

Rated output at 60 Hz	Frame size	Operating values at rated output		Rated speed at 60 Hz	Rated torque at 60 Hz	EPACT with CC No. CC 032A	Nominal efficiency at 60 Hz	Power factor at 60 Hz 4/4-load	Rated current at 460 V, 60 Hz	Order No.	For Order No. supplements for voltage and type of construction, see table below	Price	Weight IM B3 type of construction approx.
P_{rated} HP	FS	n_{rated} rpm	T_{rated} Nm				η_{rated} %	$\cos\varphi_{\text{rated}}$	I_{rated} A				m kg
2-pole, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT													
0.12	56 M	3440	0.25	No	70	0.74	0.23			1LA9 050-2KAQQ			3
0.16	56 M	3440	0.33	No	71	0.76	0.28			1LA9 053-2KAQQ			3.8
0.25	63 M	3440	0.53	No	71	0.79	0.4			1LA9 060-2KAQQ			4.1
0.33	63 M	3460	0.69	No	72	0.76	0.56			1LA9 063-2KAQQ			5.1
0.5	71 M	3445	1	No	72	0.75	0.86			1LA9 070-2KAQQ			6
0.75	71 M	3445	1.6	No	73	0.73	1.3			1LA9 073-2KAQQ			7.2
1	80 M	3485	2	Yes	75.5	0.82	1.52			1LA9 080-2KAQQ			9.8
1.5	80 M	3480	3.1	Yes	82.5	0.88	1.9			1LA9 083-2KAQQ			12.3
2	90 S	3510	4.1	Yes	84	0.86	2.6			1LA9 090-2KAQQ			15
3	90 L	3510	6.1	Yes	85.5	0.85	3.8			1LA9 096-2KAQQ			18.6
4	100 L	3510	8.1	No	86.5	0.87	5			1LA9 106-2KAQQ			24
5	112 M	3540	10	Yes	87.5	0.88	6			1LA9 113-2KAQQ			35
7.5	132 S	3540	15	Yes	88.5	0.9	8.7			1LA9 130-2KAQQ			43
10	132 S	3540	20	Yes	89.5	0.92	11.4			1LA9 131-2KAQQ			56
15	160 M	3555	30	Yes	90.2	0.9	17			1LA9 163-2KAQQ			73
20	160 M	3555	40	Yes	90.2	0.9	23.2			1LA9 164-2KAQQ			82
25	160 L	3550	50	Yes	91	0.92	27.7			1LA9 166-2KAQQ			102
30	180 M	3545	60	Yes	91	0.86	36			1LA9 183-2WAQQ			131
40	200 L	3555	80	Yes	91.7	0.88	46.5			1LA9 206-2WAQQ			185
50	200 L	3555	100	Yes	92.4	0.88	57			1LA9 207-2WAQQ			214

Order No. supplements

Motor type	Penultimate position: Voltage code		Final position: Type of construction code						
	60 Hz		Without flange IM B3/6/7/8, IM V6, IM V5 without protective cover	With flange		IM B35	With standard flange		With special flange IM B14, IM V19, IM V18 without protective cover
	460 VY	460 VΔ (see "Introduction" for outputs at 60 Hz)		IM B5, IM V1 without pro- tective cover IM V3	IM V1 with protective cover ¹⁾		IM B14, IM V19, IM V18 with- out protec- tive cover	IM B34	
	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 60 Hz	Sound pressure level at 60 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)
2-pole, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT							
1LA9 050-2KAQQ	3.6	5.5	3.8	16	0.00015	45	56
1LA9 053-2KAQQ	3.2	5.4	3.4	16	0.0002	45	56
1LA9 060-2KAQQ	2.8	4.9	3.3	16	0.00022	53	64
1LA9 063-2KAQQ	2.5	5	2.7	16	0.00026	53	64
1LA9 070-2KAQQ	3.3	7.5	3.4	16	0.00041	56	67
1LA9 073-2KAQQ	3.4	7.2	3.7	16	0.0005	56	67
1LA9 080-2KAQQ	4.4	9.6	4.4	16	0.001	60	71
1LA9 083-2KAQQ	3.8	8.6	3.2	16	0.0013	60	71
1LA9 090-2KAQQ	4.1	8.6	4.1	16	0.0018	64	76
1LA9 096-2KAQQ	4.1	8.5	5.1	16	0.0022	64	76
1LA9 106-2KAQQ	3.4	8.6	3.7	16	0.0044	66	78
1LA9 113-2KAQQ	2.8	9.2	4	16	0.0077	67	79
1LA9 130-2KAQQ	2.7	8.5	3.8	16	0.019	72	84
1LA9 131-2KAQQ	2.8	8.3	3.7	16	0.024	72	84
1LA9 163-2KAQQ	2.5	8.5	3.7	16	0.044	74	86
1LA9 164-2KAQQ	2.5	8.5	3.7	16	0.051	74	86
1LA9 166-2KAQQ	2.4	8.5	3.5	16	0.065	74	86
1LA9 183-2WAQQ	2.6	8.6	3.5	16	0.09	74	87
1LA9 206-2WAQQ	2.5	8.4	3.6	16	0.16	75	88
1LA9 207-2WAQQ	2.7	8.4	3.7	16	0.2	75	88

