

Rated output at 50 Hz	Frame size	Operating values at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Torque class	Moment of inertia	Order No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	with direct starting torque	starting current	as multiple torque			For Order No. supplements for voltage and type of construction, see table below		IM B3 type of construction approx.
P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\phi_{\text{rated}}$	I_{rated} A	$T_{\text{LR}}/T_{\text{rated}}$	$I_{\text{LR}}/I_{\text{rated}}$	$T_{\text{B}}/T_{\text{rated}}$	CL	J kg m ²			m kg
2-pole, 3000 rpm at 50 Hz, temperature class 155 (F), used acc. to temperature class 130 (B), IP55 degree of protection, with reduced output														
7.3	180 M	2945	24	91.0	0.89	13	2.4	6.5	3.4	16	0.068	1LP4 183-2FAQQ		140
10	200 L	2950	32	90.9	0.89	17.8	2.3	6.4	2.9	16	0.129	1LP4 206-2FAQQ		195
12.5	200 L	2955	40	91.9	0.90	22	2.5	7.1	3.2	16	0.153	1LP4 207-2FAQQ		215
15	225 M	2960	48	93.2	0.90	26	2.3	6.7	3.0	16	0.217	1LP4 223-2FAQQ		275
18.5	250 M	2970	59	92.6	0.89	32.5	2.0	6.6	3.0	13	0.403	1LP4 253-2FBQQ		360
25	280 S	2975	80	93.8	0.90	42.5	2.5	7.6	3.0	13	0.715	1LP4 280-2FBQQ		480
30	280 M	2975	96	94.4	0.90	51	2.6	7.2	2.9	13	0.832	1LP4 283-2FBQQ		520
37	315 S	2984	118	94.5	0.90	63	2.3	7.3	3.0	13	1.19	1LP4 310-2FBQQ		700
44	315 M	2982	141	94.0	0.91	74	2.3	6.8	2.8	13	1.39	1LP4 313-2FBQQ		755
53	315 L	2982	170	94.6	0.91	89	2.3	6.9	2.9	13	1.62	1LP4 316-2FBQQ		880
67	315 L	2984	214	95.1	0.92	110	2.1	6.5	2.8	13	2.09	1LP4 317-2FBQQ		995

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 ¹⁾	IM B5, IM V1 without protective cover ²⁾ IM V3	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	8	6	2	7	3	
1LP4 18 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 20 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 22 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 25 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 28 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 310 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 313 - □□	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 316 - □□	–	○	–	○	–	○	□ ³⁾	–	✓ ⁴⁾	✓	–	–	–	
1LP4 317 - □□														

- 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) If motors 1LP4 183-... to 1LP4 317-... (motor series 1LP4 frame sizes 180 M to 315 L) in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

2) 1LP4 220-... to 1LP4 317-... motors (motor series 1LP4 frame sizes 225 S to 315 L) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be rotated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

3) Type of construction IM V6 and IM V5 without protective cover is only possible using type of construction code **9** and order code **M1E** or **M1D**.

4) 2-pole motors in 60 Hz version available on request.

