Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating characteristics at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Relevant for IE changeover: Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Efficiency at 50 Hz 75 %-load	Power factor at 50 Hz 100 %-load	Rated current at 400 V, 50 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} kW	P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	▶ Phase-out model		m kg
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection												
0.09	0.11	56 M	2830	0.3		63	62	0.81	0.26	▶ 1LA7 050-2AA❑❑		3
0.12	0.14	56 M	2800	0.41		65	64	0.83	0.32	▶ 1LA7 053-2AA❑❑		3
0.18	0.21	63 M	2820	0.61		64	63	0.79	0.51	**1LA7 060-2AA❑❑**		3.5
0.25	0.29	63 M	2830	0.84		65	65	0.80	0.69	**1LA7 063-2AA❑❑**		4.1
0.37	0.43	71 M	2740	1.3		66	65	0.82	1	**1LA7 070-2AA❑❑**		5
0.55	0.63	71 M	2800	1.9		71	70	0.82	1.36	**1LA7 073-2AA❑❑**		6
0.75	0.86	80 M	2855	2.5	IE1	72.1	71.1	0.86	1.75	**1LA7 080-2AA❑❑**		9
1.1	1.3	80 M	2845	3.7	IE1	75.0	75.0	0.87	2.45	**1LA7 083-2AA❑❑**		11
1.5	1.75	90 S	2860	5	IE1	77.2	77.2	0.85	3.30	**1LA7 090-2AA❑❑**		12.9
2.2	2.55	90 L	2880	7.3	IE1	79.7	80.5	0.85	4.70	**1LA7 096-2AA❑❑**		15.7
3	3.45	100 L	2890	9.9	IE1	81.5	81.5	0.85	6.3	▶ 1LA7 106-2AA❑❑		22
4	4.6	112 M	2905	13	IE1	83.1	83.1	0.86	8.1	▶ 1LA7 113-2AA❑❑		29
5.5	6.3	132 S	2925	18	IE1	84.7	84.7	0.89	10.5	▶ 1LA7 130-2AA❑❑		39
7.5	8.6	132 S	2930	24	IE1	86.0	86.0	0.89	14.1	▶ 1LA7 131-2AA❑❑		48
11	12.6	160 M	2930	36	IE1	87.6	87.6	0.88	20.5	▶ 1LA7 163-2AA❑❑		68
15	17.3	160 M	2930	49	IE1	88.7	88.8	0.9	27.0	▶ 1LA7 164-2AA❑❑		77
18.5	21.3	160 L	2940	60	IE1	89.3	89.4	0.91	33.0	▶ 1LA7 166-2AA❑❑		86
22	24.5	180 M	2940	71	IE1	89.9	89.9	0.88	40.0 [1]	**1LA5 183-2AA❑❑**		113
30	33.5	200 L	2945	97	IE1	90.7	90.7	0.89	54	**1LA5 206-2AA❑❑**		159
37	41.5	200 L	2945	120	IE1	91.2	91.2	0.89	66 [1]	**1LA5 207-2AA❑❑**		179
45	51	225 M	2960	145	IE1	91.7	91.7	0.89	80 [1]	**1LA5 223-2AA❑❑**		209

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 (see "Introduction" for outputs at 60 Hz)	460 VΔ	IM B3/6/7/8, IM V6, IM V5 without protective cover	IM B5, IM V1 without protective cover [2] IM V3	IM V1 with protective cover [2] [3]	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**
1LA7 05 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	–	✓	✓	✓	✓
1LA7 06 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 07 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 08 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 09 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 10 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 11 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 13 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 16 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA5 18 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 20 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 22 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–

❑ 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) For connection to 230 V, parallel supply cables are necessary (see Catalog D 81.1 part 0 "Introduction", "Connection, circuit and connection box").

2) 1LA5 183-... to 1LA5 223-... motors (motor series 1LA5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement **-Z** and order code **K32**.

3) The "Second shaft extension" option, order code **K16** is not possible.

