Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating values at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz [1]	Power factor at 50 Hz	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	T_{rated} Nm	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, temperature classes T1 to T4										
0.37	0.43	71 M	2750	1.3	67	0.81	0.98	**1MJ6 070-2CA❑❑**		19
0.55	0.63	71 M	2790	1.9	71	0.81	1.38	**1MJ6 073-2CA❑❑**		20
0.75	0.86	80 M	2840	2.5	72	0.86	1.75	**1MJ6 080-2CA❑❑**		24
1.1	1.3	80 M	2835	3.7	74	0.87	2.45	**1MJ6 083-2CA❑❑**		26
1.5	1.75	90 L	2850	5	78	0.84	3.3	**1MJ6 096-2CA❑❑**		32
2.2	2.55	90 L	2860	7.4	80	0.86	4.6	**1MJ6 097-2CA❑❑**		35
3	3.45	100 L	2885	9.9	82	0.85	6.2	**1MJ6 106-2CA❑❑**		44
4	4.6	112 M	2895	13	84	0.88	7.8	**1MJ6 113-2CA❑❑**		57
5.5	6.3	132 S	2925	18	85	0.89	10.5	**1MJ6 130-2CA❑❑**		75
7.5	8.6	132 S	2930	24	87	0.89	14.5	**1MJ6 131-2CA❑❑**		82
11	12.6	160 M	2940	36	88	0.88	20.5	**1MJ6 163-2CA❑❑**		123
15	17.3	160 M	2940	49	89	0.91	26.5	**1MJ6 164-2CA❑❑**		134
18.5	21.3	160 L	2940	60	91	0.91	32.5	**1MJ6 166-2CA❑❑**		161
22	24.5	180 M	2940	71	92	0.88	39	**1MJ6 183-2CA❑❑**		175
30	33.5	200 L	2940	97	92.3	0.89	53	**1MJ6 206-2CA❑❑**		250
37	41.5	200 L	2945	120	92.8	0.9	64	**1MJ6 207-2CA❑❑**		266
45	51	225 M	2955	145	93.9	0.9	77 [1]	**1MJ7 223-2CB❑❑**		335
55	62	250 M	2965	177	94	0.9	93	**1MJ7 253-2CB❑❑**		445
75	84	280 S	2975	241	94.7	0.9	128 [1]	**1MJ7 280-2CC❑❑**		600
90	101	280 M	2975	289	95.1	0.91	150 [1]	**1MJ7 283-2CC❑❑**		640
110	123	315 S	2980	353	94.8	0.9	186 [1]	**1MJ7 310-2CC❑❑**		840
132	148	315 M	2980	423	95.1	0.9	225 [1]	**1MJ7 313-2CC❑❑**		900

Order No. supplements

Motor type	**Penultimate position: Voltage code**				**Final position: Type of construction code**						
	50 Hz				Without flange	With flange			With standard flange		With special flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3/6/7/8, IM V6 [2] [3]	IM B5, IM V3 [2] [4]	IM V1 with protective cover [2] [4] [5]	IM B35	IM B14, IM V19 [2]	IM B34	IM B14 IM V19 [2]
	1	**6**	**3**	**5**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
1MJ6 07 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 08 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 09 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	–
1MJ6 10 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 11 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 13 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 16 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 18 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ6 20 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 22 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 25 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 28 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 31 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–

❑ 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”).

For footnotes, see Page 2.

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 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, temperature classes T1 to T4							
1MJ6 070-2CA❑❑	2.3	4.3	2.3	16	0.00035	52	63
1MJ6 073-2CA❑❑	2.3	5.3	2.3	16	0.00045	52	63
1MJ6 080-2CA❑❑	2.4	6.3	2.3	16	0.00085	56	67
1MJ6 083-2CA❑❑	2.6	6.3	2.3	16	0.0011	56	67
1MJ6 096-2CA❑❑	2.5	6.7	2.5	16	0.0015	60	72
1MJ6 097-2CA❑❑	2.8	7.1	2.8	16	0.002	60	72
1MJ6 106-2CA❑❑	2.8	7.7	3	16	0.0038	62	74
1MJ6 113-2CA❑❑	2.4	7.6	2.8	16	0.0055	63	75
1MJ6 130-2CA❑❑	2	5.9	2.6	16	0.01	68	80
1MJ6 131-2CA❑❑	2.3	6.9	2.6	16	0.01	68	80
1MJ6 163-2CA❑❑	2.1	6.5	2.6	16	0.03	70	82
1MJ6 164-2CA❑❑	2.2	6.6	3.1	16	0.04	70	82
1MJ6 166-2CA❑❑	2.4	7	3.3	16	0.05	70	82
1MJ6 183-2CA❑❑	2.5	6.9	3.2	16	0.07	70	83
1MJ6 206-2CA❑❑	2.4	6.5	2.8	16	0.14	71	84
1MJ6 207-2CA❑❑	2.4	7.7	2.8	16	0.16	71	84
1MJ7 223-2CB❑❑	2.3	6.9	2.7	13	0.24	71	84
1MJ7 253-2CB❑❑	2.1	6.9	2.8	13	0.45	75	89
1MJ7 280-2CC❑❑	1.9	7	2.7	10	0.79	77	91
1MJ7 283-2CC❑❑	2	7	2.7	10	0.92	77	91
1MJ7 310-2CC❑❑	1.8	7	2.8	10	1.3	79	93
1MJ7 313-2CC❑❑	1.9	7	2.8	10	1.5	79	93

