

Rated output at		Frame size	Operating values at rated output						Order No.	Price	Weight IM B3 type of construction approx.
50 Hz	60 Hz		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Efficiency at 50 Hz 3/4-load	Power factor at 50 Hz 4/4-load	Rated current at 400 V, 50 Hz			
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	For Order No. supplements for voltage and type of construction, see table below		m kg
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, with increased output, used as temperature class 155 (F)											
0.2	0.23	56 M	2830	0.67	69	69	0.82	0.51	1LA9 053-2LAQQ		3.8
0.33	0.38	63 M	2775	1.1	68	67.5	0.8	0.88	1LA9 060-2LAQQ		4.1
0.45	0.52	63 M	2720	1.6	68	67.5	0.84	1.14	1LA9 063-2LAQQ		5.1
0.65	0.75	71 M	2720	2.3	72	72	0.83	1.56	1LA9 070-2LAQQ		6
0.94	1.08	71 M	2735	3.3	73	73	0.82	2.25	1LA9 073-2LAQQ		7.2
1.45	1.67	80 M	2820	4.9	76	76	0.83	3.3	1LA9 080-2LAQQ		9.8
1.75	2.01	80 M	2840	5.9	77	77.5	0.82	4	1LA9 083-2LAQQ		12.3
2.9	3.34	90 S	2825	9.8	81	81	0.82	6.3	1LA9 090-2LAQQ		15
3.8	4.37	90 L	2810	13	81	81	0.85	8	1LA9 096-2LAQQ		18.6
4.4	5.06	100 L	2880	15	82	82	0.83	9.3	1LA9 106-2LAQQ		24
6.5	7.48	112 M	2900	21	85	85	0.83	13.2	1LA9 113-2LAQQ		35
9	10.35	132 S	2895	29	87	87	0.9	16.6	1LA9 130-2LAQQ		43
12	13.8	132 S	2905	39	87	87	0.89	22.5	1LA9 131-2LAQQ		56
18	20.7	160 M	2910	59	89	89	0.87	33.5	1LA9 163-2LAQQ		73
21	24.15	160 M	2910	68	90	90	0.91	37	1LA9 164-2LAQQ		82
26	29.9	160 L	2920	85	91	91	0.91	45.5	1LA9 166-2LAQQ		102
33	37.95	180 M	2940	107	92	92	0.86	60	1LA9 183-2AAQQ		131
44	50.6	200 L	2945	143	92	92	0.86	80	1LA9 206-2AAQQ		182
53	60.95	200 L	2945	172	92.5	92.5	0.87	95	1LA9 207-2AAQQ		211

Order No. supplements

Motor type	Penultimate position: Voltage code						Final position: Type of construction code						
	50 Hz			60 Hz			Without flange	With flange		With standard flange		With special flange	
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	460 VY	460 VΔ	IM B3/6/7/8, IM V6, IM V5 without protective cover	IM B5, IM V1 without protective cover IM V3	IM V1 with protective cover 1)	IM B35	IM B14, IM V19, IM V18 without protective cover	IM B34	IM B14, IM V19, IM V18 without protective cover
	1	6	3	5	1	6	0	1	4	6	2	7	3
1LA9 05 QQ	○	○	○	–	○	○	□	✓	–	–	✓	✓	✓
1LA9 06 QQ	○	○	○	–	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 07 QQ	○	○	○	–	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 08 QQ	○	○	○	–	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 09 QQ	○	○	○	–	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 10 QQ	○	○	○	○	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 11 QQ	○	○	○	○	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 13 QQ	○	○	○	○	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 16 QQ	○	○	○	○	○	○	□	✓	✓	✓	✓	✓	✓
1LA9 18 QQ	○	○	○	○	○	○	□	✓ ²⁾	✓	✓	–	–	–
1LA9 20 QQ	○	○	○	○	○	○	□	✓ ²⁾	✓	✓	–	–	–

- Standard version
- Without additional charge
- ✓ With additional charge
- Not possible

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) The “Second shaft extension” option, order code **K16** is not possible.

2) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.

