

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

**Voltagess – Aluminum series**  
1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

## Selection and ordering data

Voltages	Voltage code 11th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)										
			Motor version	Motor type (alum.)	Motor type – Frame size										
					63	71	80	90	100	112	132	160	180	200	225
			IE2 High Efficiency	1LA9	1LA9 ①										
			IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③		
				1LA9	1LA9 with increased output ④										
				1PP7/1PP5	1PP7 ⑤						1PP5 ⑥				
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧					
			NEMA Energy Efficient	1LA9	1LA9 ⑨										
			Motor version	Motor type	Frame size										
					63	71	80	90	100	112	132	160	180	200	225
<b>1PP . . . . . ■ .</b>															
<b>1L . . . . . ■ .</b>															
<b>Voltage at 50 Hz or 60 Hz</b>															
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY	1	–	All	All	□	□	□	□	□	□	□	□	□	□	□
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ 1)	6	–	All except ⑩		□	□	□	□	□	□	□	□	□	□	□
<b>Voltage at 50 Hz and 50 Hz output</b>															
500 VY	3	–	All	All	○	○	○	○	○	○	○	○	○	○	○
500 VΔ	5	–	All	All	–	–	–	–	○	○	○	○	○	○	○
220 VΔ/380 VY (440 VY at 60 Hz)	9	L1R	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
230 VΔ	9	L1E	All	All	○	○	○	○	○	○	○	○	○	○	○
380 VΔ/660 VY (440 VΔ at 60 Hz) 1)	9	L1L	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
415 VY	9	L1C	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
415 VΔ	9	L1D	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
400 VY	9	L1A	All	All	○	○	○	○	○	○	○	○	○	○	○
400 VΔ	9	L1B	All	All	○	○	○	○	○	○	○	○	○	○	○
400 VΔ (460 VΔ at 60 Hz)	9	L1U	All	All	○	○	○	○	○	○	○	○	○	○	○
<b>Voltage at 60 Hz and required output at 60 Hz</b>															
220 VΔ/380 VY; 50 Hz output	9	L2A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
220 VΔ/380 VY; 60 Hz output 2)	9	L2B	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 50 Hz output 1)	9	L2C	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 VΔ/660 VY; 60 Hz output 1) 2)	9	L2D	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VY; 50 Hz output	9	L2Q	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VY; 60 Hz output 2)	9	L2W	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 50 Hz output	9	L2R	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 VΔ; 60 Hz output 2)	9	L2X	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 50 Hz output	9	L2S	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VY; 60 Hz output 2)	9	L2E	All except ⑩		○	○	○	○	○	○	○	○	○	○	○
460 VΔ; 50 Hz output	9	L2T	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 VΔ; 60 Hz output 2)	9	L2F	All except ⑩		○	○	○	○	○	○	○	○	○	○	○
575 VY; 50 Hz output	9	L2U	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VY; 60 Hz output 2)	9	L2L	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 50 Hz output	9	L2V	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 VΔ; 60 Hz output 2)	9	L2M	All except ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Multi-voltage at 60 Hz and required output at 60 Hz</b>															
230 VYY/460 VY 60 Hz; 50 Hz output, 9 main terminals and electrical design to NEMA 3)	9	L3E	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–
230 VYY/460 VY 60 Hz; 60 Hz output, 9 main terminals and electrical design to NEMA 3)	9	L3F	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	–
230 VΔΔ/460 VΔ 60 Hz; 50 Hz output, 12 main terminals and electrical design to NEMA 3)	9	L3G	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	–
230 VΔΔ/460 VΔ 60 Hz; 60 Hz output, 12 main terminals and electrical design to NEMA 3)	9	L3H	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	–
<b>Non-standard voltage and/or frequencies</b>															
Non-standard winding 4)	9	L1Y • and identification code	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Standard delivery times:

10 working days	20 working days	On request
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# SIMOTICS GP 1LA Standard Motors

Supplements to order numbers and special versions

Voltages – Aluminum series 1LA7, 1LA5 – pole-changing and for converter-fed operation only