The 1MJ6/1MJ7 motors can also be ordered for use with type of protection Ex d/de (Zone 1)/dust-Ex Zone 21, as well as for Zone 22 for conducting dust:
Mains-fed operation – order code **M76**
Converter-fed operation with derating – order code **M77**
See “Special versions” in the “Options” under “Options”.

Other versions up to 900 kW as 2-pole motors as DN series with Order No. 1PS4 (Ex de IIB), 1PS5 (Ex de IIC) available; also higher outputs and other numbers of poles possible.

Place request with:

Loher GmbH (a Siemens company)
Hans-Loher-Str. 32
94099 Ruhstorf/Rott

http://www.loher.com

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

2) 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.

3) If motors 1MJ6 183-... to 1MJ7 313-... (motor series 1MJ6 frame size 180 M and above to 1MJ7 frame size 315 M) in types of construction with feet IM B6, IM B7 or IM V6 are fixed to the wall, it is recommended that the motor feet are supported.

4) 1MJ7 220-... to 1MJ7 313-... motors (motor series 1MJ7 frame sizes 225 S to 315 M) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be relocated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

5) The “Second shaft extension” option, order code **K16** is not possible.

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

Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating values at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz [1]	Power factor at 50 Hz	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	T_{rated} Nm	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, temperature classes T1 to T4										
0.25	0.29	71 M	1325	1.8	60	0.77	0.78	**1MJ6 070-4CB❑❑**		20
0.37	0.43	71 M	1375	2.5	64	0.74	1.13	**1MJ6 073-4CB❑❑**		21
0.55	0.63	80 M	1395	3.7	71	0.79	1.42	**1MJ6 080-4CA❑❑**		24
0.75	0.86	80 M	1395	5.1	73	0.79	1.88	**1MJ6 083-4CA❑❑**		26
1.1	1.3	90 L	1410	7.5	73	0.80	2.7	**1MJ6 096-4CA❑❑**		32
1.5	1.75	90 L	1420	10	77	0.8	3.5	**1MJ6 097-4CA❑❑**		35
2.2	2.55	100 L	1420	15	78	0.8	5.1	**1MJ6 106-4CA❑❑**		44
3	3.45	100 L	1415	20	80	0.82	6.6	**1MJ6 107-4CA❑❑**		47
4	4.6	112 M	1435	27	83	0.82	8	**1MJ6 113-4CA❑❑**		58
5.5	6.3	132 S	1450	36	86	0.83	11.1	**1MJ6 130-4CA❑❑**		76
7.5	8.6	132 M	1450	49	86	0.84	15	**1MJ6 133-4CA❑❑**		85
11	12.6	160 M	1455	72	87	0.85	21.5	**1MJ6 163-4CA❑❑**		128
15	17.3	160 L	1455	98	89	0.85	28.5	**1MJ6 166-4CA❑❑**		158
18.5	21.3	180 M	1460	121	90.5	0.84	35	**1MJ6 183-4CA❑❑**		175
22	25.3	180 L	1460	144	91.2	0.85	41	**1MJ6 186-4CA❑❑**		189
30	34.5	200 L	1465	196	91.8	0.86	55	**1MJ6 207-4CA❑❑**		247
37	42.5	225 S	1475	240	93	0.86	67 [1]	**1MJ7 220-4CA❑❑**		325
45	52	225 M	1475	292	93.4	0.87	80 [1]	**1MJ7 223-4CA❑❑**		355
55	63	250 M	1480	355	94	0.87	97 [1]	**1MJ7 253-4CA❑❑**		465
75	86	280 S	1485	482	94.7	0.86	132 [1]	**1MJ7 280-4CA❑❑**		630
90	104	280 M	1485	579	95	0.86	160 [1]	**1MJ7 283-4CA❑❑**		680
110	127	315 S	1486	707	94.8	0.86	194 [1]	**1MJ7 310-4CA❑❑**		870
132	152	315 M	1486	848	95.5	0.86	232 [1]	**1MJ7 313-4CA❑❑**		950

