		Order code								
Motor protection										
Without (standard) [1]	**A**	**–**	□	□	□	□	□	□	Only for:	1LE55.4, 1LE55.3
1 or 3 PTC thermistors – for tripping (2 terminals) [1] [2]	**B**	**Q11**	✓	✓	✓	–	✓	✓	Only for:	1LE55.4, 1LE55.3
			–	–	□	□	–	–	Only for:	1LE56.4, 1LE56.3
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [2]	**C**	**Q12**	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (6 terminals)	**H**	**Q60**	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (12 terminals)	**J**	**Q61**	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometer (2 terminals) [2]	**K**	**Q35**	✓	✓	✓	✓	✓	✓		
2 Pt1000 resistance thermometers (4 terminals) [2]	**L**	**Q36**	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer (2 terminals) [2]	**P**	**Q62**	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (9 terminals) [2]	**Q**	**Q63**	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (18 terminals) [2]	**R**	**Q64**	✓	✓	✓	✓	✓	✓		
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

Note:

Options are available specifically for bearing protection – for order codes and descriptions, see from page 4/33.

[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 A) is not possible.

[2] Evaluation with associated tripping unit (see Catalog IC 10) is recommended.

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Cast-iron series Innomotics SD 1LE55, 1LE56

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	250	280	315	355	400	450	IEC	IE4
			1LE55.4 Basic Line				1LE5534			
					1LE56.4 Performance Line					
					1LE55.3 Basic Line		1LE55.3			IE3
					1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . ■		Order code								
Terminal box position [1]										
Terminal box base left with terminal box at the top	**0**	**–**	–	–	✓	✓	✓	✓	Only for:	frame size 315, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors) and for frame size 355 to 450
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 top	**4**	**–**	◘	◘	◘	–	–	–	Only for:	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2- ... 8-pole) 6 (6- and 8-pole)
Terminal box right-hand side	**5**	**–**	✓	✓	✓	✓	✓	✓		
Terminal box left-hand side	**6**	**–**	✓	✓	✓	✓	✓	✓		
Terminal box bottom [2]	**7**	**–**	✓	✓	✓	–	–	–	Only for:	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2- ... 8-pole) 6 (6- and 8-pole)
Terminal box left-hand side (base below) [2]	**9**	**R5L**	–	–	✓	✓	✓	✓	Only for:	frame size 315, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors) and for frame size 355 to 450
Terminal box right-hand side (base below) [2]	**9**	**R6R**	–	–	✓	✓	✓	✓		
Terminal box bottom left [2] [3]	**9**	**R7L**	–	–	✓	✓	✓	✓		
Terminal box bottom right [2] [3]	**9**	**R7R**	–	–	✓	✓	✓	✓		

◘ Standard version
○ Without additional charge
✓ With additional charge

Note:
On the motors
1LE5583-4AA3, 1LE5583-4AA5,
1LE5583-4BA3, 1LE5583-4BA5, 1LE5583-4BA7,
1LE5583-4AC7, 1LE5583-4BC3,
1LE5583-4BD7,
terminal box type 1XB1631 is mounted.

[1] For types of construction with feet and flange-mounted with feet, cast feet are standard.

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

[3] Only possible for Frame sizes 400 and 450 in combination with IM V1 type of construction.

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Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version IEC	IE4
		1LE55.4 Basic Line				**1LE5534**		IEC	IE4
				1LE56.4 Performance Line					
				1LE55.3 Basic Line		**1LE55.3**			IE3
				1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . . -Z	Order code								
Motor protection									
1 or 3 PTC thermistors – for tripping (2 terminals)	**Q11**	✓	✓	✓	✓	✓	✓	Not for:	Combination with motor protection code letter B (15th position of the Article No.)
2 or 6 PTC thermistors – for alarm and tripping (4 terminals)	**Q12**	✓	✓	✓	✓	✓	✓	Not for:	Combination with motor protection code letter C (15th position of the Article No.)
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 thermometers (4 terminals)	**Q36**	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (6 terminals)	**Q60**	✓	✓	✓	✓	✓	✓	Not for:	Combination with motor protection code letter H (15th position of the Article No.)
6 Pt100 resistance thermometers(12 terminals)	**Q61**	✓	✓	✓	✓	✓	✓	Not for:	Combination with motor protection code letter J (15th position of the Article No.)
1 Pt100 resistance thermometer 2-wire input (2 terminals)	**Q62**	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (9 terminals)	**Q63**	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (18 terminals)	**Q64**	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers in basic configuration for bearings (4 terminals)	**Q72**	✓	✓	✓	✓	✓	✓		
2 Pt100 resistance thermometers input for bearings (6 terminals)	**Q78**	✓	✓	✓	✓	✓	✓		
2 Pt100 double resistance thermometers in 3-wire input for bearings (12 terminals)	**Q79**	✓	✓	✓	✓	✓	✓		
Motor connection and terminal box									
External grounding		◘	◘	◘	◘	◘	◘		
Terminal box at NDE	**H08**	✓	✓	✓	✓	✓	✓		
Two terminal boxes at NDE	**H09**	–	–	–	–	✓	✓		
Second external grounding	**H70**	✓	✓	✓	✓	✓	✓		
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	O.R.		
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	O.R.		
Subsequently rotatable main terminal box	**R09**	–	–	–	–	✓	✓		
Rotation of the terminal box through 90°, entry from DE	**R10**	✓	✓	✓	✓	✓	✓	Not for:	Combination with type of construction code letters F, G, H, J (14th position of the Article No.)
Rotation of the terminal box through 90°, entry from NDE	**R11**	✓	✓	✓	✓	✓	✓		
Rotation of the terminal box through 180°	**R12**	✓	✓	✓	✓	✓	✓		
Terminal box in position 0°, connection from right		◘	◘	–	–	–	–		
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**	✓	✓	✓	✓	–	–		

For legends, see page 4/39.

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Cast-iron series Innomotics SD 1LE55, 1LE56

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version	
		1LE55.4 Basic Line				1LE5534		IEC	IE4
				1LE56.4 Performance Line					
				1LE55.3 Basic Line		1LE55.3			IE3
				1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . . -Z	Order code								
Motor connection and terminal box (continued)									
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	✓	✓		
Saddle terminal for connection without cable lug, accessories pack	**R19**	✓	✓	✓	✓	✓	✓		
3 cables protruding, 1.5 m long	**R21**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		
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.		
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)	**R62**	✓	✓	✓	✓	✓	✓		
Cast-iron auxiliary terminal box (large)	**R63**	✓	✓	✓	✓	✓	✓		
Stainless steel auxiliary terminal box (large)	**R65**	–	–	–	–	✓	✓		
2 small cast-iron auxiliary terminal boxes	**R67**	✓	✓	✓	✓	–	–		
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	O. R.,	✓	✓		
Non-standard threaded through hole (metric, NPT or G thread)	**Y61 •** and customer specifications	✓	✓	✓	✓	✓	✓		
Windings and insulation									
Temperature class 155 (F), utilized acc. to 155 (F), with service factor	**N01**	✓	✓	✓	✓	□	□	Not for:	1LE5583, 1LE5683 (frame sizes 315 and 355)
Temperature class 155 (F), utilized acc. to 155 (F), with increased power	**N02**	✓	✓	✓	✓	✓	✓	Not for:	1LE5583, 1LE5683 (frame sizes 315 and 355)
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	**N03**	✓	✓	✓	✓	✓	✓	Not for:	1LE5583, 1LE5683 (frame sizes 315 and 355)
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	**N05**	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	**N06**	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	**N07**	✓	✓	✓	✓	✓	✓		
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	**N08**	✓	✓	✓	✓	✓	✓		
Temperature class 180 (H)	**N10**	✓	✓	✓	✓	✓	✓		
Temperature class 180 (H) at rated power and max. CT 60 °C	**N11**	✓	✓	✓	✓	O. R.	O. R.		
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 •** CT .. °C or IA …. m above sea level	✓	✓	✓	✓	✓	✓	Not for:	1LE5583, 1LE5683 (frame sizes 280 to 355)
Temperature class 155 (F), utilized acc. to 155 (F), other requirements	**Y52 •** CT .. °C or IA …. m above sea level	✓	✓	✓	✓	✓	✓		
Temperature class 180 (H), utilized acc. to 155 (F)	**Y75 •** CT .. °C or IA …. m above sea level	✓	✓	✓	✓	O. R.	O. R.		
Colors and paint finish									
Standard paint finish C2 in RAL 7030 stone gray		□	□	□	□	□	□	Only for:	Frame sizes 315 and 355 – Basic Line, Add and Pro
Unpainted (only cast-iron parts primed)	**S00**	○	○	○	○	○	○		

For legends, see page 4/39.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version	
		1LE55.4 Basic Line				**1LE5534**		IEC	IE4
				1LE56.4 Performance Line					
				1LE55.3 Basic Line		**1LE55.3**			IE3
				1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . . -Z	Order code								
Colors and paint finish (continued)									
Unpainted, only primed	**S01**	✓	✓	✓	✓	✓	✓		
Special paint finish C3	**S02**	✓	✓	✓	–	✓	✓	Only for:	Basic Line
		–	–	□	□	–	–	Only for:	Performance Line
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	✓	✓		
Special paint finish for use offshore C5	**S04**	✓	✓	✓	✓	✓	✓		
Internal coating	**S05**	✓	✓	✓	✓	✓	✓		
Top coat polyurethane	**S06**	✓	✓	✓	✓	□	□		
Special paint finish C5mid with medium durability	**S08**	✓	✓	✓	✓	–	–		
Special paint finish CX for offshore with high durability	**S09**	✓	✓	✓	✓	–	–		
Paint finish in other standard RAL colors: RAL 1015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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….	✓	✓	✓	✓	✓	✓		
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66 •** and paint finish	✓	✓	✓	✓	✓	✓		
Modular technology – Basic versions									
Mounting of holding brake (standard assignment)	**F01**	✓	✓	✓	✓	✓	✓	Not for:	2-pole motors
Mounting of PRECIMA brake	**F04**	✓	✓	–	–	–	–		
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	–	–	–			
Mounting of separately driven fan	**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**	✓	✓	✓	O. R.	–	–		
Modular technology – Additional versions									
Brake supply voltage 24 V DC	**F10**	✓	✓	✓	✓	–	–	Not for:	2-pole motors
Brake supply voltage 230 V AC, 50/60 Hz	**F11**	O	O	O	O	O	O	Not for:	2-pole motors
Brake supply voltage 400 V AC, 50/60 Hz	**F12**	✓	✓	✓	✓	✓	✓	Not for:	2-pole motors
Backstop, counterclockwise motion blocked, clockwise direction of rotation	**F40**	✓	✓	✓	✓	–	–		
Backstop, clockwise motion blocked, counterclockwise direction of rotation	**F41**	✓	✓	✓	✓	–	–		
Special technology									
Mounting of rotary pulse encoder HOG 86E	**G03**	✓	✓	✓	✓	✓	✓		
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	✓	✓	✓	✓	✓	✓		
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	✓	✓	✓	✓	✓	✓		
Mounting of HOG 10 D 1024 I rotary pulse encoder	**G06**	✓	✓	✓	✓	✓	✓		
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake)	**G07**	✓	✓	✓	✓	–	–		
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake)	**G08**	✓	✓	✓	✓	–	–		

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Cast-iron series Innomotics SD 1LE55, 1LE56

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version IEC	IE4	IE3
		1LE55.4 Basic Line				**1LE5534**				
				1LE56.4 Performance Line						
				1LE55.3 Basic Line		**1LE55.3**				
				1LE56.3 Performance Line						
1LE5 . . . - . . . . . - . . . . -Z	Order code									
Special technology (continued)										
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 XSI 850 Overspeed	**G93**	✓	✓	✓	✓	✓	✓			
Mounting of rotary pulse encoder XHI 861 Overspeed	**G94**	✓	✓	✓	✓	✓	✓			
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.			
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	✓	✓	✓	✓	✓	✓			
Mechanical version and degrees of protection										
Low-noise version for 2-pole motors with clockwise direction of rotation	**F77**	O.R.	✓	✓	✓	□	□			
Low-noise version for 2-pole motors with counterclockwise direction of rotation	**F78**	O. R.	✓	✓	✓	○	○			
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	**H00**	✓	✓	✓	✓	✓	✓			
Screwed-on (instead of cast) feet	**H01**	✓	✓	–	–	–	–			
Vibration-proof version; vibration resistance to Class 3M4 acc. to IEC 60721-3-3:1994	**H02**	✓	✓	✓	✓	–	–			
Condensation drainage holes		□	□	□	□	□	□			
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓			
Degree of protection IP66	**H19**	✓	✓	✓	✓	–	–			
Degree of protection IP65	**H20**	✓	✓	✓	✓	✓	✓			
Degree of protection IP54	**H21**	✓	✓	✓	✓	–	–			
Degree of protection IP56	**H22**	✓	✓	✓	✓	✓	✓			
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar	**H23**	✓	✓	✓	✓	–	–			
Sealing ring made of fluoroelastomer (FKM)	**H25**	✓	✓	✓	✓	✓	✓			
Increased corrosion protection for external components	**H90**	–	–	–	–	✓	✓			
Grounding brush for converter operation	**L52**	✓	✓	✓	✓	✓	✓			

For legends, see page 4/39.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version	
		1LE55.4 Basic Line				1LE5534		IEC	IE4
				1LE56.4 Performance Line					
				1LE55.3 Basic Line		1LE55.3			IE3
				1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . . -Z	Order code								
Coolant temperature and installation altitude									
Coolant temperature –50 to +40 °C	**D02**	✓	✓	✓	✓	✓	✓		
Coolant temperature –40 to +40 °C	**D03**	✓	✓	✓	✓	✓	✓		
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	✓	✓		
Versions in accordance with standards and specifications									
VIK version	**C02**	–	✓	✓	–	O. R.	O. R.		
Chemstar version chemical industry	**C03**	–	✓	✓	–	–	–		
Chemstar version Oil & Gas industry	**C04**	✓	✓	✓	–	–	–		
Performance Line Process industry	**C06**	✓	✓	–	–	–	–		
Motor without CE marking for export outside EEA (see EU Regulation 2019/1781)	**D22**	○	○	○	○	–	–		
Motor exclusively for use in transportation equipment for passenger and freight transportation corresponding to EVPG §1 dated February 27, 2008	**D23**	–	–	○	○	–	–		
Declarations acc.to the appropriate EU Directives		◘	◘	◘	◘	◘	◘		
Electrical acc. to NEMA MG1-12	**D30**	✓	✓	✓	✓	–	–	Only for:	1LE550, 1LE560
		–	◘	◘	◘	◘	◘	Only for:	1LE553, 1LE563 1LE558, 1LE568
Design acc. to UL with "Recognition Mark"	**D31**	–	✓	✓	✓	–	–	Only for:	1LE550, 1LE560
		–	◘	◘	◘	◘	◘	Only for:	1LE553, 1LE563 1LE558, 1LE568
China Energy Efficiency Label	**D34**	○	○	○	○	–	–		
Canadian regulations (CSA)	**D40**	–	✓	✓	✓	–	–	Only for:	1LE550, 1LE560
		–	◘	◘	◘	◘	◘	Only for:	1LE553, 1LE563 1LE558, 1LE568
NEMA Premium Efficient, North America version acc. to NEMA MG1, Table 12-12, incl. UL and CSA	**D41**	–	✓	–	–	–	–		
TR CU product safety certificate EAC for Eurasian Customs Union	**D47**	✓	✓	✓	✓	✓	✓		
MEPS Australia	**D70**	–	–	✓	–	–	–	Only for:	1LE5533, 1LE5633 1LE5583, 1LE5683
BIS India (Indian standard IS 12615:2018)	**D72**	✓	✓	✓	✓	✓	✓		
SASO EER	**D73**	O. R.	O. R.	O. R.	O. R.	–	–	Only for:	IE3
UKCA marking		◘	◘	◘	◘	◘	◘		
Bearings and lubrication									
Regreasing device with M10 × 1 grease nipple acc. to DIN 71412-A	**L19**	○	○	○	○	○	○		
Located bearing DE	**L20**	✓	✓	✓	✓	◘	◘		
Located bearing NDE	**L21**	◘	◘	◘	◘	✓	✓		
Bearing design for increased cantilever forces	**L22**	✓	✓	✓	✓	O. R.	O. R.		
Regreasing device	**L23**	✓	◘	◘	◘	◘	◘		
Hot bearing grease	**L24**	–	–	O. R.	O. R.	–	–		
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	✓	◘	◘	◘	–	–	Not for:	2- pole motots (frame size 280)
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	✓	–	–	–	–	–	Not for:	8- pole motots (frame size 280)
Drainage for used grease		–	–	◘	◘	O. R.	O. R.	Only for:	Performance Line
	L30	✓	✓	✓	–			Only for:	Basic Line, Add and Pro
Bearing insulation DE	**L50**	✓	✓	✓	✓	✓	✓		
Bearing insulation NDE	**L51**	✓	✓	✓	✓	✓	✓		
Measuring nipple for SPM shock pulse measurement for bearing inspection	**Q01**	✓	✓	✓	✓	✓	✓		
Special version with higher speeds	**Y37**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.		

For legends, see page 4/39.

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Cast-iron series Innomotics SD 1LE55, 1LE56

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version	
		1LE55.4 Basic Line				1LE5534		IEC	IE4
				1LE56.4 Performance Line					
				1LE55.3 Basic Line		1LE55.3			IE3
				1LE56.3 Performance Line					
1LE5 . . . - . . . . . - . . . . -Z	Order code								
Balance and vibration severity									
Vibration severity grade A		□	□	□	□	□	□		
Vibration severity grade B	**L00**	✓	✓	✓	✓	✓	✓	Only for:	4-pole motors for (frame sizes 315 and 355)
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**	✓	✓	✓	✓	✓	✓	Not for:	Combination with type of construction code letters A, T, U, V (14th position of the Article No.) for frame sizes 315 and 355
Non-standard cylindrical shaft extension, DE	**Y58 •** and customer specifications	✓	✓	✓	✓	✓	✓		
Non-standard cylindrical shaft extension, NDE	**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		–	–	□	□	□	□	Only for:	Performance Line Add and Pro
	F74	✓	✓	✓	–			Only for:	Basic Line
Metal external fan	**F76**	✓	✓	✓	□	✓	✓	Only for	frame size 315, 11th position of Article No. 0, 2, 4, 5 (2- ... 8-pole) 6 (6- and 8-pole)
				□				Only for	frame size 315, 11th position of Article No. 6, 7 (2- and 4-pole motors) 7, 8 (6- and 8-pole motors)
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**	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 400 V (2 terminals)	**Q06**	–	–	✓	✓	✓	✓		
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	**B07**	✓	✓	✓	✓	✓	✓		
Removal of P60 60Hz data from rating plate	**B18**	✓	✓	–	–	–	–		
Second rating plate, loose	**M10**	✓	✓	✓	✓	✓	✓		
Rating plate, stainless steel	**M11**	✓	✓	✓	–	□	□	Only for:	Basic Line
		–	–	□	□				
Additional rating plate with deviating rating plate data	**Y80 •** and customer specifications	✓	✓	✓	✓	✓	✓		

For legends, see page 4/39.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 250	280	315	355	400	450	Motor version IEC	IE4	IE3
		1LE55.4 Basic Line				1LE5534				
				1LE56.4 Performance Line						
				1LE55.3 Basic Line		1LE55.3				
				1LE56.3 Performance Line						
1LE5 . . . - . . . . . - . . . . -Z	Order code									
Rating plate and additional rating plates (continued)										
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	**Q80**	✓	✓	✓	✓	✓	✓			
Extension of the liability for defects by 18 months to a total of 30 months (2.5 years) from delivery	**Q81**	✓	✓	✓	✓	✓	✓			
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery	**Q82**	✓	✓	✓	□	✓	✓			
Extension of the liability for defects by 30 months to a total of 42 months (3.5 years) from delivery	**Q83**	✓	✓	✓	✓	✓	✓			
Extension of the liability for defects by 36 months to a total of 48 months (4 years) from delivery	**Q84**	✓	✓	✓	✓	✓	✓			
Extension of the liability for defects by 48 months to a total of 60 months (5 years) from delivery	**Q85**	✓	✓	✓	✓	✓	✓			
Packaging, safety notes, documentation and test certificates										
Inspection certificate 3.1 acc. to EN 10204	**B02**	✓	✓	✓	✓	✓	✓			
Without "Made in manufacturing country" marking	**B13**	○	○	○	○	–	–			
Starting curves (torque-speed and current-speed)	**B50**	✓	✓	✓	✓	✓	✓			
Equivalent circuit diagram	**B51**	✓	✓	✓	✓	✓	✓			
Starting diagram (torque vs. speed and current vs. speed)	**B52**	✓	✓	✓	✓	✓	✓			
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓			
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓			
Standard test (routine test) with acceptance	**B65**	✓	✓	✓	✓	✓	✓			
Temperature test without acceptance	**B67**	✓	✓	✓	✓	✓	✓			
Temperature test with acceptance	**B68**	✓	✓	✓	✓	✓	✓			
Remote acceptance	**B77**	✓	✓	✓	✓	✓	✓			
Hybrid acceptance	**B78**	✓	✓	✓	✓	✓	✓			
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**	✓	✓	✓	✓	✓	✓			
Dedicated Global Project	**Y90**	✓	✓	–	–	–	–			

□ 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

Note:

The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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Overview

Couplings

The motor from Innomotics 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 blocks 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 blocks that are bolted to the machine (without washers) and fitted with taper pins are 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

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More information

Spare 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, Innomotics 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, Innomotics 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.
- For bearing types, see Catalog Section 1 "Introduction".
- 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

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Notes on the dimensions

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
S	flange (FF)	H17

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

  Dimension K: Nominal dimension according IEC 60072-1, negative deviation of tolerance H17 possible.

- 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

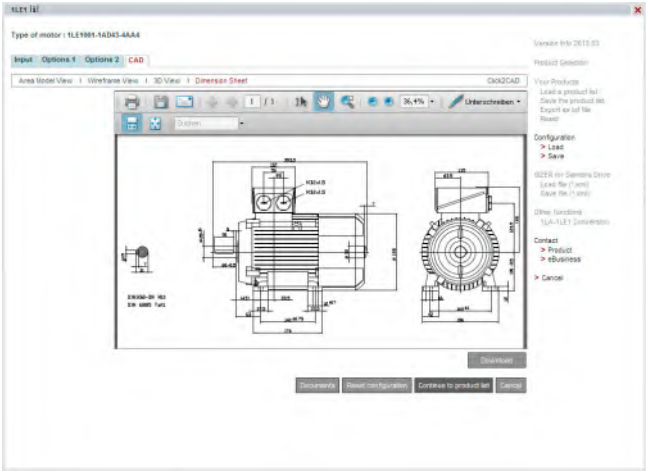
  Keyways and feather keyways (dimensions GA, GC, F, and FA) are made in compliance with DIN 6885 Part 1.
- All dimensions are specified in mm.
- The overall width of the motor is identical to the "AC" dimension.

Dimension sheet generator (within the Siemens Product Configurator)

4

Overview

A dimensional drawing can be created in the "Siemens Product 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 Siemens Product Configurator is integrated into the Siemens Industry Mall and can be used on the Internet without installation.
German: www.siemens.de/spc
English: www.siemens.com/spc

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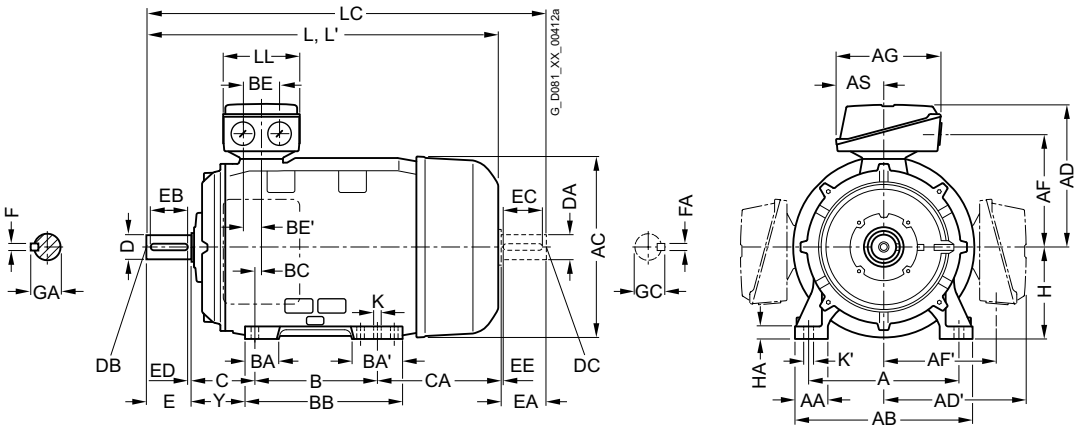
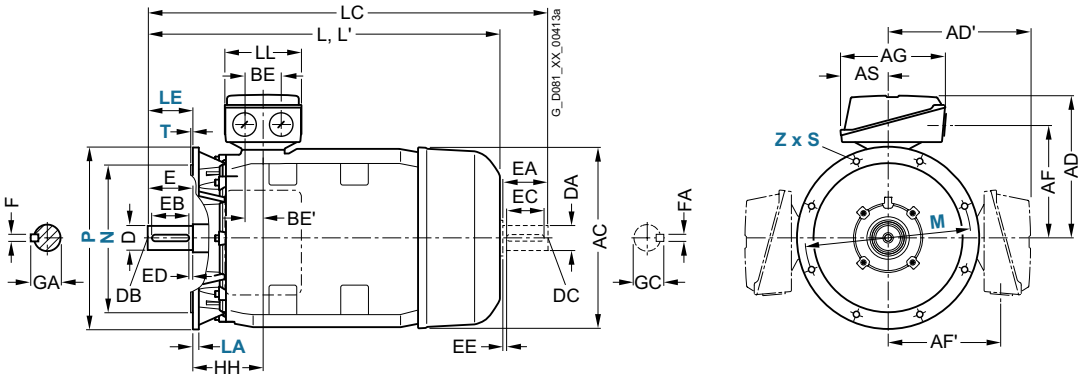
Dimensional drawings

Type of construction IM B3



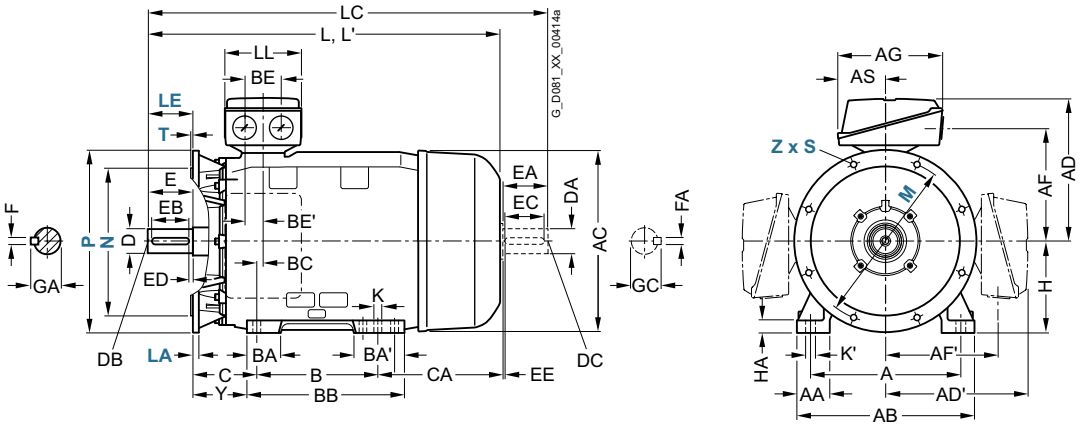
Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