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

Order No.	Locked-rotor torque with direct starting torque	Locked-rotor current as multiple of rated current	Breakdown torque torque	Torque class	Moment of inertia	Noise at rated output	
						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	L_{pfA}	L_{WA}
► Phase-out model					kgm²	dB(A)	dB(A)
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection							
► 1LA7 050-2AA❑❑	2	3.7	2.3	16	0.00015	41	52
► 1LA7 053-2AA❑❑	2.1	3.7	2.4	16	0.00015	41	52
1LA7 060-2AA❑❑	2	3.7	2.2	16	0.00018	49	60
1LA7 063-2AA❑❑	2	4	2.2	16	0.00022	49	60
1LA7 070-2AA❑❑	2.3	3.5	2.3	16	0.00029	52	63
1LA7 073-2AA❑❑	2.5	4.3	2.6	16	0.00041	52	63
1LA7 080-2AA❑❑	2.3	5.6	2.4	16	0.00079	56	67
1LA7 083-2AA❑❑	2.6	6.1	2.7	16	0.001	56	67
1LA7 090-2AA❑❑	2.4	5.5	2.7	16	0.0014	62	74
1LA7 096-2AA❑❑	2.8	6.3	3.1	16	0.0018	62	74
► 1LA7 106-2AA❑❑	2.8	6.8	3	16	0.0035	62	74
► 1LA7 113-2AA❑❑	2.6	7.2	2.9	16	0.0059	63	75
► 1LA7 130-2AA❑❑	2	5.9	2.8	16	0.015	68	80
► 1LA7 131-2AA❑❑	2.3	6.9	3	16	0.019	68	80
► 1LA7 163-2AA❑❑	2.1	6.5	2.9	16	0.034	70	82
► 1LA7 164-2AA❑❑	2.2	6.6	3	16	0.043	70	82
► 1LA7 166-2AA❑❑	2.4	7	3.1	16	0.051	70	82
1LA5 183-2AA❑❑	2.5	6.9	3.2	16	0.077	70	83
1LA5 206-2AA❑❑	2.4	7.2	2.8	16	0.14	71	84
1LA5 207-2AA❑❑	2.4	7.7	2.8	16	0.16	71	84
1LA5 223-2AA❑❑	2.8	7.7	3.4	16	0.2	71	84

► The order numbers for 1LA7 motors marked with this symbol are phase-out models – with the exception of explosion-proof motors 1LA7 FS 100 to 160.
A successor is not planned for frame size 56. 1LE1 motors are the successors for frame sizes 100 to 160.

For further information, see "1LE1/1PC1 motor generation" under "Self-ventilated energy-saving motors 1LE1 "Standard Efficiency" IE1" or under "General Line and motors with shorter delivery time – 1LE1" (predefined versions – voltages, types of construction, motor protection and connection box position).

Rated output at		Frame size	Operating characteristics at rated output							Order No.	Price	Weight
					Relevant for IE changeover							
50 Hz	60 Hz		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Efficiency at 50 Hz 75 %-load	Power factor at 50 Hz 100 %-load	Rated current at 400 V, 50 Hz	For Order No. supplements for voltage and type of construction see table below		IM B3 type of construction approx.
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	▶ Phase-out model		m kg
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection												
0.06	0.07	56 M	1350	0.42		56	55	0.77	0.2	▶ 1LA7 050-4AB❑❑		3
0.09	0.11	56 M	1350	0.64		58	57	0.77	0.29	▶ 1LA7 053-4AB❑❑		3
0.12	0.14	63 M	1350	0.85		55	54	0.75	0.42	**1LA7 060-4AB❑❑**		3.5
0.18	0.21	63 M	1350	1.3		59	60	0.76	0.58	**1LA7 063-4AB❑❑**		4.1
0.25	0.29	71 M	1350	1.8		60	60	0.78	0.77	**1LA7 070-4AB❑❑**		4.8
0.37	0.43	71 M	1370	2.6		65	65	0.78	1.06	**1LA7 073-4AB❑❑**		6
0.55	0.63	80 M	1395	3.8		67	67	0.81	1.46	**1LA7 080-4AA❑❑**		9
0.75	0.86	80 M	1395	5.1	IE1	72.1	72.1	0.8	1.88	**1LA7 083-4AA❑❑**		10
1.1	1.3	90 S	1415	7.4	IE1	75.0	75.0	0.81	2.60	**1LA7 090-4AA❑❑**		13
1.5	1.75	90 L	1420	10	IE1	77.2	77.2	0.81	3.45	**1LA7 096-4AA❑❑**		15.6
2.2	2.55	100 L	1420	15	IE1	79.7	80.0	0.82	4.85	▶ 1LA7 106-4AA❑❑		21
3	3.45	100 L	1420	20	IE1	81.5	81.8	0.82	6.5	▶ 1LA7 107-4AA❑❑		24
4	4.6	112 M	1440	27	IE1	83.1	83.4	0.83	8.4	▶ 1LA7 113-4AA❑❑		31
5.5	6.3	132 S	1455	36	IE1	84.7	84.7	0.81	11.6	▶ 1LA7 130-4AA❑❑		41
7.5	8.6	132 M	1455	49	IE1	86.0	86.4	0.82	15.4	▶ 1LA7 133-4AA❑❑		49
11	12.6	160 M	1460	72	IE1	87.6	88.0	0.84	21.5	▶ 1LA7 163-4AA❑❑		73
15	17.3	160 L	1460	98	IE1	88.7	88.8	0.84	29.0	▶ 1LA7 166-4AA❑❑		85
18.5	21.3	180 M	1460	121	IE1	89.3	89.3	0.83	36 [1]	**1LA5 183-4AA❑❑**		113
22	25.3	180 L	1460	144	IE1	89.9	89.9	0.84	42 [1]	**1LA5 186-4AA❑❑**		123
30	34.5	200 L	1465	196	IE1	90.7	90.7	0.86	56	**1LA5 207-4AA❑❑**		157
37	42.5	225 S	1470	240	IE1	91.2	91.2	0.87	67 [1]	**1LA5 220-4AA❑❑**		206
45	52	225 M	1470	292	IE1	91.7	91.7	0.87	81 [1]	**1LA5 223-4AA❑❑**		232

