Squirrel-cage motors
1MJ · explosion-proof enclosure
EEx de IIC type of protection
Selection and ordering data

5

1MJ motors
Explosion-proof enclosure

Frame size	71 to 450
Output range	0.25 to 900 kW
Temp. class	T1 to T4
Temp. class F	Utilization acc. to B
Converter compatible	Voltage peak times $t_s > 0.1\ \mu s$ at $U \leq 500$ V

The motors comply with the highest explosion group IIC.

1MJ · EEx de IIC type of protection

Selection and ordering data

Rated output	Size	Order No. / Order No. supplement for voltage and type of construction, see table below	Operating data at rated output: Rated speed	Efficiency η	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (multiple of the rated current)	Stalling torque (multiple of the rated torque)	Torque class	Moment of inertia J	Weight, Type of constr. IM B 3 approx.
kW			rpm	%		A	Nm				KL	kg m^2	kg
Temperature classes T1 to T4, IP55 degree of protection, temperature class F													**ATEX**
	3000 rpm, 2-pole, 50 Hz												
0.37	71 M	**1MJ6 070–2CA . .**	2750	67	0.81	0.98	1.3	2.3	4.3	2.3	16	0.00035	19
0.55		**1MJ6 073–2CA . .**	2790	71	0.81	1.38	1.9	2.5	5.3	2.6	16	0.00045	20
0.75	80 M	**1MJ6 080–2CA . .**	2840	72	0.86	1.75	2.5	2.4	6.3	2.3	16	0.00085	24
1.1		**1MJ6 083–2CA . .**	2835	74	0.87	2.45	3.7	2.6	6.3	2.3	16	0.0011	26
1.5	90 L	**1MJ6 096–2CA . .**	2850	78	0.84	3.3	5.0	2.5	6.7	2.5	16	0.0015	32
2.2		**1MJ6 097–2CA . .**	2860	80	0.86	4.6	7.4	2.8	7.1	2.8	16	0.0020	35
3	100 L	**1MJ6 106–2CA . .**	2885	82	0.85	6.2	9.9	2.8	7.7	3.0	16	0.0038	44
4	112 M	**1MJ6 113–2CA . .**	2895	84	0.88	7.8	13	2.4	7.6	2.8	16	0.0055	57
5.5	132 S	**1MJ6 130–2CA . .**	2925	85	0.89	10.5	18	2.0	5.9	2.6	16	0.015	75
7.5		**1MJ6 131–2CA . .**	2930	87	0.89	14	24	2.3	6.9	2.6	16	0.019	82
11	160 M	**1MJ6 163–2CA . .**	2940	88	0.88	20.5	36	2.1	6.5	2.6	16	0.034	123
15	160 M	**1MJ6 164–2CA . .**	2940	89	0.91	26.5	49	2.2	6.6	3.1	16	0.043	134
18.5	160 L	**1MJ6 166–2CA . .**	2940	91	0.91	32.5	60	2.4	7.0	3.3	16	0.051	161
22	180 M	**1MJ6 183–2CA . .**	2940	92	0.88	39	71	2.5	6.9	3.2	16	0.077	175
30	200 L	**1MJ6 206–2CA . .**	2940	92.3	0.89	53	97	2.4	6.5	2.8	16	0.14	250
37		**1MJ6 207–2CA . .**	2945	92.8	0.90	64	120	2.4	7.7	2.8	16	0.16	266
45	225 M	**1MJ7 223–2CB . .**	2955	93.9	0.90	77 [1]	145	2.3	6.9	2.7	13	0.24	335
55	250 M	**1MJ7 253–2CB . .**	2965	93.7	0.90	94	177	2.1	6.9	2.8	13	0.45	445
75	280 S	**1MJ7 280–2CC . .**	2975	94.7	0.90	128 [1]	241	1.9	7.0	2.7	10	0.79	600
90	280 M	**1MJ7 283–2CC . .**	2975	95.1	0.91	150 [1]	289	2.0	7.0	2.7	10	0.92	640
110	315 S	**1MJ7 310–2CC . .**	2980	94.8	0.90	186 [1]	353	1.8	7.0	2.8	10	1.3	840
132	315 M	**1MJ7 313–2CC . .**	2980	95.1	0.90	225 [1]	423	1.9	7.0	2.8	10	1.5	900
160	315 M	**1MJ8 313–2AB . .**	2980	95.7	0.88	280	513	2.2	6.9	2.5	13	2.3	1100
200	315 L	**1MJ8 316–2AB . .**	2980	96.2	0.89	335	641	2.3	6.9	2.6	13	2.8	1200
250	355	**1MJ8 353–2AC . .**	2980	96.2	0.89	423 [2]	801	2.1	6.7	2.6	10	3.5	1700
315		**1MJ8 356–2AC . .**	2980	96.6	0.89	530 [2]	1009	2.1	6.7	2.6	10	4.2	2000
355	355	**1MJ1 355–2AD . .**	2978	96.5	0.91	580	1138	1.0	6.4	2.7	7	4.3	2400
400		**1MJ1 357–2AD . .**	2978	96.6	0.91	655	1282	0.95	6.1	2.6	7	4.3	2400
450	400	**1MJ1 403–2AE . .**	2984	96.7	0.90	745	1440	0.8	6.2	2.8	5	6.0	2800
500		**1MJ1 405–2AE . .**	2982	96.8	0.91	820	1601	0.8	5.9	2.55	5	7.0	3000
560		**1MJ1 407–2AE . .**	2983	97.0	0.91	915	1792	0.85	6.2	2.7	5	7.0	3000
630	450	**1MJ1 453–2AE . .**	2986	96.9	0.91	600 •	2014	0.75	6.2	2.7	5	11.0	4000
710		**1MJ1 455–2AE . .**	2986	97.0	0.91	670 •	2270	0.8	6.3	2.8	5	11.0	4000
800		**1MJ1 457–2AE . .**	2986	97.1	0.91	760 •	2557	0.8	6.3	2.8	5	13.0	4200
900		**1MJ1 458–2AE . .**	2985	97.2	0.91	850 •	2879	0.85	6.4	2.7	5	13.0	4200