Voltages	Voltage code 11th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)											
			Motor version	Motor type (alum.)	Motor type – Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
<b>Voltage at 50 Hz and 50 Hz output, direct switch-on</b>																
230 V	1	–	All	All	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
400 V	6	–	All	All	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
500 V	5	–	All	All	○	○	○	○	○	○	○	○	○	○	○	○
690 V	0	–	All	All	○	○	○	○	○	○	○	○	○	○	○	○
<b>Voltage at 60 Hz and required output at 60 Hz</b>																
220 V; 50 Hz output	9	L4A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
220 V; 60 Hz output	9	L4B	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 V; 50 Hz output	9	L4C	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
380 V; 60 Hz output	9	L4D	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 V; 50 Hz output	9	L4G	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
440 V; 60 Hz output	9	L4E	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 V; 50 Hz output	9	L4J	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
460 V; 60 Hz output	9	L4H	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 V; 50 Hz output	9	L4N	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
575 V; 60 Hz output	9	L4M	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Non-standard voltage and/or frequencies</b>																
Non-standard winding <sup>4)</sup>	9	L1Y • and identification code	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-standard winding for Δ/Y starting at the lower speed <sup>4)</sup>	9	L3Y • and identification code	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓

Voltages	Voltage code 11th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)											
			Motor version	Motor type (alum.)	Motor type – Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
<b>Voltage at 50 Hz and 50 Hz output</b>																
500 VY	3	–	All	All						☐	☐	☐	☐	☐	☐	☐
500 VΔ	5	–	All	All						○	○	○	○	○	○	○
690 VY	8	–	All	All						○	○	○	○	○	○	○
400 VY	9	L1A	All	All						○	○	○	○	○	○	○
400 VΔ	9	L1B	All	All						○	○	○	○	○	○	○
<b>Non-standard voltage and/or frequencies</b>																
Non-standard winding <sup>4) 5)</sup>	9	L1Y • and identification code	All	All						✓	✓	✓	✓	✓	✓	✓

- ☐ 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 the North America export version of 1LA9 with order code D42 NEMA Energy Efficient, voltages above 600 V will not be stamped.

2) Not admissible in combination with order code D42 NEMA Energy Efficient.

3) When ordering with the brake option (order code G26), only 6 motor connection terminals are possible for 1LA7 motors of frame sizes 63 to 90.

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

5) 60 Hz data is not admissible on the rating plate.

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

Standard delivery times:











10  
working  
days

20  
working  
days

On  
request

Types of construction – Aluminum series  
1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

## Selection and ordering data

Types of construction	Type of construction code	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)											
			Motor version	Motor type (alum.)	Motor type – Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
			IE2 High Efficiency	1LA9	1LA9 ①											
			IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②						1LA5 ③					
				1LA9	1LA9 with increased output ④											
				1PP7/1PP5	1PP7 ⑤						1PP5 ⑥					
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧						
			NEMA Energy Efficient	1LA9	1LA9 ⑨											
			Pole-changing	1LA7/1LA5	1LA7 ⑩						1LA5 ⑪					
			For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬					
			Motor version	Motor type	Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
<b>Without flange</b>																
IM B3 <sup>1)</sup>		0	–	All except ⑨	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IM B6, IM B7, IM B8 <sup>1)</sup>		0	–	All except ⑨	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IM V6 <sup>1)</sup>		0	–	All except ⑨	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IM V5 without protective cover <sup>1)</sup>		0	–	All except ⑨	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IM V5 with protective cover <sup>1) 2)</sup>		9	<b>M1F</b>	All except ⑤, ⑥, ⑦, ⑧ and ⑨	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	
<b>With flange</b>																
			acc. to DIN EN 50347		FF115	FF130	FF165	FF165	FF215	FF215	FF265	FF300	FF300	FF350	FF400	
			acc. to DIN 42948		A 140	A 160	A 200	A 200	A 250	A 250	A 300	A 350	A 350	A 400	A 450	
IM B5		1	–	All	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	
IM V1 without protective cover <sup>3)</sup>		1	–	All	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	
IM V1 with protective cover <sup>2) 3)</sup>		4	–	All except ⑤, ⑥, ⑦ and ⑧	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	
IM V3 <sup>3)</sup>		1	–	All	☑	☑	☑	☑	☑	☑	☑	☑	–	–	–	
		9	<b>M1G</b>	All	–	–	–	–	–	–	–	–	☑	☑	☑	
IM B35 <sup>1)</sup>		6	–	All except ⑨	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	

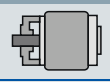
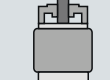

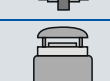
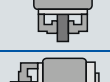
Standard delivery times:

<b>10 working days</b>	<b>20 working days</b>	<b>On request</b>
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# SIMOTICS GP 1LA/1LP/1PP Standard Motors