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 V∆/400 VY	400 V∆/690 VY	500 VY	500 V∆	460 VY (see "Introduction" for outputs at 60 Hz)	460 V∆	IM B3/6/7/8, IM V6, IM V5 without protective cover	IM B5, IM V1 without protective cover [2] IM V3	IM V1 with protective cover [2] [3]	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**
1LA7 05 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	–	✓	✓	✓	✓
1LA7 06 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 07 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 08 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 09 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 10 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 11 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 13 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 16 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA5 18 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 20 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 22 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–

❑ 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) For connection to 230 V, parallel supply cables are necessary (see Catalog D 81.1 part 0 "Introduction", "Connection, circuit and connection box").

2) 1LA5 183-... to 1LA5 223-... motors (motor series 1LA5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement **-Z** and order code **K32**.

3) The "Second shaft extension" option, order code **K16** is not possible.

4) 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	L_{pfA}	L_{WA}
►	Phase-out model					kgm²	dB(A)	dB(A)
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection								
►	1LA7 050-4AB❑❑	1.9	2.6	1.9	13	0.00027	42	53
►	1LA7 053-4AB❑❑	1.9	2.6	1.9	13	0.00027	42	53
	1LA7 060-4AB❑❑	1.9	2.8	2	13	0.00029	42	53
	1LA7 063-4AB❑❑	1.9	3	1.9	13	0.00037	42	53
	1LA7 070-4AB❑❑	1.9	3	1.9	13	0.00052	44	55
	1LA7 073-4AB❑❑	1.9	3.3	2.1	13	0.00077	44	55
	1LA7 080-4AA❑❑	2.2	3.9	2.2	16	0.0014	47	58
	1LA7 083-4AA❑❑	2.3	4.2	2.3	16	0.0017	47	58
	1LA7 090-4AA❑❑	2.3	4.6	2.4	16	0.0024	50	62
	1LA7 096-4AA❑❑	2.4	5.3	2.6	16	0.0033	50	62
►	1LA7 106-4AA❑❑	2.5	5.6	2.8	16	0.0047	56	68
►	1LA7 107-4AA❑❑	2.7	5.6	3	16	0.0055	56	68
►	1LA7 113-4AA❑❑	2.7	6	3	16	0.012	53	65
►	1LA7 130-4AA❑❑	2.5	6.3	3.1	16	0.018	62	74
►	1LA7 133-4AA❑❑	2.7	6.7	3.2	16	0.023	62	74
►	1LA7 163-4AA❑❑	2.2	6.2	2.7	16	0.043	66	78
►	1LA7 166-4AA❑❑	2.6	6.5	3	16	0.055	66	78
	1LA5 183-4AA❑❑	2.3	7.5	3	16	0.13	63	76
	1LA5 186-4AA❑❑	2.3	7.5	3	16	0.15	63	76
	1LA5 207-4AA❑❑	2.6	7	3.2	16	0.24	65	78
	1LA5 220-4AA❑❑	2.8	7	3.2	16	0.32	65	78
	1LA5 223-4AA❑❑	2.8	7.7	3.3	16	0.36	65	78

► The order numbers for 1LA7 motors marked with this symbol are phase-out models – with the exception of explosion-proof motors 1LA7 FS 100 to 160.
A successor is not planned for frame size 56. 1LE1 motors are the successors for frame sizes 100 to 160.

