

Rated output at 50 Hz, 1500 rpm		3000 rpm	Frame size	Rated speed at 50 Hz, 1500 rpm		3000 rpm		Rated torque at 50 Hz, 1500 rpm		3000 rpm		Efficiency at 50 Hz 4/4-load 1500 rpm		3000 rpm		Power factor at 50 Hz 4/4-load 1500 rpm		3000 rpm		Rated current at 400 V, 50 Hz 1500 rpm		3000 rpm		Order No.	Price	Weight motor	
P_{rated} kW			FS	n_{rated} rpm			T_{rated} Nm					η_{rated} %				$\cos\varphi_{\text{rated}}$			I_{rated} A								m kg
4/2-pole, 1500/3000 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection, double pole-changing for constant load torque with one winding connected in Dahlander circuit																											
0.1	0.15		63 M	1330	2650	0.72	0.54	45	52	0.79	0.82	0.41	0.51											1LA7 060-0AA□□			3.5
0.15	0.2		63 M	1330	2750	1.1	0.7	45	57	0.71	0.73	0.68	0.7											1LA7 063-0AA□□			4.1
0.21	0.28		71 M	1375	2770	1.5	0.97	59	48	0.73	0.76	0.7	1.1											1LA7 070-0AA□□			4.8
0.3	0.43		71 M	1390	2780	2.1	1.5	64	58	0.76	0.82	0.89	1.3											1LA7 073-0AA□□			7
0.48	0.6		80 M	1390	2810	3.3	2	66	64	0.82	0.84	1.25	1.6											1LA7 080-0AA□□			9
0.7	0.85		80 M	1390	2810	4.8	2.9	69	70	0.84	0.83	1.75	2.1											1LA7 083-0AA□□			10
1.1	1.4		90 S	1390	2810	7.6	4.8	69	66	0.85	0.85	2.7	3.6											1LA7 090-0AA□□			13
1.5	1.9		90 L	1410	2860	10	6.4	74	72	0.86	0.85	3.4	4.5											1LA7 096-0AA□□			15.6
2	2.4		100 L	1410	2870	14	8	81	75	0.84	0.84	4.25	5.5											1LA7 106-0AA□□			21
2.6	3.1		100 L	1400	2850	18	10	79	74	0.86	0.8	5.5	7.6											1LA7 107-0AA□□			24
3.7	4.4		112 M	1420	2885	25	15	79	76	0.85	0.8	8	10.5											1LA7 113-0AA□□			31
4.7	5.9		132 S	1450	2920	31	19	83	80	0.84	0.85	9.7	12.5											1LA7 130-0AA□□			41
6.5	8		132 M	1450	2930	43	26	82	82.5	0.84	0.84	13.6	16.7											1LA7 133-0AA□□			50
9.3	11.5		160 M	1455	2930	61	37	86.5	80	0.85	0.89	18.3	23.4											1LA7 163-0AA□□			74
13	17		160 L	1455	2930	85	55	87.5	87	0.84	0.88	25.6	32											1LA7 166-0AA□□			92
15	18		180 M	1470	2950	97	58	90	86.5	0.83	0.8	29	37.5											1LA5 183-0AA□□			113
18	21.5		180 L	1465	2950	117	70	90	87	0.84	0.85	34.5	42											1LA5 186-0AA□□			123
26	31		200 L	1465	2940	169	101	90.9	86.5	0.86	0.85	48.5	61											1LA5 207-0AA□□			157

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code						
	50 Hz, direct online starting				Without flange	With flange			With standard flange		With special flange
	230 V	400 V	500 V	690 V	IM B3, IM B6/7/8, IM V6/5 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	5	0	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 . - . . . □□	○	○	○	○	□	✓ ³⁾	✓	✓	–	–	–
1LA5 20 . - . . . □□	○	○	○	○	□	✓ 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 207-... motors (motor series 1LA5, frame size 180 M to 200 L) 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 1500 rpm T_{LR}/T_{rated}	Locked-rotor torque as multiple of rated torque 3000 rpm T_{LR}/T_{rated}	Locked-rotor current 1500 rpm I_{LR}/I_{rated}	Locked-rotor current 3000 rpm I_{LR}/I_{rated}	Breakdown torque 1500 rpm T_B/T_{rated}	Breakdown torque 3000 rpm T_B/T_{rated}	Torque class CL	Moment of inertia J kgm ²
4/2-pole, 1500/3000 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection, double pole-changing for constant load torque with one winding connected in Dahlander circuit								
1LA7 060-0AA□□	1.8	1.8	2.7	2.9	1.8	1.8	10	0.00029
1LA7 063-0AA□□	2	2	3	3.3	2	2	10	0.0004
1LA7 070-0AA□□	1.6	1.6	3	3.1	1.8	1.8	10	0.00052
1LA7 073-0AA□□	1.8	1.8	3.7	3.8	2	2	10	0.00076
1LA7 080-0AA□□	1.7	1.7	3.9	4	2	2	10	0.0014
1LA7 083-0AA□□	1.8	1.8	4.3	4.3	2.1	2.1	10	0.0017
1LA7 090-0AA□□	1.6	1.8	4.2	4.3	1.9	2	13	0.0024
1LA7 096-0AA□□	1.9	1.9	4.9	5.3	2	2.1	13	0.0033
1LA7 106-0AA□□	1.8	1.8	5	5.5	2	2.1	13	0.0048
1LA7 107-0AA□□	2.3	2.4	5.6	5.6	2.4	2.4	13	0.0055
1LA7 113-0AA□□	2	2.2	5.6	5.8	2.2	2.3	13	0.011
1LA7 130-0AA□□	1.7	1.6	6.3	6.5	2.2	2.2	10	0.018
1LA7 133-0AA□□	2	2.1	6.9	7.5	2.5	2.6	10	0.023
1LA7 163-0AA□□	2	1.8	6.7	7.4	2.6	2.4	10	0.043
1LA7 166-0AA□□	2.5	2.8	7.6	8.5	3	3	10	0.06
1LA5 183-0AA□□	2.1	2.2	6.7	7.5	2.7	3.2	13	0.13
1LA5 186-0AA□□	2	2.2	6.4	7.3	2.6	3.1	13	0.15
1LA5 207-0AA□□	2.6	2.6	6.7	7.5	2.8	3.3	13	0.24

See catalog part “Fan motors” for pole-changing motors for quadratic load torque for driving fans.