## Supplements to order numbers and special versions

### Types of construction – Aluminum series 1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Types of construction	Type of construction code 12th position of the Order No.	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)												
			Motor version	Motor type (alum.)	Motor type – Frame size												
					63	71	80	90	100	112	132	160	180	200	225		
			IE2 High Efficiency	1LA9	1LA9 ①												
			IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③				
				1LA9	1LA9 with increased output ④												
				1PP7/1PP5	1PP7 ⑤							1PP5 ⑥					
				1LP7/1LP5	1LP7 ⑦							1LP5 ⑧					
			NEMA Energy Efficient	1LA9	1LA9 ⑨												
			Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪				
			For converter-fed operation only	1LA7/1LA5						1LA7 ⑫			1LA5 ⑬				
			Motor version	Motor type	Frame size												
					63	71	80	90	100	112	132	160	180	200	225		
With standard flange			acc. to DIN EN 50347		FT75	FT85	FT100	FT115	FT130	FT130	FT165	FT215					
			acc. to DIN 42948		C 90	C 105	C 120	C 140	C 160	C 160	C 200	C 250					
IM B14		2	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
IM V19		2	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
IM V18 without protective cover		2	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
IM V18 with protective cover 2)		9	M2A	All except ⑤, ⑥, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
IM B34 1)		7	–	All except ⑨		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	

For legends and footnotes, see Page 5.

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

## Supplements to order numbers and special versions

Standard delivery times:






10  
working  
days

20  
working  
days

On  
request

### Types of construction – Aluminum series

1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Types of construction	Type of construction code	Additional identification code with order code and plain text if required	Motor category		Standard delivery time (colored area)											
			Motor version	Motor type (alum.)	Motor type – Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
			IE2 High Efficiency	1LA9	1LA9 ①											
			IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③			
				1LA9	1LA9 with increased output ④											
				1PP7/1PP5	1PP7 ⑤								1PP5 ⑥			
				1LP7/1LP5	1LP7 ⑦								1LP5 ⑧			
			NEMA Energy Efficient	1LA9	1LA9 ⑨											
			Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪			
			For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬					
			Motor version	Motor type	Frame size											
					63	71	80	90	100	112	132	160	180	200	225	
With special flange			acc. to DIN EN 50347		FT100 FT115 FT130 FT130 FT165 FT165 FT215 FT265											
			acc. to DIN 42948		C 120 C 140 C 160 C 160 C 200 C 200 C 250 C 300											
IM B14		3	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–
IM V19		3	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–
IM V18 without protective cover		3	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–
IM V18 with protective cover 2)		9	M2B	All except ⑤, ⑥, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–
IM B34 1)		9	M2C	All except ⑨		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–

- 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 the North America export version of 1LA9 with order code D42 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.

2) The "Second shaft extension" option, order code K16 is not possible.

3) For frame sizes 180 M to 225 M, the 1LA5, 1LP5 and 1PP5 motors can be supplied with two additional eyebolts; state identification code "-Z" and order code K32.

Standard delivery times:

**10**  
working  
days

**20**  
working  
days

**On**  
request

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

Options – Aluminum series  
1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

## Selection and ordering data

Special versions	Additional identification code <b>-Z</b> with order code and plain text if required	Motor category		Standard delivery time (colored area)											
		Motor version	Motor type (alum.)	Motor type – Frame size											
				63	71	80	90	100	112	132	160	180	200	225	
		IE2 High Efficiency	1LA9	1LA9 ①											
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③			
			1LA9	1LA9 with increased output ④											
			1PP7/1PP5	1PP7 ⑤						1PP5 ⑥					
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧					
		NEMA Energy Efficient	1LA9	1LA9 ⑨											
		Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪			
		For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬					
		Motor version	Motor type	Frame size											
		1PP .....-.....		63	71	80	90	100	112	132	160	180	200	225	
		1L .....-.....													
<b>Motor protection</b>															
Motor protection with PTC thermistors with 3 embedded temperature sensors for tripping 1)	A11	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Motor protection with PTC thermistors with 6 embedded temperature sensors for alarm and tripping 1)	A12	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Motor temperature detection with embedded temperature sensor KTY 84-130 1)	A23	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Motor temperature detection with embedded temperature sensors 2 x KTY 84-130 1)	A25	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Temperature detectors for tripping 1)	A31	All except ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Installation of 3 PT100 resistance thermometers 1)	A60	All except ⑫ and ⑬		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
<b>Motor connection and connection box</b>															
ECOFAST motor connector Han-Drive 10e for 230 VΔ/400 VY 2)	G55	All except ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	
ECOFAST motor connector EMC Han-Drive 10e for 230 VΔ/400 VY 3)	G56	All except ④, ⑩, ⑪, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	
Connection box on RHS	K09	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Connection box on LHS	K10	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	
One metal cable gland	K54	All except ①, ④ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Only applicable for ①, ④ and ⑨		–	–	✓	✓	✓	✓	✓	–	–	–	–	
Cable gland, max. configuration	K55	All except ⑤ and ⑥		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rotation of the connection box through 90°, entry from DE	K83	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rotation of the connection box through 90°, entry from NDE	K84	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rotation of the connection box through 180°	K85	All	All	✓	✓	✓	✓	○	○	○	○	✓	✓	✓	
Next larger connection box	L00	All	All	–	–	–	–	–	–	–	–	✓	✓	✓	
External grounding	L13	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
3 cables protruding, 0.5 m long 4) 5)	L44	All except ⑩ and ⑪; for ⑫ and ⑬ on request		✓	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	
3 cables protruding, 1.5 m long 4) 5)	L45	All except ⑩ and ⑪; for ⑫ and ⑬ on request		✓	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	
6 cables protruding, 0.5 m long 4)	L47	All; for ⑫ and ⑬ on request		✓	✓	✓	✓	✓	✓	✓	✓	✓	O. R.	O. R.	
6 cables protruding, 1.5 m long 4)	L48	All; for ⑫ and ⑬ on request		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6 cables protruding, 3 m long 4)	L49	All except ⑤, ⑥, ⑦, ⑧; for ⑫ and ⑬ on request		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