Rated output at 50 Hz	Frame size	Operating values at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Torque class	Moment of inertia	Order No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	with direct starting torque	starting current	as multiple torque			For Order No. supplements for voltage and type of construction, see table below		IM B3 type of construction approx.
P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\phi_{\text{rated}}$	I_{rated} A	$T_{\text{LR}}/T_{\text{rated}}$	$I_{\text{LR}}/I_{\text{rated}}$	$T_{\text{B}}/T_{\text{rated}}$	CL	J kg m ²			m kg
4-pole, 1500 rpm at 50 Hz, temperature class 155 (F), used acc. to temperature class 130 (B), IP55 degree of protection, with reduced output														
6.2	180 M	1465	40	90.6	0.87	11.4	2.1	6.6	3.0	16	0.099	1LP4 183-4FAQQ		135
7.3	180 L	1470	47	91.2	0.87	13.2	2.1	6.9	3.1	16	0.117	1LP4 186-4FAQQ		150
10	200 L	1465	65	90.5	0.88	18.2	2.3	6.6	3.2	16	0.191	1LP4 207-4FAQQ		195
12.5	225 S	1475	81	92.2	0.86	23	2.3	6.6	3.0	16	0.374	1LP4 220-4FAQQ		255
15	225 M	1475	97	93.1	0.87	26.5	2.4	7.1	3.1	16	0.447	1LP4 223-4FAQQ		290
18.5	250 M	1480	119	93.5	0.87	33	2.2	6.0	2.6	16	0.688	1LP4 253-4FAQQ		375
25	280 S	1485	161	93.9	0.87	44	2.4	7.0	2.9	16	1.19	1LP4 280-4FAQQ		515
30	280 M	1485	193	94.4	0.88	52	2.4	7.2	2.9	16	1.39	1LP4 283-4FAQQ		560
37	315 S	1488	237	94.4	0.87	65	2.2	6.2	2.6	16	1.94	1LP4 310-4FAQQ		710
44	315 M	1488	282	95.2	0.87	77	2.4	6.7	2.7	16	2.31	1LP4 313-4FAQQ		790
53	315 L	1488	340	95.5	0.87	92	2.5	6.7	2.7	16	2.88	1LP4 316-4FAQQ		935
67	315 L	1488	430	95.7	0.88	114	2.3	6.2	2.6	16	3.46	1LP4 317-4FAQQ		1040

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 ¹⁾		IM B5, IM V1 without protective cover ²⁾	IM V1 without protective cover 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	8	6	2	7	3
1LP4 18 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 20 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 22 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 25 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 28 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 310 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 313 - QQ														
1LP4 316 - QQ	–	○	–	○	–	○	□ ³⁾		–	✓	✓	–	–	–
1LP4 317 - QQ														

- 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⁾ If motors 1LP4 183-... to 1LP4 317-... (motor series 1LP4 frame sizes 180 M to 315 L) in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

²⁾ 1LP4 220-... to 1LP4 317-... motors (motor series 1LP4 frame sizes 225 S to 315 L) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be rotated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

³⁾ Type of construction IM V6 and IM V5 without protective cover is only possible using type of construction code **9** and order code **M1E** or **M1D**.

Rated output at 50 Hz	Frame size	Operating values at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Torque class	Moment of inertia	Order No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	with direct starting torque	starting current	as multiple torque			For Order No. supplements for voltage and type of construction, see table below		IM B3 type of construction approx.
P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\phi_{rated}$	I_{rated} A	T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}	CL	J kg m ²			m kg
6-pole, 1000 rpm at 50 Hz, temperature class 155 (F), used acc. to temperature class 130 (B), IP55 degree of protection, with reduced output														
5	180 L	970	49	89.4	0.83	10	2.1	5.3	2.4	16	0.175	1LP4 186-6FAQQ		145
6.2	200 L	975	61	90.4	0.83	12	2.2	5.7	2.4	16	0.238	1LP4 206-6FAQQ		185
7.3	200 L	975	71	90.8	0.82	14.2	2.3	5.8	2.4	16	0.287	1LP4 207-6FAQQ		195
10	225 M	980	97	92.1	0.84	18.6	2.3	5.5	2.4	16	0.492	1LP4 223-6FAQQ		270
12.5	250 M	982	122	92.5	0.84	23	2.3	5.8	2.2	16	0.762	1LP4 253-6FAQQ		355
15	280 S	986	145	92.5	0.86	27	2.1	6.0	2.3	16	1.12	1LP4 280-6FAQQ		455
18.5	280 M	986	179	92.9	0.86	33.5	2.1	6.0	2.4	16	1.37	1LP4 283-6FAQQ		490
25	315 S	990	241	93.9	0.87	44	2.2	6.6	2.7	16	2.10	1LP4 310-6FAQQ		665
30	315 M	988	290	94.2	0.86	53	2.3	6.8	2.8	16	2.50	1LP4 313-6FAQQ		730
37	315 L	988	358	94.5	0.87	65	2.2	6.6	2.7	16	3.20	1LP4 316-6FAQQ		870
44	315 L	990	424	94.9	0.87	77	2.7	7.2	2.9	16	4.02	1LP4 317-6FAQQ		960