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IE4 – self-ventilated · Frame sizes 250 M to 315 L

Dimensional drawings

For motor		Dimension designation acc. to **IEC**																										
Frame size	Motor type 1LE5.0.-	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
250 M	2CA2, 2CA6	2	406	100	**490**	487	**420**	420	–	319	–	–	–	349	–	–	111	111	409	80	110	55	168	305	–	–	**250**	40	–
	2CB2	4																											
	2CB6	4																											
	2CC2, 2CC6, 2CD2, 2CD6	6 8																											
280 S	2DA0. 2DA2	2	457	100	**540**	554	**433**	–	–	319		–	–	368	419	–	114	165	479	74	110	55	190	316	265	–	**280**	40	–
	2DB0. 2DC0. 2DC2. 2DD0. 2DD2. 2DD6	4. 6. 8																											
280 M	2DA6	2																											
	2DB2. 2DC6	4. 6																											
	2DB6	4																											
315 S	3AA0, 3AB0, 3AC0, 3AD0	2, 4, 6, 8	508	120	**610**	624	**539**	–	–	374	–	–	–	406	457	–	177	225	570	22	110	55	216	335	284	–	**315**	50	–
315 M	3AA2, 3AB2	2, 4	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	374	323	–	**315**	50	–
	3AC2, 3AD2	6, 8												406	457			225	570										
315 L	3AA4, 3AA5	2	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	374 524	323 473	–	**315**	50	–

For motor		Dimension designation acc. to **IEC**														DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE5.0.-	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
250 M	2CA2, 2CA6	2	–	–	–	–	–	–	–	24	30	**962**	1107	233	60	M20	140	125	7,5	18	69	55	M20	110	100	5	16	59
	2CB2	4													65							60		140	125	7,5	18	64
	2CB6	4										**1032**	1177															
	2CC2, 2CC6, 2CD2, 2CD6	6 8										**962**	1107															
280 S	2DA0. 2DA2	2	–	–	–	–	–	264	160	24	30	**1014**	1159	233	65	M20	140	125	7.5	18	69	60	M16	140	125	7.5	18	64
	2DB0. 2DC0. 2DC2. 2DD0. 2DD2. 2DD6	4. 6. 8													75					20	79.5	65						69
280 M	2DA6	2										**1069**	1214		65					18	69	60						64
	2DB2. 2DC6	4. 6													75					20	79.5	65						69
	2DB6	4										**1144**	1289															
315 S	3AA0	2,	–	–	–	–	–	238	146	28	35	**1097**	1242	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB0, 3AC0, 3AD0	4, 6, 8										**1127**	1272		80		170	140	25	22	85	70					20	74,5
315 M	3AA2	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB2	4											1362		80		170	140	25	22	85	70					20	74,5
	3AC2, 3AD2	6, 8											1272															
315 L	3AA4	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AA5											**1327**	1472															
	3AB4, 3AB5, 3AC6	4, 6										**1357**	1502		80		170	140	25	22	85	70					20	74,5
	3AC4, 3AC5, 3AD4, 3AD5	6, 8										**1217**	1362															

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Dimensional drawings

For motor		Dimension designation acc. to **IEC**																										
Frame size	Motor type 1LE5534-	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
315 S	3AA0, 3AB0, 3AC0, 3AD0	2, 4, 6, 8	508	120	**610**	624	**539**	–	–	374	–	–	–	406	457	–	177	225	570	22	110	55	216	335	284	–	**315**	50
315 M	3AA2, 3AB2	2, 4	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	374	323	–	**315**	50
	3AC2, 3AD2	6, 8												406	457			225	570									
315 L	3AA4, 3AA5	2	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508		177	227	648	22	110	55	216	374	323	–	**315**	50
	3AB4,3AB5, 3AC6	4																						524	473			
	3AC4, 3AC5	6																						374	323			
	3AD4, 3AD5,	8																										

For motor		Dimension designation acc. to **IEC**													DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE5534-	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	3AA0	2,	–	–	–	–	–	238	146	28	35	**1097**	1242	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB0, 3AC0, 3AD0	4, 6, 8										**1127**	1272		80		170	140	25	22	85	70					20	74,5
315 M	3AA2	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB2	4											1362		80		170	140	25	22	85	70					20	74,5
	3AC2, 3AD2	6, 8											1272															
315 L	3AA4	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AA5											**1327**	1472															
	3AB4, 3AB5, 3AC6	4, 6										**1357**	1502		80		170	140	25	22	85	70					20	74,5
	3AC4, 3AC5, 3AD4, 3AD5	6, 8										**1217**	1362															

[1] In the low-noise version, a second shaft extension and/or mounted encoder is not possible.

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IE4 – self-ventilated · Frame sizes 250 M to 315 L

Dimensional drawings

For motor		Dimension designation acc. to **IEC**																												
Frame size	Motor type 1LE5584-	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
280 S	2DA0, 2DA2, 2DB0, 2DC0, 2DC2, 2DD0, 2DD2, 2DD6	2, 4, 6, 8	457	100	**540**	554	**433**	–	–	319	–	–	–	368	419	–	114	165	479	74	110	55	190	316	265	–	**280**	40	–
280 M	2DA6, 2DB2, 2DC6, 2DB6	2, 4, 6, 4												419	–										–					
315 S	3AA0, 3AB0, 3AC0, 3AD0	2, 4, 6, 8	508	120	**610**	624	**539**	–	–	374	–	–	–	406	457	–	177	225	570	22	110	55	216	335	284	–	**315**	50	–
315 M	3AA2, 3AB2	2, 4	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	374	323	–	**315**	50	–
	3AC2, 3AD2	6, 8												406	457			225	570					335	284				
315 L	3AA4, 3AA5	2	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	374 524	323 473	–	**315**	50	–
	3AB4,3AB5	4																						524	473				
	3AC4, 3AC5 3AC6	6																						374 524	323 473				
	3AD4, 3AD5, 3AD6	8																						374	323	–			–

For motor		Dimension designation acc. to **IEC**													DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE5584-	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
280 S	2DA0, 2DA2, 2DB0, 2DC0, 2DC2, 2DD0, 2DD2, 2DD6	2, 4, 6, 8	–	–	–	–	–	264	160	24	30	**1014**	1159	233	65 75	M20	140	125	7,5	18 20	69 79,5	60 65	M16	140	125	7,5	18	64 69
280 M	2DB2	4	–	–	–	–	–					**1069**	1214		75					20	79.5	65						69
315 S	3AA0 3AB0, 3AC0, 3AD0	2, 4, 6, 8						238	146	28	35	**1097** **1127**	1242 1272	299	65 80	M20	140 170	125 140	10 25	18 22	69 85	60 70	M20	140	125	10	18 20	64 74,5
315 M	3AA2	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB2	4										**1217**	1362		80		170	140	25	22	85	70					20	74,5
	3AC2, 3AD2	6, 8										**1127**	1272															
315 L	3AA4	2	–	–	–	–	–	238	146	28	35	**1187**	1332	299	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AA5											**1327**	1472															
	3AB4, 3AB5, 3AC6	4, 6										**1357**	1502		80		170	140	25	22	85	70					20	74,5
	3AC4, 3AC5, 3AD4, 3AD5, 3AD6	6, 8						238				**1217**	1362	299	80						85							

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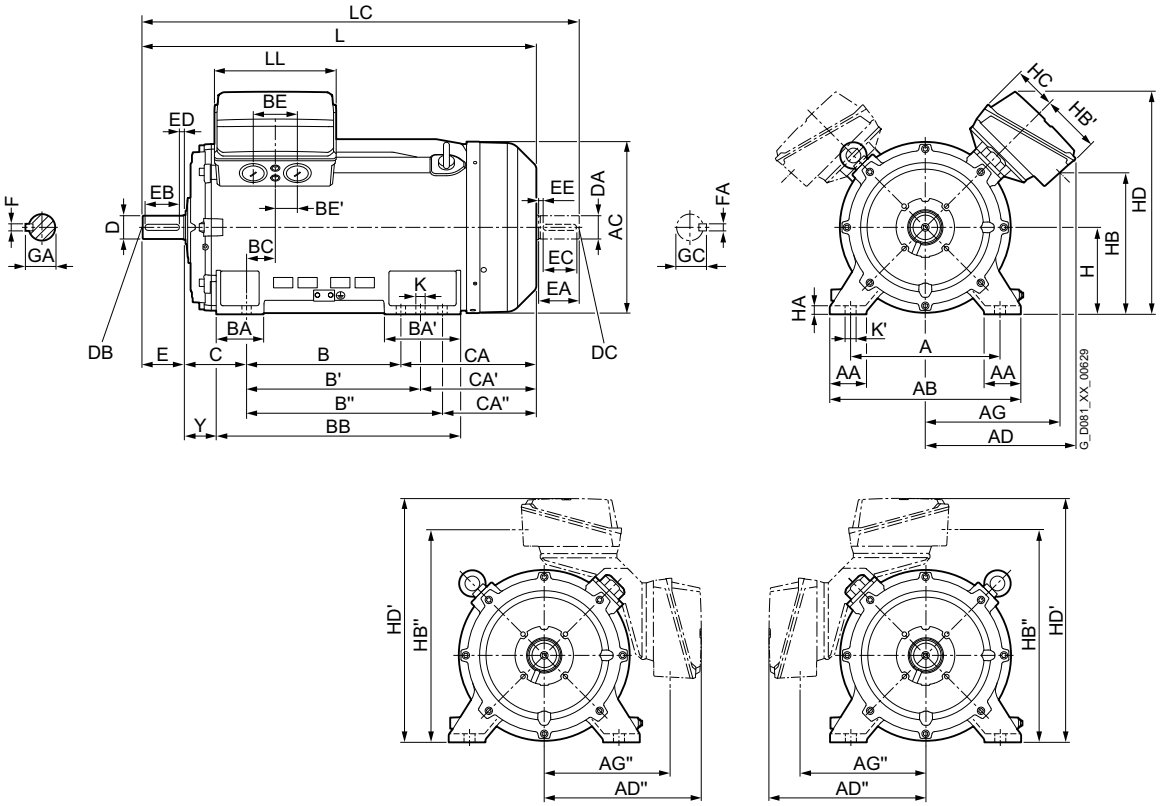
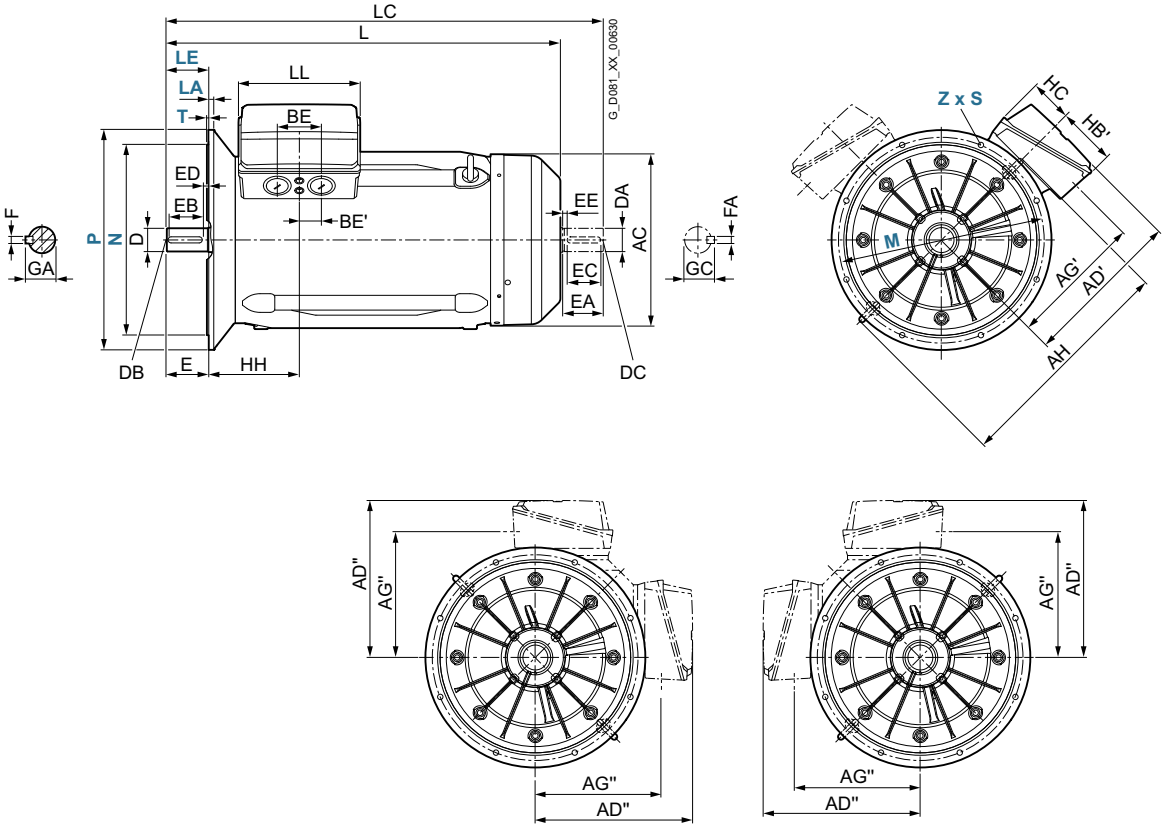
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



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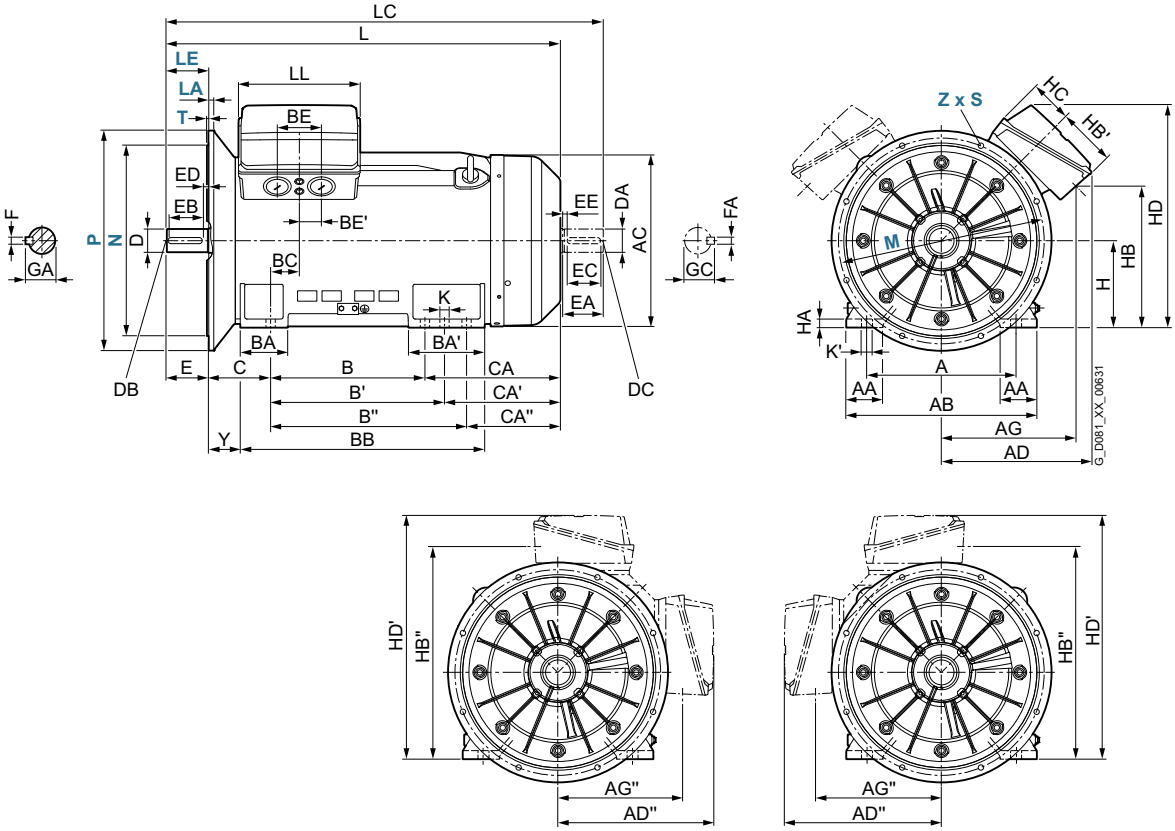
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



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Dimensional drawings

For motor		Dimension designation acc. to **IEC**																											
Frame size	Motor type 1LE5.0.-	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 L	3AA6	2	508	120	**610**	641	**590**	565	540	553	459	434	890	457	508	–	176	227	648	139	120	60	216	469	418	–	**315**	50	412
	3AB6	4														–										–			
	3AA7	2												508	560	630		298	770					498	446	376			
	3AB7	4																						528	476	406			
	3AC7	6					**542**			491	473	448									135	67.5							491
	3AC8	6					**590**			553	459	434									120	60		618	566	496			412
	3AD7	8					**543**			491	473	448									135	67.5		528	476	406			491
	3AD8	8																						618	566	496			
355 L	3BA3, 3BA4, 3BA5	2	610	150	**780**	718	**620**	657	644	550	542	530	940	630	710	800	198	315	998	116	240	120	254	553	473	383	**355**	49	574
	3BB., 3BC., 3BD.	4, 6, 8															194	311										35	

For motor		Dimension designation acc. to **IEC**														DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE5.0.-	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 L	3AA6	2	336	749	167	800	855	355	146	28	35	**1282**	1427	327	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB6	4										**1312**	1457		85		170	140	25	22	90	70					20	74.5
	3AA7	2										**1362**	1507		65		140	125	10	18	69	60					18	64
	3AB7	4										**1422**	1567		85		170	140	25	22	90	70					20	74.5
	3AC7	6	225	763																									
	3AC8	6	336	749								**1512**	1657																
	3AD7	8	225	763								**1422**	1567																
	3AD8	8										**1512**	1657																
355 L	3BA3, 3BA4, 3BA5	2	247	885	188	911	999	370	130	35	42	**1577**	1722	519	75	M20	140	125	10	20	79.5	60	M20	140	125	10	18	64
	3BB., 3BC., 3BD.	4, 6, 8										**1607**	1782		95	M24	170	140	25	25	100	80		170	140	25	22	85.5

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IE4, IE3 – self-ventilated · Frame sizes 315 L to 450

Dimensional drawings

For motor		Dimension designation acc. to **IEC**																										
Frame size	Motor type 1LE5.3.-	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 L	3AC6	2	508	120	**610**	624	**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55	216	524	473	–	**315**	50	–
	3AC7						**541**	565	539	493	480	448	890	508	560	630	176	298	770	139	135	67.5		528	476	406			491
	3AD6	8					**539**	–	–	374	–	–	–	457	508	–	177	227	648	22	110	55		374	323	–			–
	3AA6	2	508	120	**610**	641	**590**	565	540	553	459	434	890	457	508	–	176	227	648	139	120	60	216	469	418	–	**315**	50	412
	3AB6, 3AB7	4												508	560	630		298	770					528	476	406			
	3AA7	2																						498	446	376			
	3AC8	6																						618	566	496			
	3AC7, 3AD7	6					**543**			491	473	448									135	67.5		528	476	406			491
	3AD8	8																						618	566	496			
355 L	3BA3, 3BA4, 3BA5	2	610	150	**780**	718	**620**	657	644	550	542	530	940	630	710	800	198	315	998	116	240	120	254	553	473	383	**355**	49	574
	3BB., 3BC., 3BD.	4, 6, 8															194	311										35	
400	4AA	2	710	150	**860**	880	**785**	845	740	705	720	620	1110	900	–	–	220	220	1080	186	87.5	43.5	224	501	–	–	**400**	35	420
	4AB, 4AC, 4AD	4, 6, 8																											
450	4BA	2	800	180	**980**	970	**820**	895	775	740	770	655	1235	1000	–	–	260	260	1220	170	87.5	43.5	250	535	–	–	**450**	42	505
	4BB, 4BC, 4BD	4, 6, 8																											

4

For motor		Dimension designation acc. to **IEC**														DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE5.3.-	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 L	3AC6	6						238	146	28	35	**1357**	1502		80		170	140	25	22	85	70					20	74,5
	3AC7	6	225	763	167	800	855	355				**1422**	1567	327	85						90							
	3AD6	8	–	–	–	–	–	238				**1217**	1362	299	80						85							
	3AA6	2	336	749	167	800	855	355	146	28	35	**1282**	1427	327	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB6, 3AB7	4										**1422**	1567		85		170	140	25	22	90	70					20	74.5
	3AA7	2										**1362**	1507		65		140	125	10	18	69	60					18	64
	3AC8	6										**1512**	1657		85		170	140	25	22	90	70					20	74.5
	3AC7, 3AD7	6, 8	225	763								**1422**	1567															
	3AD8	8										**1512**	1657															
355 L	3BA3, 3BA4, 3BA5	2	247	885	188	911	999	370	130	35	42	**1577**	1722	519	75	M20	140	125	10	20	79.5	60	M20	140	125	10	18	64
	3BB., 3BC., 3BD.	4, 6, 8										**1607**	1782		95	M24	170	140	25	25	100	80		170	140	25	22	85.5
400	4AA	2	400	1020	190	980	1140	410	134	35	42	**1795**	1940	519	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5
	4AB, 4AC, 4AD	4, 6, 8										**1835**	2010		110	M24	210	180		28	116	90	M24	170	140	25	25	95
450	4BA	2	400	1105	190	1065	1225	420	140	42	50	**1955**	2100	519	90	M24	170	140	25	25	95	75	M20	140	125	10	20	79.5
	4BB, 4BC, 4BD	4, 6, 8										**1995**	2210		120		210	180		32	127	100	M24	210	180	25	28	106

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Dimensional drawings

For motor		Dimension designation acc. to **IEC**																												
Frame size	Motor type 1LE5584-	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 L	3AC7	6	508	120	**610**	624	**541**	–	–	493		–	–	508	560	–	176	298	770	139	135	675	216	528	476	406	**315**	50	491

For motor		Dimension designation acc. to **IEC**													DE shaft extension							NDE shaft extension					
Frame size	Motor type 1LE5584-	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 L	3AC7	6	225	763	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

For motor		Dimension designation acc. to **IEC**																												
Frame size	Motor type 1LE5583-	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 L	3AA6	2	508	120	**610**	641	**590**	565	540	553	459	434	890	457	508	-	176	227	648	139	120	60	216	469	418	-	**315**	50	412
	3AB6	4												508	560	630		298	770					498	446	376			
	3AA7	2																						528	476	406			
	3AB8	4																											
	3AC7	6					**543**			491	473	448									135	67.5							491
	3AC8	6					**590**			553	459	434									120	60		618	566	496			412
355 L	3BA.	2	610	150	**780**	718	**620**	657	644	550	542	530	940	630	710	800	198	315	998	116	240	120	254	553	473	383	**355**	49	574
	3BB3, 3BB4	4															194	311										35	
	3BB5	4																							568	478			
	3BC2, 3BC3	6																							473	383			
	3BC4	6																						648	568	478			
400	4AA	2	710	150	**860**	880	**785**	845	740	705	720	620	1110	900	–	–	220	220	1080	186	87.5	43.5	224	501	–	–	**400**	35	420
	4AB	4																											
	4AC, 4AD	6, 8																											
450	4BA	2	800	180	**980**	970	**820**	895	775	740	770	655	1235	1000	–	–	260	260	1220	170	87.5	43.5	250	535	–	–	**450**	42	505
	4BB	4																											
	4BC, 4BD	6, 8																											

For motor		Dimension designation acc. to **IEC**													DE shaft extension							NDE shaft extension					
Frame size	Motor type 1LE5583-	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 L	3AA6	2	336	749	167	800	855	355	146	28	35	**1282**	1427	327	65	M20	140	125	10	18	69	60	M20	140	125	10	18	64
	3AB6	4										**1362**	1507															
	3AA7	2										**1422**	1567		85		170	140	25	22	90	70					20	74.5
	3AB8	4										**1512**	1657															
	3AC7	6	225	763								**1422**	1567															
	3AC8	6	336	749								**1512**	1657															
355 L	3BA.	2	247	247	188	911	999	370	130	35	42	**1577**	1722	519	75	M20	140	125	10	20	79.5	60	M20	140	125	10	18	64
	3BB3, 3BB4	4										**1607**	1782		95	M24	170	140	25	25	100	80		170	140	25	22	85.5
	3BB5	4										**1702**	1877															
	3BC2, 3BC3	6										**1607**	1782															
	3BC4	6										**1702**	1877															
400	4AA	2	400	1020	190	980	1140	410	134	35	42	**1795**	1940	519	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5
	4AB	4										**1835**	2010		110	M24	210	180		28	116	90	M24	170	140	25	25	95
	4AC, 4AD	6																										
450	4BA	2	400	1105	190	1065	1225	420	140	42	50	**1955**	2100	519	90	M24	170	140	25	25	95	75	M20	140	125	10	20	79.5
	4BB	4										**1995**	2210		120		210	180		32	127	100	M24	210	180	25	28	106
	4BC, 4BD	6																										

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Overview

Innomotics GP/SD VSD motors optimized for converter operation *(VSD = **V**ariable **S**peed **D**rive)*

In addition to the standard motors optimized for line operation, Innomotics also offers two motor lines optimized for converters for variable-speed operation on a frequency converter:

- Innomotics VSD10 line – induction motors for converter operation
- Innomotics VSD4000 line – reluctance motors for operation with SINAMICS G120/S120 converters

The motors are optionally available with an aluminum housing (Innomotics GP) or with a rugged cast-iron housing (Innomotics SD).

Innomotics VSD motors are characterized by the following features:

- High energy efficiency:
  Because the Innomotics VSD motors are optimized for operation with SINAMICS converters, the system power losses are low and the energy efficiency therefore high.
  In particular, the Innomotics VSD4000 line synchronous reluctance motors in conjunction with optimized control algorithms result in excellent loss-optimized operation in the speed setting range with a full and partial load, and are superior to an induction motor system that has comparable nominal efficiency, especially in the partial-load range.
- Optimized investment costs:
  The optimized motor active part/power module allocation results in low capital investment costs. The motors and frequency converters are optimally harmonized and coordinated with one another. No power unit upgrade is therefore required. This applies in particular to the Innomotics VSD10 line motors on account of their optimized motor design.
- Low space requirement, low weight:
  The high power density and compact design ensure low space requirements combined with low weight.
- Very rugged and reliable:
  High availability using the standard protection functions for converter operation (KTY84-130 temperature sensors).
  As a result of the optimized insulation system, a high degree of reliability is obtained for four-quadrant operation with SINAMICS converters. Innomotics VSD10 motors also have insulated bearings at the non-drive end (NDE) in frame sizes 280 and 315.
- Fast and simple commissioning by transferring a motor code on the frequency converter.
- Flexible in use:
  Innomotics VSD line motors are designed as standard for operation with a 50 Hz, 60 Hz and 87 Hz characteristic.
- Wide range of options:
  By consistently utilizing the 1LE1 standard motor platform, almost all options of the 1LE1 line motors can also be used for the Innomotics VSD line motors.
- High level of compatibility:
  Line and converter motors can be easily interchanged due to their identical dimensions and customer interfaces. The connection and operating philosophy is exactly the same as for 1LE1 line motors.
- International applicability:
  The motors are not subject to any minimum efficiency requirements for specific countries.