Rated output at 50 Hz, 750 rpm		1500 rpm	Frame size	Rated speed at 50 Hz, 750 rpm		1500 rpm	Rated torque at 50 Hz, 750 rpm		1500 rpm	Efficiency at 50 Hz 4/4-load 750 rpm		1500 rpm	Power factor at 50 Hz 4/4-load 750 rpm		1500 rpm	Rated current at 400 V, 50 Hz 750 rpm		1500 rpm	Order No.	Price	Weight motor	
P_{rated} kW	kW	n_{rated} rpm		rpm	T_{rated} Nm	Nm	η_{rated} %	%	$\cos\varphi_{\text{rated}}$	I_{rated} A	A	I_{rated} A	A	m kg								
8/4-pole, 750/1500 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection, double pole-changing for constant load torque with one winding connected in Dahlander circuit																						
0.35	0.5	90 S	675	1365	5.1	3.6	60	65	0.71	0.79	1.19	1.41	1LA7 090-0ABQQ						11			
0.5	0.7	90 L	675	1380	7.1	4.9	63	62	0.72	0.78	1.6	2.1	1LA7 096-0ABQQ						13.2			
0.7	1.1	100 L	690	1380	9.8	7.7	65	61	0.74	0.8	2.1	3.25	1LA7 106-0ABQQ						20			
0.9	1.5	100 L	690	1380	13	10	69	67	0.70	0.8	2.7	4.0	1LA7 107-0ABQQ						22			
1.4	1.9	112 M	690	1410	19	13	69	70	0.73	0.75	4	5.2	1LA7 113-0ABQQ						25			
1.8	3.6	132 S	720	1430	24	24	72	80	0.57	0.9	6.3	7.2	1LA7 130-0ABQQ						41			
2.5	5	132 M	720	1430	33	33	73	80	0.6	0.9	8.2	10	1LA7 133-0ABQQ						49			
3.5	7	160 M	725	1450	46	46	77	81.5	0.56	0.89	11.7	13.9	1LA7 163-0ABQQ						73			
5.6	11	160 L	725	1450	74	72	78	83	0.56	0.89	18.5	21.5	1LA7 166-0ABQQ						91			
11	18	180 L	725	1455	144	118	83.5	83.5	0.69	0.87	27.5	35	1LA5 186-0ABQQ						123			
17	27	200 L	730	1465	223	177	89	89.5	0.68	0.86	40.5	50.5	1LA5 207-0ABQQ						157			

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code							
	50 Hz, direct online starting				Without flange	With flange			With standard flange		With special flange	
	230 V	400 V	500 V	690 V	IM B3, IM B6/7/8, IM V6/5 without protective cover	IM B5, IM V1 without protective cover 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	5	0	0	1	4	6	2	7	3	
1LA7 06 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 07 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 08 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 09 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 10 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 11 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 13 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA7 16 . - . . . QQ	○	○	○	○	□	✓	✓	✓	✓	✓	✓	
1LA5 18 . - . . . QQ	○	○	○	○	□	✓ ³⁾	✓	✓	—	—	—	
1LA5 20 . - . . . QQ	○	○	○	○	□	✓ 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 207-... motors (motor series 1LA5, frame size 180 M to 200 L) 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 750 rpm T_{LR}/T_{rated}	Locked-rotor torque current multiple of 1500 rpm T_{LR}/T_{rated}	Locked-rotor current torque 750 rpm I_{LR}/I_{rated}	Locked-rotor current torque 1500 rpm I_{LR}/I_{rated}	Breakdown torque current 750 rpm T_B/T_{rated}	Breakdown torque torque 1500 rpm T_B/T_{rated}	Torque class CL	Moment of inertia J kgm ²
8/4-pole, 750/1500 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection, double pole-changing for constant load torque with one winding connected in Dahlander circuit								
1LA7 090-0ABQQ	1.3	1.3	2.5	3.2	1.6	1.6	10	0.0023
1LA7 096-0ABQQ	1.4	1.5	3	3.5	1.7	1.8	10	0.0031
1LA7 106-0ABQQ	1.7	1.6	3.3	3.5	2	1.9	10	0.0051
1LA7 107-0ABQQ	1.8	1.6	3.5	3.6	2	1.9	10	0.0063
1LA7 113-0ABQQ	1.4	1.5	3.6	4.4	1.7	1.8	10	0.013
1LA7 130-0ABQQ	2	1.3	4.3	5.4	2.3	1.8	10	0.018
1LA7 133-0ABQQ	2	1.3	4.3	5.4	2.3	1.8	10	0.023
1LA7 163-0ABQQ	2	1.4	4	5.4	2.3	1.8	10	0.043
1LA7 166-0ABQQ	2.2	1.7	4.2	5.9	2.4	2	10	0.06
1LA5 186-0ABQQ	1.9	2	5.2	6.2	2.2	2.2	13	0.21
1LA5 207-0ABQQ	2.4	2.3	5.4	6.6	2.5	2.5	13	0.37

See catalog part “Fan motors” for pole-changing motors for quadratic load torque for driving fans.