Order No.	Locked-rotor torque	Locked-rotor current	Breakdown torque	Torque class	Moment of inertia	Noise at rated output	
	with direct starting torque	as multiple of rated current	torque			Measuring surface sound pressure level at 50 Hz	Sound pressure level at 50 Hz
	T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}	CL	J kgm²	L_{pA} dB(A)	L_{WA} dB(A)
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, with increased output, used as temperature class 155 (F)							
1LA9 053-2LAQQ	2.1	4.5	2.3	16	0.0002	41	52
1LA9 060-2LAQQ	2.3	4.4	2.2	16	0.00022	49	60
1LA9 063-2LAQQ	2.2	4.2	2.3	16	0.00026	49	60
1LA9 070-2LAQQ	2.4	4.5	2.5	16	0.00041	52	63
1LA9 073-2LAQQ	2.5	4.8	2.4	16	0.0005	52	63
1LA9 080-2LAQQ	3.1	6.7	3.1	16	0.001	56	67
1LA9 083-2LAQQ	3.7	7.4	3.5	16	0.0013	56	67
1LA9 090-2LAQQ	3.2	6.5	3	16	0.0018	60	72
1LA9 096-2LAQQ	3.1	6.5	2.7	16	0.0022	60	72
1LA9 106-2LAQQ	3	7.8	3.2	16	0.0044	62	74
1LA9 113-2LAQQ	3	8.6	3.8	16	0.0077	63	75
1LA9 130-2LAQQ	2	6.4	2.6	16	0.019	68	80
1LA9 131-2LAQQ	3	7.4	3.2	16	0.024	68	80
1LA9 163-2LAQQ	2.2	7	3.1	16	0.044	70	82
1LA9 164-2LAQQ	2	6.9	2.7	16	0.051	70	82
1LA9 166-2LAQQ	2.2	7.7	3.2	16	0.065	70	82
1LA9 183-2AAQQ	2.5	7.4	3.3	16	0.09	70	83
1LA9 206-2AAQQ	2.4	7.8	3.2	16	0.16	71	84
1LA9 207-2AAQQ	2.6	8.2	3.3	16	0.2	71	84

Rated output at		Frame size	Operating values at rated output						Order No.	Price	Weight
50 Hz	60 Hz		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Efficiency at 50 Hz 3/4-load	Power factor at 50 Hz 4/4-load	Rated current at 400 V, 50 Hz			
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	η_{rated} %	$\cos\phi_{rated}$	I_{rated} A	For Order No. supplements for voltage and type of construction, see table below		IM B3 type of construction approx. m kg
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, with increased output, used as temperature class 155 (F)											
0.14	0.16	56 M	1385	0.97	62	60.5	0.74	0.44	1LA9 053-4LAQQ		3.8
0.21	0.24	63 M	1335	1.5	60	58.5	0.77	0.66	1LA9 060-4LAQQ		4.1
0.29	0.33	63 M	1330	2.1	60	58.5	0.71	0.98	1LA9 063-4LAQQ		5.1
0.45	0.52	71 M	1340	3.2	64	63	0.71	1.42	1LA9 070-4LAQQ		6
0.6	0.69	71 M	1340	4.3	70	70	0.75	1.64	1LA9 073-4LAQQ		7.2
0.9	1.04	80 M	1340	6.4	70	70	0.81	2.3	1LA9 080-4LAQQ		9.8
1.25	1.44	80 M	1340	8.9	70	70	0.83	3.1	1LA9 083-4LAQQ		12.3
1.8	2.07	90 S	1380	12	77	77.5	0.83	4.05	1LA9 090-4LAQQ		15
2.5	2.88	90 L	1390	17	76	76	0.81	5.9	1LA9 096-4LAQQ		18
4	4.6	100 L	1410	27	77	77.5	0.81	9.3	1LA9 107-4LAQQ		25
5.5	6.33	112 M	1440	36	82	82	0.8	12.2	1LA9 113-4LAQQ		37
8.6	9.89	132 S	1440	57	84	84	0.83	17.8	1LA9 130-4LAQQ		45
11	12.65	132 M	1450	72	86	86	0.82	22.5	1LA9 133-4LAQQ		60
17	19.55	160 M	1455	112	88	88	0.84	33	1LA9 163-4LAQQ		81
22	25.3	160 L	1455	144	88	88	0.82	44	1LA9 166-4LAQQ		107
26	30	180 M	1460	170	90.5	90.5	0.83	50	1LA9 183-4AAQQ		126
32	38	180 L	1465	209	91.3	91.3	0.84	60	1LA9 186-4AAQQ		146
43	49.6	200 L	1465	280	91.7	91.7	0.85	80	1LA9 207-4AAQQ		196

