1LA/1LG · Cast iron housing · Basic version

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: Rated speed	Efficiency η at 4/4-load	Efficiency η at 3/4-load	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (For direct-on-line starting as multiple of the rated current)	Stalling torque (For direct-on-line starting as multiple of the rated torque)	Torque class	Moment of inertia J	Weight, Type of constr. IM B 3 approx.
kW			rpm	%	%		A	Nm				KL	kg m²	kg
Energy-saving motor, IP55 degree of protection, temperature class F														
		1000 rpm, 6-pole, 50 Hz												
1.5	100 L	**1LA6 106–6AA . .**	925	74.0	74.0	0.75	3.9	15	2.3	4.0	2.3	16	0.0047	33
2.2	112 M	**1LA6 113–6AA . .**	940	78.0	78.5	0.78	5.2	22	2.2	4.6	2.5	16	0.0091	40
3	132 S	**1LA6 130–6AA . .**	950	79.0	79.5	0.76	7.2	30	1.9	4.2	2.2	16	0.015	50
4	132 M	**1LA6 133–6AA . .**	950	80.5	80.5	0.76	9.4	40	2.1	4.5	2.4	16	0.019	57
5.5	132 M	**1LA6 134–6AA . .**	950	83.0	83.0	0.76	12.6	55	2.3	5.0	2.6	16	0.025	66
7.5	160 M	**1LA6 163–6AA . .**	960	86.0	86.0	0.74	17.0	75	2.1	4.6	2.5	16	0.044	103
11	160 L	**1LA6 166–6AA . .**	960	87.5	87.5	0.74	24.5	109	2.3	4.8	2.6	16	0.063	122
15	180 L	**1LG4 186–6AA . .**	965	88.9	90.3	0.83	29.5	148	2.3	5.3	2.5	16	0.18	150
18.5	200 L	**1LG4 206–6AA . .**	975	89.8	90.2	0.81	36.5	181	2.5	5.6	2.5	16	0.24	195
22		**1LG4 207–6AA . .**	975	90.3	91.0	0.81	43.5	215	2.6	5.7	2.5	16	0.29	205
30	225 M	**1LG4 223–6AA . .**	978	91.8	92.8	0.83	57.0	293	2.7	5.6	2.5	16	0.49	280
37	250 M	**1LG4 253–6AA . .**	980	92.3	93.0	0.83	70.0	361	2.7	6.0	2.3	16	0.76	370
45	280 S	**1LG4 280–6AA . .**	985	92.4	93.1	0.85	83.0	436	2.4	6.1	2.4	16	1.10	475
55	280 M	**1LG4 283–6AA . .**	985	92.7	93.3	0.86	100	533	2.5	6.3	2.5	16	1.40	510
75	315 S	**1LG4 310–6AA . .**	988	93.5	93.7	0.84	138	725	2.5	6.5	2.8	16	2.1	685
90	315 M	**1LG4 313–6AA . .**	988	93.9	94.2	0.84	164	870	2.6	6.8	2.9	16	2.5	750
110	315 L	**1LG4 316–6AA . .**	988	94.3	94.6	0.86	196	1063	2.5	6.8	2.9	16	3.2	890
132	315 L	**1LG4 317–6AA . .**	988	94.8	95.0	0.86	235	1276	3.1	7.3	3.0	16	4.0	980
160	315 L	**1LG4 318–6AA . .**	988	95.0	95.1	0.86	285	1547	3.0	7.5	3.0	16	4.7	1180
200	315	**1LA8 315–6AB . .**	989	95.7	95.8	0.86	345	1930	2.0	6.3	2.5	13	6.0	1300
250		**1LA8 317–6AB . .**	989	95.9	96.0	0.86	430	2410	2.0	6.3	2.5	13	7.3	1500
315	355	**1LA8 355–6AB . .**	993	96.2	96.2	0.86	540	3030	2.2	6.5	2.8	13	13	2000
400		**1LA8 357–6AB . .**	993	96.5	96.5	0.86	690	3850	2.2	6.5	2.8	13	16	2200
450	400	**1LA8 403–6AB . .**	992	96.5	96.5	0.86	780	4330	2.2	6.5	2.8	13	21	2800
500		**1LA8 405–6AB . .**	992	96.5	96.5	0.86	860	4810	2.3	6.5	2.8	13	24	3000
560		**1LA8 407–6AB . .**	992	96.7	96.7	0.86	960	5390	2.3	6.5	2.8	13	27	3200
630	450	**1LA8 453–6AB . .**	993	96.8	96.8	0.86	1100	6060	2.0	6.5	2.6	13	35	4000
710		**1LA8 455–6AB . .**	993	96.8	96.8	0.86	710 ● ■	6830	2.0	6.5	2.5	13	39	4200
800		**1LA8 457–6AB . .**	993	97.0	97.1	0.86	790 ● ■	7690	2.0	6.5	2.5	13	44	4500