• Rated current at 690 V.

Order No. supplements

Motor type	**Penultimate position: Voltage identifier** 50 Hz: 230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ	**Final position: Type of construction identifier** IM B 3	Price supplement IM B 5	IM V 1 With protective cover	IM B 14 With standard flange	IM B 14 With special flange	IM B 35
1MJ6 070 to 1MJ6 097	**1**	**6**	**3**	**–**	**0**	**1**	**4**	**2**	**3** [3]	**6**
1MJ6 106 to 1MJ6 166	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ6 183 to 1MJ6 207	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ7 223 to 1MJ7 313	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 313 to 1MJ8 316	**–**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 353 to 1MJ8 356	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**
1MJ1 355 to 1MJ1 458	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**

Other voltage and/or frequency, voltage identifier **"9"**.
Order codes are required for this purpose
(see "Technical information", "Voltages, currents and frequencies").

For other types of construction, see "Technical information", "Types of construction".

1) For connection to 230 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

2) The motors have two terminal blocks.

3) Only up to 1MJ6 083.

Selection and ordering data

Rated output	Size	Order No. / Order No. supplement for voltage and type of construction, see table below	Rated speed	Efficiency η	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (For direct-on-line starting as multiple of the rated current)	Stalling torque (For direct-on-line starting as multiple of the rated torque)	Torque class	Moment of inertia J	Weight Type of constr. IM B 3 approx.
kW			rpm	%		A	Nm				KL	kg m^2	kg
Temperature classes T1 to T4, IP55 degree of protection, temperature class F													**ATEX**
	1500 rpm, 4-pole, 50 Hz												
0.25	71 M	**1MJ6 070–4CB . .**	1325	60	0.77	0.78	1.8	1.8	3.2	1.8	13	0.0006	20
0.37		**1MJ6 073–4CB . .**	1375	64	0.74	1.13	2.5	2	3.6	2	13	0.0008	21
0.55	80 M	**1MJ6 080–4CA . .**	1395	71	0.79	1.42	3.7	2.3	4.7	2.4	16	0.0015	24
0.75		**1MJ6 083–4CA . .**	1395	73	0.79	1.88	5.1	2.5	5	2.6	16	0.0018	26
1.1	90 L	**1MJ6 096–4CA . .**	1410	73	0.81	2.7	7.5	2.1	4.9	2.5	16	0.0028	32
1.5		**1MJ6 097–4CA . .**	1420	77	0.8	3.5	10	2.2	5.8	2.6	16	0.0035	35
2.2	100 L	**1MJ6 106–4CA . .**	1420	78	0.8	5.1	15	2.2	6	2.6	16	0.0048	44