Application

The Innomotics GP/SD VSD motors can be deployed in all industries and sectors, e.g. paper, steel, energy, chemistry, water/waste water.

The wide field of applications that can be addressed includes, for example, the following:

- Pumps
- Fans
- Compressors
- Cranes
- Conveyor belts

Design

The Innomotics GP/SD VSD motors are based on the platform of the Innomotics 1LE1 motor type series. For this reason, the principal design is the same as for the 1LE1 line motors – the mechanical parts are identical.
The motors are adapted to the converter by appropriately dimensioning the active part and VSD-specific rating plate data.

Moreover, a large number of the variations available in the Innomotics 1LE1 motors (types of construction, motor protection, terminal box position, and options) are also available for the VSD motors.

Innomotics VSD4000 line	Innomotics VSD10 line
Use in VSD applications with high dynamic requirements	Use in VSD applications
Focus on low operating costs	Focus on low investment costs
Very low system power losses due to the reluctance principle and optimum coordination of the motor with the converter	Low system power losses due to optimum coordination of the motor with the converter
Optimized for operation with SINAMICS G120 and S120	Optimized for use with SINAMICS G120, G130, G150
36 month warranty	• 12 month warranty for Innomotics GP • 24 month warranty for Innomotics SD (optionally expandable)

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Technical specifications

Brief overview of the general technical specifications for Innomotics VSD4000 line reluctance motors

Air-cooled, enclosed version with self-ventilation [1]	
Operation	Converter operation – VSD
Power at 50 Hz [2]	0.55 … 45 kW
Rated speed	1500 rpm, 1800 rpm and 2610 rpm 3000 rpm, 3600 rpm
Voltages	50 Hz line supplies: 400 V 60 Hz line supplies: 460 V
Cooling method	IC411, self-ventilated
Frame size	Innomotics GP: 80/112 … 200 Innomotics SD: 80/112 … 225
Degree of protection [3]	IP55
Housing	Aluminum or cast-iron version
Load characteristic	$T \sim n^2$, T = const.
Motor type	Innomotics GP: 1FP10.4 Innomotics SD: 1FP15.4

Brief overview of the general technical specifications for Innomotics VSD10 line standard motors for converter operation

Air-cooled, enclosed version with self-ventilation [1]	
Operation	Converter operation – VSD
Power at 50 Hz	2.2 ... 200 kW (1500 rpm) 3 ... 90 kW (3000 rpm)
Rated speed	1500 rpm, 1800 rpm and 2610 rpm [4] 3000 rpm, 3600 rpm and 5220 rpm [4]
Voltages	50 Hz line supplies: 400 V, 500 V, 690 V 60 Hz line supplies: 460 V, 600 V
Cooling method	IC411, self-ventilated
Frame size	Innomotics GP: 100 … 160 Innomotics SD: 100 … 315
Degree of protection [3]	IP55
Housing	Aluminum or cast-iron version
Load characteristic	$T \sim n^2$, T = const.
Motor type	Innomotics GP: 1LE1092 Innomotics SD: 1LE1592

[1] Forced ventilation optionally available.
[2] Rated speed 1500 rpm.
[3] Other degrees of protection optionally available.
[4] 87 Hz characteristic not available for all frame sizes.

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Overview

Innomotics GP/SD VSD10 line motor series: 1LE109, 1LE159

Innomotics GP/SD VSD10 line motors are suitable for all sectors of industry as a result of their flexibility and the wide range of versions available.

Versions of the
Innomotics GP/SD VSD10 line motor series: 1LE109, 1LE159

The motors are squirrel-cage induction motors with compact dimensions in a surface-cooled, enclosed version with self-ventilation. They have been specifically designed for converter operation.

1LE109 General Purpose for converter operation

- Four-quadrant operation with a converter, optimally coordinated to the SINAMICS G drive system. Can be operated with SINAMICS S (ALM, SLM) in four-quadrant operation.
- IP55 degree of protection
- IC411 cooling method, self-ventilated
  (IC416 cooling method, force-ventilated version optional)
- Housing: Aluminum
- Frame sizes 100 to 160

1LE159 Severe Duty for converter operation

- Four-quadrant operation with a converter, optimally coordinated to the SINAMICS G drive system. Can be operated with SINAMICS S (ALM, SLM) in four-quadrant operation.
- IP55 degree of protection
- IC411 cooling method, self-ventilated
  (IC416 cooling method, force-ventilated version optional)
- Housing: Cast iron
- Frame sizes 100 to 315

Benefits

The Innomotics GP/SD VSD10 line motor series has been specifically developed for operation with SINAMICS G converters.

- Optimizing the assignment of the motor active part to the Power Module results in low capital investment costs.
- The high power density and compact design ensure low space requirements combined with low weight.
- An optimally harmonized drive system is created as the motor is optimally coordinated and harmonized with the converter. For instance, the converter does not have to be derated or there is low temperature rise.
- Optionally, Innomotics GP motors with an aluminum housing (frame sizes 100 to 160) or Innomotics SD motors with a rugged cast-iron housing (frame sizes 100 to 315) are available.
- High degree of availability based on standard protection functions for converter operation – KTY 84-130 temperature sensors, Pt1000 resistance thermometers (all frame sizes) and NDE insulated bearings (frame sizes 280 and 315).
- As a result of the optimized insulation system, a high degree of reliability is obtained for four-quadrant operation with SINAMICS converters.
- Fast and simple commissioning by transferring a motor code into the converter.

More power ratings

Innomotics GP/SD VSD10 line motors are designed as standard for operation with a 50 Hz, 60 Hz, and 87 Hz characteristic (up to frame size 200). No special ordering option is required.

Optimized for converter operation

The new motor series has been optimized for operation with SINAMICS G120, G130, and G150 converters with regard to converter output currents and voltage utilization. Four-quadrant operation is possible without restrictions with the SINAMICS G120 and SINAMICS S120 converter families. The motors can also be operated on other SINAMICS converters
(SINAMICS G120P, SINAMICS G120C, SINAMICS G120D).

High degree of flexibility

By consistently utilizing the 1LE1 standard motor platform, almost all options of the 1LE1 line motors can also be used for the Innomotics GP/SD VSD10 line series.

Known and established design

Line and converter motors can be easily interchanged due to their identical dimensions and customer interfaces. The connection and operating philosophy is exactly the same as for 1LE1 line motors.

International applications

The motors are not subject to any minimum efficiency requirements for specific countries. As a consequence, they can be operated without additional MEPS certificates, also in the USA, for example.

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Application

As a result of the wide range of options, the Innomotics GP/SD VSD10 line motor series can be deployed in all industrial areas and sectors. Paper, steel, energy, chemical, water/waste water are examples of some typical sectors.

Various flange and foot-mounted designs according to EN 60034-7 are available. IP55 is the standard degree of protection (other degrees of protection optionally available).

The wide field of applications that can be addressed includes, for example, the following:

- Pumps
- Fans
- Compressors
- Cranes
- Conveyor belts

Design

The Innomotics GP/SD VSD10 line motors are based on the 1LE1 platform. The principle design of the Innomotics GP/SD VSD10 line motors therefore corresponds to the 1LE1 line motors.

The mechanical parts are identical. The motors are adapted to the converter by appropriately dimensioning the active part and VSD-specific rating plate data.

Technical specifications

Overview of technical specifications

This table lists the most important technical specifications.

Type of motor	Innomotics GP/SD VSD10 line IEC Low-Voltage Motors; three-phase induction motors
Connection types	Star/delta connection The connection used depends on the particular load characteristic.
No. of poles	2, 4
Frame sizes	100 ... 315
Rated power	• 2-pole: 3 … 90 kW (50 Hz characteristic); 3.45 … 101 kW (60 Hz characteristic), 4.5 … 12.5 kW (87 Hz characteristic) • 4-pole: 2.2 … 200 kW (50 Hz characteristic); 2.55 … 230 kW (60 Hz characteristic), 3.7 … 48 kW (87 Hz characteristic)
Frequencies	Characteristics for 50 Hz, 60 Hz and 87 Hz
Versions	Air-cooled, enclosed version: • with self ventilation • with forced ventilation (optional) Innomotics GP motors in an aluminum version, frame sizes 100 … 160 Innomotics SD motors in a cast-iron version, frame sizes 100 … 315
Marking	Only permitted for converter operation. As converter motors, IE classification according to IEC 60034-30-1 is not required.
Rated speed	• 1500 rpm, 1800 rpm (up to frame size 315), and 2610 rpm (up to frame size 200) • 3000 rpm, 3600 rpm (up to frame size 280), and 5220 rpm (up to frame size 112)
Rated torque	9.6 … 1273 Nm (50 Hz characteristic); 9.2 … 1220 Nm (60 Hz characteristic), 8.2 … 176 Nm (87 Hz characteristic)
Insulation of the stator winding in accordance with EN 60034-1 (IEC 60034-1)	Temperature class F Reinforced insulation system (Advanced) up to 440 V motor connection voltage Special insulation system (Premium) up to 480 V motor connection voltage
Degree of protection acc. to EN 60034-5 (IEC 60034-5)	Standard IP55 optionally IP56 and IP65 Air-cooled, enclosed version
Cooling acc. to EN 60034-6 (IEC 60034-6)	• Standard: Self-ventilated (IC411) • Optional: Forced-air cooled (IC416)
Permissible coolant temperature and installation altitude	–20 ... +40 °C as standard, installation altitude up to 1000 m above sea level
Standard voltages acc. to EN 60038 (IEC 60038)	50 Hz line supplies: 400 V, 500 V, 690 V 60 Hz line supplies: 460 V, 600 V The rated motor voltage required is listed in the "Selection and ordering data" for the required motor.
Type of construction acc. to EN 60034-7 (IEC 60034-7)	• Without flange: IM B3, IM B6, IM B7, IM B8, IM V5, IM V6 • With flange: IM B5, IM B35, IM V1, IM V3
Paint finish Suitability of paint finish for climate group acc. to IEC 60721, Part 2-1	As standard: color RAL 7030 stone gray
Vibration severity grade acc. to EN 60034-14 (IEC 60034-14)	Grade A (normal)
Shaft extension acc. to DIN 748 (IEC 60072)	Balancing type: half-key balancing as standard
Sound pressure level acc. 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	Optional pulse encoder, brake, and separately driven fan according to ordering data
Options	See "Article No. supplements and special versions"

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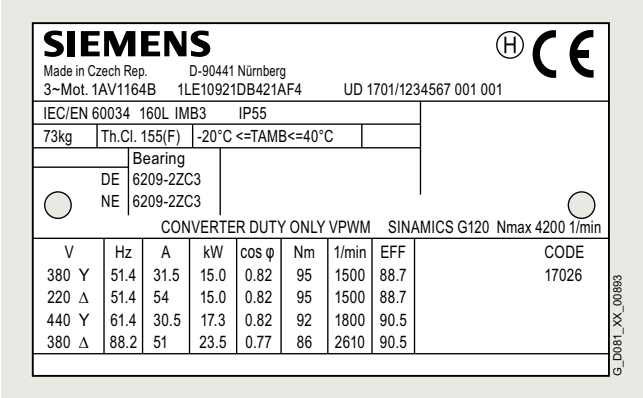
Technical specifications

Rating plate

In accordance with EN 60034-1, the approximate total weight is specified on the rating plate. The standard version of the rating plate is the international version in English.

For straightforward and fast commissioning with SINAMICS G converters, a motor code number is stamped on the rating plate (CODE). The rated frequencies deviate, depending on the slip, from 50 Hz, 60 Hz, and 87 Hz.



Example of a rating plate for Innomotics GP VSD10 line

Motors specially designed for converter operation

These motors have been specifically designed for converter operation. The catalog data apply for operation with Siemens SINAMICS G and SINAMICS S converters.

When operated with an alternative converter, the catalog data apply (thermal torque limits, maximum overload torques), approximately for the following general conditions:

- Minimum rated pulse frequencies:
  - 4 kHz at 400 V, up to 90 kW
  - 2 kHz at 500 V to 690 V, up to 132 kW
  - 1.25 kHz at 500 V to 690 V, 160 and 200 kW
- The converter can provide the rated voltage as listed in the catalog.
- Permissible voltage peaks for reinforced insulation system (Advanced):
  $\hat{U}_{\text{phase-to-phase}} \leq 1600$ V, $\hat{U}_{\text{phase-to-ground}} \leq 1400$ V, $t_s > 0.1$ µs
- Permissible voltage peaks for special insulation system (Premium):
  $\hat{U}_{\text{phase-to-phase}} \leq 2200$ V, $\hat{U}_{\text{phase-to-ground}} \leq 1500$ V, $t_s > 0.1$ µs

For SINAMICS G120 converters (from firmware version 4.7 and higher), the Innomotics GP/SD VSD10 line can be selected as the motor category and addressed using the motor code No. in the SINAMICS converter using the STARTER software or at the converter operator panel (Advanced Operator Panel (AOP), Basic Operator Panel (BOP)).

Rated voltage

The tolerance for the rated voltage is in accordance with EN 60034-1. A rated voltage range is not specified. The rated motor voltages are selected so that when operated with a SINAMICS G120 converter, the available voltage is optimally utilized.

Insulation

The motors can be operated with line voltages up to 690 V 3 AC with SINAMICS G converters and SINAMICS S converters (uncontrolled and controlled infeed) when maintaining the permissible peak voltages specified above.

Depending on the selected motor connection voltage, a special insulation system is used for converter operation.

- Up to 440 V motor voltage (480 V line voltage) reinforced insulation system (Advanced)
- From 480 V motor voltage (500 V line voltage) special insulation system (Premium)

For converter operation with the power ratings specified in the catalog, the motors can be utilized corresponding to thermal class 155 (F) (service factor 1.0).

Preferred supply system configurations are TT systems and TN systems with neutral-point grounding. In the case of a fault when connected to an IT system (ground fault), the insulation is excessively stressed. In this case, the process should be terminated as quickly as possible ($t < 2$ h), and the fault resolved. We do not recommend operation in corner-grounded TN systems.

Noise

The maximum sound pressure levels should be taken from the selection and ordering data.

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Technical specifications

Separately driven fan

For the technical specifications of the separately driven fans, see page 1/85 "Technical specifications of separately driven fans".

Bearings

To prevent bearing current damage, converter motors are equipped with insulated bearing cartridges at the NDE, available as standard for frame sizes 280 and 315.

Insulated NDE bearings are optionally available for frame sizes 100 to 250. We recommend their use depending on the particular plant or system.

For converter operation, as a result of the basic principle employed, electrical bearing stress is created through the bearing lubricant film due to a voltage that is capacitively coupled in.

The physical cause of this is the common-mode voltage at the converter output that is inherent in the control method for a converter:
The sum of the three phase voltages is – in contrast to pure line operation – not equal to zero at every point in time.

In order to apply currents to the motor which are sinusoidal as far as possible (resulting in smoother running, lower oscillation torques, and lower stray losses), a high pulse frequency is required for the converter's output voltage. The related (very steep) switching edges of the converter output voltage (and also, therefore, of the common-mode voltage) cause correspondingly high capacitive currents and voltages on the machine's internal capacitances.

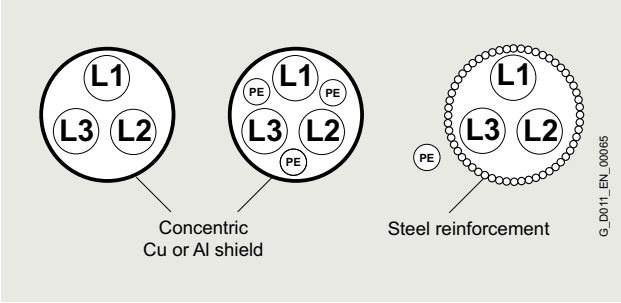
In the worst-case scenario, the capacitive voltage induced via the bearing can lead to random arcing through the bearing lubricating film, thus causing premature bearing aging or damage.

This physical effect, which occurs in isolated cases, has mostly been observed in connection with larger motors.

EMC-compliant installation of the drive system is a basic prerequisite for preventing premature bearing damage via bearing currents.

The most important measures for reducing bearing currents are:

- Insulated motor bearing at the NDE.
- Use cables with a symmetrical cable cross-section:



- Preference given to a line supply with isolated neutral point (IT system).
- Using grounding cables with low impedance over a wide frequency range (DC up to approximately 70 MHz):
for example, braided copper ribbon cables, HF finely stranded wires.
- Separate HF equipotential-bonding cable between motor housing and driven machine.
- Separate HF equipotential-bonding cable between motor housing and converter PE busbar.
- 360° HF contacting of the cable shield on the motor housing and the converter PE busbar. This can be achieved using EMC screwed glands on the motor side and EMC shield clips on the converter side, for example.

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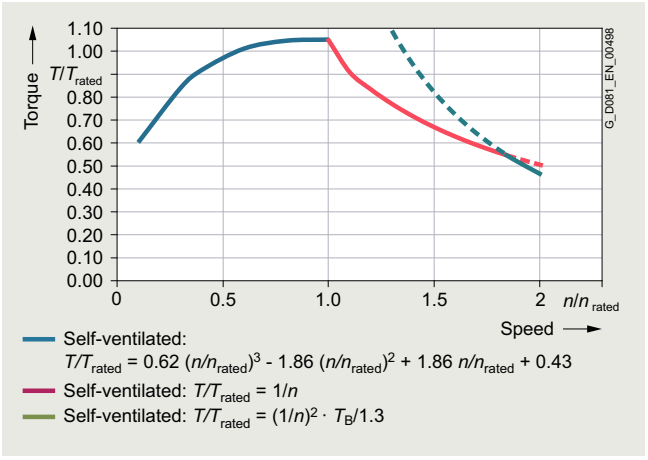
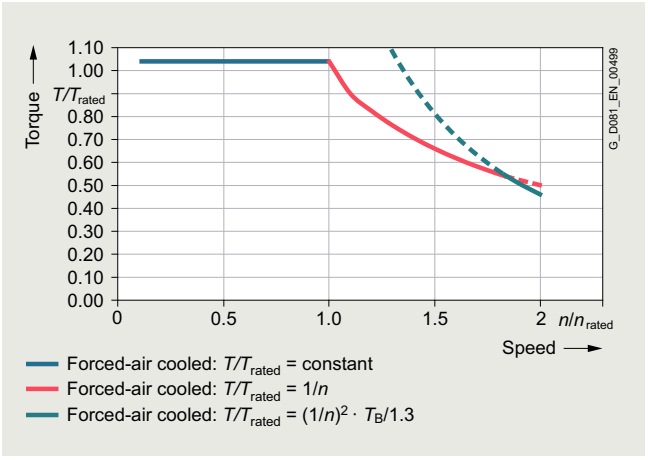
Technical specifications

Torque limits (continuous duty)

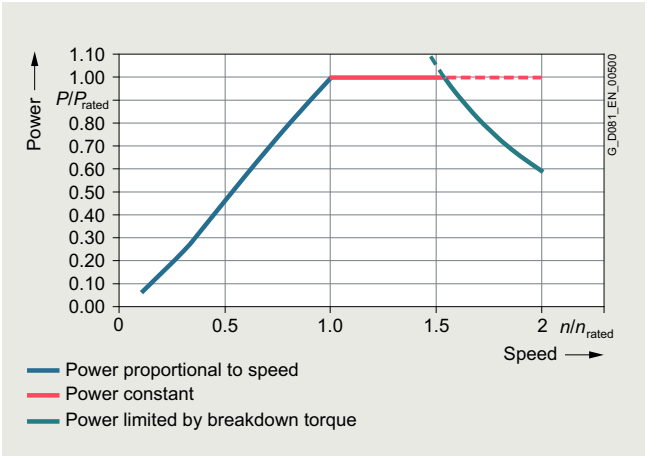
The thermal torque limit characteristics of the Innomotics GP/SD VSD10 line define the maximum load torque for uninterrupted duty (S1) over the complete speed control range. The characteristics are different for all of the cooling methods. The speed control range is limited by the mechanical speed limit, which depends on the motor's mechanical design.



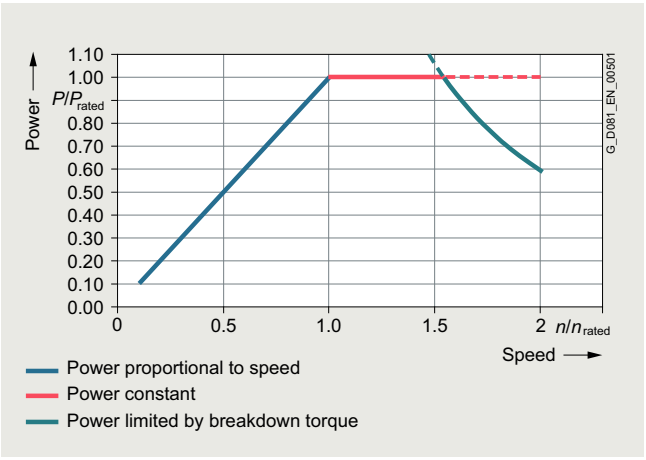
Torque limit characteristic for Innomotics GP/SD VSD10 line, self-ventilated



Torque limit characteristic for Innomotics GP/SD VSD10 line, forced-air cooled



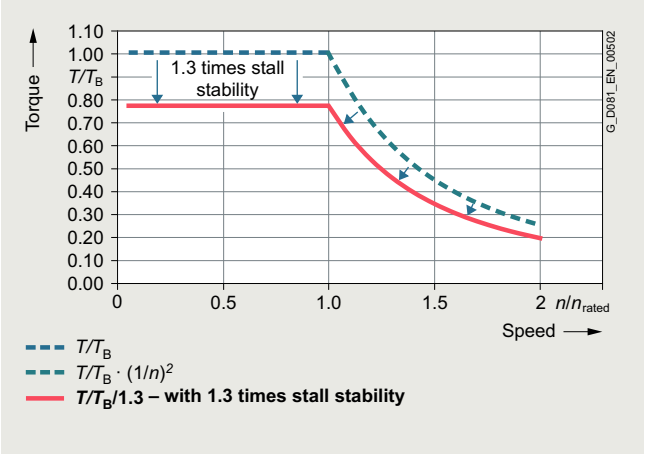
Power limit for Innomotics GP/SD VSD10 line, self-ventilated



Power limit for Innomotics GP/SD VSD10 line, forced-air cooled

Maximum overload torques

The maximum overload torque output from the motor is defined by the overload torque characteristic over the complete speed control range. The reference variable is the breakdown torque at rated speed. The breakdown torque is calculated from the breakdown torque ratio and the rated torque. Operation at the maximum overload torque is only briefly permissible, for instance, when accelerating. The speed control range is limited by the mechanical speed limit, which depends on the motor's mechanical design.



Overload torque characteristic for Innomotics GP/SD VSD10 line

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Technical specifications

Additional information

Mechanical stress and grease lifetime

When motors are operated at speeds above the rated speed, the mechanical smooth running operation and the bearings are subjected to greater mechanical stress. This reduces the grease lifetime and the bearing lifetime.

Above 100 Hz, the motors must be balanced for twice the rated frequency.

Motor protection

A motor protection function can be implemented using the I^2t sensing function implemented in the converter software. If required, more precise motor protection can be afforded by direct temperature measurement using KTY84 sensors, PTC thermistors, or Pt100/1000 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. When ordering PTC thermistors, Pt100 resistance thermistors or other temperature sensors to monitor the cooling temperature, the KTY84 sensors, otherwise provided as standard, are omitted. As described above, KTY84 sensors are evaluated in the SINAMICS converters.

Motor connection

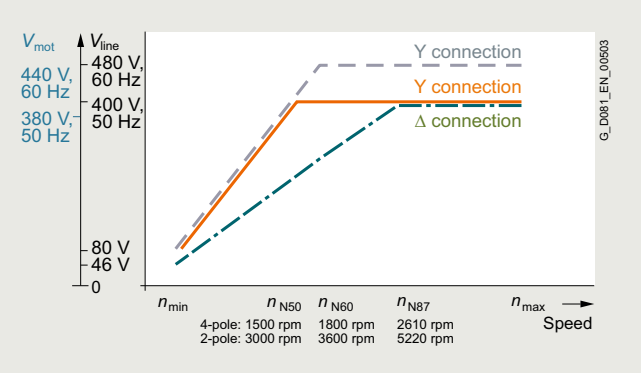
When connecting the motors, it is important to consider the restrictions for 1LE1 line motors as well as the maximum conductor cross-sections permitted for the converter.

Operating data for 50 Hz/60 Hz/87 Hz characteristics

Innomotics GP/SD VSD10 line motors are designed for operation with 50 Hz, 60 Hz and 87 Hz characteristics (87 Hz characteristic up to frame size 200).

Operation with the 50/60 Hz characteristic requires Y (star or wye) connection; operation with the 87 Hz characteristic requires Δ connection.

The corresponding power data are stamped on the rating plate as standard. An ordering option is not required.



Operating characteristics of Innomotics GP/SD VSD10 line motors

Maximum operating speed

The maximum operating speed is limited by the mechanical speed limit of the motors as well as the available converter output frequency.

A significant increase in the sound pressure level can be expected when operating the motor above its rated speed (field weakening range).

Mechanical speed limits Innomotics GP/SD VSD10 line:

Frame size	Mechanical speed limits for 1LE1.92 motors	
	2-pole	4-pole
	n_{max} rpm	n_{max} rpm
100	5500	4200
112	5500	4200
132	4500	4200
160	4500	4200
180	4500	4200
200	4500	4200
225	4500	4500
250	3900	3700
280	3600	3000
315	–	2600

International use:

As special converter motors, Innomotics GP/SD VSD10 line motors are presently not subject to any minimum efficiency requirements in the EU and USA/Canada. However, other national certificates may be required (e.g. CSA-S safety in Canada).

Therefore, for use in USA, Canada and Mexico, we recommend:

Ordering with order code **D39** (version according to UL and CSA-S).

Note:

At the present time, national Chinese regulations regarding converter motors are being revised. A conclusive interpretation relating to the design still cannot be made. As a consequence, until further notice, for China we recommend that line motors suitable for converter operation are used with CEL (China Energy Label) (e.g. 1LE100. with order code **D34**).