Order No. supplements

Motor type	**Penultimate position: Voltage code**				**Final position: Type of construction code**						
	50 Hz				Without flange	With flange			With standard flange		With special flange
	230 V∆/400 VY	400 V∆/690 VY	500 VY	500 V∆	IM B3/6/7/8, IM V6 [2] [3]	IM B5, IM V3 [2] [4]	IM V1 with protective cover [2] [4] [5]	IM B35	IM B14, IM V19 [2]	IM B34	IM B14 IM V19 [2]
	1	**6**	**3**	**5**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
1MJ6 07 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 08 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 09 . - . . . ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	–
1MJ6 10 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 11 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 13 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 16 . - . . . ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 18 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ6 20 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 22 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 25 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 28 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 31 . - . . . ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–

❑ 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”).

For footnotes, see Page 4.

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 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, temperature classes T1 to T4							
1MJ6 070-4CB❑❑	1.8	3.2	1.8	13	0.0006	44	55
1MJ6 073-4CB❑❑	2	3.6	2	13	0.0008	44	55
1MJ6 080-4CA❑❑	2.3	4.7	2.4	16	0.0015	47	58
1MJ6 083-4CA❑❑	2.5	5	2.6	16	0.0018	47	58
1MJ6 096-4CA❑❑	2.1	4.9	2.5	16	0.0028	48	60
1MJ6 097-4CA❑❑	2.2	5.8	2.6	16	0.0035	48	60
1MJ6 106-4CA❑❑	2.2	6	2.6	16	0.0048	53	65
1MJ6 107-4CA❑❑	2.7	6.4	3	16	0.0058	53	65
1MJ6 113-4CA❑❑	2.8	7.2	3	16	0.01	53	65
1MJ6 130-4CA❑❑	2.4	6.9	3.3	16	0.01	62	74
1MJ6 133-4CA❑❑	2.7	7.7	3.3	16	0.02	62	74
1MJ6 163-4CA❑❑	2.4	6.6	2.9	16	0.04	66	78
1MJ6 166-4CA❑❑	2.8	7.4	3.2	16	0.05	66	78
1MJ6 183-4CA❑❑	2.3	7.1	3	16	0.13	63	76
1MJ6 186-4CA❑❑	2.3	7.1	3	16	0.15	63	76
1MJ6 207-4CA❑❑	2.6	7.4	3.2	16	0.24	65	78
1MJ7 220-4CA❑❑	2.5	7	3.1	16	0.44	65	78
1MJ7 223-4CA❑❑	2.6	7	3.2	16	0.52	65	78
1MJ7 253-4CA❑❑	2.6	6.7	2.5	16	0.79	65	79
1MJ7 280-4CA❑❑	2.5	6.7	2.7	16	1.4	67	81
1MJ7 283-4CA❑❑	2.5	6.8	2.8	16	1.6	67	81
1MJ7 310-4CA❑❑	2.5	6.7	2.7	16	2.2	69	83
1MJ7 313-4CA❑❑	2.7	7.2	3	16	2.7	69	83

The 1MJ6/1MJ7 motors can also be ordered for use with type of protection Ex d/de (Zone 1)/dust-Ex Zone 21, as well as for Zone 22 for conducting dust:
Mains-fed operation – order code **M76**
Converter-fed operation with derating – order code **M77**
See “Special versions” in the “Options” under “Options”.

Other versions up to 1400 kW as 4-pole motors as DN series with Order No. 1PS4 (Ex de IIB), 1PS5 (Ex de IIC) available; also higher outputs and other numbers of poles possible.

Place request with:

Loher GmbH (a Siemens company)
Hans-Loher-Str. 32
94099 Ruhstorf/Rott

http://www.loher.com

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

2) 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.

3) If motors 1MJ6 183-... to 1MJ7 313-... (motor series 1MJ6 frame size 180 M and above to 1MJ7 frame size 315 M) in types of construction with feet IM B6, IM B7 or IM V6 are fixed to the wall, it is recommended that the motor feet are supported.