3		**1MJ6 107–4CA . .**	1415	80	0.82	6.6	20	2.7	6.4	3	16	0.0058	47
4	112 M	**1MJ6 113–4CA . .**	1435	83	0.82	8.5	27	2.8	7.2	3	16	0.011	58
5.5	132 S	**1MJ6 130–4CA . .**	1450	86	0.83	11.1	36	2.4	6.9	3.3	16	0.018	76
7.5	132 M	**1MJ6 133–4CA . .**	1450	86	0.84	15	49	2.7	7.7	3.3	16	0.024	85
11	160 M	**1MJ6 163–4CA . .**	1455	87	0.85	21.5	72	2.4	6.6	2.9	16	0.040	128
15	160 L	**1MJ6 166–4CA . .**	1455	89	0.85	28.5	98	2.8	7.4	3.2	16	0.052	158
18.5	180 M	**1MJ6 183–4CA . .**	1460	90.5	0.84	35	121	2.3	7.1	3	16	0.13	175
22	180 L	**1MJ6 186–4CA . .**	1460	91.2	0.85	41	144	2.3	7.1	3	16	0.15	189
30	200 L	**1MJ6 207–4CA . .**	1465	91.8	0.86	55	196	2.6	7.4	3.2	16	0.24	247
37	225 S	**1MJ7 220–4CA . .**	1475	93	0.86	67 [1]	240	2.5	7	3.1	16	0.44	325
45	225 M	**1MJ7 223–4CA . .**	1475	93.4	0.87	80 [1]	292	2.6	7	3.2	16	0.52	355
55	250 M	**1MJ7 253–4CA . .**	1480	94	0.87	97 [1]	355	2.6	6.7	2.5	16	0.79	465
75	280 S	**1MJ7 280–4CA . .**	1485	94.7	0.86	132 [1]	482	2.5	6.7	2.7	16	1.4	630
90	280 M	**1MJ7 283–4CA . .**	1485	95	0.86	160 [1]	579	2.5	6.8	2.8	16	1.6	680
110	315 S	**1MJ7 310–4CA . .**	1488	94.8	0.86	194 [1]	706	2.5	7.0	2.7	16	2.2	870
132	315 M	**1MJ7 313–4CA . .**	1488	95.5	0.86	232 [1]	847	2.7	7.5	3	16	2.7	950
160	315 M	**1MJ8 313–4AC . .**	1485	95.6	0.86	285	1029	2.4	6.8	2.5	13	3.3	1120
200	315 L	**1MJ8 316–4AB . .**	1485	95.7	0.85	355	1286	2.5	6.9	2.4	13	4.0	1200
225	355	**1MJ8 353–4AC . .**	1485	96.2	0.85	400	1447	2.1	6.6	2.3	13	5.5	1800
250		**1MJ8 354–4AD . .**	1490	96.5	0.86	435 [2]	1602	1.2	6.5	2.4	7	6	1800
280		**1MJ8 356–4AC . .**	1485	96.3	0.85	495 [2]	1801	2.1	6.6	2.3	13	6.5	2100
315		**1MJ8 357–4AD . .**	1490	96.6	0.87	540 [2]	2019	1.2	6.5	2.4	7	7	2100
355	355	**1MJ1 353–4AD . .**	1491	96.6	0.86	620	2272	1.05	6.1	2.4	7	7.5	2500
400		**1MJ1 355–4AD . .**	1491	96.7	0.86	695	2560	1.05	6.0	2.35	7	9.0	2700
450		**1MJ1 357–4AD . .**	1491	96.8	0.86	785	2880	1.1	6.2	2.4	7	9.0	2700
500	400	**1MJ1 403–4AD . .**	1492	96.8	0.87	855 [3]	3200	1.1	6.2	2.6	7	13	3100
560		**1MJ1 405–4AD . .**	1492	96.9	0.88	950 [3]	3583	1.1	6.2	2.55	7	15	3300
630		**1MJ1 407–4AD . .**	1492	97.0	0.88	1070 [2] [3] [4]	4031	1.1	6.3	2.6	7	15	3300
710	450	**1MJ1 453–4AD . .**	1493	97.0	0.89	1190 [2] [3] [4]	4540	0.95	6.3	2.5	7	24.5	4300
800		**1MJ1 455–4AD . .**	1493	97.1	0.88	1355 [2] [3] [4]	5114	1.0	6.6	2.6	7	24.5	4300
900		**1MJ1 457–4AD . .**	1493	97.2	0.88	880 ●	5755	1.05	6.6	2.5	7	29.0	4800

● Rated current at 690 V.