For further information, see "1LE1/1PC1 motor generation" under "Self-ventilated energy-saving motors 1LE1 "Standard Efficiency" IE1" or under "General Line and motors with shorter delivery time – 1LE1" (predefined versions – voltages, types of construction, motor protection and connection box position).

Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating characteristics at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Relevant for IE changeover: Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Efficiency at 50 Hz 75 %-load	Power factor at 50 Hz 100 %-load	Rated current at 400 V, 50 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} kW	P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	▶ Phase-out model		m kg
6-pole, 1000 rpm at 50 Hz, 1200 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection												
0.09	0.1	63 M	850	1		45	41.5	0.66	0.44	**1LA7 063-6AB❑❑**		4.1
0.18	0.21	71 M	850	2		53	54.5	0.68	0.72	**1LA7 070-6AA❑❑**		5
0.25	0.29	71 M	830	2.8		60	58.5	0.76	0.79	**1LA7 073-6AA❑❑**		6.3
0.37	0.43	80 M	920	3.8		62	60.5	0.72	1.2	**1LA7 080-6AA❑❑**		9
0.55	0.63	80 M	910	5.8		67	66.5	0.74	1.6	**1LA7 083-6AA❑❑**		10
0.75	0.86	90 S	915	7.8		69	69	0.76	2.05	**1LA7 090-6AA❑❑**		12.5
1.1	1.3	90 L	915	11		72	72	0.77	2.85	**1LA7 096-6AA❑❑**		15.7
1.5	1.75	100 L	925	15		74	74	0.75	3.9	▶ 1LA7 106-6AA❑❑		21
2.2	2.55	112 M	940	22		78	78.5	0.78	5.2	▶ 1LA7 113-6AA❑❑		26
3	3.45	132 S	950	30		79	79.5	0.76	7.2	▶ 1LA7 130-6AA❑❑		38
4	4.6	132 M	950	40		80.5	80.5	0.76	9.4	▶ 1LA7 133-6AA❑❑		44
5.5	6.3	132 M	950	55		83	83	0.76	12.6	▶ 1LA7 134-6AA❑❑		52
7.5	8.6	160 M	960	75		86	86	0.74	17	▶ 1LA7 163-6AA❑❑		74
11	12.6	160 L	960	109		87.5	87.5	0.74	24.5	▶ 1LA7 166-6AA❑❑		95
15	18	180 L	970	148	IE1	87.7	87.7	0.77	32.0	**1LA5 186-6AA❑❑**		126
18.5	22	200 L	975	181	IE1	88.6	88.6	0.77	39.0	**1LA5 206-6AA❑❑**		161
22	26.5	200 L	975	215	IE1	89.2	89.2	0.77	46.0	**1LA5 207-6AA❑❑**		183
30	36	225 M	978	293	IE1	90.2	90.2	0.77	62 [1]	**1LA5 223-6AA❑❑**		214

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 V∆/400 VY	400 V∆/690 VY	500 VY	500 V∆	460 VY (see "Introduction" for outputs at 60 Hz)	460 V∆	IM B3/6/7/8, IM V6, IM V5 without protective cover	IM B5, IM V1 without protective cover [2] IM V3	IM V1 with protective cover [2] [3]	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**
1LA7 05 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	–	✓	✓	✓	✓
1LA7 06 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 07 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 08 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 09 . - . . . ❑❑	○	○	○	–	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 10 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 11 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 13 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA7 16 . - . . . ❑❑	○	○	○	○	○	○	❑	✓	✓	✓	✓	✓	✓
1LA5 18 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 20 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–
1LA5 22 . - . . . ❑❑	○	○	○	○	○	○	❑	✓ [4]	✓	✓	–	–	–

❑ 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) For connection to 230 V, parallel supply cables are necessary (see Catalog D 81.1 part 0 "Introduction", "Connection, circuit and connection box").

2) 1LA5 183-... to 1LA5 223-... motors (motor series 1LA5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement **-Z** and order code **K32**.

3) The "Second shaft extension" option, order code **K16** is not possible.