The motors can also be used for 50 Hz according to CEMEP.

Rated output at 60 Hz	Frame size	Operating values at rated output			Nominal efficiency at 60 Hz	Power factor at 60 Hz 4/4-load	Rated current at 460 V, 60 Hz	Order No.	Price	Weight
P_{rated} HP	FS	n_{rated} rpm	T_{rated} Nm	EPACT with CC No. CC 032A	η_{rated} %	$\cos\phi_{\text{rated}}$	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, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT										
0.08	56 M	1715	0.33	No	63	0.65	0.18	1LA9 050-4KAQQ		3
0.12	56 M	1725	0.5	No	64	0.6	0.29	1LA9 053-4KAQQ		3.8
0.16	63 M	1710	0.66	No	68	0.6	0.37	1LA9 060-4KAQQ		4.1
0.25	63 M	1705	1.1	No	66	0.63	0.54	1LA9 063-4KAQQ		5.1
0.33	71 M	1730	1.4	No	69	0.6	0.76	1LA9 070-4KAQQ		6
0.5	71 M	1725	2.1	No	70	0.68	0.98	1LA9 073-4KAQQ		7.2
0.75	80 M	1725	3.1	No	75.5	0.74	1.24	1LA9 080-4KAQQ		9.8
1	80 M	1720	4.1	Yes	82.5	0.75	1.59	1LA9 083-4KAQQ		12.3
1.5	90 S	1755	6.1	Yes	84	0.76	2.15	1LA9 090-4KAQQ		15
2	90 L	1755	8.1	Yes	84	0.76	2.95	1LA9 096-4KAQQ		18
3	100 L	1750	12	No	87.5	0.79	4	1LA9 106-4KAQQ		25
4	100 L	1750	16	No	87.5	0.79	5.5	1LA9 107-4KAQQ		30
5	112 M	1755	20	Yes	87.5	0.79	6.7	1LA9 113-4KAQQ		37
7.5	132 S	1760	30	Yes	89.5	0.81	9.5	1LA9 130-4KAQQ		45
10	132 M	1760	40	Yes	89.5	0.82	12.8	1LA9 133-4KAQQ		60
15	160 M	1765	61	Yes	91	0.85	17.9	1LA9 163-4KAQQ		81
20	160 L	1765	81	Yes	91	0.85	24.5	1LA9 166-4KAQQ		107
25	180 M	1770	101	Yes	92.4	0.83	30.5	1LA9 183-4WAQQ		126
30	180 L	1770	121	Yes	92.4	0.83	36	1LA9 186-4WAQQ		146
40	200 L	1770	161	Yes	93	0.86	47	1LA9 207-4WAQQ		199