Order No. supplements

Motor type	Penultimate position: Voltage identifier (50 Hz)				Final position: Type of construction identifier					
					IM B 3	Price supplement				
	230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ		IM B 5	IM V 1 With protective cover	IM B 14 With standard flange	IM B 14 With special flange	IM B 35
1MJ6 070 to 1MJ6 097	**1**	**6**	**3**	**–**	**0**	**1**	**4**	**2**	**3** [5]	**6**
1MJ6 106 to 1MJ6 166	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ6 183 to 1MJ6 207	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ7 220 to 1MJ7 313	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 313 to 1MJ8 316	**–**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 353 to 1MJ8 357	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**
1MJ1 353 to 1MJ1 457	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**

Other voltage and/or frequency, voltage identifier **"9"**.
Order codes are required for this purpose
(see "Technical information", "Voltages, currents and frequencies").

For other types of construction, see "Technical information", "Types of construction".

1) For connection to 230 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

2) The motors have two terminal blocks.

3) For connection to 400 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

4) For connection to 500 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

5) Only up to 1MJ6 083.

Selection and ordering data

Rated output	Size	Order No. / Order No. supplement for voltage and type of construction, see table below	Operating data at rated output: Rated speed	Efficiency η	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (multiple of the rated current)	Stalling torque (multiple of the rated torque)	Torque class	Moment of inertia J	Weight Type of constr. IM B 3 approx.
kW			rpm	%		A	Nm				KL	kg m^2	kg
Temperature classes T1 to T4, IP55 degree of protection, temperature class F													**ATEX**
	1000 rpm, 6-pole, 50 Hz												
0.25	71 M	**1MJ6 073–6CA . .**	870	63	0.7	0.82	2.7	2.2	3.1	2.2	16	0.0009	16
0.37	80 M	**1MJ6 080–6CA . .**	910	64	0.71	1.18	3.9	1.9	3.3	2	16	0.0015	35
0.55		**1MJ6 083–6CA . .**	900	64	0.74	1.67	5.8	2	3.5	2.1	16	0.0018	23
0.75	90 L	**1MJ6 096–6CA . .**	910	69	0.76	2.1	8.0	2.2	3.9	2.3	16	0.0028	32
1.1		**1MJ6 097–6CA . .**	905	72	0.75	2.95	12	2.4	4.3	2.4	16	0.0035	32