● Rated current at 690 V.

■ Also supplied for 400 VΔ (voltage identifier **"9"** and order code **L1Y**).

Order No. supplements

Motor type	Penultimate position: Voltage identifier, 50 Hz: 230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ	690 VΔ	60 Hz: 460 VY (Outputs at 60 Hz see "Technical information")	460 VΔ	Final position: Type of construction identifier, IM B 3	Price supplement: 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
1LA6 106 to 1LA6 166	**1**	**6**	**3**	**5**	**–**	**1**	**6**	**0**	**1**	**1**	**4**	**2**	**3**	**6**
1LG4 183 to 1LG4 313	**1**	**6**	**3**	**5**	**–**	**1**	**6**	**0**	**1**	**1**	**4**	**–**	**–**	**6**
1LG4 316 to 1LG4 318	**–**	**6**	**–**	**5**	**–**	**–**	**6**	**0**	**–**	**8**	**4**	**–**	**–**	**6**
1LA8 315 to 1LA8 453	**–**	**6**	**–**	**5**	**–**	**–**	**9 L2F**	**0**	**–**	**8**	**4**	**–**	**–**	**6**
1LA8 455 to 1LA8 457	**–**	**–**	**–**	**5**	**0**	**–**	On request	**0**	**–**	**8**	**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".

■ **Parallel supply cables required** (see "Technical information", "Connections, circuits and terminal blocks")

Voltage	1LG4 186	206	207	223	253	280	283	310	313	316	317	318	1LA8 315	317	355	357	403	405	407	453	455	457
230 V				■																		
400 V														■	■	■		■	■	■		
500 V																■				■	■	■