4) 1MJ7 220-... to 1MJ7 313-... motors (motor series 1MJ7 frame sizes 225 S to 315 M) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be relocated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

5) The “Second shaft extension” option, order code **K16** is not possible.

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

Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating values at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz [1]	Power factor at 50 Hz	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	T_{rated} Nm	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 temperature classes T1 to T4										
0.25	0.29	71 M	870	2.7	63	0.7	0.82	**1MJ6 073-6CA❑❑**		16
0.37	0.43	80 M	910	3.9	64	0.71	1.18	**1MJ6 080-6CA❑❑**		35
0.55	0.63	80 M	900	5.8	64	0.74	1.67	**1MJ6 083-6CA❑❑**		22.5
0.75	0.86	90 L	910	8	68	0.74	2.15	**1MJ6 096-6CA❑❑**		32
1.1	1.3	90 L	905	12	72	0.75	2.95	**1MJ6 097-6CA❑❑**		32
1.5	1.75	100 L	930	15	75	0.73	4	**1MJ6 106-6CA❑❑**		39
2.2	2.55	112 M	945	22	76	0.76	5.5	**1MJ6 113-6CA❑❑**		52
3	3.45	132 S	945	30	78	0.75	7.4	**1MJ6 130-6CA❑❑**		78
4	4.6	132 M	945	40	79	0.76	9.6	**1MJ6 133-6CA❑❑**		85
5.5	6.3	132 M	950	55	83	0.76	12.6	**1MJ6 134-6CA❑❑**		92
7.5	8.6	160 M	960	75	86	0.72	17.5	**1MJ6 163-6CA❑❑**		134
11	12.6	160 L	960	109	87	0.74	24.5	**1MJ6 166-6CA❑❑**		167
15	18	180 L	970	148	89	0.83	29.5	**1MJ6 186-6CA❑❑**		190
18.5	22	200 L	975	181	90.2	0.82	36	**1MJ6 206-6CA❑❑**		240
22	26.5	200 L	975	215	90.8	0.83	42.5	**1MJ6 207-6CA❑❑**		255
30	36	225 M	978	293	92	0.84	56	**1MJ7 223-6CA❑❑**		330
37	44.5	250 M	980	361	92.4	0.84	69	**1MJ7 253-6CA❑❑**		440
45	54	280 S	982	438	93	0.86	81	**1MJ7 280-6CA❑❑**		560
55	66	280 M	984	534	93.6	0.86	99 [1]	**1MJ7 283-6CA❑❑**		600
75	90	315 S	988	725	93.8	0.85	136	**1MJ7 310-6CA❑❑**		810
90	108	315 M	988	870	94.2	0.85	162 [1]	**1MJ7 313-6CA❑❑**		870

Order No. supplements

Motor type	**Penultimate position: Voltage code**				**Final position: Type of construction code**						
	50 Hz				Without flange	With flange			With standard flange		With special flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3/6/7/8, IM V6 [2] [3]	IM B5, IM V3 [2] [4]	IM V1 with protective cover [2] [4] [5]	IM B35	IM B14, IM V19 [2]	IM B34	IM B14 IM V19 [2]
	1	**6**	**3**	**5**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
1MJ6 07 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 08 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 09 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	–
1MJ6 10 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 11 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 13 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 16 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 18 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ6 20 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 22 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 25 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 28 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–
1MJ7 31 .-... ❑❑	○	○	○	○	❑	✓ [6]	✓	✓	–	–	–

❑ 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”).

For footnotes, see Page 6.