1.5	100 L	**1MJ6 106–6CA . .**	930	75	0.73	4.0	15	2.3	4.5	2.5	16	0.0063	39
2.2	112 M	**1MJ6 113–6CA . .**	945	76	0.76	5.5	22	2.2	4.8	2.5	16	0.011	52
3	132 S	**1MJ6 130–6CA . .**	945	78	0.75	7.4	30	2	4.8	2.2	16	0.015	78
4	132 M	**1MJ6 133–6CA . .**	945	79	0.76	9.6	40	2	5	2.4	16	0.019	85
5.5	132 M	**1MJ6 134–6CA . .**	950	83	0.76	12.6	55	2.2	5.4	2.5	16	0.025	92
7.5	160 M	**1MJ6 163–6CA . .**	960	86	0.72	17.5	75	2.1	5.1	2.5	16	0.041	134
11	160 L	**1MJ6 166–6CA . .**	960	87	0.74	24.5	109	2.3	5.5	2.5	16	0.049	167
15	180 L	**1MJ6 186–6CA . .**	970	89	0.83	29.5	148	2.6	6.3	2.4	16	0.20	190
18.5	200 L	**1MJ6 206–6CA . .**	975	90.2	0.82	36	181	2.6	6.3	2.3	16	0.29	240
22		**1MJ6 207–6CA . .**	975	90.8	0.83	42.5	215	2.5	5.7	2.3	16	0.33	255
30	225 M	**1MJ7 223–6CA . .**	978	92	0.84	56	293	2.6	5.7	2.2	16	0.57	330
37	250 M	**1MJ7 253–6CA . .**	980	92.4	0.84	69	361	2.6	6	2.1	16	0.89	440
45	280 S	**1MJ7 280–6CA . .**	982	93	0.86	81	438	2.4	6	2.3	16	1.3	560
55	280 M	**1MJ7 283–6CA . .**	984	93.6	0.86	99 [1]	534	2.5	6.2	2.4	16	1.5	600
75	315 S	**1MJ7 310–6CA . .**	988	93.8	0.85	136	725	2.4	6.2	2.5	16	2.4	810
90	315 M	**1MJ7 313–6CA . .**	988	94.2	0.85	162 [1]	870	2.4	6.2	2.5	16	2.9	870
110	315 M	**1MJ8 313–6AC . .**	990	95.3	0.86	195	1061	2.1	6.8	2.3	10	4.8	1150
132	315 M	**1MJ8 314–6AC . .**	990	95.4	0.87	228	1273	2.1	6.6	2.3	10	4.8	1150
160	315 L	**1MJ8 316–6AC . .**	990	95.5	0.87	275	1543	2.1	6.6	2.3	10	6.0	1250
200	355	**1MJ8 353–6AD . .**	990	95.6	0.86	350	1929	1.1	6.5	2.2	7	8	1900
250		**1MJ8 356–6AD . .**	990	95.8	0.85	440	2412	1.1	6.5	2.2	7	9	2200
280	355	**1MJ1 353–6AD . .**	993	96.3	0.84	500	2693	1.05	5.8	2.4	7	10.5	2500
315		**1MJ1 355–6AD . .**	993	96.4	0.84	560	3029	1.0	5.7	2.35	7	12.5	2700
355		**1MJ1 357–6AD . .**	993	96.5	0.85	630	3415	1.0	5.6	2.3	7	12.5	2700
400	400	**1MJ1 403–6AD . .**	994	96.5	0.84	715	3844	1.0	5.6	2.3	7	18	3200
450		**1MJ1 405–6AD . .**	994	96.6	0.84	800 [2]	4323	1.0	5.5	2.25	7	21.5	3500
500		**1MJ1 407–6AD . .**	994	96.7	0.84	890 [2]	4805	1.05	5.7	2.3	7	21.5	3500
560	450	**1MJ1 453–6AD . .**	995	96.9	0.85	980 [2] [3]	5374	0.95	5.8	2.3	7	34.0	4600
630		**1MJ1 455–6AD . .**	995	97.0	0.85	1105 [2] [3] [4]	6046	0.95	5.7	2.3	7	34.0	4600
710		**1MJ1 457–6AD . .**	995	97.1	0.85	1240 [2] [3] [4]	6813	0.95	5.7	2.25	7	40.0	4900
780		**1MJ1 458–6AD . .**	995	97.2	0.85	790 ●	7486	1.0	6.0	2.4	7	40.0	4900