## Options – Aluminum series

1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Special versions	Additional identification code -Z with order code and plain text if required	Motor category		Standard delivery time (colored area)														
		Motor version	Motor type (alum.)	Motor type – Frame size														
				63	71	80	90	100	112	132	160	180	200	225				
		IE2 High Efficiency	1LA9	1LA9 ①														
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③						
			1LA9	1LA9 with increased output ④														
			1PP7/1PP5	1PP7 ⑤						1PP5 ⑥								
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧								
		NEMA Energy Efficient	1LA9	1LA9 ⑨														
		Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪						
		For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬								
1PP .....		Motor version	Motor type	Frame size				63	71	80	90	100	112	132	160	180	200	225
1L .....																		
<b>Motor connection and connection box</b> (continued)																		
Connection box on NDE	M64	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminal strip for main and auxiliary terminals	M69	All except ①, ④, ⑨, ⑫ and ⑬		✓	✓	✓	✓	–	–	–	–	–	–	–	–	–	–	–
<b>Windings and insulation</b>																		
Temperature class 155 (F), used acc. to 155 (F), with service factor (SF)	C11	All except ④, ⑦, ⑧, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 155 (F), with increased output	C12	All except ④, ⑦, ⑧, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 155 (F), with increased coolant temperature	C13	All except ④, ⑦, ⑧, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H) at rated output and max. CT 60 °C ⑥)	C18	All except ①, ④, ⑦, ⑧, ⑨, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature, with 30 to 60 g water per m <sup>3</sup> of air	C19	All except ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 % ⑦)	C22	All except ④, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 % ⑦)	C23	All except ④, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 % ⑦)	C24	All except ④, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	C25	All except ④, ⑦ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature, with 60 to 100 g water per m <sup>3</sup> of air	C26	All except ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 130 (B), with higher coolant temperature and/or site altitude	Y50 •	All except ④, ⑦, ⑧, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), used acc. to 155 (F), other requirements	Y52 •	All except ④, ⑦, ⑧, ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Standard delivery times:

10 working days	20 working days	On request
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# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

**Options – Aluminum series**  
1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Special versions	Additional identification code -Z with order code and plain text if required	Motor category		Standard delivery time (colored area)												
		Motor version	Motor type (alum.)	Motor type – Frame size												
				63	71	80	90	100	112	132	160	180	200	225		
		IE2 High Efficiency	1LA9	1LA9 ①												
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③				
			1LA9	1LA9 with increased output ④												
			1PP7/1PP5	1PP7 ⑤						1PP5 ⑥						
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧						
		NEMA Energy Efficient	1LA9	1LA9 ⑨												
		Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪				
		For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬						
		Motor version	Motor type	Frame size		63	71	80	90	100	112	132	160	180	200	225
		1PP .....														
		1L .....														
<b>Colors and paint finish</b>																
Special finish in RAL 7030 stone gray		All	All	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Special finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog D 81.1 · 2008 Part 0 "Introduction")	Y54 • and special finish RAL .....	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" in Catalog D 81.1 · 2008 Part 0 "Introduction"	Y51 • and special finish RAL .....	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Special finish sea air resistant	M94	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Unpainted (only cast-iron parts primed)	K23	All	All	○	○	○	○	○	○	○	○	○	○	○	○	○
Unpainted, only primed	K24	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Modular technology – Basic versions 8)</b>																
Mounting of separately driven fan	G17	All except ⑤, ⑥, ⑦ and ⑧		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake 9)	G26	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8001-1 (HTL) rotary pulse encoder	H57	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of 1XP8001-2 (TTL) rotary pulse encoder	H58	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Modular technology – Combinations of basic versions 8)</b>																
Mounting of separately driven fan and 1XP8001-1 rotary pulse encoder	H61	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake and 1XP8001-1 rotary pulse encoder 9)	H62	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake and separately driven fan 9)	H63	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake, separately driven fan and 1XP8001-1 rotary pulse encoder 9)	H64	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of separately driven fan and 1XP8001-2 rotary pulse encoder	H97	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake and 1XP8001-2 rotary pulse encoder 9)	H98	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓
Mounting of brake, separately driven fan and 1XP8001-2 rotary pulse encoder 9)	H99	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓



# SIMOTICS GP 1LA/1LP/1PP Standard Motors

## Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

### Options – Aluminum series

1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Special versions	Additional identification code -Z with order code and plain text if required	Motor category		Standard delivery time (colored area)											
		Motor version	Motor type (alum.)	Motor type – Frame size											
				63	71	80	90	100	112	132	160	180	200	225	
<b>1PP</b> ..... <b>1L</b> .....		IE2 High Efficiency	1LA9	1LA9 ①											
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②							1LA5 ③				
			1LA9	1LA9 with increased output ④											
			1PP7/1PP5	1PP7 ⑤							1PP5 ⑥				
			1LP7/1LP5	1LP7 ⑦							1LP5 ⑧				
		NEMA Energy Efficient	1LA9	1LA9 ⑨											
		Pole-changing	1LA7/1LA5	1LA7 ⑩							1LA5 ⑪				
For converter-fed operation only	1LA7/1LA5								1LA7 ⑫			1LA5 ⑬			
		Motor version	Motor type	Frame size											
				63	71	80	90	100	112	132	160	180	200	225	
<b>Modular technology – Additional versions</b>															
Brake supply voltage 24 V DC	<b>C00</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Brake supply voltage 400 V AC	<b>C01</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Brake supply voltage 180 V DC, for operation on MICROMASTER 411-ECOFAS <sup>10)</sup>	<b>C02</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧, ⑨, ⑩ and ⑪		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	
Mechanical manual brake release with lever (no locking)	<b>K82</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Special technology ⑧)</b>															
Prepared for mounting of MMI 11)	<b>H15</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧, ⑨, ⑫ and ⑬		O. R.	✓	✓	✓	✓	✓	✓	–	–	–	–	
Mounting of LL 861 900 220 rotary pulse encoder	<b>H70</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Mounting of HOG 9 D 1024 I rotary pulse encoder	<b>H72</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Mounting of HOG 10 D 1024 I rotary pulse encoder	<b>H73</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Prepared for mounting of LL 861 900 220	<b>H78</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Prepared for mounting of HOG 9 D 1024 I	<b>H79</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Prepared for mounting of HOG 10 D 1024 I	<b>H80</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
<b>Mechanical design and degrees of protection</b>															
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar 12)	<b>K17</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
With two additional eyebolts for IM V1/IM V3	<b>K32</b>	All except ①, ④ and ⑨		–	–	–	–	–	–	–	–	✓	✓	✓	
Low-noise version for 2-pole motors with clockwise direction of rotation 10)	<b>K37</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧, ⑨, ⑫ and ⑬		–	–	–	–	–	–	✓	✓	✓	✓	✓	
		Only applicable for ①, ④ and ⑨		–	–	–	–	–	–	–	–	✓	✓		
Low-noise version for 2-pole motors with counter-clockwise direction of rotation 10)	<b>K38</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧, ⑨, ⑫ and ⑬		–	–	–	–	–	–	✓	✓	✓	✓	✓	
		Only applicable for ①, ④ and ⑨		–	–	–	–	–	–	–	–	✓	✓		
IP65 degree of protection 13)	<b>K50</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IP56 degree of protection 14)	<b>K52</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Vibration-proof version	<b>L03</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Condensation drainage holes 15)	<b>L12</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rust-resistant screws (externally)	<b>M27</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mechanical protection for encoder 16)	<b>M68</b>	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Coolant temperature and site altitude</b>															
Coolant temperature –40 to +40 °C 17)	<b>D03</b>	All except ①, ④ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Only applicable for ①, ④ and ⑨		–	–	✓	✓	✓	✓	✓	✓	✓	–	–	
Coolant temperature –30 to +40 °C 17)	<b>D04</b>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Standard delivery times:

10 working days	20 working days	On request
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# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