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 ¹⁾		IM B5, IM V1 without protective cover ²⁾	IM V1 without protective cover 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	8	6	2	7	3
1LP4 18 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 20 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 22 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 25 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 28 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 310 - QQ	○	○	○	○	○	○	□		✓	–	✓	–	–	–
1LP4 313 - QQ														
1LP4 316 - QQ	–	○	–	○	–	○	□ ³⁾		–	✓	✓	–	–	–
1LP4 317 - QQ														

- 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⁾ If motors 1LP4 183-... to 1LP4 317-... (motor series 1LP4 frame sizes 180 M to 315 L) in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

²⁾ 1LP4 220-... to 1LP4 317-... motors (motor series 1LP4 frame sizes 225 S to 315 L) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be rotated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

³⁾ Type of construction IM V6 and IM V5 without protective cover is only possible using type of construction code **9** and order code **M1E** or **M1D**.

Rated output at 50 Hz	Frame size	Operating values at rated output					Locked-rotor torque	Locked-rotor current	Break-down torque	Torque class	Moment of inertia	Order No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	with direct starting torque	starting current	as multiple torque					
P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\phi_{\text{rated}}$	I_{rated} A	$T_{\text{LR}}/T_{\text{rated}}$	$I_{\text{LR}}/I_{\text{rated}}$	$T_{\text{B}}/T_{\text{rated}}$	CL	J kg m ²	For Order No. supplements for voltage and type of construction, see table below		IM B3 type of construction approx. m kg
8-pole, 750 rpm at 50 Hz, temperature class 155 (F), used acc. to temperature class 130 (B), IP55 degree of protection, with reduced output														
3.7	180 L	725	49	88.4	0.76	10	1.5	4.4	2.0	13	0.169	1LP4 186-8FBQQ		145
5	200 L	730	65	88.3	0.78	10.4	2.0	5.1	2.5	13	0.290	1LP4 207-8FBQQ		195
6.2	225 S	735	81	89.8	0.80	12.4	2.1	5.6	2.6	13	0.482	1LP4 220-8FBQQ		260
7.3	225 M	735	95	90.2	0.81	14.4	2.1	5.7	2.7	13	0.551	1LP4 223-8FBQQ		280
10	250 M	735	130	91.6	0.82	19.2	2.0	5.4	2.5	13	0.837	1LP4 253-8FBQQ		370
12.5	280 S	735	162	92.3	0.82	24	1.9	4.9	2.1	13	1.11	1LP4 280-8FBQQ		455
15	280 M	735	195	92.6	0.81	29	1.9	5.0	2.0	13	1.35	1LP4 283-8FBQQ		495
18.5	315 S	740	239	93.2	0.83	34.5	2.0	5.8	2.5	13	2.08	1LP4 310-8FBQQ		660
25	315 M	738	323	93.5	0.84	46	2.0	5.7	2.5	13	2.48	1LP4 313-8FBQQ		725
30	315 L	740	387	93.6	0.84	55	2.0	5.8	2.6	13	3.14	1LP4 316-8FBQQ		845
37	315 L	740	477	94.1	0.84	68	2.2	6.0	2.7	13	3.95	1LP4 317-8FBQQ		1000

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 ¹⁾	IM B5, IM V1 without protective cover ²⁾ IM V3	IM V1 without protective cover 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	8	6	2	7	3	
1LP4 18 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 20 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 22 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 25 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 28 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 310 - QQ	○	○	○	○	○	○	□	✓	–	✓	–	–	–	
1LP4 313 - QQ														
1LP4 316 - QQ	–	○	–	○	–	○	□ ³⁾	–	✓	✓	–	–	–	
1LP4 317 - QQ														

- 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) If motors 1LP4 183-... to 1LP4 317-... (motor series 1LP4 frame sizes 180 M to 315 L) in types of construction with feet IM B6, IM B7, IM V6 or IM V5 without protective cover are fixed to the wall, it is recommended that the motor feet are supported.

2) 1LP4 220-... to 1LP4 317-... motors (motor series 1LP4 frame sizes 225 S to 315 L) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be rotated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

3) Type of construction IM V6 and IM V5 without protective cover is only possible using type of construction code **9** and order code **M1E** or **M1D**.