Order number code

0.1

Overview

12-character order numbers for 1LA, 1LG, 1LL, 1LP, 1MA, 1MJ, 1PP and 1PQ motors

The Order No. consists of a combination of digits and letters and is devided into two hyphenated blocks to provide a better overview, e.g.:
1LA9163-4KA19-Z
M1F + A11

The first block (positions 1 to 7) identifies the motor type; further characteristics of the version are encoded in the second (positions 8 to 12).

For deviations in the second block from the catalog codes, either -Z or 9 should be used as appropriate.

Ordering data:

- Complete Order No. and order code(s) or plain text.
- If a quotation has been requested, please specify the quotation number in addition to the Order 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 Order No.

Structure of the Order No.:		Position: 1	2	3	4	5	6	7	-	8	9	10	11	12
SIMOTICS Low-Voltage Motors, surface-cooled														
Positions 1 to 3: Digit, letter, letter	• Self-ventilated by fan mounted on and driven by rotor, aluminum or cast-iron housing	**1**	**L**	**A**										
	• Self-ventilated by fan mounted on and driven by rotor, cast-iron housing	**1**	**L**	**G**										
	• Self-ventilated by fan mounted on and driven by rotor, increased safety, type of protection Ex e II	**1**	**M**	**A**										
	• Self-ventilated by fan mounted on and driven by rotor, explosion-proof enclosure, type of protection Ex de IIC	**1**	**M**	**J**										
	• Self-ventilated with through-ventilation, cast-iron housing	**1**	**L**	**L**										
	• Naturally cooled without external fan, aluminum and cast-iron housing	**1**	**L**	**P**										
	• Forced-air cooled by air flow from the fan to be driven, aluminum or cast-iron housing	**1**	**P**	**P**										
	• Forced-air cooled by separately driven fan, cast-iron housing	**1**	**P**	**Q**										
Position 4: Digit	Series 3				**3**									
	Series 4				**4**									
	Series 5				**5**									
	Series 6				**6**									
	Series 7				**7**									
	Series 8				**8**									
	Series 9				**9**									
Positions 5 to 7: 3 digits	**Motor frame size** (frame size comprising shaft height and construction length, codes from 050 to 457)					**050 ... 457**								
Position 8: Digit	**Number of poles** 0: Pole-changing, with one winding connected in Dahlander circuit 1: Pole-changing, with two windings 2: 2-pole, 4: 4-pole, 6: 6-pole, 8: 8-pole									**0 ... 8**				
Positions 9 and 10: 2 letters	**Version**										**A ...**	**A ...**		
Position 11: Digit	**Voltage, circuit and frequency** (encoded with 0 ... 9, 9 requires order code L.. (e.g. L1Y))												**0 ... 9**	
Position 12: Digit	**Type of construction** (encoded with 0 ... 9, 9 requires order code M.. (e.g. M1F))													**0 ... 9**
	Special order versions: encoded – additional order code required not encoded – additional plain text required								**-**	**Z**				

Ordering example

Selection criteria	Requirement	Structure of the Order No.
Motor type 1LA9	Standard motor with High Efficiency IE2, IP55 degree of protection, aluminum housing	1LA9■■■-■■■■■
Motor frame size/No. of poles/Speed	160 M/4-pole/1500 rpm	1LA9163-4KA■■
Rated output	11 kW	
Voltage and frequency	230 VΔ/400 VY, 50 Hz	1LA9163-4KA1■
Type of construction	IM V5 with protective cover	1LA9163-4KA19 M1F
Special version: Motor protection	Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping	1LA9163-4KA19-Z M1F+A11

The assignment of the order number supplements and order codes to the order numbers of the individual motor series is shown in the section "Order number supplements and special versions" in Catalog Sections 2 to 5.

Overview (continued)

16-character order numbers for 1LE1 and 1PC1 motors

The Order No. 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 in some cases the frequency/output; and in the third block (positions 13 to 16), the frequency/output, type of construction and further characteristics of the version are encoded.

For deviations in the second and third block from the catalog codes, either -Z or 9 should be used as appropriate.

Ordering data:

- Complete Order No. and order code(s) or plain text.
- If a quotation has been requested, please specify the quotation number in addition to the Order 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 Order No.

Structure of the Order No.:	Position: 1	2	3	4	5	6	7	-	8	9	10	11	12	-	13	14	15	16	
SIMOTICS Low-Voltage Motors, surface-cooled																			
Positions 1 to 4: Digit, letter, letter, digit	• Self-ventilated by fan mounted on and driven by rotor • Forced-air cooled by air flow from the fan to be driven with option extension F90	**1**	**L**	**E**	**1**														
	• Naturally cooled without external fan and fan cover	**1**	**P**	**C**	**1**														
Position 5: Digit	Aluminum housing					**0**													
	Cast-iron housing Basic Line					**5**													
	Cast-iron housing Performance Line					**6**													
Positions 6 to 7: 2 digits	Motors with High Efficiency IE2						**0 1**												
	Motors with Standard Efficiency IE1						**0 2**												
	Motors with Premium Efficiency IE3						**0 3**												
	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**												
Positions 8, 9 and 11: Digit, letter, digit	**Motor frame size** (frame size comprising shaft height and construction length, encoded)								**0 ... 3**	**A ... E**		**0 ... 6**							
Position 10: Letter	**Number 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 ... D**								
Positions 12 and 13: 2 digits	**Voltage, circuit and frequency** (encoded with 2 digits, 9-0 requires order code M.. (e.g. M1Y))												**0 ... 9**		**0 ... 8**				
Position 14: Letter	**Type of construction** (encoded with A ... V)															**A ... V**			
Position 15: Letter	**Motor protection** (encoded with A ... Z; Z requires order code Q.. (e.g. Q2A))																**A ... Z**		
Position 16: Digit	**Connection box position** 4: Connection box top, 5: Connection box right, 6: Connection box left, 7: Connection box below																	**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 Order No.
Motor type 1LE1	Standard motor with High Efficiency IE2, IP55 degree of protection, aluminum housing	**1LE1001-■■■■■-■■■■**
Motor frame size/No. of poles/Speed	160 M/4-pole/1500 rpm	**1LE1001-1DB2■-■■■■**
Rated output	11 kW	
Voltage and frequency	230 VΔ/400 VY, 50 Hz	**1LE1001-1DB22-2■■■**
Type of construction with special version	IM V5 with protective cover [1]	**1LE1001-1DB22-2C■■-Z H00**
Motor protection	Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping [2]	**1LE1001-1DB22-2CB■-Z H00**
Connection box position	Connection box on right (viewed from DE)	**1LE1001-1DB22-2CB5-Z H00**

The assignment of the order number supplements and order codes to the order numbers of the individual motor series is shown in the section "Order number supplements and special versions" in Catalog Section 1.

1) Standard without protective cover – the protective cover is defined with Option H00 and must be ordered in addition with this option.

2) No additional option must be specified in the order.