● Rated current at 690 V.

Order No. supplements

Motor type	**Penultimate position: Voltage identifier** 50 Hz				**Final position: Type of construction identifier** IM B 3	Price supplement				
	230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ		IM B 5	IM V 1 With protective cover	IM B 14 With standard flange	IM B 14 With special flange	IM B 35
1MJ6 073 to 1MJ6 097	**1**	**6**	**3**	**–**	**0**	**1**	**4**	**2**	**3** [5])	**6**
1MJ6 106 to 1MJ6 166	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ6 186 to 1MJ6 207	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ7 223 to 1MJ7 313	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 313 to 1MJ8 316	**–**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 353 to 1MJ8 356	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**
1MJ1 353 to 1MJ1 458	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**

Other voltage and/or frequency, voltage identifier **"9"**.
Order codes are required for this purpose
(see "Technical information", "Voltages, currents and frequencies").

For other types of construction, see "Technical information", "Types of construction".

1) For connection to 230 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

2) For connection to 400 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

3) The motors have two terminal blocks.

4) For connection to 500 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

5) Only up to 1MJ6 083.

Selection and ordering data

Rated output	Size	Order No. / Order No. supplement for voltage and type of construction, see table below	Operating data at rated output: Rated speed	Efficiency η	Power factor p.f.	Rated current at 400 V	Rated torque	Starting torque (For direct-on-line starting as multiple of the rated torque)	Starting current (multiple of the rated current)	Stalling torque (multiple of the rated torque)	Torque class	Moment of inertia J	Weight Type of constr. IM B 3 approx.
kW			rpm	%		A	Nm				KL	kg m^2	kg
Temperature classes T1 to T4, IP55 degree of protection, temperature class F													**ATEX**
	750 rpm, 8-pole, 50 Hz												
0.37	90 L	**1MJ6 096–8CB . .**	655	61	0.76	1.16	5.3	1.4	2.8	1.7	13	0.0025	28
0.55		**1MJ6 097–8CB . .**	655	65	0.76	1.62	7.9	1.5	2.9	1.7	13	0.0035	30
0.75	100 L	**1MJ6 106–8CB . .**	665	65	0.77	2.15	11	1.6	3.5	1.8	13	0.0053	40
1.1		**1MJ6 107–8CB . .**	685	74	0.74	2.9	16	1.8	3.9	2	13	0.0070	48
1.5	112 M	**1MJ6 113–8CB . .**	700	74	0.73	4.0	21	1.8	4.4	2	13	0.013	52
2.2	132 S	**1MJ6 130–8CB . .**	695	74	0.72	6.0	30	1.7	4.2	2.1	13	0.014	78
3	132 M	**1MJ6 133–8CB . .**	700	76	0.72	7.9	40	1.9	4.4	2.2	13	0.019	85
4	160 M	**1MJ6 163–8CB . .**	715	81	0.72	9.9	54	2.1	4.8	2.3	13	0.035	119
5.5	160 M	**1MJ6 164–8CB . .**	710	83	0.72	13.3	74	2.3	5.1	2.5	13	0.043	134
7.5	160 L	**1MJ6 166–8CB . .**	715	84	0.72	17.9	100	2.6	5.8	2.8	13	0.062	159
11	180 L	**1MJ6 186–8CB . .**	725	87	0.7	26	145	2	5	2.2	13	0.21	191
15	200 L	**1MJ6 207–8CB . .**	725	87.5	0.78	32	198	2.1	5	2.2	13	0.37	263
18.5	225 S	**1MJ7 220–8CB . .**	725	88.6	0.8	37.5	244	2.1	5	2.2	13	0.58	325
22	225 M	**1MJ7 223–8CB . .**	725	90.1	0.81	43.5	290	2.1	5	2.2	13	0.66	350
30	250 M	**1MJ7 253–8CB . .**	730	91.6	0.81	58	392	2.1	5	2.1	13	1.1	465
37	280 S	**1MJ7 280–8CB . .**	732	92.7	0.82	70	483	2.2	5.5	2.2	13	1.4	570
45	280 M	**1MJ7 283–8CB . .**	734	92.8	0.83	84	585	2.2	5.5	2.2	13	1.6	620
55	315 S	**1MJ7 310–8CB . .**	738	93.1	0.82	104	712	2.2	6	2.4	13	2.3	780
75	315 M	**1MJ7 313–8CB . .**	738	93.6	0.82	140	970	2.3	6.2	2.5	13	3.0	890
90	315 M	**1MJ8 313–8AB . .**	740	94.4	0.79	175	1161	1.7	6.1	2	10	4.8	1150
110	315 M	**1MJ8 314–8AB . .**	740	94.4	0.79	210	1420	1.7	6.1	2	10	4.8	1150
132	315 L	**1MJ8 316–8AB . .**	740	94.4	0.8	255	1704	1.8	6.1	2	10	6.0	1250
160	355	**1MJ8 353–8AD . .**	740	95.1	0.83	292	2065	1.3	5.3	2.2	7	12	1900
200		**1MJ8 356–8AD . .**	740	95.4	0.83	365	2581	1.3	5.3	2.2	7	14.7	2250
250	355	**1MJ1 355–8AD . .**	743	95.9	0.83	455	3213	1.1	5.4	2.25	7	12.5	2700
280		**1MJ1 357–8AD . .**	743	96.0	0.82	515	3597	1.15	5.4	2.3	7	12.5	2700
315	400	**1MJ1 403–8AD . .**	744	96.1	0.82	580	4043	1.0	5.4	2.35	7	17.5	3200
355		**1MJ1 405–8AD . .**	744	96.2	0.82	645	4557	1.0	5.3	2.3	7	21.0	3500
400		**1MJ1 407–8AD . .**	744	96.3	0.82	735	5136	0.95	5.2	2.25	7	21.0	3500
450	450	**1MJ1 453–8AE . .**	745	96.6	0.84	800 [1]	5769	0.85	5.3	2.25	5	35.5	4600
500		**1MJ1 455–8AE . .**	745	96.7	0.83	900 [1]	6411	0.85	5.2	2.2	5	35.5	4600
560		**1MJ1 457–8AE . .**	745	96.7	0.84	1000 [1] [2] [3]	7178	0.85	5.4	2.25	5	42.0	4900
630		**1MJ1 458–8AE . .**	745	96.8	0.83	1130 [1] [2] [3]	8075	0.9	5.3	2.25	5	42.0	4900

