Selection and ordering data

■ 50 Hz

The motors can also be used for 60 Hz according to EPACT, see Pages 3/6 and 3/7.

For further details, see "Technical information", "Motors for the US market".

Rated output	Size	Order No. / Order No. supplement for voltage and type of construction, see table below	Efficiency class	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			EFF I	rpm	%	%		A	Nm				KL	kg m²	kg
Energy-saving motor to CEMEP "High Efficiency" eff1, IP55 degree of protection, temperature class F															EFF I
	3000 rpm, 2-pole, 50 Hz														
0.09	56 M	**1LA9 050–2KA . .**		2830	68.0	68.0	0.79	0.24	0.30	2.9	4.5	3.0	16	0.00015	3
0.12		**1LA9 053–2KA . .**		2830	69.0	69.0	0.81	0.31	0.40	2.6	4.3	2.8	16	0.00020	4
0.18	63 M	**1LA9 060–2KA . .**		2840	70.0	70.0	0.78	0.48	0.61	2.5	4.8	3.1	16	0.00022	4
0.25		**1LA9 063–2KA . .**		2830	70.0	70.0	0.82	0.63	0.84	2.3	4.9	2.5	16	0.00026	5
0.37	71 M	**1LA9 070–2KA . .**		2840	74.0	74.0	0.77	0.94	1.2	3.1	6.5	3.1	16	0.00041	6
0.55		**1LA9 073–2KA . .**		2835	75.0	75.0	0.75	1.42	1.9	3.0	6.3	2.9	16	0.00050	7
0.75	80 M	**1LA9 080–2KA . .**		2870	80.0	80.0	0.84	1.65	2.5	3.5	8.3	3.2	16	0.0010	10
1.1		**1LA9 083–2KA . .**	**1**	2860	84.0	84.0	0.89	2.15	3.7	3.2	7.0	3.2	16	0.0013	12
1.5	90 S	**1LA9 090–2KA . .**	**1**	2890	85.0	85.0	0.87	2.95	5.0	3.5	7.0	3.5	16	0.0018	15
2.2	90 L	**1LA9 096–2KA . .**	**1**	2890	86.5	86.5	0.87	4.25	7.3	3.5	7.0	3.5	16	0.0022	18
3	100 L	**1LA9 106–2KA . .**	**1**	2890	87.0	87.0	0.88	5.70	9.9	3.1	7.0	3.2	16	0.0044	24
4	112 M	**1LA9 113–2KA . .**	**1**	2905	88.5	88.5	0.89	7.40	13	2.6	7.0	3.2	16	0.0077	35
5.5	132 S	**1LA9 130–2KA . .**	**1**	2930	89.5	89.5	0.90	9.90	18	2.4	7.0	3.2	16	0.019	43
7.5		**1LA9 131–2KA . .**	**1**	2930	90.5	90.5	0.92	13.0	24	2.5	7.0	3.1	16	0.024	56
11	160 M	**1LA9 163–2KA . .**	**1**	2945	91.0	91.0	0.90	19.4	36	2.3	7.0	3.1	16	0.044	73
15	160 M	**1LA9 164–2KA . .**	**1**	2945	91.5	91.5	0.90	26.3	49	2.3	7.0	3.1	16	0.051	82
18.5	160 L	**1LA9 166–2KA . .**	**1**	2940	92.3	92.5	0.92	31.5	60	2.3	7.0	3.1	16	0.065	102
22	180 M	**1LA9 183–2WA . .**	**1**	2945	93.0	93.2	0.89	38.0 [1])	71	2.5	7.2	3.3	16	0.090	131
30	200 L	**1LA9 206–2WA . .**	**1**	2950	93.5	93.5	0.89	52.0	97	2.4	7.0	3.2	16	0.16	185
37		**1LA9 207–2WA . .**	**1**	2950	94.0	94.1	0.89	64.0 [1])	120	2.4	7.0	3.3	16	0.20	214
	1500 rpm, 4-pole, 50 Hz														
0.06	56 M	**1LA9 050–4KA . .**		1380	61.0	61.0	0.66	0.22	0.42	2.7	3.1	2.8	16	0.00027	3
0.09		**1LA9 053–4KA . .**		1390	62.0	62.0	0.68	0.31	0.62	2.7	3.2	2.8	16	0.00035	4
0.12	63 M	**1LA9 060–4KA . .**		1395	66.0	66.0	0.65	0.41	0.82	2.6	3.5	2.6	16	0.00037	4
0.18		**1LA9 063–4KA . .**		1340	62.0	62.0	0.68	0.62	1.3	2.9	3.2	2.5	16	0.00045	5
0.25	71 M	**1LA9 070–4KA . .**		1410	70.0	70.0	0.64	0.81	1.7	3.2	4.3	3.1	16	0.00076	6
0.37		**1LA9 073–4KA . .**		1385	71.0	71.0	0.73	1.03	2.6	2.8	4.2	3.0	16	0.00095	7
0.55	80 M	**1LA9 080–4KA . .**		1410	77.0	77.0	0.78	1.32	3.7	2.8	5.6	2.9	16	0.0017	10
0.75		**1LA9 083–4KA . .**		1400	81.0	81.0	0.75	1.80	5.1	3.6	5.8	3.5	16	0.0024	12
1.1	90 S	**1LA9 090–4KA . .**	**1**	1440	84.0	84.0	0.77	2.45	7.3	2.7	6.4	3.2	16	0.0033	15
1.5	90 L	**1LA9 096–4KA . .**	**1**	1440	85.0	85.0	0.77	3.30	9.9	3.1	6.7	3.4	16	0.0040	18
2.2	100 L	**1LA9 106–4KA . .**	**1**	1435	86.5	86.5	0.82	4.55	15	3.1	7.0	3.6	16	0.0062	25
3		**1LA9 107–4KA . .**	**1**	1435	87.5	87.7	0.81	6.10	20	3.5	7.0	3.9	16	0.0077	30
4	112 M	**1LA9 113–4KA . .**	**1**	1440	88.5	89.0	0.81	8.10	27	2.8	6.9	3.2	16	0.014	37
5.5	132 S	**1LA9 130–4KA . .**	**1**	1455	89.5	89.5	0.84	10.6	36	2.9	7.0	3.6	16	0.023	45
7.5	132 M	**1LA9 133–4KA . .**	**1**	1455	90.3	90.5	0.84	14.3	49	3.0	7.0	3.6	16	0.029	60
11	160 M	**1LA9 163–4KA . .**	**1**	1460	91.5	92.0	0.85	20.5	72	2.7	6.9	3.2	16	0.055	81
15	160 L	**1LA9 166–4KA . .**	**1**	1460	92.0	92.3	0.86	27.5	98	2.9	7.0	3.3	16	0.072	107
18.5	180 M	**1LA9 183–4WA . .**	**1**	1465	92.5	93.0	0.84	34.5 [1])	121	2.5	7.0	3.2	16	0.15	126
22	180 L	**1LA9 186–4WA . .**	**1**	1465	93.0	93.4	0.84	40.5 [1])	143	2.6	7.3	3.4	16	0.19	146
30	200 L	**1LA9 207–4WA . .**	**1**	1465	93.5	94.0	0.87	53.0	196	2.6	7.0	3.2	16	0.32	199

Higher outputs under "1LG · Cast iron housing" on Page 3/16.

1) For connection to 230 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

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 V△ / 400 VY	400 V△ / 690 VY	500 VY	500 V△	460 VY	460 V△		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".