Order No. supplements

Motor type	Penultimate position: Voltage code		Final position: Type of construction code						
	60 Hz	460 VΔ	Without flange	With flange	IM V1 with protective cover 1)	IM B35	With standard flange	With special flange	
	460 VY (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 B14, IM V19, IM V18 without protective cover	IM B34	IM B14, IM V19, IM V18 without protective cover
	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 60 Hz	Sound pressure level at 60 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, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT							
1LA9 050-4KAQQ	2.7	3.4	3	16	0.00027	46	57
1LA9 053-4KAQQ	2.8	3.5	3	16	0.00035	46	57
1LA9 060-4KAQQ	2.7	3.9	2.8	16	0.00037	46	57
1LA9 063-4KAQQ	3	3.6	3.1	16	0.00045	46	57
1LA9 070-4KAQQ	3.6	4.9	3.4	16	0.00076	48	59
1LA9 073-4KAQQ	3.3	4.9	3.4	16	0.00095	48	59
1LA9 080-4KAQQ	3.4	6.8	3.6	16	0.0017	51	62
1LA9 083-4KAQQ	4	7.3	3.9	16	0.0024	51	62
1LA9 090-4KAQQ	3.1	7.7	3.9	16	0.0033	52	64
1LA9 096-4KAQQ	3.6	8.1	4.2	16	0.004	52	64
1LA9 106-4KAQQ	3.4	8.4	4.3	16	0.0062	57	69
1LA9 107-4KAQQ	3.8	8.7	4.6	16	0.0077	57	69
1LA9 113-4KAQQ	3.2	8.6	3.9	16	0.014	57	69
1LA9 130-4KAQQ	3.2	8.7	4.1	16	0.023	66	78
1LA9 133-4KAQQ	3.4	8.7	4.1	16	0.029	66	78
1LA9 163-4KAQQ	2.6	8.1	3.2	16	0.055	70	82
1LA9 166-4KAQQ	2.8	8.5	3.5	16	0.072	70	82
1LA9 183-4WAQQ	2.8	8.4	3.6	16	0.15	67	80
1LA9 186-4WAQQ	3.1	8.8	3.9	16	0.19	67	80
1LA9 207-4WAQQ	3	8.3	3.6	16	0.32	69	82

The motors can also be used for 50 Hz according to CEMEP.

Rated output at 60 Hz	Frame size	Operating values at rated output			Nominal efficiency at 60 Hz	Power factor at 60 Hz 4/4-load	Rated current at 460 V, 60 Hz	Order No. supplements for voltage and type of construction, see table below	Price	Weight IM B3 type of construction approx. <i>m</i> kg
<i>P</i> _{rated} HP	FS	<i>n</i> _{rated} rpm	<i>T</i> _{rated} Nm	EPACT with CC No. CC 032A	<i>η</i> _{rated} %	cos <i>φ</i> _{rated}	<i>I</i> _{rated} A			
6-pole, 1200 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT										
1	90 S	1140	6.2	Yes	80	0.66	1.78	1LA9 090-6KAQQ		15.7
1.5	90 L	1150	9.3	Yes	85.5	0.64	2.55	1LA9 096-6KAQQ		19
2	100 L	1150	12	No	86.5	0.70	3.1	1LA9 106-6KAQQ		25
3	112 M	1160	18	Yes	87.5	0.66	4.8	1LA9 113-6KAQQ		37
5	132 M	1160	31	Yes	87.5	0.77	6.9	1LA9 133-6KAQQ		49
7.5	132 M	1160	46	Yes	89.5	0.73	10.6	1LA9 134-6KAQQ		64
10	160 M	1165	61	Yes	89.5	0.7	15	1LA9 163-6KAQQ		98
15	160 L	1165	92	Yes	90.2	0.77	19	1LA9 166-6KAQQ		105
20	180 L	1175	121	Yes	90.2	0.75	28	1LA9 186-6WAQQ		144
25	200 L	1175	152	Yes	91.7	0.75	34	1LA9 206-6WAQQ		186
30	200 L	1175	182	Yes	91.7	0.75	40	1LA9 207-6WAQQ		217

Order No. supplements

Motor type	Penultimate position: Voltage code		Final position: Type of construction code						
	60 Hz		Without flange	With flange			With standard flange		With special flange
	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 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	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 60 Hz	Sound pressure level at 60 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)
6-pole, 1200 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection, for use in the North American market according to EPACT							
1LA9 090-6KA□□	3	5.6	3	16	0.0033	47	59
1LA9 096-6KA□□	3.7	6.4	3.7	16	0.005	47	59
1LA9 106-6KA□□	3.5	7.2	3.8	16	0.0065	51	63
1LA9 113-6KA□□	2.9	7.5	3.7	16	0.014	56	68
1LA9 133-6KA□□	3	7.9	3.6	16	0.025	67	79
1LA9 134-6KA□□	3.7	8.4	4.3	16	0.03	67	79
1LA9 163-6KA□□	2.4	6.4	2.8	16	0.063	70	82
1LA9 166-6KA□□	3.1	8.3	3.8	16	0.072	70	82
1LA9 186-6WA□□	2.8	7.1	2.8	16	0.19	70	82
1LA9 206-6WA□□	2.8	7.1	2.8	16	0.28	70	82
1LA9 207-6WA□□	2.8	7.2	2.8	16	0.36	70	82

The motors can also be used for 50 Hz according to CEMEP.