Order No. supplements

Motor type	**Penultimate position: Voltage identifier** 50 Hz: 230 VΔ / 400 VY	400 VΔ / 690 VY	500 VY	500 VΔ	**Final position: Type of construction identifier** IM B 3	Price supplement IM B 5	IM V 1 With protective cover	IM B 14 With standard flange	IM B 14 With special flange	IM B 35
1MJ6 096 and 1MJ6 097	**1**	**6**	**3**	**–**	**0**	**1**	**4**	**2**	**3** [4]	**6**
1MJ6 106 to 1MJ6 166	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ6 186 to 1MJ6 207	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ7 220 to 1MJ7 313	**1**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 313 to 1MJ8 316	**–**	**6**	**3**	**5**	**0**	**1**	**4**	**–**	**–**	**6**
1MJ8 353 to 1MJ8 356	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**
1MJ1 355 to 1MJ1 458	**–**	**6**	**3**	**5**	**0**	**–**	**4**	**–**	**–**	**6**

Other voltage and/or frequency, voltage identifier **"9"**.
Order codes are required for this purpose
(see "Technical information", "Voltages, currents and frequencies").

For other types of construction, see "Technical information", "Types of construction".

1) For connection to 400 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

2) The motors have two terminal blocks.

3) For connection to 500 V, parallel supply cables are required (see "Technical information", "Connections, circuits and terminal blocks").

4) Only up to 1MJ6 083.

Order codes for special designs

Additional order suffix –Z with order code	Special designs	Motor type – Size 1MJ6	1MJ7	1MJ8	1MJ1
Motor protection					
A11	Motor protection with PTC thermistor and 3 embedded temperature sensors for shutdown [1])	71 – 200 ●	225 – 315	315 – 355	355 – 450
A12	Motor protection with PTC thermistor and 6 embedded temperature sensors for alarm and shutdown [1])	71 – 200 ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
A15	Motor protection with PTC thermistor for converter-fed operation with 3 embedded temperature sensors for shutdown [1])	71 – 200 ●	225 – 315	315 – 355	355 – 450
A16	Motor protection with PTC thermistor for converter-fed operation with 6 embedded temperature sensors for alarm and shutdown [1])	71 – 200 ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲

● Anti-condensation heating (order codes K45, K46) up to size 160 L not possible additionally.

▲ Anti-condensation heating (order codes K45, K46) not possible additionally. Exception: 1MJ7 31 .

Paint finish					
K26	Special paintwork in RAL 7030 stone grey	Standard design (without order code)	225 – 315	315 – 355	355 – 450
M16	Special paintwork in RAL 1002 sand yellow	71 – 200	225 – 315 With order code **Y54** and special paint-work RAL	315 – 355 With order code **Y54** and special paint-work RAL	355 – 450 With order code **Y54** and special paint-work RAL . . . .
M17	Special paintwork in RAL 1013 pearl white				
M18	Special paintwork in RAL 3000 flame red				
K27	Special paintwork in RAL 6011 mignonette green				
M19	Special paintwork in RAL 6021 pale green				
M20	Special paintwork in RAL 7001 silver grey				
K28	Special paintwork in RAL 7031 bluish grey				
L42	Special paintwork in RAL 7032 pebble grey				
M21	Special paintwork in RAL 7035 light grey				
M22	Special paintwork in RAL 9001 cream				
M23	Special paintwork in RAL 9002 grey white				
L43	Special paintwork in RAL 9005 jet black				
Y54 ● And special paintwork RAL....	Special paintwork in other colors: RAL 1015, 1019, 2003, 2004, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6019, 7000, 7004, 7011, 7016, 7022, 7033	71 – 200	225 – 315	315 – 355	355 – 450
Y53 ● And standard paintwork RAL....	Standard paintwork in other colors	–	225 – 315	315 – 355	355 – 450
K23	Unpainted (only cast iron parts primed)	71 – 200	225 – 315	315 – 355	355 – 450
K24	Unpainted, only primed	71 – 200	–	–	–

RAL No.	Name of color	RAL No.	Name of color
1015	Light ivory	5017	Traffic blue
1019	Grey beige	5018	Turquoise blue
2003	Pastel orange	5019	Capri blue
2004	Pure orange	6019	Pastel green
3007	Wine red	7000	Squirrel grey
5007	Black blue	7004	Signal grey
5009	Azure blue	7011	Iron grey
5010	Gentian blue	7016	Anthracite grey
5012	Light blue	7022	Umbra grey
5015	Sky blue	7033	Cement grey

● Additional plain text required.