## Options – Aluminum series 1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Special versions	Additional identification code -Z with order code and plain text if required	Motor category		Standard delivery time (colored area)											
		Motor version	Motor type (alum.)	Motor type – Frame size											
				63	71	80	90	100	112	132	160	180	200	225	
		IE2 High Efficiency	1LA9	1LA9 ①											
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②							1LA5 ③				
			1LA9	1LA9 with increased output ④											
			1PP7/1PP5	1PP7 ⑤					1PP5 ⑥						
			1LP7/1LP5	1LP7 ⑦					1LP5 ⑧						
		NEMA Energy Efficient	1LA9	1LA9 ⑨											
		Pole-changing	1LA7/1LA5	1LA7 ⑩							1LA5 ⑪				
		For converter-fed operation only	1LA7/1LA5						1LA7 ⑫			1LA5 ⑬			
1PP .....		Motor version	Motor type	Frame size											
1L .....				63	71	80	90	100	112	132	160	180	200	225	
Designs in accordance with standards and specifications															
CCC China Compulsory Certification 18)	D01	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		✓	✓	✓	✓	✓	✓	–	–	–	–	–	
		Only applicable for ①, ④ and ⑨		✓	✓	✓	✓	–	–	–	–	–	–	–	
IE1 motor without CE marking for export outside EEA (see EU Directive 640/2009)	D22 <i>New!</i>	Only possible for ②, ③, ④, ⑤, ⑥, ⑦ and ⑧		○	○	○	○	○	○	○	○	○	○	○	
Electrical according to NEMA MG1-12 19)	D30	All except ⑤, ⑥, ⑦ and ⑧; for ④ standard version		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Design according to UL with "Recognition Mark" 19)	D31	All except ⑫ and ⑬; for ④ standard version		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Certified for Korea acc. to KS C4202 20)	D33	Only possible for ①		–	–	✓	✓	✓	✓	✓	✓	✓	✓	–	
China Energy Efficiency Label	D34 <i>New!</i>	Only possible for ① and ⑨		○	○	○	○	○	○	○	○	○	○	○	
Canadian regulations (CSA) 21)	D40	All except ⑫ and ⑬; for ④ standard version		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
NEMA Energy Efficient, North America version according to NEMA MG1, Table 12-11, incl. UL and CSA	D42 <i>New!</i>	Only possible for ③		O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	–	
PSE mark for Japan 22)	D46	All except ⑫ and ⑬		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	
VIK version (comprises Zone 2 for mains-fed operation, without Ex nA II marking on rating plate) 23)	K30	Only possible for ①, ⑨, 8-pole motors and motors < 0.75 kW		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
Ex nA II on VIK rating plate	C27	Only possible for ①, ⑨, 8-pole motors and motors < 0.75 kW		✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	
Bearings and lubrication															
Measuring nipple for SPM shock pulse measurement for bearing inspection 24)	G50	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Bearing design for increased cantilever forces	K20	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Regreasing device 24) 25)	K40	All	All	–	–	–	–	✓	✓	✓	✓	✓	✓	✓	
Located bearing DE	K94	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Located bearing NDE	L04	All except ⑤ and ⑥		✓	✓	✓	✓	✓	✓	✓	□	□	□	□	
		Only applicable for ⑤ and ⑥		✓	✓	✓	✓	✓	✓	✓	–	–	–	–	
Balance and vibration quantity															
Vibration quantity level A		All	All	□	□	□	□	□	□	□	□	□	□	□	
Vibration quantity level B	K02	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Full-key balancing	L68	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Balancing without key	M37	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Shaft and rotor															
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 Tolerance R for flange-mounting motors 26)	K04	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Second standard shaft extension	K16	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Shaft extension with standard dimensions, without feather keyway	K42	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L39	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

Supplements to order numbers and special versions

Standard delivery times:

10  
working  
days

20  
working  
days

On  
request

## Options – Aluminum series

1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

Special versions	Additional identification code -Z with order code and plain text if required	Motor category		Standard delivery time (colored area)												
		Motor version	Motor type (alum.)	Motor type – Frame size												
				63	71	80	90	100	112	132	160	180	200	225		
		IE2 High Efficiency	1LA9	1LA9 ①												
		IE1 Standard Efficiency	1LA7/1LA5	1LA7 ②								1LA5 ③				
			1LA9	1LA9 with increased output ④												
			1PP7/1PP5	1PP7 ⑤						1PP5 ⑥						
			1LP7/1LP5	1LP7 ⑦						1LP5 ⑧						
		NEMA Energy Efficient	1LA9	1LA9 ⑨												
		Pole-changing	1LA7/1LA5	1LA7 ⑩								1LA5 ⑪				
		For converter-fed operation only	1LA7/1LA5	1LA7 ⑫						1LA5 ⑬						
		Motor version	Motor type	Frame size		63	71	80	90	100	112	132	160	180	200	225
<b>Shaft and rotor (continued)</b>																
Standard shaft made of stainless steel	M65	All except ①, ④ and ⑨		–	–	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Non-standard cylindrical shaft extension <sup>27)</sup>	Y55 • and identification code	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
<b>Heating and ventilation</b>																
Fan cover for textile industry <sup>28)</sup>	H17	All except ①, ④, ⑤, ⑥, ⑦, ⑧ and ⑨		–	–	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
		Only applicable for ①, ④ and ⑨		–	–	–	–	–	–	–	✓	✓	–	–	–	–
Metal external fan <sup>29)</sup>	K35	All except ⑤, ⑥, ⑦ and ⑧		✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 230 V <sup>30)</sup>	K45	All; for ⑫ and ⑬ on request		✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Anti-condensation heating for 115 V <sup>30)</sup>	K46	All; for ⑫ and ⑬ on request		✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
<b>Rating plate and extra rating plates</b>																
Second lubrication plate, loose	B06	All	All	–	–	–	–	–	–	✓	✓	✓	✓	✓	✓	✓
Extra rating plate for voltage tolerance <sup>31)</sup>	B07 <i>New!</i>	All except ⑦, ⑧, ⑩, ⑪ and 8-pole motors		✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Second rating plate, loose	K31	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Rating plate, stainless steel	M40 <i>New!</i>	Only possible for ①, ④ and ⑨		✓	✓	✓	✓	–	–	✓	✓	✓	✓	–	–	–
Extra rating plate or rating plate with deviating rating plate data	Y80 • and identification code	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Extra rating plate with identification codes	Y82 • and identification code	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Additional information on rating plate and on package label (max. 20 characters)	Y84 • and identification code	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
<b>Packaging, safety notes, documentation and test certificates</b>																
With one safety and start-up guide per box pallet	B01	All except ⑤, ⑥, ⑦ and ⑧		□	□	□	□	–	–	□	□	□	□	□	–	–
		Only applicable for ⑤, ⑥, ⑦ and ⑧		–	–	□	□	–	–	□	□	□	□	–	–	–
Acceptance test certificate, 3.1 in acc. with EN 10204 <sup>32)</sup>	B02	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Printed German/English Operating Instructions (Compact) enclosed <sup>33)</sup>		All	All	□	□	□	□	–	–	□	□	□	□	□	□	□
Printed German/English Operating Instructions enclosed	B23	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Type test with heat run for horizontal motors, with acceptance	F83	All except ⑫ and ⑬		✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Wire-lattice pallet	L99	All	All	○	○	○	○	–	–	○	○	○	○	○	–	–
Connected in star for dispatch	M32	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓
Connected in delta for dispatch	M33	All	All	✓	✓	✓	✓	–	–	✓	✓	✓	✓	✓	✓	✓

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

For footnotes, see Page 12.

