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, type of construction and explosion protection zones according to ATEX, see tables 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			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

Special versions according to ATEX

Motor type		**Zone 2**		**VIK** (includes Zone 2) [2]		**Zone 21**		**Zone 22**	
		Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)
	Frame size	Order code **M72**	Order code **M73**	Order code **K30**	On request	Order code **M34**	Order code **M38**	Order code **M35**	Order code **M39**
1LA7	56	–	–	–	–	✓	✓	✓	✓
	63	✓	✓	✓	✓	✓	✓	✓	✓
	71	✓	✓	✓	✓	✓	✓	✓	✓
	80	✓	✓	✓	✓	✓	✓	✓	✓
	90	✓	✓	✓	✓	✓	✓	✓	✓
	100	✓	✓	✓	✓	✓	✓	✓	✓
	112	✓	✓	✓	✓	✓	✓	✓	✓
	132	✓	✓	✓	✓	✓	✓	✓	✓
	160	✓	✓	✓	✓	✓	✓	✓	✓
1LA5	180	–	–	–	–	✓	✓	✓	✓
	200	–	–	–	–	✓	✓	✓	✓
	225	–	–	–	–	✓	✓	✓	✓

✓ With additional charge
– Not possible

The motors can also be orderd in design for Zones 2 and 22 for non-conducting dust (IP55):
Mains-fed operation – order code **M74**
Converter-fed operation with derating – order code **M75**
See “Special versions” in the “Options” under “Options”.

1) For connection to 230 V, parallel feeders are necessary.

2) If the marking Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code **C27**. The VIK version is not possible in combination with Zone 21 and 22.

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 kgm²	L_{pfA} 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							
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

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 [1]	IM B5, IM V3 [1]	IM V1 with protective cover [1] [2] [3]	IM B35	IM B14, IM V19 [1]	IM B34	IM B14, IM V19 [1]
	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) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air-flow.

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**.

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, type of construction and explosion protection zones according to ATEX, see tables 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			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

Special versions according to ATEX

Motor type		**Zone 2**		**VIK** (includes Zone 2) [2]		**Zone 21**		**Zone 22**	
		Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)
	Frame size	Order code **M72**	Order code **M73**	Order code **K30**	On request	Order code **M34**	Order code **M38**	Order code **M35**	Order code **M39**
1LA7	56	–	–	–	–	✓	✓	✓	✓
	63	✓	✓	✓	✓	✓	✓	✓	✓
	71	✓	✓	✓	✓	✓	✓	✓	✓
	80	✓	✓	✓	✓	✓	✓	✓	✓
	90	✓	✓	✓	✓	✓	✓	✓	✓
	100	✓	✓	✓	✓	✓	✓	✓	✓
	112	✓	✓	✓	✓	✓	✓	✓	✓
	132	✓	✓	✓	✓	✓	✓	✓	✓
	160	✓	✓	✓	✓	✓	✓	✓	✓
1LA5	180	–	–	–	–	✓	✓	✓	✓
	200	–	–	–	–	✓	✓	✓	✓
	225	–	–	–	–	✓	✓	✓	✓

✓ With additional charge
– Not possible

The motors can also be orderd in design for Zones 2 and 22 for non-conducting dust (IP55):
Mains-fed operation – order code **M74**
Converter-fed operation with derating – order code **M75**
See “Special versions” in the “Options” under “Options”.

[1] For connection to 230 V, parallel feeders are necessary.

[2] If the marking Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code **C27**. The VIK version is not possible in combination with Zone 21 and 22.

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 kgm²	L_{pfA} 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							
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

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 [1]	IM B5, IM V3 [1]	IM V1 with protective cover [1] [2] [3]	IM B35	IM B14, IM V19 [1]	IM B34	IM B14, IM V19 [1]
	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) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air-flow.

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**.