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Technical specifications

Load characteristics for the line supply voltage: 400 V 3 AC, 50 Hz

Rated speed 3000 rpm

Load characteristic $T \sim n^2$	T = const. Speed control range from 1500 rpm 1 : 2	from 750 rpm 1 : 4	from 300 rpm 1 : 10	Innomotics GP/SD VSD10 line motors	SINAMICS G120 converters
P_{max}	P_{max}	P_{max}	P_{max}		
kW	kW	kW	kW	Motor type	Converter type
3	1.47	0.63	0.21	1LE1.92-1AA42-1...	6SL3210-1PE18-0.L1
4	1.97	0.84	0.27	1LE1.92-1BA22-1...	6SL3210-1PE21-1.L0
5.5	2.69	1.17	0.39	1LE1.92-1CA02-1...	6SL3210-1PE21-4.L0
7.5	3.64	1.59	0.54	1LE1.92-1CA12-1...	6SL3210-1PE21-8.L0
11	5.38	2.34	0.79	1LE1.92-1DA22-1...	6SL3210-1PE22-7.L0
15	7.33	3.19	1.08	1LE1.92-1DA32-1...	6SL3210-1PE23-3.L0
18.5	9.05	3.93	1.32	1LE1.92-1DA42-1...	6SL3210-1PE23-8.L0
22	10.77	4.69	1.59	1LE1592-1EA22-1...	6SL3210-1PE24-5.L0
30	14.64	6.37	2.13	1LE1592-2AA42-1...	6SL3210-1PE26-0.L0
37	18.08	7.86	2.66	1LE1592-2AA52-1...	6SL3210-1PE27-5.L0
45	21.99	9.54	3.21	1LE1592-2BA22-1...	6SL3210-1PE28-8.L0
55	26.86	11.65	3.91	1LE1592-2CA22-1...	6SL3210-1PE31-1.L0
75	36.63	15.85	5.33	1LE1592-2DA02-1...	6SL3210-1PE31-5.L0
90	43.91	19.00	6.38	1LE1592-2DA22-1...	6SL3210-1PE31-8.L0

Rated speed 1500 rpm

Load characteristic $T \sim n^2$	T = const. Speed control range from 750 rpm 1:2	from 375 rpm 1:4	from 150 rpm 1:10	Innomotics GP/SD VSD10 line motors	SINAMICS converters
P_{max}	P_{max}	P_{max}	P_{max}		
kW	kW	kW	kW	Motor type	Converter type
2.2	1.06	0.43	0.13	1LE1.92-1AB42-1...	6SL3210-1PE16-1.L1
3	1.45	0.59	0.18	1LE1.92-1AB52-1...	6SL3210-1PE18-0.L1
4	1.93	0.78	0.24	1LE1.92-1BB22-1...	6SL3210-1PE21-1.L0
5.5	2.65	1.07	0.33	1LE1.92-1CB02-1...	6SL3210-1PE21-4.L0
7.5	3.60	1.45	0.45	1LE1.92-1CB22-1...	6SL3210-1PE21-8.L0
11	5.31	2.14	0.66	1LE1.92-1DB22-1...	6SL3210-1PE22-7.L0
15	7.20	2.91	0.90	1LE1.92-1DB42-1...	6SL3210-1PE23-3.L0
18.5	8.94	3.61	1.11	1LE1592-1EB22-1...	6SL3210-1PE23-8.L0
22	10.61	4.29	1.32	1LE1592-1EB42-1...	6SL3210-1PE24-5.L0
30	14.48	5.85	1.80	1LE1592-2AB52-1...	6SL3210-1PE26-0.L0
37	17.89	7.23	2.22	1LE1592-2BB02-1...	6SL3210-1PE27-5.L0
45	21.68	8.76	2.70	1LE1592-2BB22-1...	6SL3210-1PE28-8.L0
55	26.53	10.72	3.30	1LE1592-2CB22-1...	6SL3210-1PE31-1.L0
75	36.15	14.61	4.50	1LE1592-2DB02-1...	6SL3210-1PE31-5.L0
90	43.43	17.55	5.40	1LE1592-2DB22-1...	6SL3210-1PE31-8.L0
106	53.05	21.44	6.60	1LE1592-3AB02-1...	6SL3210-1PE32-1.L0
130	63.66	25.73	7.92	1LE1592-3AB22-1...	6SL3210-1PE32-5.L0
160	77.23	31.21	9.60	1LE1592-3AB42-1...	6SL3224-0XE41-3.A0
200	96.48	38.99	12.00	1LE1592-3AB52-1...	6SL3224-0XE41-6.A0

Note:

The converter recommendation applies to standard ambient conditions (40 °C; 1000 m above sea level).

If, as a result of different ambient conditions, the rated motor power is significantly reduced, under certain circumstances, another converter is the optimum solution. Here, please use the configuration options for converters in the Siemens Product Configurator.

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Technical specifications

Innomotics GP/SD VSD10 line standard motors for converter operation with converter SINAMICS G120 Power Modules PM240-2

Rated power	Innomotics GP/SD VSD10 1LE109/1LE159	Frame size	SINAMICS G120 Power Module PM240-2	Pulse frequency	Frame size	System power loss, relative $P_{V,rel}$ as a % referred to P_{rated} Operating points at partial load [1]							at rated load [1]	IES class acc. to EN 50598-2
						0/25	0/50	0/100	50/25	50/50	50/100	100/50	100/100	
kW	Type		Type	kHz		%	%	%	%	%	%	%	%	
Line voltage 400 V 3 AC, 50/60 Hz, rated speed 3000 rpm														
3	1LE1.92-1AA42-1...	100 L	6SL3210-1PE18-0.L1	4	FSA	3.433	6.367	17.333	5.4	8.533	21.433	13.567	27.833	IES 1
4	1LE1.92-1BA22-1...	112 M	6SL3210-1PE21-1.L0	4	FSB	3.775	5.8	14.35	5.65	8.025	17.6	13.375	24.45	IES 1
5.5	1LE1.92-1CA02-1...	132 S	6SL3210-1PE21-4.L0	4	FSB	3.109	5.218	13.836	4.109	6.564	16.6	10.309	21.6	IES 1
7.5	1LE1.92-1CA12-1...	132 S	6SL3210-1PE21-8.L0	4	FSB	2.56	4.333	11.587	3.653	5.693	13.84	9.093	18.533	IES 2
11	1LE1.92-1DA22-1...	160 M	6SL3210-1PE22-7.L0	4	FSC	2.664	4.364	11.2	3.973	5.936	13.845	10.255	19.555	IES 1
15	1LE1.92-1DA32-1...	160 M	6SL3210-1PE23-3.L0	4	FSC	1.96	3.68	10.227	3.153	5.04	12.693	8.547	17.4	IES 1
18.5	1LE1592-1DA42-1...	160 L	6SL3210-1PE23-8.L0	4	FSD	2.308	3.649	8.854	3.53	5.022	10.865	8.059	15.07	IES 2
22	1LE1592-1EA22-1...	180 M	6SL3210-1PE24-5.L0	4	FSD	1.695	3.027	8.345	2.586	4.073	9.741	6.482	13.255	IES 2
30	1LE1592-2AA42-1...	200 L	6SL3210-1PE26-0.L0	4	FSD	1.33	2.703	7.327	2.233	3.737	8.88	6.233	12.797	IES 2
37	1LE1592-2AA52-1...	200 L	6SL3210-1PE27-5.L0	4	FSD	1.276	2.3	6.238	2.108	3.276	7.611	5.257	10.678	IES 2
45	1LE1592-2BA22-1...	225 M	6SL3210-1PE28-8.L0	4	FSE	1.127	2.093	5.749	2.044	3.144	7.016	5.538	10.471	IES 2
55	1LE1592-2CA22-1...	250 M	6SL3210-1PE31-1.L0	4	FSE	1.056	1.991	5.467	1.869	2.945	6.771	5.396	10.253	IES 2
75	1LE1592-2DA02-1...	280 S	6SL3210-1PE31-5.L0	4	FSF	1.064	1.847	4.784	2.064	2.971	6.207	5.564	9.799	IES 2
90	1LE1592-2DA22-1...	280 M	6SL3210-1PE31-8.L0	4	FSF	0.932	1.643	4.241	1.696	2.527	5.473	4.523	8.412	IES 2
Line voltage 400 V 3 AC, 50/60 Hz, rated speed 1500 rpm														
2.2	1LE1.92-1AB42-1...	100 L	6SL3210-1PE16-1.L1	4	FSA	5.273	8.273	19.273	6.682	10.364	27.682	14.364	32.091	IES 1
3	1LE1.92-1AB52-1...	100 L	6SL3210-1PE18-0.L1	4	FSA	4.433	7.233	16.4	5.867	9	22.367	12.433	27	IES 1
4	1LE1.92-1BB22-1...	112 M	6SL3210-1PE21-1.L0	4	FSB	4.45	6.9	16.1	5.675	8.425	20.025	11.5	24.3	IES 1
5.5	1LE1.92-1CB02-1...	132 S	6SL3210-1PE21-4.L0	4	FSB	3.618	6	15.618	4.764	7.455	18.818	10.545	23.036	IES 1
7.5	1LE1.92-1CB22-1...	132 M	6SL3210-1PE21-8.L0	4	FSB	3.413	5.24	12.533	4.787	6.84	15.24	10.013	19.733	IES 1
11	1LE1.92-1DB22-1...	160 M	6SL3210-1PE22-7.L0	4	FSC	3.255	4.918	11.445	4.482	6.355	13.936	9.418	18.336	IES 1
15	1LE1.92-1DB42-1...	160 L	6SL3210-1PE23-3.L0	4	FSC	2.94	4.387	10.073	4.013	5.627	12.06	8.14	15.8	IES 2
18.5	1LE1592-1EB22-1...	180 M	6SL3210-1PE23-8.L0	4	FSD	2.205	3.665	9.092	3.465	5.076	11.292	7.514	14.843	IES 2
22	1LE1592-1EB42-1...	180 L	6SL3210-1PE24-5.L0	4	FSD	2.232	3.527	8.5	3.1	4.545	10.145	6.15	12.841	IES 2
30	1LE1592-2AB52-1...	200 L	6SL3210-1PE26-0.L0	4	FSD	1.99	3.167	7.903	2.877	4.197	9.32	6.06	12.26	IES 2
37	1LE1592-2BB02-1...	225 S	6SL3210-1PE27-5.L0	4	FSD	1.53	2.635	6.938	2.551	3.797	8.568	6.051	11.924	IES 2
45	1LE1592-2BB22-1...	225 M	6SL3210-1PE28-8.L0	4	FSE	1.413	2.493	6.644	2.291	3.504	8.053	5.447	10.982	IES 2
55	1LE1592-2CB22-1...	250 M	6SL3210-1PE31-1.L0	4	FSE	1.298	2.427	7.129	2.104	3.36	8.082	5.3	11.051	IES 2
75	1LE1592-2DB02-1...	280 S	6SL3210-1PE31-5.L0	4	FSF	1.317	2.135	5.216	2.441	3.373	6.811	5.909	10.315	IES 2
90	1LE1592-2DB22-1...	280 M	6SL3210-1PE31-8.L0	4	FSF	1.224	2.033	5.132	2.002	2.92	6.357	4.579	8.95	IES 2
106	1LE1592-3AB02-1...	315 S	6SL3210-1PE32-1.L0	2	FSF	1.021	1.711	4.398	1.959	2.765	5.781	4.811	8.863	IES 2
130	1LE1592-3AB22-1...	315 M	6SL3210-1PE32-5.L0	2	FSF	0.947	1.543	3.828	1.754	2.468	5.094	4.256	7.9	IES 2
160	1LE1592-3AB42-1...	315 L	6SL3224-0XE41-3.A0	2	FSGX	1.343	1.981	4.441	2.224	2.974	5.771	4.762	8.614	IES 2
200	1LE1592-3AB52-1...	315 L	6SL3224-0XE41-6.A0	2	FSGX	1.149	1.879	4.737	1.871	2.703	5.838	4.154	8.251	IES 2

[1] Output frequency, rel. [%] referred to the rated speed/
Torque, rel. [%] referred to the rated torque T_{rated}.

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Article number code

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.:
1LE1592-1DB42-1GF4-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		**1**	**L**	**E**	**1**															
5th position: Digit	Innomotics GP – aluminum housing Innomotics SD – cast-iron housing						**0** **5**														
6th position: Digit	VSD10 line motor (motor for converter operation)							**9**													
7th position: Digit	Standard efficiency class								**2**												
8th and 9th position: Digit, letter	**Motor frame size** (frame size as a combination of shaft height and overall length, encoded)										**1** **...** **3**	**A** **...** **D**									
10th position: Letter	**No. of poles** A: 2-pole B: 4-pole												**A** **B**								
11th position: Digit	**Laminated core length**													**0** **1** **2** **3** **4** **5**							
12th and 13th position: 2 digits	**Voltage and frequency** [1] 380 V 3 AC, 50 Hz/440 V 3 AC, 60 Hz/380 V 3 AC, 87Hz 480 V 3 AC, 50 Hz/550 V 3 AC, 60 Hz/480 V 3 AC, 87Hz 660 V 3 AC, 50 Hz/660 V 3 AC, 87 Hz Non-standard winding, requires order code M.. (e.g. M1Y)														**2** **2** **3** **9**		**1** **6** **3** **0**				
14th position: Letter	**Type of construction** (encoded with A ... V)																	**A** **...** **V**			
15th position: Letter	**Motor protection** (encoded with B ... Z; Z requires order code Q.. (e.g. Q3A); F = standard version with integrated KTY 84 temperature sensor)																		**B** **...** **Z**		
16th position: Digit	**Terminal box position** 4: Terminal box top (normal version), 5: Terminal box right, 6: Terminal box left																			**4** **...** **6**	
	Special order versions: encoded – additional order code required not encoded – additional plain text required																			**-**	**Z**

[1] Depending on slip, the rated frequency is above 50 Hz, 60 Hz, or 87 Hz (see Technical specifications).

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Selection and ordering data

Ordering example:

Selection criteria	Requirement	Structure of the Article No.
Motor type 1LE1	Standard motor for converter operation Innomotics GP VSD10 line, aluminum version	**1LE1092-■■■■■-■■■■**
Motor frame size	160 L	**1LE1092-1DB■■-■■■■**
No. of poles	4-pole	**1LE1092-1DB4■-■■■■**
Rated power	$P_{rated\ 50}$: 15 kW $P_{rated\ 60}$: 17.3 kW $P_{rated\ 87}$: 23.5 kW	
Voltage and frequency	380 V 3 AC, 50 Hz/440 V 3 AC, 60 Hz/380 V 3 AC, 87 Hz	**1LE1092-1DB42-1■■■**
Type of construction with special version	IM V5 with protective cover [1]	**1LE1092-1DB42-1C■■-Z H00**
Motor protection	Motor protection with PTC thermistors with 1 or 3 embedded temperature sensors for tripping	**1LE1092-1DB42-1CB■-Z H00**
Terminal box position	Terminal box right (viewed from DE)	**1LE1092-1DB42-1CB5-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.

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Aluminum series Innomotics GP 1LE1092, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Selection and ordering data

					Operating values at rated power					1LE1092 aluminum series
$P_{rated,\ 50\ Hz,\ 400\ V}$	$P_{rated,\ 60\ Hz,\ 460\ V}$	$P_{rated,\ 87\ Hz,\ 400\ V}$	Frame size	Connection	f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 380 V, 50 Hz/440 V, 60 Hz/380 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			100 L	Y	52.9	9.5	81.5	0.87	6.4	1LE1092-1AA42-1■■■
	3.45			Y	62.8	9.2	84.5	0.88	6.1	
		4.5		Δ	89.4	8.2	84.5	0.82	9.9	
4			112 M	Y	51.2	12.7	83.1	0.86	8.5	1LE1092-1BA22-1■■■
	4.55			Y	61.2	12.1	84.5	0.88	8	
		6.6		Δ	88.2	12.1	84.5	0.83	14.2	
5.5			132 S	Y	51.4	17.5	84.7	0.89	11.1	1LE1092-1CA02-1■■■
	6.3			Y	61.4	16.7	86.0	0.90	10.7	
7.5			132 S	Y	51.2	24.0	86.0	0.87	15.2	1LE1092-1CA12-1■■■
	8.6			Y	61.2	22.8	87.5	0.88	14.7	
11			160 M	Y	51.3	35.0	87.6	0.85	22.5	1LE1092-1DA22-1■■■
	12.6			Y	61.2	33.4	87.5	0.86	22	
15			160 M	Y	51.4	47.5	88.7	0.84	30.5	1LE1092-1DA32-1■■■
	17.3			Y	61.4	45.9	89.5	0.86	29.5	
18.5			160 L	Y	51.1	59	89.0	0.86	36.5	1LE1092-1DA42-1■■■
	21.3			Y	61.1	56.5	89.5	0.87	36	
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			100 L	Y	52.9	14.0	79.7	0.81	5.2	1LE1092-1AB42-1■■■
	2.55			Y	62.8	13.5	83.0	0.82	4.9	
		3.7		Δ	89.3	13.5	83.0	0.79	8.6	
3			100 L	Y	52.7	19.1	81.5	0.85	6.6	1LE1092-1AB52-1■■■
	3.45			Y	62.6	18.3	85.0	0.86	6.2	
		5		Δ	89.3	18.3	85.0	0.79	11.3	
4			112 M	Y	52.3	25.5	83.1	0.85	8.6	1LE1092-1BB22-1■■■
	4.55			Y	62.2	24.0	85.0	0.85	8.3	
		6.6		Δ	89.0	24.0	85.0	0.81	14.6	
5.5			132 S	Y	52.1	35.0	84.7	0.82	12	1LE1092-1CB02-1■■■
	6.3			Y	62.0	33.5	87.0	0.84	11.3	
		9		Δ	88.8	33.0	87.0	0.81	19.4	
7.5			132 M	Y	51.7	47.5	86.0	0.82	16.2	1LE1092-1CB22-1■■■
	8.6			Y	61.7	45.5	87.5	0.84	15.4	
		12.5		Δ	88.8	45.5	87.5	0.80	27	
11			160 M	Y	51.5	70.0	87.6	0.82	23.5	1LE1092-1DB22-1■■■
	12.6			Y	61.4	67.0	88.5	0.82	23	
		17		Δ	88.3	62.0	88.5	0.78	37.5	
15			160 L	Y	51.4	95.0	88.7	0.82	31.5	1LE1092-1DB42-1■■■
	17.3			Y	61.4	92.0	90.5	0.82	30.5	
		23.5		Δ	88.2	86.0	90.5	0.77	51	
For versions, see Article No. supplements and special versions.										■■■

All technical specifications refer to converter operation.

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Aluminum series Innomotics GP 1LE1092, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1092-1AA42-1...	20	0.0034	79.0	91.0	5500	TB1F00	6SL3210-1PE18-0.L1	FSA	IES 1
		0.0034	79.0	91.0	5500		6SL3210-1PE18-0.L1	FSA	IES 1
		0.0034	83.0	95.1	5500		6SL3210-1PE21-4.L0	FSB	IES 1
1LE1092-1BA22-1...	25	0.0067	78.0	90.0	5500	TB1F00	6SL3210-1PE21-1.L0	FSB	IES 1
		0.0067	78.0	90.0	5500		6SL3210-1PE21-1.L0	FSB	IES 1
		0.0067	83.0	95.2	5500		6SL3210-1PE21-8.L0	FSB	IES 1
1LE1092-1CA02-1...	35	0.013	76.0	88.0	4500	TB1F00	6SL3210-1PE21-4.L0	FSB	IES 1
		0.013	76.0	88.0	4500		6SL3210-1PE21-4.L0	FSB	IES 1
1LE1092-1CA12-1...	40	0.016	76.0	88.0	4500	TB1H00	6SL3210-1PE21-8.L0	FSB	IES 2
		0.016	76.0	88.0	4500		6SL3210-1PE21-8.L0	FSB	IES 2
1LE1092-1DA22-1...	60	0.03	79.0	91.0	4500	TB1H00	6SL3210-1PE22-7.L0	FSC	IES 1
		0.03	78.0	90.0	4500		6SL3210-1PE22-7.L0	FSC	IES 1
1LE1092-1DA32-1...	68	0.036	79.0	92.0	4500	TB1J00	6SL3210-1PE23-3.L0	FSC	IES 1
		0.036	78.0	91.0	4500		6SL3210-1PE23-3.L0	FSC	IES 1
1LE1092-1DA42-1...	78	0.044	79.0	92.0	4500	TB1J00	6SL3210-1PE23-8.L0	FSD	IES 2
		0.044	78.0	91.0	4500		6SL3210-1PE23-8.L0	FSD	IES 2
1LE1092-1AB42-1...	18	0.0059	79.0	91.0	4200	TB1F00	6SL3210-1PE16-1.L1	FSA	IES 1
		0.0059	79.0	91.0	4200		6SL3210-1PE16-1.L1	FSA	IES 1
		0.0059	81.0	93.0	4200		6SL3210-1PE21-1.L0	FSB	IES 1
1LE1092-1AB52-1...	22	0.0078	79.0	91.0	4200	TB1F00	6SL3210-1PE18-0.L1	FSA	IES 1
		0.0078	79.0	91.0	4200		6SL3210-1PE18-0.L1	FSA	IES 1
		0.0078	81.0	93.0	4200		6SL3210-1PE21-4.L0	FSB	IES 1
1LE1092-1BB22-1...	27	0.01	77.0	89.0	4200	TB1F00	6SL3210-1PE21-1.L0	FSB	IES 1
		0.01	77.0	89.0	4200		6SL3210-1PE21-1.L0	FSB	IES 1
		0.01	78.4	90.4	4200		6SL3210-1PE21-8.L0	FSB	IES 1
1LE1092-1CB02-1...	38	0.019	76.0	88.0	4200	TB1H00	6SL3210-1PE21-4.L0	FSB	IES 1
		0.019	76.0	88.0	4200		6SL3210-1PE21-4.L0	FSB	IES 1
		0.019	83.0	95.0	4200		6SL3210-1PE22-7.L0	FSC	IES 1
1LE1092-1CB22-1...	44	0.024	76.0	88.0	4200	TB1H00	6SL3210-1PE21-8.L0	FSB	IES 1
		0.024	76.0	88.0	4200		6SL3210-1PE21-8.L0	FSB	IES 1
		0.024	83.0	95.0	4200		6SL3210-1PE23-3.L0	FSC	IES 1
1LE1092-1DB22-1...	62	0.044	84.0	96.0	4200	TB1J00	6SL3210-1PE22-7.L0	FSC	IES 1
		0.044	82.0	94.0	4200		6SL3210-1PE22-7.L0	FSC	IES 1
		0.044	85.8	97.8	4200		6SL3210-1PE24-5.L0	FSD	IES 1
1LE1092-1DB42-1...	73	0.056	84.0	96.0	4200	TB1J00	6SL3210-1PE23-3.L0	FSC	IES 2
		0.056	82.0	94.0	4200		6SL3210-1PE23-3.L0	FSC	IES 2
		0.056	85.8	97.8	4200		6SL3210-1PE26-0.L0	FSD	IES 2

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Aluminum series Innomotics GP 1LE1092, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 500\ V}$	$P_{rated,\ 60\ Hz,\ 575\ V}$	$P_{rated,\ 87\ Hz,\ 500\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1092 aluminum series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 480 V, 50 Hz/550 V, 60 Hz/480 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			**100 L**	Y	52.9	9.5	81.5	0.87	5.1	**1LE1092-1AA42-6■■■**
	3.45			Y	63.0	9.2	84.5	0.88	4.85	
		5		Δ	89.6	9.1	84.5	0.85	8.4	
4			**112 M**	Y	51.3	12.7	83.1	0.86	6.7	**1LE1092-1BA22-6■■■**
	4.55			Y	61.3	12.1	84.5	0.88	6.4	
		6.6		Δ	88.2	12.1	84.5	0.84	11.1	
5.5			**132 S**	Y	51.6	17.5	84.7	0.89	8.8	**1LE1092-1CA02-6■■■**
	6.3			Y	61.6	16.7	86.0	0.90	8.5	
7.5			**132 S**	Y	51.2	24.0	86.0	0.87	12.1	**1LE1092-1CA12-6■■■**
	8.6			Y	61.2	22.8	87.5	0.88	11.7	
11.0			**160 M**	Y	51.3	35.0	87.6	0.85	17.8	**1LE1092-1DA22-6■■■**
	12.6			Y	61.3	33.4	87.5	0.86	17.6	
14			**160 M**	Y	51.1	44.5	88.7	0.84	22.5	**1LE1092-1DA32-6■■■**
	16.5			Y	61.2	43.8	89.5	0.86	22.5	
17			**160 L**	Y	51.1	54.0	89.3	0.85	27	**1LE1092-1DA42-6■■■**
	19.5			Y	61.1	51.7	89.5	0.86	26.5	
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			**100 L**	Y	52.8	14.0	79.7	0.81	4.1	**1LE1092-1AB42-6■■■**
	2.55			Y	62.8	13.5	83.0	0.82	3.95	
		3.7		Δ	89.6	13.5	83.0	0.79	6.8	
3			**100 L**	Y	52.6	19.1	81.5	0.85	5.2	**1LE1092-1AB52-6■■■**
	3.45			Y	62.6	18.3	85.0	0.86	4.95	
		5		Δ	89.3	18.3	85.0	0.79	8.7	
4			**112 M**	Y	52.4	25.5	83.1	0.85	6.8	**1LE1092-1BB22-6■■■**
	4.55			Y	62.3	24.1	85.0	0.85	6.6	
		6.6		Δ	89.1	24.0	85.0	0.81	12	
5.5			**132 S**	Y	52.0	35.0	84.7	0.82	9.5	**1LE1092-1CB02-6■■■**
	6.3			Y	62.0	33.4	87.0	0.84	9	
		9		Δ	88.8	33.0	87.0	0.81	15.4	
7.5			**132 M**	Y	51.9	47.5	86.0	0.82	12.8	**1LE1092-1CB22-6■■■**
	8.6			Y	61.9	45.6	87.5	0.84	12.3	
		12.5		Δ	88.7	45.5	87.5	0.80	21.5	
11			**160 M**	Y	51.5	70.0	87.6	0.82	18.4	**1LE1092-1DB22-6■■■**
	12.6			Y	61.5	66.9	88.5	0.82	18.2	
		17		Δ	88.4	62.0	88.5	0.78	29.5	
13.5			**160 L**	Y	51.2	86.0	88.7	0.79	23	**1LE1092-1DB42-6■■■**
	15.6			Y	61.2	82.8	90.5	0.81	22.5	
		23.5		Δ	88.3	86.0	90.5	0.77	40.5	

For versions, see Article No. supplements and special versions. ■■■

All technical specifications refer to converter operation.