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 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 temperature classes T1 to T4							
1MJ6 073-6CA❑❑	2.2	3.1	2.2	16	0.0009	39	50
1MJ6 080-6CA❑❑	1.9	3.3	2	16	0.0015	40	51
1MJ6 083-6CA❑❑	2	3.5	2.1	16	0.0018	40	51
1MJ6 096-6CA❑❑	2.2	3.9	2.3	16	0.0028	43	55
1MJ6 097-6CA❑❑	2.4	4.3	2.4	16	0.0035	43	55
1MJ6 106-6CA❑❑	2.3	4.5	2.5	16	0.0063	47	59
1MJ6 113-6CA❑❑	2.2	4.8	2.5	16	0.01	52	64
1MJ6 130-6CA❑❑	2	4.8	2.2	16	0.01	63	75
1MJ6 133-6CA❑❑	2	5	2.4	16	0.01	63	75
1MJ6 134-6CA❑❑	2.2	5.4	2.5	16	0.02	63	75
1MJ6 163-6CA❑❑	2.1	5.1	2.5	16	0.04	66	78
1MJ6 166-6CA❑❑	2.3	5.5	2.5	16	0.04	66	78
1MJ6 186-6CA❑❑	2.6	6.3	2.4	16	0.2	66	78
1MJ6 206-6CA❑❑	2.6	6.3	2.3	16	0.29	66	78
1MJ6 207-6CA❑❑	2.5	5.7	2.3	16	0.33	66	78
1MJ7 223-6CA❑❑	2.6	5.7	2.2	16	0.57	66	78
1MJ7 253-6CA❑❑	2.6	6	2.1	16	0.89	60	74
1MJ7 280-6CA❑❑	2.4	6	2.3	16	1.3	60	74
1MJ7 283-6CA❑❑	2.5	6.2	2.4	16	1.5	60	74
1MJ7 310-6CA❑❑	2.4	6.2	2.5	16	2.4	63	77
1MJ7 313-6CA❑❑	2.4	6.2	2.5	16	2.9	63	77

The 1MJ6/1MJ7 motors can also be ordered for use with type of protection Ex d/de (Zone 1)/dust-Ex Zone 21, as well as for Zone 22 for conducting dust:
Mains-fed operation – order code **M76**
Converter-fed operation with derating – order code **M77**
See “Special versions” in the “Options” under “Options”.

Other versions up to 1600 kW as 6-pole motors as DN series with Order No. 1PS4 (Ex de IIB), 1PS5 (Ex de IIC) available; also higher outputs and other numbers of poles possible.

Place request with:

Loher GmbH (a Siemens company)
Hans-Loher-Str. 32
94099 Ruhstorf/Rott

http://www.loher.com

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

2) 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.

3) If motors 1MJ6 183-... to 1MJ7 313-... (motor series 1MJ6 frame size 180 M and above to 1MJ7 frame size 315 M) in types of construction with feet IM B6, IM B7 or IM V6 are fixed to the wall, it is recommended that the motor feet are supported.

4) 1MJ7 220-... to 1MJ7 313-... motors (motor series 1MJ7 frame sizes 225 S to 315 M) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be relocated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

5) The “Second shaft extension” option, order code **K16** is not possible.

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

Rated output at 50 Hz	Rated output at 60 Hz	Frame size	Operating values at rated output: Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz	Power factor at 50 Hz	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 construc-tion approx.
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	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, temperature classes T1 to T4										
0.37	0.43	90 L	655	5.3	61	0.76	1.16	**1MJ6 096-8CB❑❑**		27.5
0.55	0.63	90 L	655	7.9	65	0.76	1.62	**1MJ6 097-8CB❑❑**		29.5
0.75	0.86	100 L	685	10	65	0.72	2.3	**1MJ6 106-8CB❑❑**		40
1.1	1.3	100 L	685	16	74	0.74	2.9	**1MJ6 107-8CB❑❑**		48
1.5	1.75	112 M	700	21	74	0.73	4	**1MJ6 113-8CB❑❑**		52
2.2	2.55	132 S	695	30	74	0.72	6	**1MJ6 130-8CB❑❑**		78
3	3.45	132 M	700	40	76	0.72	7.9	**1MJ6 133-8CB❑❑**		85
4	4.6	160 M	715	54	81	0.72	9.9	**1MJ6 163-8CB❑❑**		119
5.5	6.3	160 M	710	74	83	0.72	13.3	**1MJ6 164-8CB❑❑**		134
7.5	8.6	160 L	715	100	84	0.72	17.9	**1MJ6 166-8CB❑❑**		159
11	13.2	180 L	725	145	87	0.7	26	**1MJ6 186-8CB❑❑**		191
15	18	200 L	725	198	87.5	0.78	32	**1MJ6 207-8CB❑❑**		263
18.5	22	225 S	725	244	88.6	0.8	37.5	**1MJ7 220-8CB❑❑**		325
22	26.5	225 M	725	290	90.1	0.81	43.5	**1MJ7 223-8CB❑❑**		350
30	36	250 M	730	392	91.6	0.81	58	**1MJ7 253-8CB❑❑**		465
37	44.5	280 S	732	483	92.7	0.82	70	**1MJ7 280-8CB❑❑**		570
45	54	280 M	734	585	92.8	0.83	84	**1MJ7 283-8CB❑❑**		620
55	66	315 S	738	712	93.1	0.82	104	**1MJ7 310-8CB❑❑**		780
75	90	315 M	738	970	93.6	0.82	140	**1MJ7 313-8CB❑❑**		890

