

Totally enclosed squirrel cage three phase motors, cast iron frame IP 55 IC 411

400 V 50 Hz

Output kW	Motor type	Product code	Speed r/min	Effi- ciency %	Power factor cos φ	Current		Torque			
						I_N A	I_s I_N	T_N Nm	T_s T_N	T_{max} T_N	
1000 r/min = 6 poles			Basic design								
0.18 2)	QU	71 M6 AT	GST 073 310--A	850	49.0	0.60	0.88	3.0	2	1.9	2.0
0.25 2)		71 M6 BT	GST 073 320--A	860	53.0	0.61	1.12	3.2	2.8	2.2	2.4
0.37 3)		80 M6 AT	083 310--A	925	68.0	0.67	1.17	3.2	3.82	1.7	2.2
0.55 3)		80 M6 BT	083 320--A	930	70.0	0.67	1.69	3.6	5.65	1.7	2.2
0.75 4)		90 S6 AT	093 110--A	935	74.0	0.71	2.05	4.3	7.65	2.1	2.5
1.1 4)		90 L6 AT	093 510--A	920	75.0	0.75	2.8	4.1	11.5	2.0	2.3
1.5 4)		100 L6 AT	103 510--A	950	79.0	0.72	3.8	5.0	15	2.3	2.7
2.2 4)		112 M6 AT	113 310--A	950	83.0	0.76	5	5.7	22	2.2	2.7
3 4)		132 S6 AT	133 110--A	955	84.5	0.79	6.5	6.2	30	2.2	3.0
4 4)		132 M6 AT	133 310--A	955	85.0	0.77	8.8	6.5	40	2.6	3.3
5.5 4)		132 M6 BT	133 320--A	955	87.0	0.80	11.4	6.9	55	2.6	3.1
7.5 11	M2BA	160 M	3GBA 163 300--D	970	89.3	0.79	15.4	6.7	74	2.0	2.8
		160 L	163 500--D	970	89.8	0.78	23	7.1	109	2.2	2.9
15		180 L	183 500--D	970	90.8	0.78	31	7.0	148	2.1	3.0
18.5 22		200 MLA	203 410--D	985	91.1	0.81	36	7.0	179	2.5	2.7
		200 MLB	203 420--D	980	91.7	0.81	43	7.2	214	2.5	2.7
30		225 SMB	223 220--D	985	92.8	0.83	56	6.6	291	2.5	2.7
37		250 SMA	253 210--D	985	93.7	0.83	69	7.3	359	2.8	2.8
45 55		280 SMA	283 210--A	990	94.5	0.84	82	6.7	434	2.5	2.4
		280 SMB	283 220--A	990	94.7	0.84	101	7.0	531	2.7	2.6
75 90		315 SMA	313 210--A	992	95.0	0.82	141	7.4	722	2.4	2.8
		315 SMB	313 220--A	992	95.5	0.84	163	7.5	866	2.4	2.8
110 132		315 SMC	313 230--A	991	95.6	0.83	202	7.4	1060	2.5	2.9
		315 MLA	313 410--A	991	95.8	0.83	240	7.5	1272	2.7	3.0
160 200		355 S	353 100--A	992	95.9	0.85	280	6.8	1540	1.8	2.7
		355 SMA	353 210--A	992	95.9	0.85	355	7.1	1925	2.0	2.7
250 315		355 SMB	353 220--A	992	96.0	0.84	450	7.5	2407	2.2	2.8
		355 MLA	353 410--A	991	96.2	0.84	565	7.3	3036	2.0	3.0
355		355 MLC	353 430--A	991	96.4	0.84	635	7.6	3421	1.5	3.0
250 315		400 M	403 300--A	992	96.0	0.84	450	7.5	2407	2.2	2.8
		400 MA	403 310--A	991	96.2	0.84	565	7.3	3036	2.0	3.0
355 400		400 MB	403 320--A	991	96.4	0.84	635	7.6	3421	1.5	3.0
		400 LKA	403 510--A	992	96.5	0.85	700	6.4	3851	1.2	2.7
450 500		400 LKB	403 520--A	993	96.5	0.85	790	6.8	4328	1.3	2.8
		400 LKC	403 530--A	992	96.5	0.85	880	6.8	4813	1.3	2.8

