

# Preferred and Express motors

## Motors with Standard Efficiency

Standard delivery times:

Express

10  
working  
days

20  
working  
days

SIMOTICS GP – Aluminum series 1LA7

### Selection and ordering data

Basic type 1LA7

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

P <sub>Rated</sub> 50 Hz kW	Frame size FS	CCC	Order No.	Voltage →		Type →		Motor protection →		Preferred/Express →
				50 Hz, 230 VΔ/400 VY	60 Hz, 460 VY	Without flange IM B3	With flange IM B5, IM V1 without protective cover, IM V3	Without motor protection	PTC thermistor with 3 embed- ded temperature sensors for tripping	
			1LA7■■■■-■■■■..	10	10-Z A11	11	11-Z A11	11-Z X66	12	
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz										
0.18	63 M	■	1LA7060-2AA..	✓	-	✓	-	-	✓	
0.25	63 M	■	1LA7063-2AA..	✓	-	✓	-	-	✓	
0.37	71 M	■	1LA7070-2AA..	✓	-	✓	✓	-	✓	
0.55	71 M	■	1LA7073-2AA..	✓	✓	✓	✓	-	✓	
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz										
0.12	63 M	■	1LA7060-4AB..	✓	-	✓	✓	-	✓	
0.18	63 M	■	1LA7063-4AB..	✓	-	✓	✓	-	✓	
0.25	71 M	■	1LA7070-4AB..	✓	✓	✓	✓	✓	✓	
0.37	71 M	■	1LA7073-4AB..	✓	✓	✓	✓	✓	✓	
0.55	80 M	■	1LA7080-4AA..	✓	✓	✓	✓	✓	✓	
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz										
0.18	71 M	■	1LA7070-6AA..	✓	-	✓	✓	-	✓	
0.25	71 M	■	1LA7073-6AA..	✓	-	✓	✓	-	✓	
0.37	80 M	■	1LA7080-6AA..	✓	-	✓	✓	-	✓	
0.55	80 M	■	1LA7083-6AA..	✓	-	✓	✓	-	✓	

■ With "CCC" (China Compulsory Certification) for export to China.

# Preferred and Express motors Motors with Standard Efficiency

SIMOTICS GP – Aluminum series 1LA7 and 1LE1  
Pole-changing versions

Standard delivery times:

Express	10 working days	20 working days
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## Selection and ordering data

Basic types 1LA7 and 1LE1

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

$P_{\text{Rated1}}$ , 50 Hz	$P_{\text{Rated2}}$ , 50 Hz	Frame size	CCC	Voltage →	50 Hz, 400 V
				Type →	Without flange IM B3
kW	kW	FS	CCC	Motor protection →	PTC thermistor with 3 or 6 embedded temperature sensors for tripping
				Preferred/Express →	Preferred
				Order No.	
				1LE1■1■-■■■■-.....	3-4AB4
				1LA7■■■■-■■■■..	60-Z A11

4/2-pole: 1500/3000 rpm at 50 Hz with one winding connected in Dahlander circuit

1500 rpm	3000 rpm				
0.25	0.95	80 M	■	1LA7083-0BA..	✓
0.33	1.4	90 S	■	1LA7090-0BA..	✓
0.5	2	90 L	■	1LA7096-0BA..	✓
0.65	2.5	100 L	■	1LA7106-0BA..	✓
0.8	3.1	100 L		1LE1011-1AP5-.....	✓
1.1	4.4	112 M		1LE1011-1BP2-.....	✓

6/4-pole: 1000/1500 rpm at 50 Hz with two windings

1000 rpm	1500 rpm				
0.12	0.4	80 M	■	1LA7080-1BD..	✓
0.18	0.55	80 M	■	1LA7083-1BD..	✓
0.29	0.8	90 S	■	1LA7090-1BD..	✓
0.38	1.1	90 L	■	1LA7096-1BD..	✓
0.6	1.7	100 L		1LE1012-1AQ4-.....	✓
0.75	2.1	100 L	■	1LA7107-1BD..	✓
0.9	3	112 M		1LA7113-1BD..	✓
1.2	3.9	132 S		1LE1012-1CQ0-.....	✓
1.7	5.4	132 M		1LE1012-1CQ2-.....	✓
2.5	7.2	160 M		1LE1012-1DQ2-.....	✓
3.7	12	160 L		1LE1012-1DQ4-.....	✓

8/4-pole: 750/1500 rpm at 50 Hz with one winding connected in Dahlander circuit

750 rpm	1500 rpm				
0.1	0.5	80 M	■	1LA7080-0BB..	✓
0.15	0.7	80 M	■	1LA7083-0BB..	✓
0.22	1	90 S	■	1LA7090-0BB..	✓
0.33	1.5	90 L	■	1LA7096-0BB..	✓
0.5	2	100 L		1LE1011-1AR4-.....	✓
0.65	2.5	100 L		1LE1011-1AR5-.....	✓
0.9	3.6	112 M		1LE1011-1BR2-.....	✓
1.1	4.7	132 S		1LE1011-1CR0-.....	✓
1.4	6.4	132 M		1LE1011-1CR2-.....	✓
2.2	9.5	160 M		1LE1011-1DR2-.....	✓
3.3	14	160 L		1LE1011-1DR4-.....	✓

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