


Squirrel-cage motors

1LA · Aluminium housing · Basic version

Selection and ordering data

Rated output	Size	Order No. Order No. supplement for voltage and type of construction, see table below	Efficiency class 	Operating data at rated output					Starting torque For direct-on-line starting as multiple of the rated torque	Starting current current	Stalling torque torque	Torque class KL	Moment of inertia J kg m ²	Weight Type of constr. IM B 3 approx. kg	
				Rated speed rpm	Efficiency η at 4/4-load 3/4-load % %		Power factor p.f.	Rated current at 400 V A							Rated torque Nm
Energy-saving motor to CEMEP "Improved Efficiency" eff2, IP55 degree of protection, temperature class F															
3000 rpm, 2-pole, 50 Hz															
0.09	56 M	1LA7 050-2AA ..	2	2830	63.0	62.0	0.81	0.26	0.30	2.0	3.7	2.3	16	0.00015	3
0.12		1LA7 053-2AA ..		2800	65.0	64.0	0.83	0.32	0.41	2.1	3.7	2.4	16	0.00015	3
0.18	63 M	1LA7 060-2AA ..	2	2820	63.0	62.0	0.82	0.50	0.61	2.0	3.7	2.2	16	0.00018	4
0.25		1LA7 063-2AA ..		2830	65.0	65.0	0.82	0.68	0.84	2.0	4.0	2.2	16	0.00022	4
0.37	71 M	1LA7 070-2AA ..	2	2740	66.0	65.0	0.82	1.00	1.3	2.3	3.5	2.3	16	0.00029	5
0.55		1LA7 073-2AA ..		2800	71.0	70.0	0.82	1.36	1.9	2.5	4.3	2.6	16	0.00041	6
0.75	80 M	1LA7 080-2AA ..	2	2855	73.0	72.0	0.86	1.73	2.5	2.3	5.6	2.4	16	0.00079	9
1.1		1LA7 083-2AA ..		2845	77.0	77.0	0.87	2.40	3.7	2.6	6.1	2.7	16	0.0010	11
1.5	90 S	1LA7 090-2AA ..	2	2860	79.0	80.0	0.85	3.25	5.0	2.4	5.5	2.7	16	0.0014	13
2.2		1LA7 096-2AA ..		2880	82.0	82.0	0.85	4.55	7.3	2.8	6.3	3.1	16	0.0018	16
3	100 L	1LA7 106-2AA ..	2	2890	84.0	84.0	0.85	6.10	9.9	2.8	6.8	3.0	16	0.0035	22
4		1LA7 113-2AA ..		2905	86.0	86.0	0.86	7.80	13	2.6	7.2	2.9	16	0.0059	29
5.5	132 S	1LA7 130-2AA ..	2	2925	86.5	86.5	0.89	10.4	18	2.0	5.9	2.8	16	0.015	39
7.5		1LA7 131-2AA ..		2930	88.0	88.0	0.89	13.8	24	2.3	6.9	3.0	16	0.019	48
11	160 M	1LA7 163-2AA ..	2	2940	89.5	89.5	0.88	20.0	36	2.1	6.5	2.9	16	0.034	68
15		1LA7 164-2AA ..		2940	90.0	90.2	0.90	26.5	49	2.2	6.6	3.0	16	0.043	77
18.5	160 L	1LA7 166-2AA ..	2	2940	91.0	91.2	0.91	32.0	60	2.4	7.0	3.1	16	0.051	86
22	180 M	1LA5 183-2AA ..	2	2940	91.7	91.7	0.88	39.5 ¹⁾	71	2.5	6.9	3.2	16	0.077	113
30		1LA5 206-2AA ..		2945	92.3	92.3	0.89	53.0	97	2.4	7.2	2.8	16	0.14	159
37	200 L	1LA5 207-2AA ..	2	2945	92.8	92.8	0.89	65.0 ¹⁾	120	2.4	7.7	2.8	16	0.16	179