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, type of construction and explosion protection zones according to ATEX, see tables 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			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

Special versions according to ATEX

Motor type		**Zone 2**		**VIK** (includes Zone 2) [2]		**Zone 21**		**Zone 22**	
		Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)
	Frame size	Order code **M72**	Order code **M73**	Order code **K30**	On request	Order code **M34**	Order code **M38**	Order code **M35**	Order code **M39**
1LA7	63	✓	✓	✓	✓	✓	✓	✓	✓
	71	✓	✓	✓	✓	✓	✓	✓	✓
	80	✓	✓	✓	✓	✓	✓	✓	✓
	90	✓	✓	✓	✓	✓	✓	✓	✓
	100	✓	✓	✓	✓	✓	✓	✓	✓
	112	✓	✓	✓	✓	✓	✓	✓	✓
	132	✓	✓	✓	✓	✓	✓	✓	✓
	160	✓	✓	✓	✓	✓	✓	✓	✓
1LA5	180	–	–	–	–	✓	✓	✓	✓
	200	–	–	–	–	✓	✓	✓	✓
	225	–	–	–	–	✓	✓	✓	✓

✓ With additional charge
– Not possible

The motors can also be orderd in design for Zones 2 and 22 for non-conducting dust (IP55):
Mains-fed operation – order code **M74**
Converter-fed operation with derating – order code **M75**
See “Special versions” in the “Options” under “Options”.

1) For connection to 230 V, parallel feeders are necessary.

2) If the marking Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code **C27**. The VIK version is not possible in combination with Zone 21 and 22.

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 kgm²	L_{pfA} dB(A)	L_{WA} 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

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 [1]	IM B5, IM V3 [1]	IM V1 with protective cover [1] [2] [3]	IM B35	IM B14, IM V19 [1]	IM B34	IM B14, IM V19 [1]
	1	**6**	**3**	**5**	**1**	**6**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
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) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air-flow.

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**.

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, type of construction and explosion protection zones according to ATEX, see tables 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			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

Special versions according to ATEX

Motor type		**Zone 2**		**VIK** (includes Zone 2) [1]		**Zone 21**		**Zone 22**	
		Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)	Mains-fed operation	Converter-fed operation (FC)
	Frame size	Order code **M72**	Order code **M73**	Order code **K30**	On request	Order code **M34**	Order code **M38**	Order code **M35**	Order code **M39**
1LA7	71	✓	✓	✓	✓	✓	✓	✓	✓
	80	✓	✓	✓	✓	✓	✓	✓	✓
	90	✓	✓	✓	✓	✓	✓	✓	✓
	100	✓	✓	✓	✓	✓	✓	✓	✓
	112	✓	✓	✓	✓	✓	✓	✓	✓
	132	✓	✓	✓	✓	✓	✓	✓	✓
	160	✓	✓	✓	✓	✓	✓	✓	✓
1LA5	180	–	–	–	–	✓	✓	✓	✓
	200	–	–	–	–	✓	✓	✓	✓
	225	–	–	–	–	✓	✓	✓	✓

✓ With additional charge
– Not possible

The motors can also be orderd in design for Zones 2 and 22 for non-conducting dust (IP55):
Mains-fed operation – order code **M74**
Converter-fed operation with derating – order code **M75**
See “Special versions” in the “Options” under “Options”.

[1] If the marking Ex nA II is required in addition to VIK on the rating plate, this must be ordered using order code **C27**. The VIK version is not possible in combination with Zone 21 and 22.

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_{pfA} dB(A)	L_{WA} 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

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 [1]	IM B5, IM V3 [1]	IM V1 with protective cover [1] [2] [3]	IM B35	IM B14, IM V19 [1]	IM B34	IM B14, IM V19 [1]
	1	**6**	**3**	**5**	**1**	**6**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
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) The following applies for explosion-proof motors: In the case of the types of construction with shaft extension down, the version "with protective cover" is required. For types of construction with shaft extension pointing upwards, a suitable cover must be implemented to prevent small parts from falling into the fan cover (see the standard IEC/EN 60079-0). The cover must not block the cooling air-flow.

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**.