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Aluminum series Innomotics GP 1LE1092, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1092-1AA42-6...	20	0.0034	80.0	92.0	5500	TB1F00			
	20	0.0034	80.0	92.0	5500				
	20	0.0034	85.0	92.1	5500				
1LE1092-1BA22-6...	25	0.0067	79.0	91.0	5500	TB1F00			
	25	0.0067	79.0	91.0	5500				
	25	0.0067	85.0	91.1	5500		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CA02-6...	35	0.013	77.0	89.0	4500	TB1F00	6SL3210-1PH21-4.L0	FSD	
	35	0.013	77.0	89.0	4500		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CA12-6...	40	0.016	77.0	89.4	4500	TB1H00	6SL3210-1PH21-4.L0	FSD	
	40	0.016	77.0	89.4	4500		6SL3210-1PH21-4.L0	FSD	
1LE1092-1DA22-6...	60	0.03	80.0	92.0	4500	TB1H00	6SL3210-1PH22-0.L0	FSD	
	60	0.03	80.0	92.0	4500		6SL3210-1PH22-0.L0	FSD	
1LE1092-1DA32-6...	68	0.036	80.0	93.0	4500	TB1J00	6SL3210-1PH22-3.L0	FSD	
	68	0.036	80.0	93.0	4500		6SL3210-1PH22-3.L0	FSD	
1LE1092-1DA42-6...	78	0.044	80.0	93.0	4500	TB1J00	6SL3210-1PH22-7.L0	FSD	
	78	0.044	80.0	93.0	4500		6SL3210-1PH22-7.L0	FSD	
1LE1092-1AB42-6...	18	0.0059	80.0	92.0	4200	TB1F00			
	18	0.0059	80.0	92.0	4200				
	18	0.0059	81.0	93.1	4200				
1LE1092-1AB52-6...	22	0.0078	80.0	92.0	4200	TB1F00			
	22	0.0078	80.0	92.0	4200				
	22	0.0078	81.0	93.1	4200				
1LE1092-1BB22-6...	27	0.01	79.0	91.0	4200	TB1F00			
	27	0.01	79.0	91.0	4200				
	27	0.01	80.0	92.3	4200		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CB02-6...	38	0.019	77.0	89.0	4200	TB1H00	6SL3210-1PH21-4.L0	FSD	
	38	0.019	77.0	89.0	4200		6SL3210-1PH21-4.L0	FSD	
	38	0.019	83.0	95.4	4200		6SL3210-1PH22-0.L0	FSD	
1LE1092-1CB22-6...	44	0.024	77.0	89.0	4200	TB1H00	6SL3210-1PH21-4.L0	FSD	
	44	0.024	77.0	89.0	4200		6SL3210-1PH21-4.L0	FSD	
	44	0.024	83.0	95.4	4200		6SL3210-1PH22-3.L0	FSD	
1LE1092-1DB22-6...	62	0.044	85.0	98.0	4200	TB1J00	6SL3210-1PH22-0.L0	FSD	
	62	0.044	85.0	98.0	4200		6SL3210-1PH22-0.L0	FSD	
	62	0.044	85.0	97.8	4200		6SL3210-1PH23-5.L0	FSD	
1LE1092-1DB42-6...	73	0.056	85.0	98.0	4200	TB1J00	6SL3210-1PH22-3.L0	FSD	
	73	0.056	85.0	98.0	4200		6SL3210-1PH22-3.L0	FSD	
	73	0.056	85.0	97.8	4200		6SL3210-1PH24-2.L0	FSD	

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Aluminum series Innomotics GP 1LE1092, line voltage 690 V, 50 Hz/690 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated, 50\ Hz, 690\ V}$	$P_{rated, 60\ Hz}$	$P_{rated, 87\ Hz, 690\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated, 4/4}$ for converter operation	$\cos\varphi_{rated, 4/4}$	I_{rated}	1LE1092 aluminum series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 660 V/50 Hz/660 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			100 L	Y	52.7	9.5	81.5	0.87	3.7	1LE1092-1AA43-3■■■
		5		Δ	89.5	9.1	84.5	0.81	6.4	
4			112 M	Y	51.2	12.7	83.1	0.86	4.9	1LE1092-1BA23-3■■■
		6.6		Δ	88.2	12.1	84.5	0.83	8.2	
5.5			132 S	Y	51.6	17.5	84.7	0.89	6.4	1LE1092-1CA03-3■■■
7.5			132 S	Y	51.2	24.0	86.0	0.87	8.8	1LE1092-1CA13-3■■■
11			160 M	Y	51.3	35.0	87.6	0.85	12.9	1LE1092-1DA23-3■■■
15			160 M	Y	51.4	47.5	88.7	0.84	17.6	1LE1092-1DA33-3■■■
18.5			160 L	Y	51.3	59.0	89.3	0.86	20.5	1LE1092-1DA43-3■■■
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			100 L	Y	52.9	14.0	79.7	0.81	3	1LE1092-1AB43-3■■■
		3.7		Δ	89.5	13.5	83.0	0.79	4.95	
3			100 L	Y	52.5	19.1	81.5	0.85	3.8	1LE1092-1AB53-3■■■
		5		Δ	89.5	18.3	85.0	0.79	6.5	
4			112 M	Y	52.5	25.5	83.1	0.85	5	1LE1092-1BB23-3■■■
		6.6		Δ	89.2	24.0	85.0	0.81	8.4	
5.5			132 S	Y	52.0	35.0	84.7	0.82	6.9	1LE1092-1CB03-3■■■
		9		Δ	88.7	32.9	87.0	0.81	11.2	
7.5			132 M	Y	51.7	47.5	86.0	0.82	6.9	1LE1092-1CB23-3■■■
		12.5		Δ	88.6	45.5	87.5	0.80	15.6	
11			160 M	Y	51.5	70.0	87.6	0.82	13.4	1LE1092-1DB23-3■■■
		17		Δ	88.3	62.0	88.5	0.78	21.5	
15			160 L	Y	51.4	95.0	88.7	0.82	18	1LE1092-1DB43-3■■■
		23.5		Δ	88.2	86.0	90.5	0.77	29.5	
For versions, see Article No. supplements and special versions.										■■■

All technical specifications refer to converter operation.

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Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1092-1AA43-3...	20	0.0034	80.0	92.0	5500	TB1F00			
	20	0.0034	85.0	97.1	5500				
1LE1092-1BA23-3...	25	0.0067	79.0	91.0	5500	TB1F00			
	25	0.0067	85.0	97.2	5500		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CA03-3...	35	0.013	77.0	89.0	4500	TB1F00	6SL3210-1PH21-4.L0	FSD	
1LE1092-1CA13-3...	40	0.016	77.0	89.0	4500	TB1H00	6SL3210-1PH21-4.L0	FSD	
1LE1092-1DA23-3...	60	0.03	80.0	92.0	4500	TB1H00	6SL3210-1PH21-4.L0	FSD	
1LE1092-1DA33-3...	68	0.036	80.0	93.0	4500	TB1J00	6SL3210-1PH22-0.L0	FSD	
1LE1092-1DA43-3...	78	0.044	80.0	93.0	4500	TB1J00	6SL3210-1PH22-3.L0	FSD	
1LE1092-1AB43-3...	18	0.0059	80.0	92.0	4200	TB1F00			
	18	0.0059	81.0	93.1	4200				
1LE1092-1AB53-3...	22	0.0078	80.0	92.0	4200	TB1F00			
	22	0.0078	81.0	93.1	4200				
1LE1092-1BB23-3...	27	0.01	79.0	91.0	4200	TB1F00			
	27	0.01	80.0	92.3	4200		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CB03-3...	38	0.019	77.0	89.0	4200	TB1H00	6SL3210-1PH21-4.L0	FSD	
	38	0.019	83.0	95.4	4200		6SL3210-1PH21-4.L0	FSD	
1LE1092-1CB23-3...	44	0.024	77.0	89.0	4200	TB1H00	6SL3210-1PH21-4.L0	FSD	
	44	0.024	83.0	95.4	4200		6SL3210-1PH22-0.L0	FSD	
1LE1092-1DB23-3...	62	0.044	85.0	98.0	4200	TB1J00	6SL3210-1PH21-4.L0	FSD	
	62	0.044	85.0	97.8	4200		6SL3210-1PH22-7.L0	FSD	
1LE1092-1DB43-3...	73	0.056	85.0	98.0	4200	TB1J00	6SL3210-1PH22-0.L0	FSD	
	73	0.056	85.0	97.8	4200		6SL3210-1PH23-5.L0	FSD	

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Cast-iron series Innomotics SD 1LE1592, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 400\ V}$	$P_{rated,\ 60\ Hz,\ 460\ V}$	$P_{rated,\ 87\ Hz,\ 400\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1592 cast-iron series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 380 V, 50 Hz/440 V, 60 Hz/380 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			**100 L**	Y	52.9	9.6	81.5	0.87	6.4	**1LE1592-1AA42-1■■■**
	3.45			Y	62.8	9.2	84.5	0.88	6.1	
		4.5		Δ	89.4	8.2	84.5	0.82	9.9	
4.0			**112 M**	Y	51.2	12.7	83.1	0.86	8.5	**1LE1592-1BA22-1■■■**
	4.6			Y	61.2	12.1	84.5	0.88	8	
		6.6		Δ	88.2	12.1	84.5	0.83	14.2	
5.5			**132 S**	Y	51.4	17.5	84.7	0.89	11.1	**1LE1592-1CA02-1■■■**
	6.3			Y	61.4	16.7	86.0	0.90	10.7	
7.5			**132 S**	Y	51.2	24.0	86.0	0.87	15.2	**1LE1592-1CA12-1■■■**
	8.6			Y	61.2	22.8	87.5	0.88	14.7	
11			**160 M**	Y	51.3	35.0	87.6	0.85	22.5	**1LE1592-1DA22-1■■■**
	12.6			Y	61.2	33.4	87.5	0.86	22	
15.0			**160 M**	Y	51.4	47.5	88.7	0.84	30.5	**1LE1592-1DA32-1■■■**
	17.3			Y	61.4	45.9	89.5	0.86	29.5	
18.5			**160 L**	Y	51.1	59.0	89.0	0.86	36.5	**1LE1592-1DA42-1■■■**
	21.3			Y	61.1	56.5	89.5	0.87	36	
22			**180 M**	Y	51.0	70	89.9	0.87	42.5	**1LE1592-1EA22-1■■■**
	24.5			Y	60.9	65.0	89.5	0.87	41.5	
30			**200 L**	Y	50.9	95	90.7	0.84	60	**1LE1592-2AA42-1■■■**
	33.5			Y	60.9	88.9	91.5	0.84	57	
37			**200 L**	Y	50.8	118	91.2	0.88	70	**1LE1592-2AA52-1■■■**
	41.5			Y	60.7	110.1	91.7	0.89	67	
45			**225 M**	Y	50.7	143	91.7	0.88	85	**1LE1592-2BA22-1■■■**
	51			Y	60.7	135.0	92.4	0.88	82	
55			**250 M**	Y	50.6	175	92.1	0.88	103	**1LE1592-2CA22-1■■■**
	62			Y	60.6	164.0	92.4	0.88	100	
75			**280 S**	Y	50.5	240	93.0	0.87	141	**1LE1592-2DA02-1■■■**
	84			Y	60.5	223.0	93.0	0.87	136	
90			**280 M**	Y	50.4	285	93.0	0.88	167	**1LE1592-2DA22-1■■■**
	101			Y	60.4	268	93.0	0.88	162	

For versions, see Article No. supplements and special versions. ■■■

All technical specifications refer to converter operation.

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Cast-iron series Innomotics SD 1LE1592, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1592-1AA42-1...	31	0.0034	79.0	91.0	5500	TB1F01	6SL3210-1PE18-0.L1	FSA	IES 1
		0.0034	79.0	91.0	5500		6SL3210-1PE18-0.L1	FSA	IES 1
		0.0034	83.0	95.1	5500		6SL3210-1PE21-4.L0	FSB	IES 1
1LE1592-1BA22-1...	36	0.0067	78.0	90.0	5500	TB1F01	6SL3210-1PE21-4.L0	FSB	IES 1
		0.0067	78.0	90.0	5500		6SL3210-1PE21-4.L0	FSB	IES 1
		0.0067	83.0	95.2	5500		6SL3210-1PE22-7.L0	FSC	IES 1
1LE1592-1CA02-1...	53	0.013	76.0	88.0	4500	TB1H01	6SL3210-1PE21-8.L0	FSB	IES 1
		0.013	76.0	88.0	4500		6SL3210-1PE21-8.L0	FSB	IES 1
1LE1592-1CA12-1...	58	0.016	76.0	88.0	4500	TB1H01	6SL3210-1PE22-7.L0	FSC	IES 2
		0.016	76.0	88.0	4500		6SL3210-1PE22-7.L0	FSC	IES 2
1LE1592-1DA22-1...	87	0.03	79.0	91.0	4500	TB1J01	6SL3210-1PE23-3.L0	FSC	IES 1
		0.03	78.0	90.0	4500		6SL3210-1PE23-3.L0	FSC	IES 1
1LE1592-1DA32-1...	95	0.036	79.0	92.0	4500	TB1J01	6SL3210-1PE23-8.L0	FSD	IES 1
		0.036	78.0	91.0	4500		6SL3210-1PE23-8.L0	FSD	IES 1
1LE1592-1DA42-1...	105	0.044	79.0	92.0	4500	TB1J01	6SL3210-1PE23-8.L0	FSD	IES 2
		0.044	78.0	91.0	4500		6SL3210-1PE23-8.L0	FSD	IES 2
1LE1592-1EA22-1...	145	0.069	79.0	92.0	4500	TB1J01	6SL3210-1PE24-5.L0	FSD	IES 2
		0.069	78.0	91.0	4500		6SL3210-1PE24-5.L0	FSD	IES 2
1LE1592-2AA42-1...	191	0.124	78.0	91.0	4500	TB1L01	6SL3210-1PE26-0.L0	FSD	IES 2
		0.124	78.0	91.0	4500		6SL3210-1PE26-0.L0	FSD	IES 2
1LE1592-2AA52-1...	223	0.15	76.0	89.0	4500	TB1L01	6SL3210-1PE27-5.L0	FSD	IES 2
		0.15	76.0	89.0	4500		6SL3210-1PE27-5.L0	FSD	IES 2
1LE1592-2BA22-1...	280	0.22	78.0	90.0	4500	TB1L01	6SL3210-1PE28-8.L0	FSE	IES 2
		0.22	80.0	93.0	4500		6SL3210-1PE28-8.L0	FSE	IES 2
1LE1592-2CA22-1...	360	0.4	78.0	92.0	3900	TB1N01	6SL3210-1PE31-1.L0	FSE	IES 2
		0.4	82.0	96.0	3900		6SL3210-1PE31-1.L0	FSE	IES 2
1LE1592-2DA02-1...	470	0.72	78.0	92.0	3600	TB1N01	6SL3210-1PE31-5.L0	FSF	IES 2
		0.72	82.0	96.0	3600		6SL3210-1PE31-5.L0	FSF	IES 2
1LE1592-2DA22-1...	530	0.83	78.0	92.0	3600	TB1N01	6SL3210-1PE31-8.L0	FSF	IES 2
		0.83	82.0	96.0	3600		6SL3210-1PE31-8.L0	FSF	IES 2

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Cast-iron series Innomotics SD 1LE1592, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 400\ V}$	$P_{rated,\ 60\ Hz,\ 460\ V}$	$P_{rated,\ 87\ Hz,\ 400\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1592 cast-iron series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 380 V, 50 Hz/440 V, 60 Hz/380 V, 87 Hz										
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			100 L	Y	52.9	14.0	79.7	0.81	5.2	1LE1592-1AB42-1■■■
	2.55			Y	62.8	13.5	83.0	0.82	4.9	
		3.7		Δ	89.3	13.5	83.0	0.79	8.6	
3			100 L	Y	52.7	19.1	81.5	0.85	6.6	1LE1592-1AB52-1■■■
	3.45			Y	62.6	18.3	85.0	0.86	6.2	
		5		Δ	89.3	18.3	85.0	0.79	11.3	
4			112 M	Y	52.3	25.5	83.1	0.85	8.6	1LE1592-1BB22-1■■■
	4.55			Y	62.2	24.0	85.0	0.85	8.3	
		6.6		Δ	89.0	24.0	85.0	0.81	14.6	
5.5			132 S	Y	52.1	35.0	84.7	0.82	12	1LE1592-1CB02-1■■■
	6.3			Y	62.0	33.5	87.0	0.84	11.3	
		9		Δ	88.8	33.0	87.0	0.81	19.4	
7.5			132 M	Y	51.7	47.5	86.0	0.82	16.2	1LE1592-1CB22-1■■■
	8.6			Y	61.7	45.5	87.5	0.84	15.4	
		12.5		Δ	88.8	45.5	87.5	0.80	27.0	
11			160 M	Y	51.5	70.0	87.6	0.82	23.5	1LE1592-1DB22-1■■■
	12.6			Y	61.4	67.0	88.5	0.82	23	
		17		Δ	88.3	62.0	88.5	0.78	37.5	
15			160 L	Y	51.4	95.0	88.7	0.82	31.5	1LE1592-1DB42-1■■■
	17.3			Y	61.4	92.0	90.5	0.82	30.5	
		23.5		Δ	88.2	86.0	90.5	0.77	51	
18.5			180 M	Y	51.1	118	89.3	0.85	37	1LE1592-1EB22-1■■■
	21.3			Y	61.1	113	91.0	0.85	36	
		31		Δ	88.1	113	91.0	0.84	62	
22			180 L	Y	51.1	140	89.9	0.83	45	1LE1592-1EB42-1■■■
	25.3			Y	61.1	134	91.0	0.84	43.5	
		36.5		Δ	88.0	134	91.0	0.82	74	
30			200 L	Y	50.9	191	90.7	0.83	60	1LE1592-2AB52-1■■■
	34.5			Y	60.9	183	92.4	0.84	58	
		48		Δ	87.8	176	92.4	0.81	97	
37			225 S	Y	50.9	235	91.4	0.85	72	1LE1592-2BB02-1■■■
	42.5			Y	60.9	225	92.4	0.86	70	
45			225 M	Y	50.9	285	92.4	0.88	84	1LE1592-2BB22-1■■■
	52			Y	60.9	276	93.0	0.88	83	
55			250 M	Y	50.8	350	92.3	0.86	105	1LE1592-2CB22-1■■■
	63			Y	60.8	334	93.0	0.86	103	
75			280 S	Y	50.6	475	92.7	0.86	143	1LE1592-2DB02-1■■■
	86			Y	60.6	456	93.2	0.87	139	
90			280 M	Y	50.6	570	93.0	0.87	169	1LE1592-2DB22-1■■■
	104			Y	60.6	552	93.2	0.87	168	
106			315 S	Y	50.4	670	94.0	0.84	205	1LE1592-3AB02-1■■■
	125			Y	60.4	663	94.2	0.85	205	
130			315 M	Y	50.4	830	94.4	0.84	250	1LE1592-3AB22-1■■■
	152			Y	60.4	806	94.8	0.85	250	
160			315 L	Y	50.4	1020	95.0	0.87	295	1LE1592-3AB42-1■■■
	184			Y	60.4	976	95.0	0.87	290	
200			315 L	Y	50.5	1270	95.5	0.89	360	1LE1592-3AB52-1■■■
	230			Y	60.5	1220	95.0	0.89	355	

For versions, see Article No. supplements and special versions. ■■■

All technical specifications refer to converter operation.

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Cast-iron series Innomotics SD 1LE1592, line voltage 400 V, 50 Hz/460 V, 60 Hz/400 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm²	dB(A)	dB(A)	rpm				
1LE1592-1AB42-1...	29	0.0059	79.0	91.0	4200	TB1F01	6SL3210-1PE16-1.L1	FSA	IES 1
		0.0059	79.0	91.0	4200		6SL3210-1PE16-1.L1	FSA	IES 1
		0.0059	81.0	93.0	4200		6SL3210-1PE21-1.L0	FSB	IES 1
1LE1592-1AB52-1...	33	0.0078	79.0	91.0	4200	TB1F01	6SL3210-1PE18-0.L1	FSA	IES 1
		0.0078	79.0	91.0	4200		6SL3210-1PE18-0.L1	FSA	IES 1
		0.0078	81.0	93.0	4200		6SL3210-1PE21-4.L0	FSB	IES 1
1LE1592-1BB22-1...	38	0.01	77.0	89.0	4200	TB1F01	6SL3210-1PE21-1.L0	FSB	IES 1
		0.01	77.0	89.0	4200		6SL3210-1PE21-1.L0	FSB	IES 1
		0.01	78.4	90.4	4200		6SL3210-1PE21-8.L0	FSB	IES 1
1LE1592-1CB02-1...	60	0.019	76.0	88.0	4200	TB1H01	6SL3210-1PE21-4.L0	FSB	IES 1
		0.019	76.0	88.0	4200		6SL3210-1PE21-4.L0	FSB	IES 1
		0.019	83.0	95.0	4200		6SL3210-1PE22-7.L0	FSC	IES 1
1LE1592-1CB22-1...	62	0.024	76.0	88.0	4200	TB1H01	6SL3210-1PE21-8.L0	FSB	IES 1
		0.024	76.0	88.0	4200		6SL3210-1PE21-8.L0	FSB	IES 1
		0.024	83.0	95.0	4200		6SL3210-1PE23-3.L0	FSC	IES 1
1LE1592-1DB22-1...	89	0.044	84.0	96.0	4200	TB1J01	6SL3210-1PE22-7.L0	FSC	IES 1
		0.044	82.0	94.0	4200		6SL3210-1PE22-7.L0	FSC	IES 1
		0.044	85.8	97.8	4200		6SL3210-1PE24-5.L0	FSD	IES 1
1LE1592-1DB42-1...	100	0.056	84.0	96.0	4200	TB1J01	6SL3210-1PE23-3.L0	FSC	IES 2
		0.056	82.0	94.0	4200		6SL3210-1PE23-3.L0	FSC	IES 2
		0.056	85.8	97.8	4200		6SL3210-1PE26-0.L0	FSD	IES 2
1LE1592-1EB22-1...	168	0.13	71.0	83.0	4200	TB1J01	6SL3210-1PE23-8.L0	FSD	IES 2
		0.13	73.0	85.0	4200		6SL3210-1PE23-8.L0	FSD	IES 2
		0.13	84.0	96.0	4200		6SL3210-1PE27-5.L0	FSD	IES 2
1LE1592-1EB42-1...	168	0.13	71.0	83.0	4200	TB1J01	6SL3210-1PE24-5.L0	FSD	IES 2
		0.13	73.0	85.0	4200		6SL3210-1PE24-5.L0	FSD	IES 2
		0.13	84.0	96.0	4200		6SL3210-1PE28-8.L0	FSE	IES 2
1LE1592-2AB52-1...	220	0.2	76.0	88.0	4200	TB1L01	6SL3210-1PE26-0.L0	FSD	IES 2
		0.2	78.0	80.0	4200		6SL3210-1PE26-0.L0	FSD	IES 2
		0.2	83.1	95.1	4200		6SL3210-1PE31-1.L0	FSE	IES 2
1LE1592-2BB02-1...	260	0.37	67.0	83.0	4500	TB1L01	6SL3210-1PE27-5.L0	FSD	IES 2
		0.37	70.0	86.0	4500		6SL3210-1PE27-5.L0	FSD	IES 2
1LE1592-2BB22-1...	290	0.45	70.0	83.0	4500	TB1L01	6SL3210-1PE28-8.L0	FSE	IES 2
		0.45	72.0	86.0	4500		6SL3210-1PE28-8.L0	FSE	IES 2
1LE1592-2CB22-1...	360	0.69	70.0	83.0	3700	TB1N01	6SL3210-1PE31-1.L0	FSE	IES 2
		0.69	72.0	86.0	3700		6SL3210-1PE31-1.L0	FSE	IES 2
1LE1592-2DB02-1...	540	1.2	75.0	90.0	3000	TB1N01	6SL3210-1PE31-5.L0	FSF	IES 2
		1.2	76.0	91.0	3000		6SL3210-1PE31-5.L0	FSF	IES 2
1LE1592-2DB22-1...	580	1.4	75.0	90.0	3000	TB1N01	6SL3210-1PE31-8.L0	FSF	IES 2
		1.4	76.0	91.0	3000		6SL3210-1PE31-8.L0	FSF	IES 2
1LE1592-3AB02-1...	730	1.9	79.0	94.0	2600	TB1Q01	6SL3210-1PE32-1.L0	FSF	IES 2
		1.9	82.0	96.0	2600		6SL3210-1PE32-1.L0	FSF	IES 2
1LE1592-3AB22-1...	760	2.2	79.0	94.0	2600	TB1Q01	6SL3210-1PE32-5.L0	FSF	IES 2
		2.2	82.0	96.0	2600		6SL3210-1PE32-5.L0	FSF	IES 2
1LE1592-3AB42-1...	940	2.8	79.0	94.0	2600	TB1Q01	6SL3224-0XE41-3.A0	FSGX	IES 2
		2.8	80.0	95.0	2600		6SL3224-0XE41-3.A0	FSGX	IES 2
1LE1592-3AB52-1...	1140	3.5	81.0	96.0	2600	TB1Q01	6SL3224-0XE41-6.A0	FSGX	IES 2
		3.5	82.0	96.0	2600		6SL3224-0XE41-6.A0	FSGX	IES 2

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Cast-iron series Innomotics SD 1LE1592, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 500\ V}$	$P_{rated,\ 60\ Hz,\ 575\ V}$	$P_{rated,\ 87\ Hz,\ 500\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1592 cast-iron series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 480 V, 50 Hz/550 V, 60 Hz/480 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			**100 L**	Y	52.9	9.5	81.5	0.87	5.1	**1LE1592-1AA42-6■■■**
	3.45			Y	63.0	9.2	84.5	0.88	4.85	
		5		Δ	89.6	9.1	84.5	0.85	8.4	
4			**112 M**	Y	51.3	12.7	83.1	0.86	6.7	**1LE1592-1BA22-6■■■**
	4.55			Y	61.3	12.1	84.5	0.88	6.4	
		6.6		Δ	88.2	12.1	84.5	0.84	11.1	
5.5			**132 S**	Y	51.6	17.5	84.7	0.89	8.8	**1LE1592-1CA02-6■■■**
	6.3			Y	61.6	16.7	86.0	0.90	8.5	
7.5			**132 S**	Y	51.2	24.0	86.0	0.87	12.1	**1LE1592-1CA12-6■■■**
	8.6			Y	61.2	22.8	87.5	0.88	11.7	
11			**160 M**	Y	51.3	35.0	87.6	0.85	17.8	**1LE1592-1DA22-6■■■**
	12.6			Y	61.3	33.4	87.5	0.86	17.6	
14			**160 M**	Y	51.1	44.5	88.7	0.84	22.5	**1LE1592-1DA32-6■■■**
	16.5			Y	61.2	43.8	89.5	0.86	22.5	
17			**160 L**	Y	51.1	54.0	89.3	0.85	27	**1LE1592-1DA42-6■■■**
	19.5			Y	61.1	51.7	89.5	0.86	26.5	
22			**180 M**	Y	50.9	70	89.9	0.87	34	**1LE1592-1EA22-6■■■**
	24.5			Y	60.9	65	89.5	0.87	33	
30			**200 L**	Y	50.8	95	90.7	0.82	48.5	**1LE1592-2AA42-6■■■**
	33.5			Y	60.8	89	91.5	0.82	47	
34			**200 L**	Y	50.7	108	91.2	0.87	52	**1LE1592-2AA52-6■■■**
	40			Y	60.8	106	91.7	0.89	51	
41			**225 M**	Y	50.6	131	91.7	0.88	61	**1LE1592-2BA22-6■■■**
	48			Y	60.7	127	91.7	0.88	62	
53			**250 M**	Y	50.5	169	92.1	0.88	79	**1LE1592-2CA22-6■■■**
	60			Y	60.5	159	92.4	0.88	77	
75			**280 S**	Y	50.5	240	92.7	0.87	112	**1LE1592-2DA02-6■■■**
	84			Y	60.5	223	93.0	0.87	109	
90			**280 M**	Y	50.4	285	93.0	0.88	132	**1LE1592-2DA22-6■■■**
	101			Y	60.4	268	93.0	0.88	130	
For versions, see Article No. supplements and special versions.										■■■

All technical specifications refer to converter operation.