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: Rated speed	Efficiency η at 4/4-load	Efficiency η at 3/4-load	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (multiple of the rated current)	Stalling torque (multiple of the rated torque)	Torque class	Moment of inertia J	Weight Type of constr. IM B 3 approx.
kW			rpm	%	%		A	Nm				KL	kg m²	kg
Energy-saving motor, IP55 degree of protection, temperature class F														
		750 rpm, 8-pole, 50 Hz												
0.75	100 L	**1LA6 106–8AB . .**	680	66.0	65.0	0.76	2.15	11	1.6	3.0	1.9	13	0.0051	29
1.1		**1LA6 107–8AB . .**	680	72.0	72.0	0.76	2.90	15	1.8	3.3	2.1	13	0.0063	32
1.5	112 M	**1LA6 113–8AB . .**	705	74.0	74.0	0.76	3.85	20	1.8	3.7	2.1	13	0.013	39
2.2	132 S	**1LA6 130–8AB . .**	700	75.0	75.0	0.74	5.70	30	1.9	3.9	2.3	13	0.014	50
3	132 M	**1LA6 133–8AB . .**	700	77.0	77.5	0.74	7.60	41	2.1	4.1	2.4	13	0.019	57
4	160 M	**1LA6 163–8AB . .**	715	80.0	80.0	0.72	10.0	53	2.2	4.5	2.6	13	0.036	91
5.5	160 M	**1LA6 164–8AB . .**	710	83.5	83.5	0.73	13.0	74	2.3	4.7	2.7	13	0.046	102
7.5	160 L	**1LA6 166–8AB . .**	715	85.5	85.5	0.72	17.6	100	2.7	5.3	3.0	13	0.064	122
11	180 L	**1LG4 186–8AB . .**	725	87.5	88.3	0.73	25.0	145	1.7	4.2	2.1	13	0.17	150
15	200 L	**1LG4 207–8AB . .**	725	87.7	88.4	0.76	32.5	198	2.2	4.9	2.6	13	0.29	205
18.5	225 S	**1LG4 220–8AB . .**	730	89.4	90.4	0.78	38.5	242	2.3	5.5	2.7	13	0.48	270
22	225 M	**1LG4 223–8AB . .**	730	89.7	90.7	0.79	45.0	288	2.3	5.6	2.8	13	0.55	290
30	250 M	**1LG4 253–8AB . .**	730	91.4	92.2	0.81	58.0	392	2.3	5.5	2.6	13	0.84	385
37	280 S	**1LG4 280–8AB . .**	735	92.0	92.8	0.81	72.0	481	2.2	5.0	2.1	13	1.11	475
45	280 M	**1LG4 283–8AB . .**	735	92.4	93.3	0.81	87.0	585	2.2	5.1	2.1	13	1.40	515
55	315 S	**1LG4 310–8AB . .**	740	93.0	93.4	0.81	106	710	2.2	5.8	2.6	13	2.1	680
75	315 M	**1LG4 313–8AB . .**	738	93.3	94.0	0.83	140	971	2.2	5.7	2.6	13	2.5	745
90	315 L	**1LG4 316–8AB . .**	738	93.4	94.0	0.83	168	1165	2.2	5.8	2.7	13	3.1	865
110	315 L	**1LG4 317–8AB . .**	738	94.0	94.4	0.83	205	1423	2.4	6.1	2.8	13	3.9	1020
132	315 L	**1LG4 318–8AB . .**	738	94.2	94.6	0.83	245	1708	2.5	6.5	2.9	13	4.5	1100
160	315	**1LA8 315–8AB . .**	739	94.9	95.1	0.82	295	2070	2.1	6.0	2.3	13	6.0	1300
200		**1LA8 317–8AB . .**	739	95.2	95.6	0.82	370	2580	2.1	6.0	2.3	13	7.3	1500
250	355	**1LA8 355–8AB . .**	741	95.7	96.0	0.82	460	3220	2.1	6.1	2.4	13	13	2000
315		**1LA8 357–8AB . .**	741	96.0	96.0	0.82	580	4060	2.1	6.1	2.4	13	16	2200
355	400	**1LA8 403–8AB . .**	742	96.1	96.2	0.82	650	4570	2.0	6.5	2.6	13	21	2800
400		**1LA8 405–8AB . .**	742	96.2	96.4	0.82	730	5150	2.1	6.5	2.6	13	24	3000
450		**1LA8 407–8AB . .**	742	96.3	96.3	0.82	820	5790	2.1	6.5	2.6	13	27	3200
500	450	**1LA8 453–8AB . .**	744	96.4	96.4	0.81	920	6420	2.0	6.6	2.4	13	35	4000
560		**1LA8 455–8AB . .**	744	96.5	96.4	0.81	1040	7190	2.0	6.6	2.4	13	39	4200
630		**1LA8 457–8AB . .**	744	96.6	96.6	0.81	1160	8090	2.0	6.6	2.4	13	44	4500

Order No. supplements

Motor type	Penultimate position: Voltage identifier, 50 Hz: 230 V△ / 400 VY	400 V△ / 690 VY	500 VY	500 V△	690 V△	60 Hz: 460 VY (Outputs at 60 Hz see "Technical information")	460 V△ (Outputs at 60 Hz see "Technical information")	Final position: Type of construction identifier, IM B 3	Price supplement: 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
1LA6 106 to 1LA6 166	**1**	**6**	**3**	**5**	**–**	**1**	**6**	**0**	**1**	**1**	**4**	**2**	**3**	**6**
1LG4 183 to 1LG4 313	**1**	**6**	**3**	**5**	**–**	**1**	**6**	**0**	**1**	**1**	**4**	**–**	**–**	**6**
1LG4 316 to 1LG4 318	**–**	**6**	**–**	**5**	**–**	**–**	**6**	**0**	**–**	**8**	**4**	**–**	**–**	**6**
1LA8 315 to 1LA8 457	**–**	**6**	**–**	**5**	**–**	**–**	**9 L2F**	**0**	**–**	**8**	**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".

■ **Parallel supply cables required** (see "Technical information", "Connections, circuits and terminal blocks")

Voltage	1LA8 315	317	355	357	403	405	407	453	455	457
400 V				■			■	■	■	■
500 V									■	■