1) For appropriate certified 3RN1 tripping unit, see Catalog LV 10.

Order codes for special designs

Additional order suffix –Z with order code	Special designs	Motor type – Size 1MJ6	1MJ7	1MJ8	1MJ1
Mechanical design					
K09	Terminal box on RHS (view onto drive end)	90 – 200	225 – 315	315 – 355	355 – 450
K10	Terminal box on LHS (view onto drive end)	90 – 200	225 – 315	315 – 355	355 – 450
K83	Rotation of terminal box by 90°, inserted from drive end	71 – 200	225 – 315	315 – 355	355 – 450
K84	Rotation of terminal box by 90°, inserted from non-drive end	71 – 200	225 – 315	315 – 355	355 – 450
K85	Rotation of terminal box by 180°	71 – 200	225 – 315	315 – 355	355 – 450
K01	Vibrational severity grade R	71 – 200	225 – 315	315 – 355	355 – 450
K16	Second standard shaft end [1]	71 – 200	225 – 315	315 – 355	355 – 450
K17	Radial sealing ring on drive end with flange types [2]	71 – 200	225 – 315	315 – 355	355 – 450
K20	Bearings for increased cantilever forces	180 – 200 Vibrational severity grade R on request.	225 – 250	–	–
K40	Regreasing device	180 – 200	225 – 250, Standard design from 280 and higher	Standard design	Standard design
L27	Insulated bearing cartridge	–	250 – 315	315 – 355	355 – 450
D01	CCC China Compulsory Certification	71 – 90 [3]	–	–	–
K30	VIK design [4]	71 – 200	225 – 315	315 – 355	355
K31	Extra rating plate, loose	71 – 200	225 – 315	315 – 355	355 – 450
Y82 ●	Extra rating plate	71 – 200	225 – 315	315 – 355	355 – 450
And order codes					
K37	Low noise version for 2-pole motors with clockwise rotation [5]	132 – 200	225 – 315	315 – 355	355 – 450
K38	Low noise version for 2-pole motors with anti-clockwise rotation [5]	132 – 200	225 – 315	315 – 355	355 – 450
K45	Anti-condensation heating for 230 V	71 – 200 ● ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
K46	Anti-condensation heating for 115 V	71 – 200 ● ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
L99	Wire-lattice pallet	71 – 160	–	–	–

● PTC thermistor (order codes A11, A15) up to size 160 L not available additionally.

▲ 6 PTC thermistors (order codes A12, A16) not available additionally. Exception: 1MJ7 31 .

Certification					
B02	Factory test certificate 2.3 acc. to EN 10 204	71 – 200	225 – 315	–	–
Marine version – "Operation below deck" [6] [7]					
E00	Without certificate acc. to ABS 50 °C/CCS 45 °C/ RINA 45 °C Temperature class F used acc. to F	71 – 200	225 – 315	–	–
E11	Certified according to GL (Germanischer Lloyd) Germany, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 [8]	–	–
E21	Certified according to LRS (Lloyds Register of Shipping) Great Britain, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 [8]	–	–
E31	Certified according to BV (Bureau Veritas) France, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 [8]	–	–
E51	Certified according to DNV (Det Norske Veritas) Norway, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 [8]	–	–

● Additional plain text required.

1) For 1MJ6/1MJ7 and vertical designs from frame size 180 M upwards available on request, low-noise version (2-pole) not possible.
Design with cover not available.

2) Not possible for size IM V 3, only for 4-pole to 8-pole motors for size 180 M upwards.

3) The following motors require a CCC certificate:
– 2-pole motors: ≤ 2.2 kW
– 4-pole motors: ≤ 1.1 kW
– 6-pole motors: ≤ 0.75 kW
– 8-pole motors: ≤ 0.55 kW

4) For 2-pole motors from size 315 S upwards, additional low-noise version is required. Order code K37 or K38.

5) The motors are up to 80 mm longer than normal. Second shaft end not possible.

6) Works test certificate 2.3 to EN 10 204 is also supplied (does not apply to Order Code **E00**). Individual acceptance test must be specified in plain text on ordering if required (price supplement).

7) For 1MJ motors of class F used acc. to class B, derating may be necessary.

8) The 1MJ7 motors do not have a type approval certificate (certificate only for individual acceptance test).