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Cast-iron series Innomotics SD 1LE1592, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1592-1AA42-6...	31	0.0034	80.0	92.0	5500	TB1F01			
		0.0034	80.0	92.0	5500				
		0.0034	85.0	97.1	5500				
1LE1592-1BA22-6...	36	0.0067	79.0	91.0	5500	TB1F01			
		0.0067	79.0	91.0	5500				
		0.0067	85.0	97.2	5500		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CA02-6...	53	0.013	77.0	89.0	4500	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.013	77.0	89.0	4500		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CA12-6...	58	0.016	77.0	89.0	4500	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.016	77.0	89.0	4500		6SL3210-1PH21-4.L0	FSD	
1LE1592-1DA22-6...	87	0.03	80.0	92.0	4500	TB1J01	6SL3210-1PH22-0.L0	FSD	
		0.03	80.0	92.0	4500		6SL3210-1PH22-0.L0	FSD	
1LE1592-1DA32-6...	95	0.036	80.0	93.0	4500	TB1J01	6SL3210-1PH22-3.L0	FSD	
		0.036	80.0	93.0	4500		6SL3210-1PH22-3.L0	FSD	
1LE1592-1DA42-6...	105	0.044	80.0	93.0	4500	TB1J01	6SL3210-1PH22-7.L0	FSD	
		0.044	80.0	93.0	4500		6SL3210-1PH22-7.L0	FSD	
1LE1592-1EA22-6...	145	0.069	80.0	93.0	4500	TB1J01	6SL3210-1PH23-5.L0	FSD	
		0.069	80.0	93.0	4500		6SL3210-1PH23-5.L0	FSD	
1LE1592-2AA42-6...	191	0.124	79.0	92.0	4500	TB1L01	6SL3210-1PH25-2.L0	FSE	
		0.124	79.0	92.0	4500		6SL3210-1PH25-2.L0	FSE	
1LE1592-2AA52-6...	223	0.15	77.0	90.0	4500	TB1L01	6SL3210-1PH25-2.L0	FSE	
		0.15	77.0	90.0	4500		6SL3210-1PH25-2.L0	FSE	
1LE1592-2BA22-6...	280	0.22	78.0	90.0	4500	TB1L01	6SL3210-1PH26-2.L0	FSE	
		0.22	80.0	93.0	4500		6SL3210-1PH26-2.L0	FSE	
1LE1592-2CA22-6...	360	0.4	78.0	92.0	3900	TB1N01	6SL3210-1PH28-0.L0	FSF	
		0.4	82.0	96.0	3900		6SL3210-1PH28-0.L0	FSF	
1LE1592-2DA02-6...	470	0.72	78.0	92.0	3600	TB1N01	6SL3210-1PH31-2.L0	FSF	
		0.72	82.0	96.0	3600		6SL3210-1PH31-2.L0	FSF	
1LE1592-2DA22-6...	530	0.83	78.0	92.0	3600	TB1N01	6SL3210-1PH31-4.L0	FSF	
		0.83	82.0	96.0	3600		6SL3210-1PH31-4.L0	FSF	

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Cast-iron series Innomotics SD 1LE1592, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 500\ V}$	$P_{rated,\ 60\ Hz,\ 575\ V}$	$P_{rated,\ 87\ Hz,\ 500\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1592 cast-iron series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 480 V, 50 Hz/550 V, 60 Hz/480 V, 87 Hz										
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			**100 L**	Y	52.8	14.0	79.7	0.81	4.1	**1LE1592-1AB42-6■■■**
	2.55			Y	62.8	13.5	83.0	0.82	3.95	
		4		Δ	89.6	13.5	83.0	0.79	6.8	
3			**100 L**	Y	52.6	19.1	81.5	0.85	5.2	**1LE1592-1AB52-6■■■**
	3.45			Y	62.6	18.3	85.0	0.86	4.95	
		5		Δ	89.3	18.3	85.0	0.79	8.7	
4			**112 M**	Y	52.4	25.5	83.1	0.85	6.8	**1LE1592-1BB22-6■■■**
	4.55			Y	62.3	24.1	85.0	0.85	6.6	
		7		Δ	89.1	24.0	85.0	0.81	12	
5.5			**132 S**	Y	52.0	35.0	84.7	0.82	9.5	**1LE1592-1CB02-6■■■**
	6.3			Y	62.0	33.4	87.0	0.84	9	
		9		Δ	88.8	33.0	87.0	0.81	15.4	
7.5			**132 M**	Y	51.9	47.5	86.0	0.82	12.8	**1LE1592-1CB22-6■■■**
	8.6			Y	61.9	45.6	87.5	0.84	12.3	
		13		Δ	88.7	45.5	87.5	0.80	21.5	
11			**160 M**	Y	51.5	70.0	87.6	0.82	18.4	**1LE1592-1DB22-6■■■**
	12.6			Y	61.5	66.9	88.5	0.82	18.2	
		17		Δ	88.4	62.0	88.5	0.78	29.5	
13.5			**160 L**	Y	51.2	86.0	88.7	0.79	23	**1LE1592-1DB42-6■■■**
	15.6			Y	61.2	82.8	90.5	0.81	22.5	
		24		Δ	88.3	86.0	90.5	0.77	40.5	
16.7			**180 M**	Y	51.0	106	89.3	0.84	27	**1LE1592-1EB22-6■■■**
	19.2			Y	61.0	102	91.0	0.84	26.5	
		31		Δ	88.0	113	91.0	0.84	49	
21.5			**180 L**	Y	51.1	137	89.9	0.83	34.5	**1LE1592-1EB42-6■■■**
	25.3			Y	61.2	134	91.0	0.84	34.5	
		37		Δ	88.1	134	91.0	0.82	59	
30			**200 L**	Y	51.0	191	90.7	0.83	48	**1LE1592-2AB52-6■■■**
	34.5			Y	61.0	183	92.4	0.84	46.5	
		48		Δ	87.9	176	92.4	0.81	77	
33			**225 S**	Y	50.6	210	92.0	0.84	51	**1LE1592-2BB02-6■■■**
	38			Y	60.6	202	92.4	0.84	51	
41			**225 M**	Y	50.7	260	92.4	0.87	61	**1LE1592-2BB22-6■■■**
	47			Y	60.7	249	93.0	0.87	61	
52			**250 M**	Y	50.7	330	92.3	0.85	80	**1LE1592-2CB22-6■■■**
	59			Y	60.7	313	93.0	0.85	78	
75			**280 S**	Y	50.5	475	92.7	0.85	114	**1LE1592-2DB02-6■■■**
	86			Y	60.5	456	93.2	0.86	113	
90			**280 M**	Y	50.6	570	93.0	0.87	134	**1LE1592-2DB22-6■■■**
	102			Y	60.6	541	93.2	0.87	132	
110			**315 S**	Y	50.4	700	94.0	0.84	168	**1LE1592-3AB02-6■■■**
	127			Y	60.4	674	94.2	0.84	168	
132			**315 M**	Y	50.4	840	94.4	0.85	198	**1LE1592-3AB22-6■■■**
	152			Y	60.4	806	94.8	0.85	198	
160			**315 L**	Y	50.3	1020	95.0	0.86	235	**1LE1592-3AB42-6■■■**
	184			Y	60.3	976	95.0	0.86	235	
200			**315 L**	Y	50.4	1270	95.0	0.88	290	**1LE1592-3AB52-6■■■**
	230			Y	60.4	1220	95.0	0.88	290	

For versions, see Article No. supplements and special versions. ■■■

All technical specifications refer to converter operation.

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Cast-iron series Innomotics SD 1LE1592, line voltage 500 V, 50 Hz/575 V, 60 Hz/500 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm²	dB(A)	dB(A)	rpm				
1LE1592-1AB42-6...	29	0.0059	80.0	92.0	4200	TB1F01			
		0.0059	80.0	92.0	4200				
		0.0059	81.0	93.1	4200				
1LE1592-1AB52-6...	33	0.0078	80.0	92.0	4200	TB1F01			
		0.0078	80.0	92.0	4200				
		0.0078	81.0	93.1	4200				
1LE1592-1BB22-6...	38	0.01	79.0	91.0	4200	TB1F01			
		0.01	79.0	91.0	4200				
		0.01	80.0	92.3	4200		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CB02-6...	60	0.019	77.0	89.0	4200	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.019	77.0	89.0	4200		6SL3210-1PH21-4.L0	FSD	
		0.019	83.0	95.4	4200		6SL3210-1PH22-0.L0	FSD	
1LE1592-1CB22-6...	62	0.024	77.0	89.0	4200	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.024	77.0	89.0	4200		6SL3210-1PH21-4.L0	FSD	
		0.024	83.0	95.4	4200		6SL3210-1PH22-3.L0	FSD	
1LE1592-1DB22-6...	89	0.044	85.0	98.0	4200	TB1J01	6SL3210-1PH22-0.L0	FSD	
		0.044	85.0	98.0	4200		6SL3210-1PH22-0.L0	FSD	
		0.044	85.0	97.8	4200		6SL3210-1PH23-5.L0	FSD	
1LE1592-1DB42-6...	100	0.056	85.0	98.0	4200	TB1J01	6SL3210-1PH22-3.L0	FSD	
		0.056	85.0	98.0	4200		6SL3210-1PH22-3.L0	FSD	
		0.056	85.0	97.8	4200		6SL3210-1PH24-2.L0	FSD	
1LE1592-1EB22-6...	168	0.13	72.0	85.0	4200	TB1J01	6SL3210-1PH22-7.L0	FSD	
		0.13	72.0	85.0	4200		6SL3210-1PH22-7.L0	FSD	
		0.13	84.0	97.0	4200		6SL3210-1PH25-2.L0	FSE	
1LE1592-1EB42-6...	168	0.13	72.0	85.0	4200	TB1J01	6SL3210-1PH23-5.L0	FSD	
		0.13	72.0	85.0	4200		6SL3210-1PH23-5.L0	FSD	
		0.13	84.0	97.0	4200		6SL3210-1PH26-2.L0	FSE	
1LE1592-2AB52-6...	220	0.2	78.0	91.0	4200	TB1L01	6SL3210-1PH25-2.L0	FSE	
		0.2	78.0	91.0	4200		6SL3210-1PH25-2.L0	FSE	
		0.2	84.0	97.3	4200		6SL3210-1PH31-0.L0	FSF	
1LE1592-2BB02-6...	260	0.37	70.0	84.0	4500	TB1L01	6SL3210-1PH25-2.L0	FSE	
		0.37	70.0	84.0	4500		6SL3210-1PH25-2.L0	FSE	
1LE1592-2BB22-6...	290	0.45	71.0	84.0	4500	TB1L01	6SL3210-1PH26-2.L0	FSE	
		0.45	71.0	84.0	4500		6SL3210-1PH26-2.L0	FSE	
1LE1592-2CB22-6...	360	0.69	71.0	84.0	3700	TB1N01	6SL3210-1PH28-0.L0	FSF	
		0.69	71.0	84.0	3700		6SL3210-1PH28-0.L0	FSF	
1LE1592-2DB02-6...	540	1.2	76.0	91.0	3000	TB1N01	6SL3210-1PH31-2.L0	FSF	
		1.2	76.0	91.0	3000		6SL3210-1PH31-2.L0	FSF	
1LE1592-2DB22-6...	580	1.4	76.0	91.0	3000	TB1N01	6SL3210-1PH31-4.L0	FSF	
		1.4	76.0	91.0	3000		6SL3210-1PH31-4.L0	FSF	
1LE1592-3AB02-6...	730	1.9	80.0	95.0	2600	TB1Q01	6SL3710-1GF31-8.A3	–	
		1.9	80.0	95.0	2600		6SL3710-1GF31-8.A3	–	
1LE1592-3AB22-6...	760	2.2	80.0	95.0	2600	TB1Q01	6SL3710-1GF32-2.A3	–	
		2.2	80.0	95.0	2600		6SL3710-1GF32-2.A3	–	
1LE1592-3AB42-6...	940	2.9	80.0	95.0	2600	TB1Q01	6SL3710-1GF32-6.A3	–	
		2.8	80.0	95.0	2600		6SL3710-1GF32-6.A3	–	
1LE1592-3AB52-6...	1140	3.5	82.0	96.0	2600	TB1Q01	6SL3710-1GF33-3.A3	–	
		3.5	82.0	96.0	2600		6SL3710-1GF33-3.A3	–	

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Cast-iron series Innomotics SD 1LE1592, line voltage 690 V, 50 Hz/690 V, 87 Hz – self-ventilated

Selection and ordering data

$P_{rated,\ 50\ Hz,\ 690\ V}$	$P_{rated,\ 60\ Hz}$	$P_{rated,\ 87\ Hz,\ 690\ V}$	Frame size	Connection	Operating values at rated power f_{rated}	T_{rated}	$\eta_{rated,\ 4/4}$ for converter operation	$\cos\varphi_{rated,\ 4/4}$	I_{rated}	1LE1592 cast-iron series Version specifically for converter operation
kW	kW	kW			Hz	Nm	%		A	Article No.
• Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 155 (temperature class F)										
• Operation with a SINAMICS G converter with uncontrolled infeed – rated motor voltage 660 V, 50 Hz/660 V, 87 Hz										
3000 rpm	3600 rpm	5220 rpm	2-pole							
3			100 L	Y	52.7	9.6	81.5	0.87	3.7	1LE1592-1AA43-3■■■
		5		Δ	89.5	9.1	84.5	0.81	6.4	
4			112 M	Y	51.2	12.7	83.1	0.86	4.9	1LE1592-1BA23-3■■■
		6.6		Δ	88.2	12.1	84.5	0.83	8.2	
5.5			132 S	Y	51.6	17.5	84.7	0.89	6.4	1LE1592-1CA03-3■■■
7.5			132 S	Y	51.2	23.9	86.0	0.87	8.8	1LE1592-1CA13-3■■■
11			160 M	Y	51.3	35.0	87.6	0.85	12.9	1LE1592-1DA23-3■■■
15			160 M	Y	51.4	47.8	88.7	0.84	17.6	1LE1592-1DA33-3■■■
18.5			160 L	Y	51.3	58.9	89.3	0.86	20.5	1LE1592-1DA43-3■■■
22			180 M	Y	51.0	70	89.9	0.87	24.5	1LE1592-1EA23-3■■■
30			200 L	Y	50.9	96	90.7	0.84	34.5	1LE1592-2AA43-3■■■
37			200 L	Y	50.9	118	91.2	0.88	40.5	1LE1592-2AA53-3■■■
45			225 M	Y	50.7	143	91.7	0.88	49	1LE1592-2BA23-3■■■
55			250 M	Y	50.6	175	92.1	0.88	59	1LE1592-2CA23-3■■■
75			280 S	Y	50.5	239	92.7	0.88	80	1LE1592-2DA03-3■■■
90			280 M	Y	50.4	286	93.0	0.88	96	1LE1592-2DA23-3■■■
1500 rpm	1800 rpm	2610 rpm	4-pole							
2.2			100 L	Y	52.9	14.0	79.7	0.81	3	1LE1592-1AB43-3■■■
		3.7		Δ	89.5	13.5	83.0	0.79	4.95	
3			100 L	Y	52.5	19.1	81.5	0.85	3.8	1LE1592-1AB53-3■■■
		5		Δ	89.5	18.3	85.0	0.79	6.5	
4			112 M	Y	52.5	25.5	83.1	0.85	5	1LE1592-1BB23-3■■■
		6.6		Δ	89.2	24.0	85.0	0.81	8.4	
5.5			132 S	Y	52.0	35.0	84.7	0.82	6.9	1LE1592-1CB03-3■■■
		9		Δ	88.7	33.0	87.0	0.81	11.2	
7.5			132 M	Y	51.7	47.8	86.0	0.82	9.3	1LE1592-1CB23-3■■■
		12.5		Δ	88.6	45.5	87.5	0.80	15.6	
11			160 M	Y	51.5	70.0	87.6	0.82	13.4	1LE1592-1DB23-3■■■
		17		Δ	88.3	62.0	88.5	0.78	21.5	
15			160 L	Y	51.4	95.5	88.7	0.82	18	1LE1592-1DB43-3■■■
		23.5		Δ	88.2	86.0	90.5	0.77	29.5	
18.5			180 M	Y	51.1	118	89.3	0.85	21.5	1LE1592-1EB23-3■■■
		31		Δ	88.0	112	91.0	0.84	35	
22			180 L	Y	51.2	140	89.9	0.85	25	1LE1592-1EB43-3■■■
		36.5		Δ	88.2	134	91.0	0.84	42	
30			200 L	Y	51.0	191	90.7	0.83	35	1LE1592-2AB53-3■■■
		48		Δ	87.9	176	92.4	0.81	56	
37			225 S	Y	50.8	235	91.4	0.85	41.5	1LE1592-2BB03-3■■■
45			225 M	Y	50.8	285	92.4	0.88	48.5	1LE1592-2BB23-3■■■
55			250 M	Y	50.8	350	92.3	0.86	61	1LE1592-2CB23-3■■■
72			280 S	Y	50.5	460	92.7	0.85	80	1LE1592-2DB03-3■■■
90			280 M	Y	50.6	570	93.0	0.87	97	1LE1592-2DB23-3■■■
105			315 S	Y	50.4	670	94.0	0.85	115	1LE1592-3AB03-3■■■
130			315 M	Y	50.4	830	94.4	0.85	142	1LE1592-3AB23-3■■■
160			315 L	Y	50.3	1020	95.0	0.87	169	1LE1592-3AB43-3■■■
200			315 L	Y	50.4	1270	95.0	0.89	205	1LE1592-3AB53-3■■■
For versions, see Article No. supplements and special versions.										■■■

All technical specifications refer to converter operation.

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Cast-iron series Innomotics SD 1LE1592, line voltage 690 V, 50 Hz/690 V, 87 Hz – self-ventilated

Motor type	$m_{IM\ B3}$	J	L_{pfA}, tolerance +3 dB(A) load	L_{WA}, tolerance +3 dB(A) load	Mech. speed limit	Terminal box	**Preferred SINAMICS G120 – PM240(-2)** Other SINAMICS converters also possible Operating mode: Low overload Type [1]	Frame size	IES class acc. to EN 50598-2
	kg	kgm^2	dB(A)	dB(A)	rpm				
1LE1592-1AA43-3...	31	0.0034	80.0	92.0	5500	TB1F01			
		0.0034	85.0	97.1	5500				
1LE1592-1BA23-3...	36	0.0067	79.0	91.0	5500	TB1F01			
		0.0067	85.0	97.2	5500		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CA03-3...	53	0.013	77.0	89.0	4500	TB1H01	6SL3210-1PH21-4.L0	FSD	
1LE1592-1CA13-3...	58	0.016	77.0	89.0	4500	TB1H01	6SL3210-1PH21-4.L0	FSD	
1LE1592-1DA23-3...	87	0.03	80.0	92.0	4500	TB1J01	6SL3210-1PH21-4.L0	FSD	
1LE1592-1DA33-3...	95	0.036	80.0	93.0	4500	TB1J01	6SL3210-1PH22-0.L0	FSD	
1LE1592-1DA43-3...	105	0.044	80.0	93.0	4500	TB1J01	6SL3210-1PH22-3.L0	FSD	
1LE1592-1EA23-3...	145	0.069	80.0	93.0	4500	TB1J01	6SL3210-1PH22-7.L0	FSD	
1LE1592-2AA43-3...	191	0.124	79.0	92.0	4500	TB1L01	6SL3210-1PH23-5.L0	FSD	
1LE1592-2AA53-3...	223	0.15	77.0	90.0	4500	TB1L01	6SL3210-1PH24-2.L0	FSD	
1LE1592-2BA23-3...	280	0.22	78.0	90.0	4500	TB1L01	6SL3210-1PH25-2.L0	FSE	
1LE1592-2CA23-3...	360	0.4	78.0	92.0	3900	TB1N01	6SL3210-1PH26-2.L0	FSE	
1LE1592-2DA03-3...	470	0.72	78.0	92.0	3600	TB1N01	6SL3210-1PH28-0.L0	FSF	
1LE1592-2DA23-3...	530	0.83	78.0	92.0	3600	TB1N01	6SL3210-1PH31-0.L0	FSF	
1LE1592-1AB43-3...	29	0.0059	80.0	92.0	4200	TB1F01			
		0.0059	81.0	93.1	4200				
1LE1592-1AB53-3...	33	0.0078	80.0	92.0	4200	TB1F01			
		0.0078	81.0	93.1	4200				
1LE1592-1BB23-3...	38	0.01	79.0	91.0	4200	TB1F01			
		0.01	80.0	92.3	4200		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CB03-3...	60	0.019	77.0	89.0	4200	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.019	83.0	95.4	4200		6SL3210-1PH21-4.L0	FSD	
1LE1592-1CB23-3...	62	0.024	77.0	89.0	4200	TB1H01	6SL3210-1PH21-4.L0	FSD	
		0.024	83.0	95.4	4200		6SL3210-1PH22-0.L0	FSD	
1LE1592-1DB23-3...	89	0.044	85.0	98.0	4200	TB1J01	6SL3210-1PH21-4.L0	FSD	
		0.044	85.0	97.8	4200		6SL3210-1PH22-7.L0	FSD	
1LE1592-1DB43-3...	100	0.056	85.0	98.0	4200	TB1J01	6SL3210-1PH22-0.L0	FSD	
		0.056	85.0	97.8	4200		6SL3210-1PH23-5.L0	FSD	
1LE1592-1EB23-3...	168	0.13	72.0	85.0	4200	TB1J01	6SL3210-1PH22-3.L0	FSD	
		0.13	84.0	97.0	4200		6SL3210-1PH24-2.L0	FSD	
1LE1592-1EB43-3...	168	0.13	72.0	85.0	4200	TB1J01	6SL3210-1PH22-7.L0	FSD	
		0.13	84.0	97.0	4200		6SL3210-1PH25-2.L0	FSE	
1LE1592-2AB53-3...	220	0.2	78.0	91.0	4200	TB1L01	6SL3210-1PH23-5.L0	FSD	
		0.2	84.0	97.3	4200		6SL3210-1PH26-2.L0	FSE	
1LE1592-2BB03-3...	260	0.37	70.0	84.0	4500	TB1L01	6SL3210-1PH24-2.L0	FSD	
1LE1592-2BB23-3...	290	0.45	71.0	84.0	4500	TB1L01	6SL3210-1PH25-2.L0	FSE	
1LE1592-2CB23-3...	360	0.69	71.0	84.0	3700	TB1N01	6SL3210-1PH26-2.L0	FSE	
1LE1592-2DB03-3...	540	1.2	76.0	91.0	3000	TB1N01	6SL3210-1PH28-0.L0	FSF	
1LE1592-2DB23-3...	580	1.4	76.0	91.0	3000	TB1N01	6SL3210-1PH31-0.L0	FSF	
1LE1592-3AB03-3...	730	1.9	80.0	95.0	2600	TB1Q01	6SL3710-1GH31-2.A3	–	
1LE1592-3AB23-3...	760	2.2	80.0	95.0	2600	TB1Q01	6SL3710-1GH31-5.A3	–	
1LE1592-3AB43-3...	940	2.8	80.0	95.0	2600	TB1Q01	6SL3710-1GH31-8.A3	–	
1LE1592-3AB53-3...	1140	3.5	82.0	96.0	2600	TB1Q01	6SL3710-1GH32-2.A3	–	

[1] In addition to the Power Module, a Control Unit and an Operator Panel are required (see Catalog D 31 and/or D 35).

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Aluminum series Innomotics GP 1LE1092

Selection and ordering data

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

□ Standard version
✓ With additional charge
• This order code only determines the price of the version – Additional plain text is required.

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Selection and ordering data

Voltages	Article No. supplement			Frame size										Motor version
	Voltage code 12th and 13th position of the Article No.		Additional identification code with order code and plain text if required	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**	
				1LE1592										Standard Efficiency
1LE1592-. . . . ■ - ■ . . .			Order code											
Voltage at 50 Hz or 60 Hz														
Line voltage: 50 Hz, 400 V 60 Hz, 480 V	**2**	**1**	**–**	□	□	□	□	□	□	□	□	□	□	
Line voltage: 50 Hz, 500 V 60 Hz, 600 V	**2**	**6**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Line voltage: 50 Hz, 690 V	**3**	**3**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard voltage and/or frequencies														
Non-standard winding Reinforced insulation system (Advanced)	**9**	**0**	**M1Y •** and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard winding Special insulation system (Premium)	**9**	**0**	**M2Y •** and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

□ Standard version
✓ With additional charge
• This order code only determines the price of the version – Additional plain text is required.

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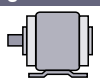
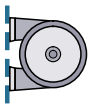
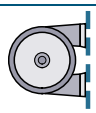
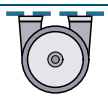
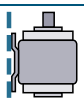
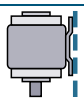
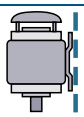
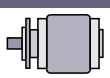
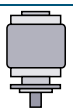
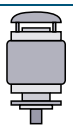
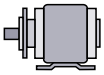
Aluminum series Innomotics GP 1LE1092

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**	**100**	**112**	**132**	**160**	
			1LE1092				Standard Efficiency
1LE1092-. . . . . - . ■ **. . (-Z)**		Order code					
Without flange							
IM B3 [1) 2)] 	**A**	**–**	□	□	□	□	
IM B6 [2)] 	**T**	**–**	□	□	□	□	
IM B7 [2)] 	**U**	**–**	□	□	□	□	
IM B8 [2)] 	**V**	**–**	□	□	□	□	
IM V6 [2)] 	**D**	**–**	□	□	□	□	
IM V5 without protective cover [2)] 	**C**	**–**	□	□	□	□	
IM V5 with protective cover [2) 3) 4) 5)] 	**C**	**H00**	✓	✓	✓	✓	
With flange	**Acc. to EN 50347** **Acc. to DIN 42948**		**FF215** **A 250**	**FF215** **A 250**	**FF265** **A 300**	**FF300** **A 350**	
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 5/113.

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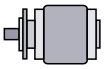
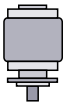
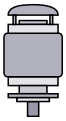
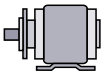
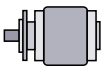
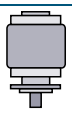
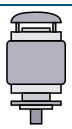
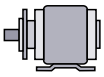
Types of construction	Article No. supplement		Frame size				Motor version
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**100**	**112**	**132**	**160**	
			1LE1092				Standard Efficiency
1LE1092-. . . . . - . ■ . . (-Z)		Order code					
With flange next largest	**Acc. to EN 50347 Acc. to DIN 42948**		**FF265 A 300**	**FF265 A 300**	**FF300 A 350**	**FF350 A 400**	
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	**Acc. to EN 50347 Acc. to DIN 42948**		**FF165 A 200**	**FF165 A 200**	**FF215 A 250**	**FF265 A 300**	
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 5/113.