4) 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	as multiple of rated				Measuring surface sound pressure level at 50 Hz	Sound pressure level at 50 Hz
		torque	current	torque				
		T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}	CL	J	L_{pfA}	L_{WA}
►	Phase-out model					kgm²	dB(A)	dB(A)
6-pole, 1000 rpm at 50 Hz, 1200 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection								
	1LA7 063-6AB❑❑	1.8	2	1.9	13	0.00037	39	50
	1LA7 070-6AA❑❑	2.1	2.3	1.9	16	0.00055	39	50
	1LA7 073-6AA❑❑	2.2	2.7	2	16	0.0008	39	50
	1LA7 080-6AA❑❑	1.9	3.1	2.1	16	0.0014	40	51
	1LA7 083-6AA❑❑	2.1	3.4	2.2	16	0.0017	40	51
	1LA7 090-6AA❑❑	2.2	3.7	2.2	16	0.0024	43	55
	1LA7 096-6AA❑❑	2.3	3.8	2.3	16	0.0033	43	55
►	1LA7 106-6AA❑❑	2.3	4	2.3	16	0.0047	47	59
►	1LA7 113-6AA❑❑	2.2	4.6	2.5	16	0.0091	52	64
►	1LA7 130-6AA❑❑	1.9	4.2	2.2	16	0.015	63	75
►	1LA7 133-6AA❑❑	2.1	4.5	2.4	16	0.019	63	75
►	1LA7 134-6AA❑❑	2.3	5	2.6	16	0.025	63	75
►	1LA7 163-6AA❑❑	2.1	4.6	2.5	16	0.044	66	78
►	1LA7 166-6AA❑❑	2.3	4.8	2.6	16	0.063	66	78
	1LA5 186-6AA❑❑	2	5.2	2.4	16	0.15	66	78
	1LA5 206-6AA❑❑	2.7	5.5	2.8	16	0.24	66	78
	1LA5 207-6AA❑❑	2.8	5.5	2.9	16	0.28	66	78
	1LA5 223-6AA❑❑	2.8	5.7	2.9	16	0.36	66	78

► The order numbers for 1LA7 motors marked with this symbol are phase-out models – with the exception of explosion-proof motors 1LA7 FS 100 to 160.
1LE1 motors are the successors.

For further information, see "1LE1/1PC1 motor generation" under "Self-ventilated energy-saving motors 1LE1 "Standard Efficiency" IE1" or under "General Line and motors with shorter delivery time – 1LE1" (predefined versions – voltages, types of construction, motor protection and connection box position).

Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating characteristics at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Relevant for IE changeover: Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Efficiency at 50 Hz 75 %-load	Power factor at 50 Hz 100 %-load	Rated current at 400 V, 50 Hz	Order No.	Price	Weight
										For Order No. supplements for voltage and type of construction see table below		IM B3 type of construction approx.
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	▶ Phase-out model		m kg
8-pole, 750 rpm at 50 Hz, 900 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection												
0.09	0.1	71 M	630	1.4		53	54.5	0.68	0.36	**1LA7 070-8AB❑❑**		6.3
0.12	0.14	71 M	645	1.8		53	49.5	0.64	0.51	**1LA7 073-8AB❑❑**		6.3
0.18	0.21	80 M	675	2.5		51	49.5	0.68	0.75	**1LA7 080-8AB❑❑**		9
0.25	0.29	80 M	685	3.5		55	50.5	0.64	1.02	**1LA7 083-8AB❑❑**		10
0.37	0.43	90 S	675	5.2		63	62	0.75	1.14	**1LA7 090-8AB❑❑**		10.5
0.55	0.63	90 L	675	7.8		66	65	0.76	1.58	**1LA7 096-8AB❑❑**		13.2
0.75	0.86	100 L	680	11		66	65	0.76	2.15	▶ 1LA7 106-8AB❑❑		19
1.1	1.3	100 L	680	15		72	72	0.76	2.9	▶ 1LA7 107-8AB❑❑		22
1.5	1.75	112 M	705	20		74	74	0.76	3.85	▶ 1LA7 113-8AB❑❑		24
2.2	2.55	132 S	700	30		75	75	0.74	5.7	▶ 1LA7 130-8AB❑❑		38
3	3.45	132 M	700	41		77	77.5	0.74	7.6	▶ 1LA7 133-8AB❑❑		44
4	4.6	160 M	715	53		80	80	0.72	10	▶ 1LA7 163-8AB❑❑		64
5.5	6.3	160 M	710	74		83.5	83.5	0.73	13	▶ 1LA7 164-8AB❑❑		74
7.5	8.6	160 L	715	100		85.5	85.5	0.72	17.6	▶ 1LA7 166-8AB❑❑		94
11	13.2	180 L	725	145		87	87	0.75	24.5	**1LA5 186-8AB❑❑**		128
15	18	200 L	725	198		87.5	87.5	0.78	31.5	**1LA5 207-8AB❑❑**		176
18.5	22	225 S	725	244		89.2	89.2	0.79	38	**1LA5 220-8AB❑❑**		184
22	26.5	225 M	725	290		90.6	90.6	0.79	44.5	**1LA5 223-8AB❑❑**		214