Order No. supplements

Motor type	Penultimate position: Voltage code						Final position: Type of construction code							
	50 Hz			60 Hz			Without flange		With flange			With standard flange		With special flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	460 VY	460 VΔ (see "Introduction" for outputs at 60 Hz)	IM B3/6/7/8, IM V6, IM V5 without protective cover		IM B5, IM V1 without protective cover IM V3	IM V1 with protective cover 1)	IM B35	IM B14, IM V19, IM V18 without protective cover	IM B34	IM B14, IM V19, IM V18 without protective cover
	1	6	3	5	1	6	0		1	4	6	2	7	3
1LA9 05 .-...QQ	○	○	○	–	○	○	□		✓	–	–	✓	✓	✓
1LA9 06 .-...QQ	○	○	○	–	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 07 .-...QQ	○	○	○	–	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 08 .-...QQ	○	○	○	–	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 09 .-...QQ	○	○	○	–	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 10 .-...QQ	○	○	○	○	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 11 .-...QQ	○	○	○	○	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 13 .-...QQ	○	○	○	○	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 16 .-...QQ	○	○	○	○	○	○	□		✓	✓	✓	✓	✓	✓
1LA9 18 .-...QQ	○	○	○	○	○	○	□		✓ ²⁾	✓	✓	–	–	–
1LA9 20 .-...QQ	○	○	○	○	○	○	□		✓ ²⁾	✓	✓	–	–	–

- Standard version
- Without additional charge
- ✓ With additional charge
- Not possible

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) The “Second shaft extension” option, order code **K16** is not possible.

2) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.

Order No.	Locked-rotor torque	Locked-rotor current	Breakdown torque	Torque class	Moment of inertia	Noise at rated output	
	with direct starting torque	as multiple of rated current	torque			Measuring surface sound pressure level at 50 Hz	Sound pressure level at 50 Hz
	T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}	CL	J kgm ²	L_{pA} dB(A)	L_{WA} dB(A)
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, with increased output, used as temperature class 155 (F)							
1LA9 053-4LAQQ	2.3	3.5	2.2	16	0.00035	42	53
1LA9 060-4LAQQ	2.1	2.9	2.1	16	0.00037	42	53
1LA9 063-4LAQQ	2.3	2.9	2.3	16	0.00045	42	53
1LA9 070-4LAQQ	2.3	3.4	2.3	16	0.00076	44	55
1LA9 073-4LAQQ	2.3	3.6	2.3	16	0.00095	44	55
1LA9 080-4LAQQ	2.3	4.1	2.4	16	0.0017	47	58
1LA9 083-4LAQQ	2.7	4.5	2.4	16	0.0024	47	58
1LA9 090-4LAQQ	2.4	5.1	2.4	16	0.0033	48	60
1LA9 096-4LAQQ	2.5	5.1	2.3	16	0.004	48	60
1LA9 107-4LAQQ	2.7	6	3	16	0.0062	53	65
1LA9 113-4LAQQ	3	6.8	3	16	0.014	53	65
1LA9 130-4LAQQ	2.3	6.8	2.7	16	0.023	62	74
1LA9 133-4LAQQ	2.8	7.4	3.1	16	0.029	62	74
1LA9 163-4LAQQ	2.9	7.5	2.8	16	0.055	66	78
1LA9 166-4LAQQ	3.1	8.3	3.4	16	0.072	66	78
1LA9 183-4AAQQ	2.4	7.5	3.2	16	0.15	63	76
1LA9 186-4AAQQ	2.5	7.9	3.4	16	0.19	63	76
1LA9 207-4AAQQ	2.7	7.8	3.5	16	0.32	65	78