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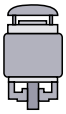
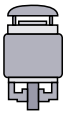
Aluminum series Innomotics GP 1LE1092

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**	**100**	**112**	**132**	**160**	
				1LE1092				Standard Efficiency
1LE1092-. . . . . - .		**■ . . (-Z)**	Order code					
With flange		**Acc. to EN 50347** **Acc. to DIN 42948**		**FT130** **C 160**	**FT130** **C 160**	**FT165** **C 200**	**–** **–**	
IM B14 2) 7)		**K**	**–**	✓	✓	✓	✓	
IM V19 2)		**L**	**–**	✓	✓	✓	✓	
IM V18 without protective cover 2)		**M**	**–**	✓	✓	✓	✓	
IM V18 with protective cover 2) 3) 4) 5)		**M**	**–**	✓	✓	✓	✓	
IM B34		**N**	**–**	✓	✓	✓	✓	
With flange next largest		**Acc. to EN 50347** **Acc. to DIN 42948**		**FT165** **C 200**	**FT165** **C 200**	**FT215** **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**	✓	✓	✓	–	

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For legends and footnotes, see page 5/113.

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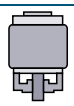
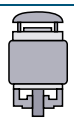
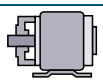
Types of construction	Article No. supplement		Frame size				Motor version
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**100**	**112**	**132**	**160**	
			1LE1092				Standard Efficiency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

□ Standard version
✓ With additional charge
– Not possible
O. R. Possible on request

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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 "Second shaft extension" option (order code **L05**) is not possible.

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

5) Not possible for forced-air cooled motors with order code **F90** without external fan and fan cover.

6) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as 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.

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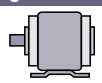
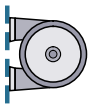
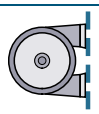
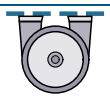
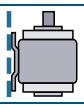
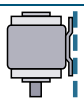
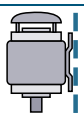
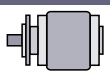
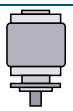
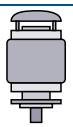
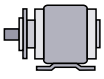
Cast-iron series Innomotics SD 1LE1592

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**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315 S/M**	**315 L**	
				1LE1592											Standard Efficiency
1LE1592-. . . . . - .		**■ . . (-Z)**	Order code												
Without flange															
IM B3 [1) 2)]		**A**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM B6 [2)]		**T**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM B7 [2)]		**U**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM B8 [2)]		**V**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM V6 [2)]		**D**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM V5 without protective cover [2)]		**C**	**–**	□	□	□	□	□	□	□	□	□	□	□	
IM V5 with protective cover [2) 3) 4)]		**C**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
With flange		**Acc. to EN 50347** **Acc. to DIN 42948**		**FF215** **A 250**	**FF215** **A 250**	**FF265** **A 300**	**FF300** **A 350**	**FF300** **A 350**	**FF350** **A 400**	**FF400** **A 450**	**FF500** **A 550**	**FF500** **A 550**	**FF600** **A 660**	**–** **A 660**	
IM B5 [2) 5)]		**F**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	
IM V1 without protective cover [2)]		**G**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IM V1 with protective cover [2) 3) 4)]		**G**	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IM V3 [4)]		**H**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–	
IM B35		**J**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

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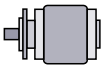
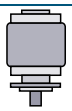
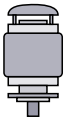
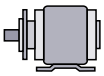
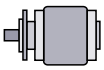
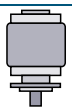
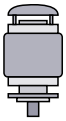
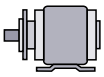
Types of construction		Article No. supplement		Frame size											Motor version
		Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315 S/M**	**315 L**	
				1LE1592											Standard Efficiency
1LE1592-. . . . . - . ■ . . (-Z)			Order code												
With flange next largest		**Acc. to EN 50347**		**FF265**	**FF265**	**FF300**	–	–	–	–	–	–	–	–	
		Acc. to DIN 42948		**A 300**	**A 300**	**A 350**	–	–	–	–	–	–	–	–	
IM B5 [2) 5)]		**F**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V1 without protective cover [2)]		**G**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V1 with protective cover [2) 3) 4)]		**G**	**P01+H00**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V3 [4)]		**H**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM B35		**J**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
With flange next smallest		**Acc. to EN 50347**		**FF165**	**FF215**	**FF215**	**FF265**	**FF265**	**FF300**	–	–	–	–	–	
		Acc. to DIN 42948		**A 200**	**A 250**	**A 250**	**A 300**	**A 300**	**A 350**	–	–	–	–	–	
IM B5 [2) 5)]		**F**	**P02**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	
IM V1 without protective cover [2)]		**G**	**P02**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	
IM V1 with protective cover [2) 3) 4)]		**G**	**P02+H00**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	
IM V3 [4)]		**H**	**P02**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	
IM B35		**J**	**P02**	✓	✓	✓	✓	✓	✓	–	–	–	–	–	

For legends and footnotes, see page 5/117.

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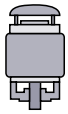
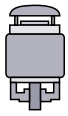
Cast-iron series Innomotics SD 1LE1592

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**	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315 S/M**	**315 L**	
				1LE1592											Standard Efficiency
1LE1592-. . . . . - .		**■ . . (-Z)**	Order code												
With flange		**Acc. to EN 50347**		**FT130**	**FT130**	**FT165**	**FT215**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	
		Acc. to DIN 42948		**C 160**	**C 160**	**C 200**	**C 250**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	
IM B14 2) 6)		**K**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	
IM V19 2)		**L**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	
IM V18 without protective cover 2)		**M**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	
IM V18 with protective cover 2) 3) 4)		**M**	**H00**	✓	✓	✓	✓	–	–	–	–	–	–	–	
IM B34		**N**	**–**	✓	✓	✓	✓	–	–	–	–	–	–	–	
With flange next largest		**Acc. to EN 50347**		**FT165**	**FT165**	**FT215**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	
		Acc. to DIN 42948		**C 200**	**C 200**	**C 250**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	
IM B14 2) 6)		**K**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V19 2)		**L**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V18 without protective cover 2)		**M**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM V18 with protective cover 2) 3) 4)		**M**	**P01+H00**	✓	✓	✓	–	–	–	–	–	–	–	–	
IM B34		**N**	**P01**	✓	✓	✓	–	–	–	–	–	–	–	–	

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For legends and footnotes, see page 5/117.

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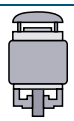
Types of construction	Article No. supplement		Frame size											Motor version
	Type of construction code letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code **-Z**	**100**	**112**	**132**	**160**	**180**	**200**	**225**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

□ 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 no stamping of these types of construction on the rating plate is required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.

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

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

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

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

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

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Aluminum series Innomotics GP 1LE1092

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	**100**	**112**	**132**	**160**		
			1LE1092				Standard Efficiency	
1LE1092-. . . . . - . . ■ .		Order code						
Motor protection								
1 or 3 PTC thermistors – for tripping (2 terminals) [1]	**B**	**–**	✓	✓	✓	✓		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [1]	**C**	**–**	✓	✓	✓	✓		
3 Pt100 resistance thermometers (6 terminals) [1]	**H**	**–**	✓	✓	✓	✓		
1 Pt1000 resistance thermometer (2 terminals) [2]	**K**	**–**	○	○	○	○		
2 Pt1000 resistance thermometers (4 terminals) [2]	**L**	**–**	✓	✓	✓	✓		
1 Pt100 resistance thermometers (2 terminals) [1]	**P**	**–**	✓	✓	✓	✓		
3 Pt100 resistance thermometers (9 terminals) [1]	**Q**	**–**	✓	✓	✓	✓		
6 Pt100 resistance thermometers (18 terminals) [1]	**R**	**–**	✓	✓	✓	✓		
3 bimetal sensors (NC contacts) for tripping (2 terminals) [1]	**Z**	**Q3A**	✓	✓	✓	✓	Only for:	Voltage code 2-1 (12th and 13th position of the Article No.)

○ Without additional charge
✓ With additional charge

5

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

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

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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	100	112	132	160	180	200	225	250	280	315		
			1LE1592										Standard Efficiency	
1LE1592-. . . . . - . . ■ .		Order code												
Motor protection														
1 or 3 PTC thermistors – for tripping (2 terminals) [1]	**B**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
2 or 6 PTC thermistors – for alarm and tripping (4 terminals) [1]	**C**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (6 terminals)	**H**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 Pt1000 resistance thermometers (2 terminals) [3]	**K**	**–**	○	○	○	○	○	○	○	○	○	○		
2 Pt1000 resistance thermometers (4 terminals) [3]	**L**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
1 Pt100 resistance thermometer (2 terminals)	**P**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 Pt100 resistance thermometers (9 terminals)	**Q**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
6 Pt100 resistance thermometers (18 terminals)	**R**	**–**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
3 bimetal sensors (NC contacts) for tripping (2 terminals) [2]	**Z**	**Q3A**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Only for:	Voltage code 2-1 (12th and 13th position of the Article No.)

○ Without additional charge
✓ With additional charge

5

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

[2] Only applicable for voltage code (12th and 13th position of the Article No.) 2-1.

[3] Not possible in combination with UL.

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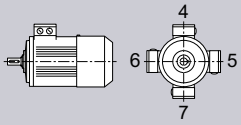
Aluminum series Innomotics GP 1LE1092

Selection and ordering data

Terminal box position	Article No. supplement		Frame size				Motor version
	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	**100**	**112**	**132**	**160**	
			1LE1092				Standard Efficiency
1LE1092-. . . . . -. . . ■		Order code					
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 [2]	**7**	–	✓	✓	✓	✓	

□ Standard version
✓ With additional charge

5

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

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

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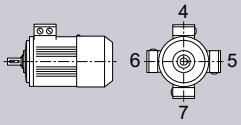
Selection and ordering data

Terminal box position	Article No. supplement		Frame size										Motor version
	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	**100**	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**	
			1LE1592										Standard Efficiency
1LE1592-. . . . . -. . . ■		Order code											
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 [2]	**7**	–	✓	✓	✓	✓	–	–	–	–	–	–	

□ Standard version
✓ With additional charge

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

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

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Aluminum series Innomotics GP 1LE1092

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size **100**	**112**	**132**	**160**	Motor version
		1LE1092				Standard Efficiency
1LE1092-. . . . . -. . . . -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**	✓	✓	✓	✓	
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**	O. R.	O. R.	O. R.	O. R.	
1 Pt1000 resistance thermometer (2 terminals)	**Q35**	○	○	○	○	
2 Pt1000 resistance thermometers (4 terminals)	**Q36**	✓	✓	✓	✓	
3 Pt100 resistance thermometers (6 terminals)	**Q60**	✓	✓	✓	✓	
6 Pt100 resistance thermometers (12 terminals)	**Q61**	✓	✓	✓	✓	
1 Pt100 resistance thermometer (2 terminals)	**Q62**	✓	✓	✓	✓	
3 Pt100 resistance thermometers (9 terminals)	**Q63**	✓	✓	✓	✓	
6 Pt100 resistance thermometers (18 terminals)	**Q64**	✓	✓	✓	✓	
2 Pt100 resistance thermometers in basic configuration for bearings (4 terminals)	**Q72**	O. R.	O. R.	O. R.	O. R.	
2 Pt100 resistance thermometers for bearings (6 terminals)	**Q78**	O. R.	O. R.	O. R.	O. R.	
2 Pt100 double resistance thermometers for bearings (12 terminals)	**Q79**	O. R.	O. R.	O. R.	O. R.	
Motor connection and terminal box						
External grounding	**H04**	✓	✓	✓	✓	
Terminal box on NDE	**H08**	✓	✓	✓	✓	
Connected in star for dispatch	**M01**	✓	✓	✓	✓	
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	
Rotation of the terminal box through 90°, entry from DE	**R10**	○	○	○	○	
Rotation of the terminal box through 90°, entry from NDE	**R11**	○	○	○	○	
Rotation of the terminal box through 180°	**R12**	○	○	○	○	
Terminal box in position 0°; connection from right	**R13**	○	○	○	–	
One metal cable gland	**R15**	✓	✓	✓	✓	
Metal cable gland, maximum configuration	**R18**	✓	✓	✓	✓	
3 cables protruding, 0.5 m long	**R20**	✓	✓	✓	✓	
6 cables protruding, 0.5 m long	**R22**	✓	✓	✓	✓	
Larger terminal box	**R50**	✓	✓	✓	✓	
Motor connector Han-Drive 10e for 230 VΔ/400 VY	**R70**	✓	✓	✓	–	
Motor connector EMC Han-Drive 10e for 230 VΔ/400 VY	**R71**	✓	✓	✓	–	
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	✓	
Windings and insulation						
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N30**	✓	✓	✓	✓	
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**	✓	✓	✓	✓	

For legends, see page 5/125.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size **100**	**112**	**132**	**160**	Motor version
		1LE1092				Standard Efficiency
1LE1092-. . . . . -. . . . -Z	Order code					
Colors and paint finish (continued)						
Special paint finish sea air resistant C4	**S03**	✓	✓	✓	✓	
Internal coating	**S05**	✓	✓	✓	✓	
Paint finish in other standard RAL colors: RAL 1015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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….	✓	✓	✓	✓	
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66 •** and paint finish	✓	✓	✓	✓	
Modular technology – Basic versions						
Mounting of holding brake (standard assignment)	**F01**	✓	✓	✓	✓	
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**	✓	✓	✓	✓	
Brake supply voltage 205 V DC	**F18**	✓	✓	✓	✓	
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	✓	✓	
Special technology						
Mounting of rotary pulse encoder HOG 86E	**G03**	✓	✓	✓	✓	
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	✓	✓	✓	✓	
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	✓	✓	✓	✓	
Mounting of HOG 10 D 1024 I rotary pulse encoder	**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**	✓	✓	✓	✓	
Mechanical version and degrees of protection						
Prepared for mountings, 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	**H00**	✓	✓	✓	✓	
Screwed-on (instead of cast) feet	**H01**	✓	✓	✓	✓	
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	**H02**	✓	✓	✓	✓	
Condensation drainage holes	**H03**	✓	✓	✓	✓	
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	
IP66 degree of protection	**H19**	✓	✓	✓	✓	
IP65 degree of protection	**H20**	✓	✓	✓	✓	
IP56 degree of protection	**H22**	✓	✓	✓	✓	
Drive-end seal for flange-mounted motors, oil-tight to 0.1 bar	**H23**	✓	✓	✓	✓	
Coolant temperature and installation altitude						
Coolant temperature –40 to +40 °C	**D03**	✓	✓	✓	✓	
Coolant temperature –30 to +40 °C	**D04**	✓	✓	✓	✓	

For legends, see page 5/125.

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Aluminum series Innomotics GP 1LE1092

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size **100**	**112**	**132**	**160**	Motor version
		1LE1092				Standard Efficiency
1LE1092-. . . . . -. . . . -Z	Order code					
Versions in accordance with standards and specifications						
Version according to UL and CSA (Canadian regulation)	**D39**	✓	✓	✓	✓	
TR CU product safety certificate EAC for Eurasian Customs Union	**D47**	✓	✓	✓	✓	
UKCA-marking		□	□	□	□	
Bearings and lubrication						
Located bearing DE	**L20**	✓	✓	✓	✓	
Located bearing NDE	**L21**	✓	✓	✓	□	
Bearing design for increased cantilever forces	**L22**	✓	✓	✓	✓	
Regreasing device	**L23**	✓	✓	✓	✓	
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	✓	✓	✓	✓	
Bearing for high axial tension forces	**L34**	✓	✓	✓	✓	
Bearing insulation NDE	**L51**	✓	✓	✓	✓	
Measuring nipple for SPM shock pulse measurement for bearing inspection	**Q01**	✓	✓	✓	✓	
Special version with higher speeds	**Y37**	O. R.	O. R.	O. R.	O. R.	
Balance and vibration severity						
Vibration severity grade A		□	□	□	□	
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	**Y58 •** and customer specifications	✓	✓	✓	✓	
Non-standard cylindrical shaft extension, NDE	**Y59 •** and customer specifications	✓	✓	✓	✓	
Heating and ventilation						
Mounted separately driven fan	**F70**	✓	✓	✓	✓	
Sheet metal fan cover	**F74**	✓	✓	✓	✓	
Fan cover for textile industry	**F75**	✓	✓	✓	✓	
Metal external fan	**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**	✓	✓	✓	✓	
Rating plate and additional rating plates						
Second rating plate, loose	**M10**	✓	✓	✓	✓	
Rating plate, stainless steel	**M11**	✓	✓	✓	✓	
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	✓	✓	✓	✓	

For legends, see page 5/125.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size **100**	**112**	**132**	**160**	Motor version
		1LE1092				Standard Efficiency
1LE1092-. . . . . -. . . . -Z	Order code					
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	**B01**	○	○	○	○	
Inspection certificate 3.1 according to EN 10204	**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**	○	○	○	○	

□ 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

Note:
The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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Cast-iron series Innomotics SD 1LE1592

Selection and ordering data

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 100	112	132	160	180	200	225	250	280	315	Motor version
		1LE1592										Standard Efficiency
1LE1592- . . . . . - . . . . -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**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
3 bimetal sensors (NC contacts) for tripping (2 terminals)	**Q31**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
6 bimetal sensors (NC contacts) for alarm and tripping (4 terminals)	**Q32**	–	–	–	–	✓	✓	✓	✓	✓	✓	Only for: Voltage code 2-1 (12th and 13th position of the Article No.)
3 bimetal sensors (NC contacts) for tripping (6 terminals)	**Q33**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
6 bimetal sensors (NC contacts) thermostat for alarm and tripping (12 terminals)	**Q34**	–	–	–	–	✓	✓	✓	✓	✓	✓	
1 Pt1000 resistance thermometer (2 terminals)	**Q35**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
2 Pt1000 resistance thermometers (4 terminals)	**Q36**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
3 Pt100 resistance thermometers (6 terminals)	**Q60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1 Pt100 resistance thermometer (2 terminals)	**Q62**	–	–	–	–	✓	✓	✓	✓	✓	✓	
3 Pt100 resistance thermometers (9 terminals)	**Q63**	–	–	–	–	✓	✓	✓	✓	✓	✓	
6 Pt100 resistance thermometers (18 terminals)	**Q64**	–	–	–	–	✓	✓	✓	✓	✓	✓	
2 Pt100 resistance thermometers in basic configuration for bearings (4 terminals)	**Q72**	–	–	–	–	✓	✓	✓	✓	✓	✓	
2 Pt100 resistance thermometers in for bearings (6 terminals)	**Q78**	–	–	–	–	✓	✓	✓	✓	✓	✓	
2 Pt100 double resistance thermometers for bearings (12 terminals)	**Q79**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Motor connection and terminal box												
External grounding	**H04**	✓	✓	✓	✓	□	□	□	□	□	□	
Terminal box on NDE	**H08**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Second external grounding	**H70**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Connected in star for dispatch	**M01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Connected in delta for dispatch	**M02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rotation of the terminal box through 90°, entry from DE	**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**	–	–	–	–	–	–	–	✓	✓	✓	
Saddle terminal for connection without cable lug, accessories pack	**R19**	–	–	–	–	–	–	–	✓	✓	✓	
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)	**R62**	–	–	–	–	✓	✓	✓	✓	✓	✓	
2 small cast-iron auxiliary terminal boxes	**R67**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Version with reduced silicon amount according to VDMA 24364-C1/T70	**R77**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard threaded through hole (metric, NPT or G thread)	**Y61 •** and customer specifications	–	–	–	–	✓	✓	✓	✓	✓	✓	
Windings and insulation												
Increased air humidity/temperature with 30 to 60 g water per m^3 of air	**N30**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

For legend, see page 5/129.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size										Motor version
		100	**112**	**132**	**160**	**180**	**200**	**225**	**250**	**280**	**315**	
		1LE1592										Standard Efficiency
1LE1592-. . . . . -. . . . -Z	Order code											
Windings and insulation (continued)												
Increased air humidity/temperature with 60 to 100 g water per m^3 of air	**N31**	–	–	–	–	✓	✓	✓	✓	✓	✓	
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special paint finish for use offshore C5	**S04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Internal coating	**S05**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Special paint finish C5mid with medium durability	**S08**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special paint finish CX for offshore with high durability	**S09**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Paint finish in other standard RAL colors: RAL 11015, 3000, 5002, 5009, 5010, 5012, 5015, 6011, 7001, 7011, 7016, 7031, 7032, 7035, 7037, 8012, 9005, 9010 (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....	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard colors Colors see "Paint finish in non-standard colors (see Catalog Section 1 "Introduction")	**Y66 •** and paint finish	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Modular technology – Basic versions												
Mounting of holding brake (standard assignment)	**F01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Brake supply voltage 205 V DC	**F18**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mechanical manual brake release with lever (no locking)	**F50**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special technology												
Mounting of rotary pulseencoder HOG 86E	**G03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of LL 861 900 220 rotary pulse encoder	**G04**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of HOG 9 DN 1024 I rotary pulse encoder	**G05**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of HOG 10 D 1024 I rotary pulse encoder	**G06**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of POG 10 DN rotary pulse encoder (only in combination with separately driven fan or brake)	**G07**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Mounting of POG 9 rotary pulse encoder (only in combination with separately driven fan or brake)	**G08**	–	–	–	–	✓	✓	✓	✓	✓	✓	
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**	–	–	–	–	✓	✓	✓	✓	✓	✓	

For legends, see page 5/129.

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Cast-iron series Innomotics SD 1LE1592

Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 100	112	132	160	180	200	225	250	280	315	Motor version
		1LE1592										Standard Efficiency
1LE1592-. . . . . -. . . . -Z	Order code											
Special technology (continued)												
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.	
Mechanical version and degrees of protection												
Prepared for mountings, 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	**H00**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Screwed-on (instead of cast) feet	**H01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3:1994	**H02**	–	–	–	–	✓	✓	✓	✓	–	–	
Condensation drainage holes		□	□	□	□	□	□	□	□	□	□	
Rust-resistant screws (externally)	**H07**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IP66 degree of protection	**H19**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IP65 degree of protection	**H20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IP54 degree of protection	**H21**	–	–	–	–	✓	✓	✓	✓	✓	✓	
IP56 degree of protection	**H22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drive-end seal for flange-mounted motors, oil-tight to 0.1 bar	**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	**D03**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Coolant temperature –30 to +40 °C	**D04**	O. R.	O. R.	O. R.	O. R.	✓	✓	✓	✓	✓	✓	
Versions in accordance with standards and specifications												
Version according to UL and CSA (Canadian regulation)	**D39**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
TR CU product safety certificate EAC for Eurasian Customs Union	**D47**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
UKCA-marking		□	□	□	□	□	□	□	□	□	□	
Bearings and lubrication												
Regreasing device with M10 × 1 grease nipple according to DIN 71412 A	**L19**	–	–	–	–	✓	✓	✓	✓	○	○	
Located bearing DE	**L20**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Located bearing NDE	**L21**	✓	✓	✓	□	□	□	□	□	□	□	
Bearing design for increased cantilever forces	**L22**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Regreasing device	**L23**	✓	✓	✓	✓	✓	✓	✓	✓	□	□	
Bearings reinforced at both ends for DE and NDE, bearing size 63	**L25**	✓	✓	✓	✓	✓	✓	✓	✓	□	□	
Reinforced bearings at both DE and NDE, DE bearing for increased cantilever forces	**L28**	–	–	–	–	✓	✓	✓	✓	–	–	
Bearing for high axial tension forces	**L34**	✓	✓	✓	✓	–	–	✓	✓	–	–	
Bearing insulation DE	**L50**	–	–	–	–	–	–	✓	✓	✓	✓	
Bearing insulation NDE	**L51**	✓	✓	✓	✓	–	–	✓	✓	□	□	
Measuring nipple for SPM shock pulse measurement for bearing inspection	**Q01**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special version with higher speeds	**Y37**	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
Balance and vibration severity												
Vibration severity grade A		□	□	□	□	□	□	□	□	□	□	
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**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

For legends, see page 5/129.

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Special versions	Additional identification code **-Z** with order code and plain text if required	Frame size 100	112	132	160	180	200	225	250	280	315	Motor version
		1LE1592										Standard Efficiency
1LE1592-. . . . . -. . . . -Z	Order code											
Shaft and rotor (continued)												
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	**Y58 •** and customer specifications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard cylindrical shaft extension, NDE	**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.	
Heating and ventilation												
Mounted separately driven fan	**F70**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sheet metal fan cover	**F74**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Metal external fan	**F76**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
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 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	**Q80**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Extension of the liability for defects by 24 months to a total of 36 months (3 years) from delivery	**Q82**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Packaging, safety notes, documentation and test certificates												
Inspection certificate 3.1 according to EN 10204	**B02**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Document - Electrical datasheet	**B60**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Document - Order dimensional drawing	**B61**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Standard test (routine test) with acceptance	**B65**	–	–	–	–	✓	✓	✓	✓	✓	✓	
Remote acceptance	**B77**	–	–	–	–	–	–	✓	✓	✓	✓	
Hybrid acceptance	**B78**	–	–	–	–	–	–	✓	✓	✓	✓	
Type test with heat run for horizontal motors, with acceptance	**B83**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
"Basic" documentation package	**B90**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
"Advanced" documentation package	**B91**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
"Projects" documentation package	**B92**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

□ 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

Note:
The catalog provides an overview of the available motor options but doesn't detail the correct logic combinations. For a customized selection tailored to your specific requirements, please use the Siemens Product Configurator at the following address: siemens.com/spc.

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Overview

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

Foundation blocks 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 blocks that are bolted to the machine (without washers) and fitted with taper pins are 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

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

Couplings

The motor from Innomotics 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, Innomotics 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

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, Innomotics will supply a comparable spare motor with regard to the mounting dimensions and functions (the type series may vary).
  - If a spare motor is provided within the 3-year period, this will not mean that the warranty restarts.
  - Replacement motors delivered after the active production of the motor 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, Innomotics 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.
- For bearing types, see Catalog Section 1 "Introduction".
- For standard components, a commitment to supply repaired parts does not apply.
- Support hotline
  In Germany
  Phone +49 (0) 911 895 7222

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

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Notes on the dimensions

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
S	flange (FF)	H17

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

  Dimension K: nominal dimension according IEC 60072-1, negative deviation of tolerance H17 possible.