45		1LA5 223-2AA ..		2960	93.6	93.6	0.89	78.0 ¹⁾	145	2.8	7.7	3.4	16	0.20	209
1500 rpm, 4-pole, 50 Hz															
0.06	56 M	1LA7 050-4AB ..	2	1350	56.0	55.0	0.77	0.20	0.42	1.9	2.6	1.9	13	0.00027	3
0.09		1LA7 053-4AB ..		1350	58.0	57.0	0.77	0.29	0.64	1.9	2.6	1.9	13	0.00027	3
0.12	63 M	1LA7 060-4AB ..	2	1350	55.0	54.0	0.75	0.42	0.85	1.9	2.8	2.0	13	0.00029	4
0.18		1LA7 063-4AB ..		1350	60.0	60.0	0.77	0.56	1.3	1.9	3.0	1.9	13	0.00037	4
0.25	71 M	1LA7 070-4AB ..	2	1350	60.0	60.0	0.78	0.77	1.8	1.9	3.0	1.9	13	0.00052	5
0.37		1LA7 073-4AB ..		1370	65.0	65.0	0.78	1.06	2.6	1.9	3.3	2.1	13	0.00077	6
0.75	80 M	1LA7 080-4AA ..	2	1395	67.0	67.0	0.82	1.44	3.8	2.2	3.9	2.2	16	0.0014	9
0.55		1LA7 083-4AA ..		1395	72.0	72.0	0.81	1.91	5.1	2.3	4.2	2.3	16	0.0017	10
1.1	90 S	1LA7 090-4AA ..	2	1415	77.0	77.0	0.81	2.55	7.4	2.3	4.6	2.4	16	0.0024	13
1.5		1LA7 096-4AA ..		1420	79.0	79.0	0.81	3.40	10	2.4	5.3	2.6	16	0.0033	16
2.2	100 L	1LA7 106-4AA ..	2	1420	82.0	82.5	0.82	4.70	15	2.5	5.6	2.8	16	0.0047	21
3		1LA7 107-4AA ..		1420	83.0	83.5	0.82	6.40	20	2.7	5.6	3.0	16	0.0055	24
4	112 M	1LA7 113-4AA ..	2	1440	85.0	85.5	0.83	8.20	27	2.7	6.0	3.0	16	0.012	31
5.5		1LA7 130-4AA ..		1455	86.0	86.0	0.81	11.4	36	2.5	6.3	3.1	16	0.018	41
7.5	132 M	1LA7 133-4AA ..	2	1455	87.0	87.5	0.82	15.2	49	2.7	6.7	3.2	16	0.023	49
11	160 M	1LA7 163-4AA ..	2	1460	88.5	89.0	0.84	21.5	72	2.2	6.2	2.7	16	0.043	73
15		1LA7 166-4AA ..		1460	90.0	90.2	0.84	28.5	98	2.6	6.5	3.0	16	0.055	85
18.5	180 M	1LA5 183-4AA ..	2	1460	90.5	90.5	0.83	35.5 ¹⁾	121	2.3	7.5	3.0	16	0.13	113
22		1LA5 186-4AA ..		1460	91.2	91.2	0.84	41.5 ¹⁾	144	2.3	7.5	3.0	16	0.15	123
30	200 L	1LA5 207-4AA ..	2	1465	91.8	91.8	0.86	55.0	196	2.6	7.0	3.2	16	0.24	157
37		1LA5 220-4AA ..		1470	92.9	92.9	0.87	66.0 ¹⁾	240	2.8	7.0	3.2	16	0.32	206
45	225 S	1LA5 223-4AA ..	2	1470	93.4	93.4	0.87	80.0 ¹⁾	292	2.8	7.7	3.3	16	0.36	232

Higher outputs under "1LA/1LG · Cast iron housing" on Pages 3/12 and 3/13.

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 VΔ / 500 VY	400 VY	690 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	
1LA7 050 to 1LA7 096	1	6	3	–	1	6	0	1	1	4	2	3	6
1LA7 106 to 1LA7 166	1	6	3	5	1	6	0	1	1	4	2	3	6
1LA5 183 to 1LA5 223	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".

1) For connection to 230 V, parallel supply cables are required (see

"Technical information", "Connections, circuits and terminal blocks").