Order No. supplements

Motor type	**Penultimate position: Voltage code** 50 Hz				**Final position: Type of construction code** Without flange	With flange			With standard flange		With special flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3/6/7/8, IM V6 [1) 2)]	IM B5, IM V3 [1) 3)]	IM V1 with protective cover [1) 3) 4)]	IM B35	IM B14, IM V19 [1)]	IM B34	IM B14 IM V19 [1)]
	1	**6**	**3**	**5**	**0**	**1**	**4**	**6**	**2**	**7**	**3**
1MJ6 07 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 08 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	✓
1MJ6 09 .-... ❑❑	○	○	○	–	❑	✓	✓	✓	✓	✓	–
1MJ6 10 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 11 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 13 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 16 .-... ❑❑	○	○	○	○	❑	✓	✓	✓	–	–	–
1MJ6 18 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–
1MJ6 20 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–
1MJ7 22 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–
1MJ7 25 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–
1MJ7 28 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–
1MJ7 31 .-... ❑❑	○	○	○	○	❑	✓ [5)]	✓	✓	–	–	–

❑ 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”).

For footnotes, see Page 8.

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 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, temperature classes T1 to T4							
1MJ6 096-8CB❑❑	1.4	2.8	1.7	13	0.0025	41	53
1MJ6 097-8CB❑❑	1.5	2.9	1.7	13	0.0035	41	53
1MJ6 106-8CB❑❑	1.6	3.5	1.8	13	0.0053	45	57
1MJ6 107-8CB❑❑	1.8	3.9	2	13	0.007	45	57
1MJ6 113-8CB❑❑	1.8	4.4	2	13	0.01	49	61
1MJ6 130-8CB❑❑	1.7	4.2	2.1	13	0.01	53	65
1MJ6 133-8CB❑❑	1.9	4.4	2.2	13	0.01	53	65
1MJ6 163-8CB❑❑	2.1	4.8	2.3	13	0.03	63	75
1MJ6 164-8CB❑❑	2.3	5.1	2.5	13	0.04	63	75
1MJ6 166-8CB❑❑	2.6	5.8	2.8	13	0.06	63	75
1MJ6 186-8CB❑❑	2	5	2.2	13	0.21	60	73
1MJ6 207-8CB❑❑	2.1	5	2.2	13	0.37	58	71
1MJ7 220-8CB❑❑	2.1	5	2.2	13	0.58	58	71
1MJ7 223-8CB❑❑	2.1	5	2.2	13	0.66	58	71
1MJ7 253-8CB❑❑	2.1	5	2.1	13	1.1	57	71
1MJ7 280-8CB❑❑	2.2	5.5	2.2	13	1.4	58	72
1MJ7 283-8CB❑❑	2.2	5.5	2.2	13	1.6	58	72
1MJ7 310-8CB❑❑	2.2	6	2.4	13	2.3	62	76
1MJ7 313-8CB❑❑	2.3	6.2	2.5	13	3	62	76

The 1MJ6/1MJ7 motors can also be ordered for use with type of protection Ex d/de (Zone 1)/dust-Ex Zone 21, as well as for Zone 22 for conducting dust:
Mains-fed operation – order code **M76**
Converter-fed operation with derating – order code **M77**
See “Special versions” in the “Options” under “Options”.

Other versions up to 1350 kW as 8-pole motors as DN series with Order No. 1PS4 (Ex de IIB), 1PS5 (Ex de IIC) available; also higher outputs and other numbers of poles possible.

Place request with:

Loher GmbH (a Siemens company)
Hans-Loher-Str. 32
94099 Ruhstorf/Rott

http://www.loher.com

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) If motors 1MJ6 183-... to 1MJ7 313-... (motor series 1MJ6 frame size 180 M and above to 1MJ7 frame size 315 M) in types of construction with feet IM B6, IM B7 or IM V6 are fixed to the wall, it is recommended that the motor feet are supported.

3) 1MJ7 220-... to 1MJ7 313-... motors (motor series 1MJ7 frame sizes 225 S to 315 M) are supplied with two screw-in eyebolts in accordance with IM B5, whereby one can be relocated in accordance with IM V1 or IM V3. It is important to note that stress must not be applied perpendicular to the ring plane.

4) The “Second shaft extension” option, order code **K16** is not possible.

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