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

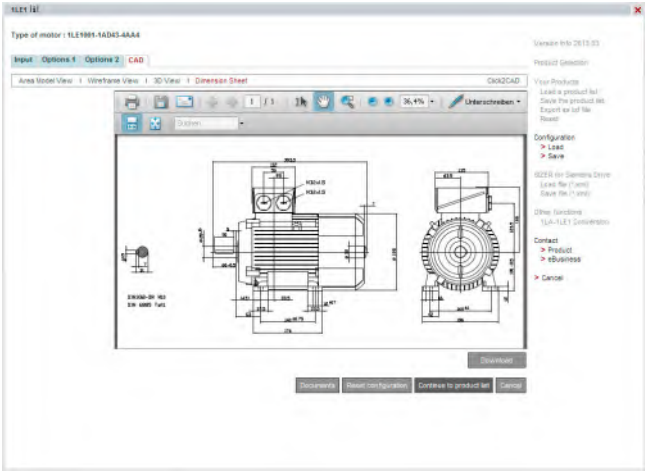
Dimension designation	Dimension	Admissible deviation
H	to 250	– 0.5
	over 250	– 1.0
E, EA		– 0.5

  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.
- The overall width of the motor is identical to the "AC" dimension.

Dimension sheet generator (within the Siemens Product Configurator)

Overview

A dimensional drawing can be created in the "Siemens Product 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 Siemens Product 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

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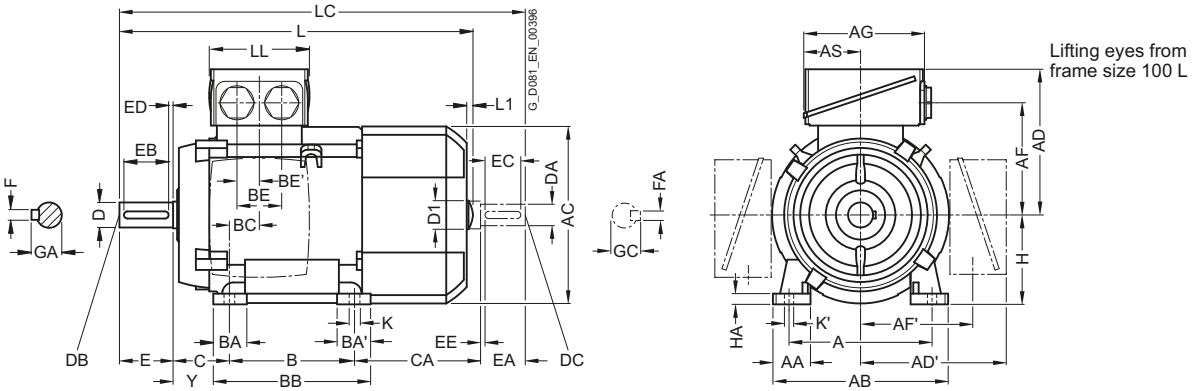
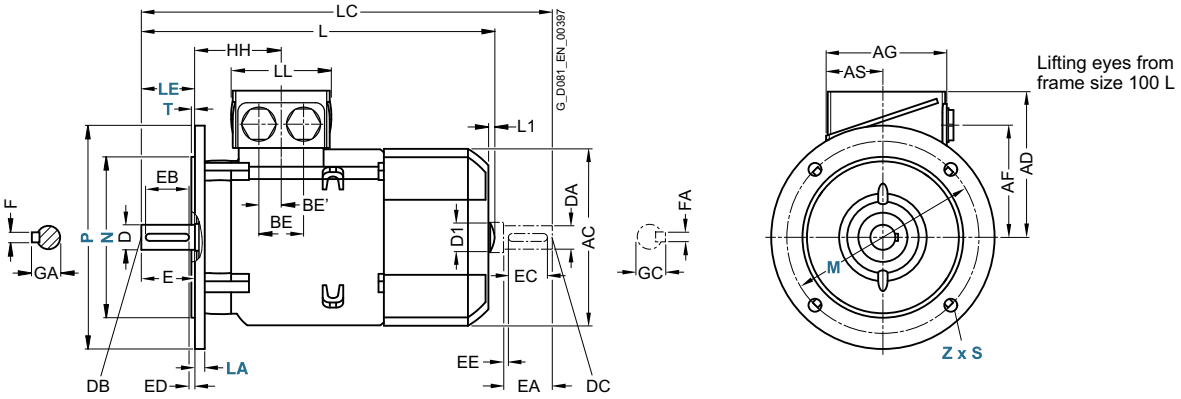
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																					
Frame size	Motor type 1LE1092	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	All	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	141	**100**	12	45
112 M	All	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	129.7	**112**	12	52
132 S	All	2, 4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	140	38	76	218	26.5	48	24	89	128.5	**132**	15	69
132 M	All	2, 4	216	53	**256**	262	**202**	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	128.5	**132**	15	69
160 M	All	2, 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	210	44	89	300	47	57	28.5	108	148	**160**	18	85
160 L	All	2, 4	254	60	**300**	314	**236.5**	236.5	190	190	175	77.5	254	44	89	300	47	57	28.5	108	148	**160**	18	85

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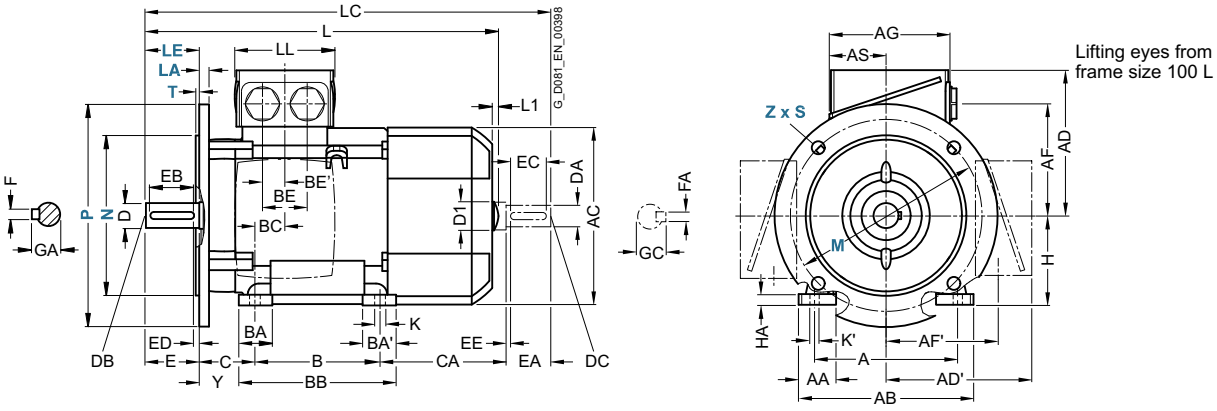
Dimensional drawings

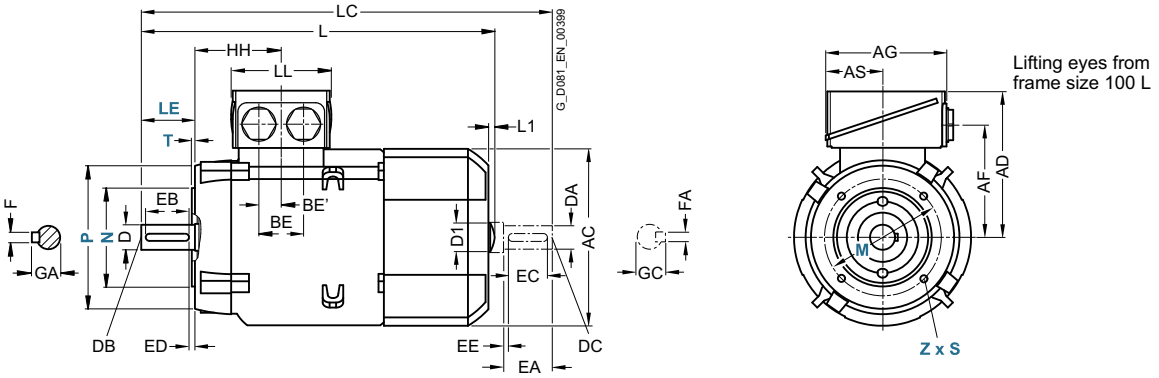
Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**								DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1092	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	All	2, 4	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	96	12	16	**389**	7	32	450	112	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4	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	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	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	155	15	19	**604**	10	45	730	145	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

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

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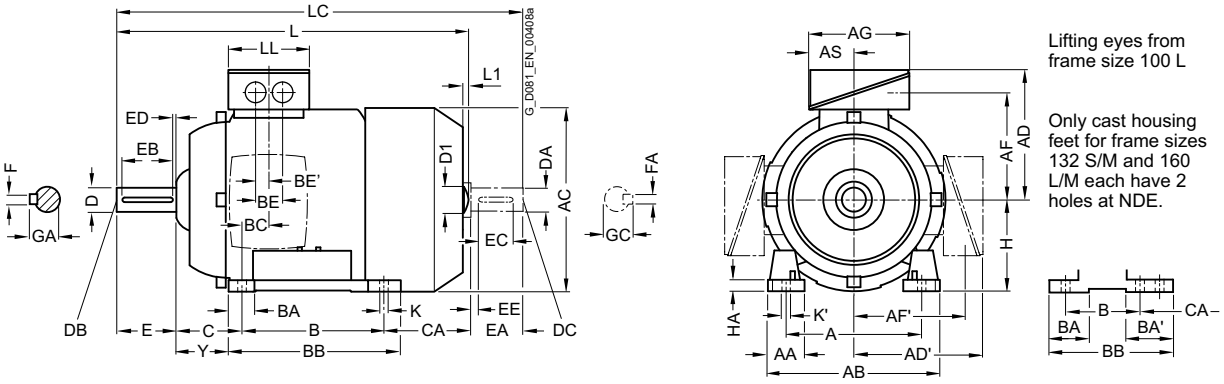
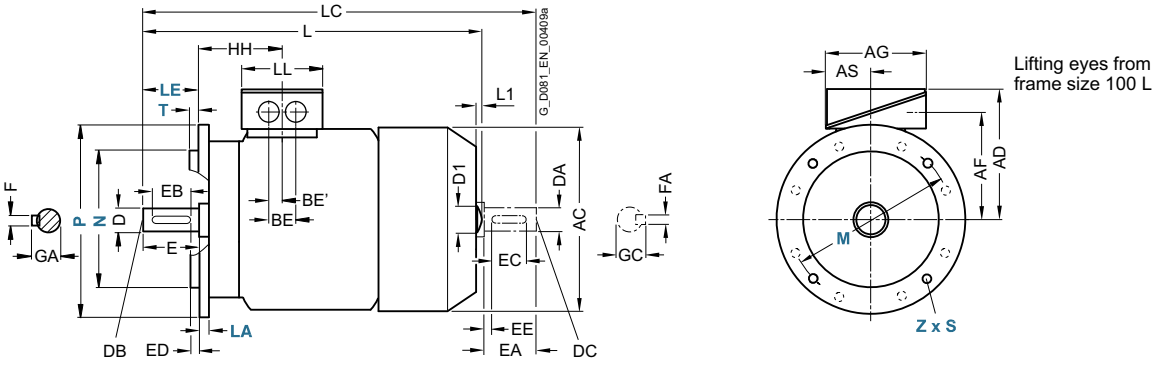
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																				
Frame size	Motor type 1LE1592	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	All	2, 4	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	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	All	2, 4	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	140	52[1]	89[1]	218[2]	26.5	48	24	89	166.5	**132**	15	69
132 M	All	2, 4	216	53	**256**	281	**214.5**	214.5	169	169	163	80.5	178	52[1]	89[3]	218	26.5	48	24	89	128.5	**132**	15	69
160 M	All	2, 4	254	60	**300**	333.5	**265**	265	213	213	190	92	210	73[4]	117[4]	300[5]	37	60	30	108	192	**160**	18	85
160 L	All	2, 4	254	60	**300**	333.5	**265**	265	213	213	190	92	254	73[4]	117[6]	300	37	60	30	108	148	**160**	18	85

[1] With screwed-on feet, this dimension is 41 mm.
[2] With screwed-on feet, this dimension is 180 mm.
[3] With screwed-on feet, this dimension is 79 mm.
[4] With screwed-on feet, this dimension is 51 mm.
[5] With screwed-on feet, this dimension is 256 mm.
[6] With screwed-on feet, this dimension is 95 mm.

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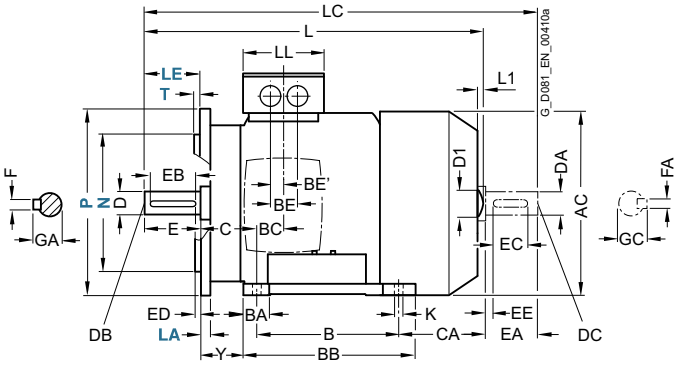
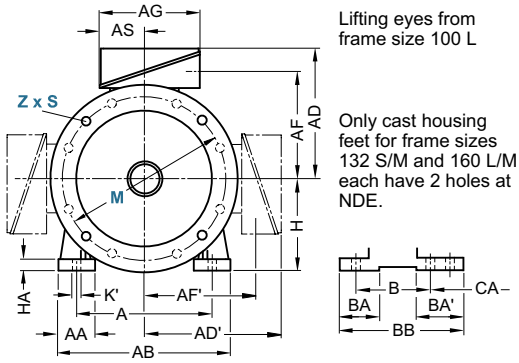
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



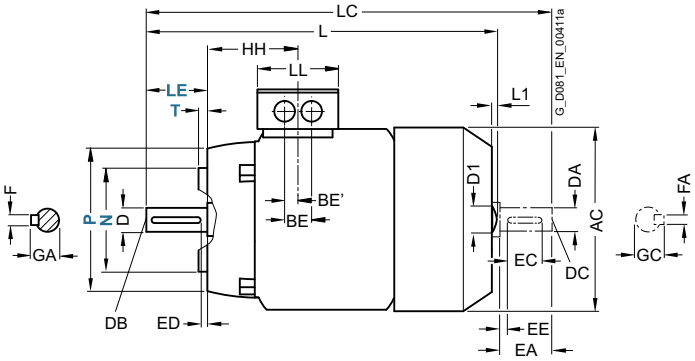


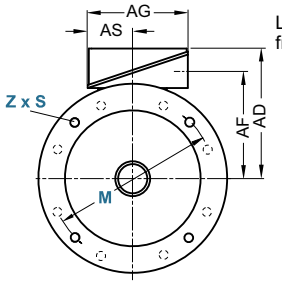
Lifting eyes from frame size 100 L

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 1/50 (**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 1LE1592	No. of poles	HH	K	K'	**L**	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	All	2, 4	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	100.5	12	16	**390.5**	7	32	450	134	28	M10	60	50	5	8	31	24	M8	50	40	5	8	27
132 S	All	2, 4	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	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	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	145	14.5	18	**606**	10	45	730	165	42	M16	110	90	10	12	45	42	M16	110	90	10	12	45

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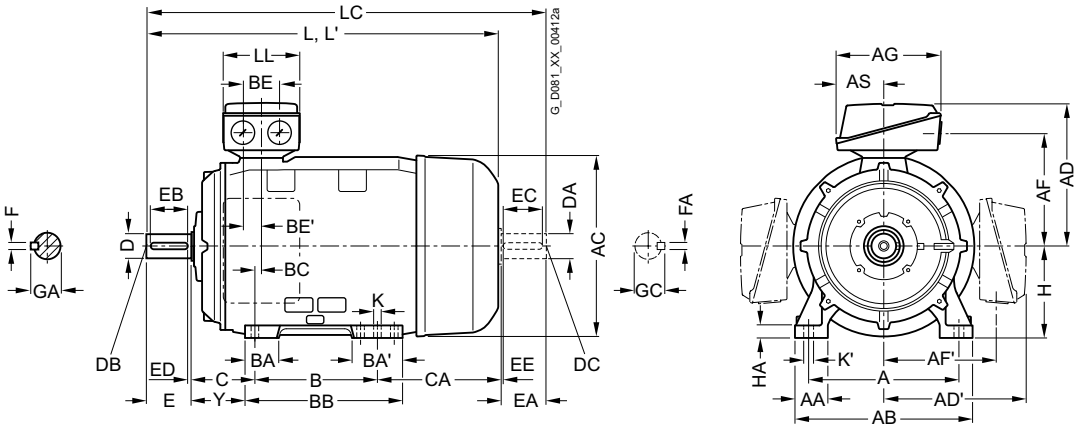
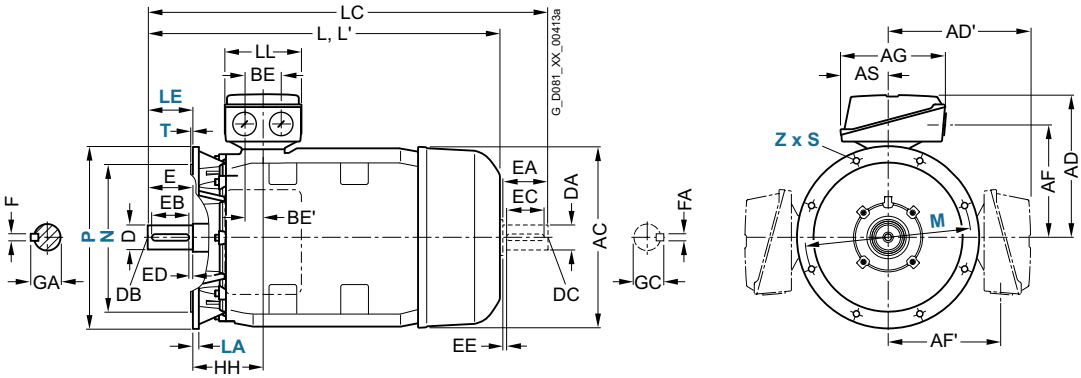
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																	
Frame size	Motor type 1LE1592-	No. of poles	A	AA	**AB**	AC	**AD**	AD´	AF	AF´	AG	AS	B	BA	BA´	BB	BC	BE	BE´	C	CA
180 M	1EA2	2	279	65	**339**	356	**286**	286	234	234	190	92	241	85	120	328	34	60	30	121	202
	1EB2	4											279								
180 L	1EB4	4																			
200 L	2AA4	2	318	70	**378**	396	**315**	315	259	259	266	112	305	104	104	355	31	85	42.5	133	177
	2AA5	2																			
	2AB5	4																			
225 S	2BB0	4	356	80	**436**	449	**338**	338	282	282	266	112	311	92	117	361	15	85	42.5	149	253
225 M	2BA2	2																			
	2BB2	4																			
250 M	2CA2	2	406	100	**490**	497	**410**	410	322	322	319	145	349	102	102	409	24	110	55	168	230
	2CB2	4																			

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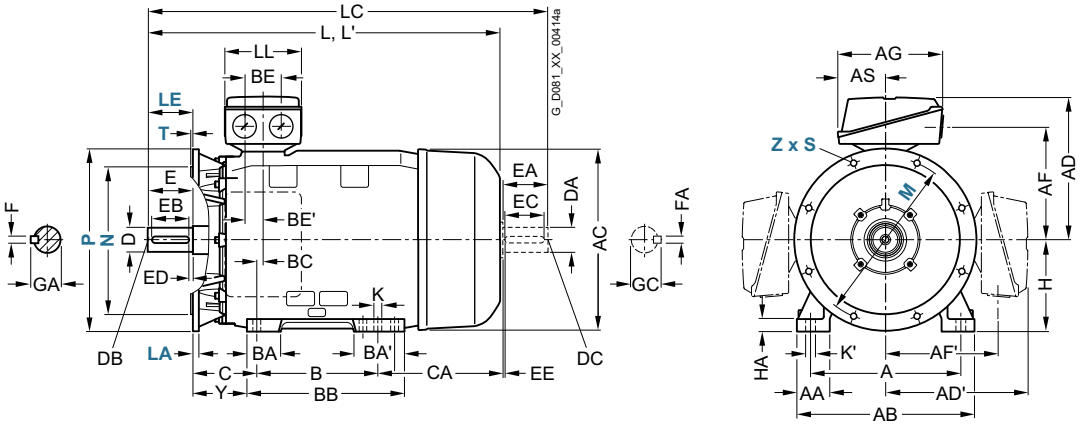
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**										DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1592-	No. of poles	**H**	HA	Y	HH	K	K´	**L**	L´	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
180 M	1EA2	2	**180**	20	95	155	15	19	**668**	668	784	165	48	M16	110	100	5	14	52	48	M16	110	100	5	14	51.5
	1EB2	4							**698**	698	814															
180 L	1EB4	4																								
200 L	2AA4	2	**200**	25	108	164	19	25	**721**	755	835	197	55	M20	110	100	5	16	59	55	M20	110	100	5	16	59
	2AA5	2																								
	2AB5	4																								
225 S	2BB0	4	**225**	34	124	164	19	25	**788**	–	903	197	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
225 M	2BA2	2							**818**	852	933		55		110	100	5	16	59	48	M16				14	51.5
	2BB2	4							**848**	–	963		60		140	125	10	18	64	55	M20				16	59
250 M	2CA2	2	**250**	40	138	192	24	30	**887**	924	1002	233	60	M20	140	125	10	18	64	55	M20	110	100	5	16	59
	2CB2	4								–	1032		65						69	60		140	125	10	18	64

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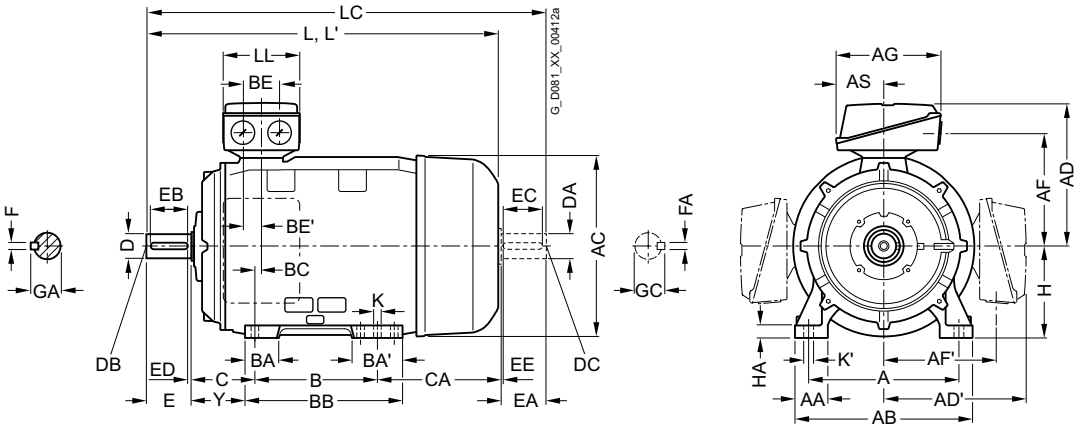
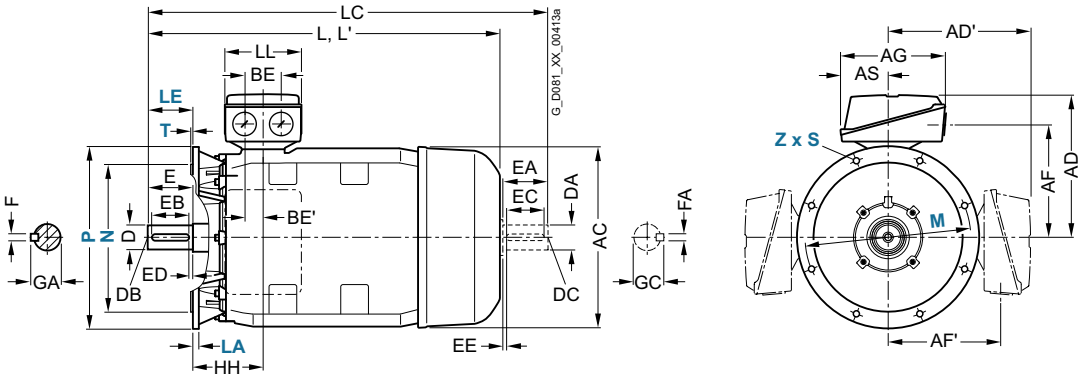
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**																	
Frame size	Motor type 1LE1592-	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 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
315 S	3AB0	4	508	120	**610**	616	**515**	515	404	404	374	164	406	113	170	527	22	110	55	216	295
315 M	3AB2[1)]	4	508	120	**610**	616	**515**	515	404	404	374	164	457	113	170	578	22	110	55	216	409
315 L[1)]	3AB4 3AB5	4 4	508	120	**610**	616	**515**	515	404	404	374	164	508	113 176	170 227	578 648	22	110	55	216	358 513

[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.

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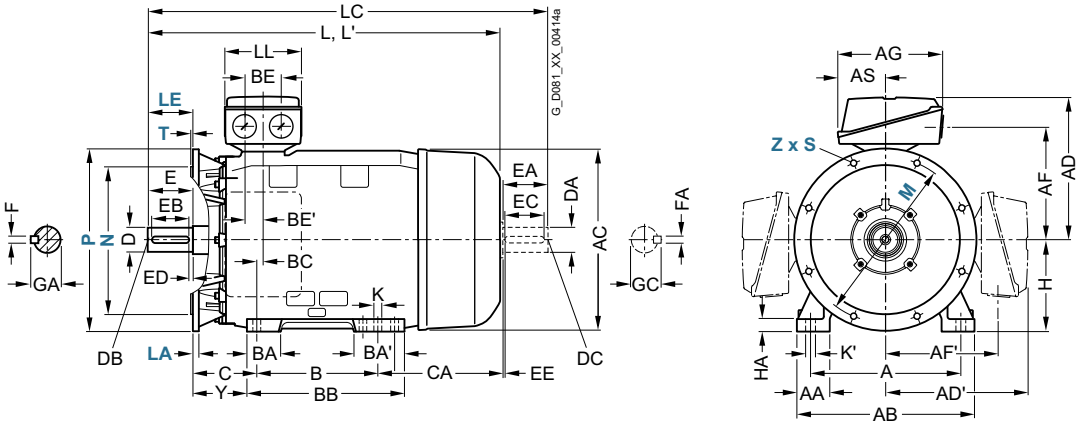
Dimensional drawings

Type of construction IM B35

For flange dimensions, see page 1/50 (**Z** = the number of retaining holes)



For motor			Dimension designation acc. to **IEC**										DE shaft extension							NDE shaft extension						
Frame size	Motor type 1LE1592-	No. of poles	**H**	HA	Y	HH	K	K´	**L**	L´	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
280 S	2DA0 2DB0	2 4	**280**	40	160	210	24	30	**960**	998 –	1105	233	65 75	M20	140	125	10	18 20	69 79.5	60 65	M20	140	125	10	18	64 69
280 M	2DA2 2DB2	2 4	**280**	40	160	210	24	30	**960**	998 –	1105	233	65 75	M20	140	125	10	18 20	69 79.5	60 65	M20	140	125	10	18	64 69
315 S	3AB0	4	**315**	50	181	238	28	35	**1082**	–	1227	299	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5
315 M	3AB2 [1]	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
315 L [1]	3AB4 3AB5	4 4	**315**	50	146	238	28	35	**1247** **1402**	–	1547	299	80	M20	170	140	25	22	85	70	M20	140	125	10	20	74.5

[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.

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