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 (see "Introduction" for outputs at 60 Hz)	460 VΔ	IM B3/6/7/8, IM V6, IM V5 without protective cover	IM B5, IM V1 without protective cover [1] IM V3	IM V1 with protective cover [1] [2]	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**
1LA7 05 . - . . . ❑❑	○	○	○	–	○	○	◘	✓	–	✓	✓	✓	✓
1LA7 06 . - . . . ❑❑	○	○	○	–	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 07 . - . . . ❑❑	○	○	○	–	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 08 . - . . . ❑❑	○	○	○	–	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 09 . - . . . ❑❑	○	○	○	–	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 10 . - . . . ❑❑	○	○	○	○	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 11 . - . . . ❑❑	○	○	○	○	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 13 . - . . . ❑❑	○	○	○	○	○	○	◘	✓	✓	✓	✓	✓	✓
1LA7 16 . - . . . ❑❑	○	○	○	○	○	○	◘	✓	✓	✓	✓	✓	✓
1LA5 18 . - . . . ❑❑	○	○	○	○	○	○	◘	✓ [3]	✓	✓	–	–	–
1LA5 20 . - . . . ❑❑	○	○	○	○	○	○	◘	✓ [3]	✓	✓	–	–	–
1LA5 22 . - . . . ❑❑	○	○	○	○	○	○	◘	✓ [3]	✓	✓	–	–	–

◘ 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) 1LA5 183-... to 1LA5 223-... motors (motor series 1LA5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement **-Z** and order code **K32**.

2) The "Second shaft extension" option, order code **K16** is not possible.

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

	Order No.	Locked-rotor torque with direct starting torque	Locked-rotor current as multiple of rated current	Breakdown torque	Torque class	Moment of inertia	Noise at rated output	
							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	L_{pfA}	L_{WA}
►	Phase-out model					kgm²	dB(A)	dB(A)
8-pole, 750 rpm at 50 Hz, 900 rpm at 60 Hz, temperature class 155 (F), IP55 degree of protection								
	1LA7 070-8AB❑❑	1.9	2.2	1.7	13	0.0008	36	47
	1LA7 073-8AB❑❑	2.2	2.2	2	13	0.0008	36	47
	1LA7 080-8AB❑❑	1.7	2.3	1.9	13	0.0014	41	52
	1LA7 083-8AB❑❑	2	2.6	2.2	13	0.0017	41	52
	1LA7 090-8AB❑❑	1.6	2.9	1.8	13	0.0023	41	53
	1LA7 096-8AB❑❑	1.7	3	1.9	13	0.0031	41	53
►	1LA7 106-8AB❑❑	1.6	3	1.9	13	0.0051	45	57
►	1LA7 107-8AB❑❑	1.8	3.3	2.1	13	0.0063	45	57
►	1LA7 113-8AB❑❑	1.8	3.7	2.1	13	0.013	49	61
►	1LA7 130-8AB❑❑	1.9	3.9	2.3	13	0.014	53	65
►	1LA7 133-8AB❑❑	2.1	4.1	2.4	13	0.019	53	65
►	1LA7 163-8AB❑❑	2.2	4.5	2.6	13	0.036	63	75
►	1LA7 164-8AB❑❑	2.3	4.7	2.7	13	0.046	63	75
►	1LA7 166-8AB❑❑	2.7	5.3	3	13	0.064	63	75
	1LA5 186-8AB❑❑	2	5	2.2	13	0.21	60	73
	1LA5 207-8AB❑❑	2.1	5	2.2	13	0.37	58	71
	1LA5 220-8AB❑❑	2.1	4.5	2.2	13	0.37	58	71
	1LA5 223-8AB❑❑	2.2	4.8	2.3	13	0.45	58	71

► The order numbers for 1LA7 motors marked with this symbol are phase-out models – with the exception of explosion-proof motors 1LA7 FS 100 to 160.
1LE1 motors are the successors.

For further information, see “1LE1/1PC1 motor generation” under “Self-ventilated energy-saving motors 1LE1 “Standard Efficiency” IE1” or under “General Line and motors with shorter delivery time – 1LE1” (predefined versions – voltages, types of construction, motor protection and connection box position).