

Squirrel-cage motors

1LA · Aluminium housing · With increased power

Selection and ordering data

Rated output	Size	Order No. Order No. supplement for voltage and type of construction, see table below	Operating data at rated output					Starting torque	Starting current	Stalling torque	Torque class	Moment of inertia <i>J</i>	Weight
			Rated speed	Efficiency η	Power factor p.f.	Rated current at 400 V	Rated torque	For direct-on-line starting as multiple of the rated					Type of constr. IM B 3 approx.
								torque	current	torque			
kW			rpm	%		A	Nm				KL	kg m ²	kg
IP55 degree of protection, temperature class F, used acc. to class F													
	3000 rpm, 2-pole, 50 Hz												
0.20	56 M	1LA9 053-2LA ..	2830	69.0	0.82	0.51	0.67	2.1	4.5	2.3	16	0.00020	4
0.33	63 M	1LA9 060-2LA ..	2775	68.0	0.80	0.88	1.1	2.3	4.4	2.2	16	0.00022	4
0.45		1LA9 063-2LA ..	2720	68.0	0.84	1.14	1.6	2.2	4.2	2.3	16	0.00026	5
0.65	71 M	1LA9 070-2LA ..	2720	72.0	0.83	1.56	2.3	2.4	4.5	2.5	16	0.00041	6
0.94		1LA9 073-2LA ..	2735	73.0	0.82	2.25	3.3	2.5	4.8	2.4	16	0.00050	7
1.45	80 M	1LA9 080-2LA ..	2820	76.0	0.83	3.30	4.9	3.1	6.7	3.1	16	0.0010	10
1.75		1LA9 083-2LA ..	2840	77.0	0.82	4.00	5.9	3.7	7.4	3.5	16	0.0013	12
2.9	90 S 90 L	1LA9 090-2LA ..	2825	81.0	0.82	6.30	9.8	3.2	6.5	3.0	16	0.0018	15
3.8		1LA9 096-2LA ..	2810	81.0	0.85	8.00	13	3.1	6.5	2.7	16	0.0022	18
4.4	100 L	1LA9 106-2LA ..	2880	82.0	0.83	9.30	15	3.0	7.8	3.2	16	0.0044	24
6.5	112 M	1LA9 113-2LA ..	2900	85.0	0.83	13.2	21	3.0	8.6	3.8	16	0.0077	35
9	132 S	1LA9 130-2LA ..	2915	87.0	0.90	16.6	29	2.0	6.4	2.6	16	0.019	43
12		1LA9 131-2LA ..	2915	87.0	0.89	22.5	39	3.0	7.4	3.2	16	0.024	56
18	160 M	1LA9 163-2LA ..	2920	89.0	0.87	33.5	59	2.2	7.0	3.1	16	0.044	73
21	160 M	1LA9 164-2LA ..	2930	90.0	0.91	37.0	68	2.0	6.9	2.7	16	0.051	82
26	160 L	1LA9 166-2LA ..	2935	91.0	0.91	45.5	85	2.2	7.7	3.2	16	0.065	102
33	180 M	1LA9 183-2AA ..	2940	92.0	0.86	60.0	107	2.5	7.4	3.3	16	0.090	131
44	200 L	1LA9 206-2AA ..	2945	92.0	0.86	80.0	143	2.4	7.8	3.2	16	0.16	182
53		1LA9 207-2AA ..	2945	92.5	0.87	95.0	172	2.6	8.2	3.3	16	0.20	211
	1500 rpm, 4-pole, 50 Hz												
0.14	56 M	1LA9 053-4LA ..	1385	62.0	0.74	0.44	0.97	2.3	3.5	2.2	16	0.00035	4
0.21	63 M	1LA9 060-4LA ..	1335	60.0	0.77	0.66	1.5	2.1	2.9	2.1	16	0.00037	4
0.29		1LA9 063-4LA ..	1330	60.0	0.71	0.98	2.1	2.3	2.9	2.3	16	0.00045	5
0.45	71 M	1LA9 070-4LA ..	1340	64.0	0.71	1.42	3.2	2.3	3.4	2.3	16	0.00076	6
0.60		1LA9 073-4LA ..	1340	70.0	0.75	1.64	4.3	2.3	3.6	2.3	16	0.00095	7
0.90	80 M	1LA9 080-4LA ..	1340	70.0	0.81	2.30	6.4	2.3	4.1	2.4	16	0.0017	10
1.25		1LA9 083-4LA ..	1340	70.0	0.83	3.10	8.9	2.7	4.5	2.4	16	0.0024	12
1.8	90 S 90 L	1LA9 090-4LA ..	1380	77.0	0.83	4.05	12	2.4	5.1	2.4	16	0.0033	15
2.5		1LA9 096-4LA ..	1390	76.0	0.81	5.90	17	2.5	5.1	2.3	16	0.0040	18
4.0	100 L	1LA9 107-4LA ..	1410	77.0	0.81	9.30	27	2.7	6.0	3.0	16	0.0062	25
5.5	112 M	1LA9 113-4LA ..	1440	82.0	0.80	12.2	36	3.0	6.8	3.0	16	0.014	37
8.6	132 S 132 M	1LA9 130-4LA ..	1440	84.0	0.83	17.8	57	2.3	6.8	2.7	16	0.023	45
11		1LA9 133-4LA ..	1450	85.0	0.83	22.5	72	2.8	7.4	3.1	16	0.029	60
17	160 M	1LA9 163-4LA ..	1455	88.0	0.84	33.0	112	2.9	7.5	2.8	16	0.055	81
22	160 L	1LA9 166-4LA ..	1455	88.0	0.82	44.0	144	3.1	8.3	3.4	16	0.072	107
26	180 M	1LA9 183-4AA ..	1460	90.5	0.83	50.0	170	2.4	7.5	3.2	16	0.15	126
32	180 L	1LA9 186-4AA ..	1465	91.3	0.84	60.0	209	2.5	7.9	3.4	16	0.19	146
43	200 L	1LA9 207-4AA ..	1465	91.7	0.85	80.0	280	2.7	7.8	3.5	16	0.32	196

Higher outputs under "1LG · Cast iron housing" on Page 3/20.

Order No. supplements

Motor type	Penultimate position: Voltage identifier							Final position: Type of construction identifier						
	50 Hz			60 Hz				IM B 3	Price supplement					
	230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ	460 VY	460 VΔ			IM B 5	IM V 1 Without protective cover	IM V 1 With protective cover	IM B 14 With standard flange	IM B 14 With special flange	IM B 35
1LA9 050 to 1LA9 096	1	6	3	—	1	6		0	1	1	4	2	3	6
1LA9 106 to 1LA9 166	1	6	3	5	1	6		0	1	1	4	2	3	6
1LA9 183 to 1LA9 207	1	6	3	5	1	6		0	1	1	4	—	—	6

Other voltage and/or frequency, voltage identifier "9".
Order codes are required for this purpose (see "Technical information", "Voltages, currents and frequencies").

For other types of construction, see "Technical information", "Types of construction".