# SIMOTICS GP 1LA/1LP/1PP Standard Motors

## Supplements to order numbers and special versions

Options – Aluminum series  
1LA7, 1LA5, 1LA9, 1LP7, 1LP5, 1PP7, 1PP5

- 1) Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors with separate windings, the number of temperature sensors must be doubled (order code A11, prices of A12 or order code A12, prices available on request).
- 2) Not possible for pole-changing motors and for 1LA9 motors with increased output in frame size 132. Only one sensor (temperature sensor or PTC thermistor) can be connected. Only possibilities are voltage code 1 with voltage of 230 V/400 VY and special voltage with voltage code 9 and order code L1U (400 VΔ). The following order codes cannot be used in combination with the ECOFAST plugs, order code G55: A12, C02, C18, D31, D40, G50, H15, H17, H62, H63, H64, H98, H99, K04, K15, K16, K34, K35, K40, K45, K46, K52, K54, K82, L03, L44, L45, L47, L48, L49, L51, L52.
- 3) Not possible for pole-changing motors. Only one sensor (temperature sensor or PTC thermistor) can be connected. Only possibilities are voltage code 1 with voltage of 230 VΔ/400 VY and special voltage with voltage code 9 and order code L1U (400 VΔ). The following order codes cannot be used in combination with the ECOFAST plugs, order code G56: A12, A23, A31, C00, C18, D31, D40, G50, H15, H17, K04, K15, K16, K34, K35, K40, K45, K46, K52, K54, K82, L03, L44, L45, L47, L48, L49, L51, L52. The following order codes can be used in combination with the ECOFAST plugs, order code G56 only with order codes C01 (400 V AC) or C02 (180 V DC): G26, H62, H63, H64, H98, H99.
- 4) In combination with the options "PTC thermistor" or "Anti-condensation heating", please inquire before ordering.
- 5) Not possible for pole-changing motors and/or with voltage code 1 or 6.
- 6) Cannot be used for motors in UL version (order code D31). Cannot be used for motors according to CSA approval (order code D40) for the 1LA5 motor series in frame sizes 180 to 225. The grease lifetime specified in Catalog D 81.1 · 2008 in Part 0 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 7) No derating in combination with the following order codes: L2A, L2C, L2Q, L2R, L2S, L2T, L2U, L2V, L3E and L3G.
- 8) Second shaft extension is not possible, with mounted brake on request. The order codes listed cannot be combined within the various technologies nor with each other within the same technology system. This applies for:
  - Modular technology
  - Basic versions of "Modular technology"
  - Combinations of basic versions "Special technology"
- 9) The standard brake supply voltage is 230 V AC, 50/60 Hz. Other brake supply voltages are possible with order codes C00, C01 and C02.
- 10) Not possible in motors in a pole-changing version.
- 11) Converter mounting is possible, if the MICROMASTER type is specified for 230 VΔ/400 VY (see Catalog DA 51.3).
- 12) Not possible for type of construction IM V3.
- 13) Not possible in combination with rotary pulse encoder HOG 9 D 1024 I (order code H72, H79) and/or brake 2LM8 (used for motors up to and including frame size 225, order code G26).
- 14) Not possible in combination with brake 2LM8 (used for motors up to and including frame size 225, order code G26).
- 15) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If condensation drainage holes are required in motors of the IM B6, IM B7 or IM B8 type of construction (feet located on side or top), it is necessary to relocate the bearing plates at the drive end (DE) and non-drive end (NDE) so that the condensation drainage holes situated between the feet on delivery are underneath.
- 16) Not necessary when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover.
- 17) For 1LA5/1LA7 motors with special insulation for converter-fed operation, in connection with mountings, the respective technical data must be observed, please inquire before ordering.
- 18) CCC certification is required for:
  - 2-pole motors  $\leq 2.2$  kW
  - 4-pole motors  $\leq 1.1$  kW
  - 6-pole motors  $\leq 0.75$  kW
  - 8-pole motors  $\leq 0.55$  kWFor frame sizes 100 and 112, order code D01 is only applicable to 1LA7 pole-changing motors.
- 19) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes D30 and D31 do not authorize importing into USA and Mexico. The North America export version of the 1LA9 with order code D42 NEMA Energy Efficient is available for this purpose.
- 20) The 2, 4 and 6-pole IE2 motors 1LA9 and 1LG6 in the 0.75 kW to 200 kW range for 50 Hz output at 60 Hz are certified for Korea.
- 21) The rated voltage is indicated on the rating plate without voltage range. Order code D40 does not authorize importing into Canada. The North America export version of the 1LA9 with order code D42 NEMA Energy Efficient is available for this purpose.
- 22) "Small power motors" with a rated output of up to 3 kW which are exported to Japan must bear the correct marking.
- 23) Not possible in combination with anti-condensation heating, order codes K45 and K46. Order code M14 or M15 must be selected instead – for further details, see Part 4 "SIMOTICS XP 1MA/1MJ/1LA/1LG Explosion-Proof Motors".
- 24) Not possible when brake is mounted.
- 25) Not possible for 1LA9 134-6KA.. motors.
- 26) Can be combined with deep-groove bearings of series 60.., 62.. and 63... Not possible in combination with parallel roller bearings (e.g. bearings for increased cantilever forces, order code K20), brake mounting or encoder mounting.
- 27) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer normatively. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes Y55 and K16:
  - Dimensions D and DA  $\leq$  internal diameter of roller bearing (see dimension tables under "Dimensions")
  - Dimensions E and EA  $\leq 2 \times$  length E (normal) of the shaft extension. For an explanation of the order codes, see Catalog D 81.1 · 2008 Part 0 "Introduction".
- 28) The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".
- 29) For 1LA5/6/7/9 motors and 1LG with metal external fan, converter-fed operation is permitted. The metal external fan is not possible in combination with the low-noise version – Order code K37 or K38.
- 30) Not possible in combination with VIK order code K30. Order code M14 or M15 must be selected instead – for further details, see Part 4 "SIMOTICS XP 1MA/1MJ/1LA/1LG Explosion-Proof Motors".
- 31) Can be ordered for 230VΔ/400VY or 400VΔ/690VY (voltage code 1 or 6). Not possible for pole-changing motors, naturally cooled motors, 8-pole motors and in combination with order code D34.
- 32) The delivery time for the factory test certificate may differ from the delivery time for the motor.
- 33) The Operating Instructions (Compact) are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WWW/view/en/10803948/133300>.