1000 r/min = 6 poles High-output design

15 1)	M2BA	160 LB	3GBA 163 510--D	960	89.1	0.77	29.5	7.6	139	2.7	3.1
18.5 1)		180 LB	183 510--D	965	90.6	0.79	37.5	6.2	183	2.0	2.6
30		200 MLC	203 430--D	980	91.7	0.81	56	7.5	292	3.3	3.0
37		225 SMC	223 230--D	985	93.2	0.83	69	7.7	359	3.1	3.0
45		250 SMB	253 220--D	985	94.1	0.84	82	7.3	436	2.8	2.8
75		280 SMC	283 230--A	990	95.2	0.84	137	7.3	723	2.9	2.8

The two bullets in the product code indicate choice of mounting arrangement (page 15, pos 12.), voltage and frequency (below). The generation code (page 15, pos 14) is given above, by frame sizes 160-250 it can also be C or E.

Code letters for supplementing the product code for voltage and frequency:

A	B	D	E	F	H
380 VY 50 Hz	380 VΔ 50 Hz	380-420 VΔ 50 Hz 660-690 VY 50 Hz 440-480 VΔ 60 Hz	500 VΔ 50 Hz 575 VΔ 60 Hz	500 VY 50 Hz 575 VY 60 Hz	415 VΔ 50 Hz
S	T	U	X		
220-240 VΔ 50 Hz 380-420 VY 50 Hz 440-480 VY 60 Hz	660 VΔ 50 Hz	690 VΔ 50 Hz	Other rated voltage, connection or frequency, max. 690 V		

Insulation class F Temperature rise class B

380 V 50 Hz

415 V 50 Hz

Output kW	Motor type	Speed r/min	Effi- ciency %	Power factor cos φ	Current I _N A	Speed r/min	Effi- ciency %	Power factor cos φ	Current I _N A	Moment of inertia J = ¼ GD ² kgm ²	Weight kg	Sound	
												pressure level L _p dB(A)	
1000 r/min = 6 poles													
Basic design													
0.18 ²⁾	QU	71 M6 AT	835	47.0	0.64	0.91	865	47.0	0.59	0.9	0.0006	11	47
0.25 ²⁾		71 M6 BT	845	51.1	0.65	1.14	875	51.2	0.60	1.13	0.00082	11	47
0.37 ³⁾		80 M6 AT	910	66.2	0.71	1.2	940	66.5	0.66	1.17	0.0019	17	48
0.55 ³⁾		80 M6 BT	915	68.3	0.71	1.72	945	68.8	0.66	1.69	0.0024	18	48
0.75 ⁴⁾		90 S6 AT	920	72.4	0.74	2.1	945	73.0	0.70	2.05	0.0039	21	48
1.1 ⁴⁾		90 L6 AT	905	73.5	0.78	2.9	930	74.2	0.74	2.8	0.0049	24	48
1.5 ⁴⁾		100 L6 AT	940	77.6	0.75	3.9	960	78.4	0.71	3.75	0.011	35	51
2.2 ⁴⁾		112 M6 AT	940	81.7	0.79	5.2	955	82.6	0.74	5	0.017	44	54
3 ⁴⁾		132 S6 AT	945	83.3	0.81	6.8	960	84.3	0.77	6.4	0.038	71	59
4 ⁴⁾		132 M6 AT	945	83.9	0.79	9.2	960	85.0	0.75	8.7	0.049	78	59
5.5 ⁴⁾		132 M6 BT	945	86.0	0.82	11.8	960	87.2	0.78	11.2	0.065	80	59
7.5	M2BA	160 M	960	88.7	0.80	16.1	970	89.6	0.77	15.1	0.089	115	59
11		160 L	960	89.4	0.80	23.5	970	90.0	0.76	22.4	0.107	135	59
15		180 L	970	90.9	0.79	32	975	91.1	0.74	31	0.217	177	68
18.5		200 MLA	980	90.8	0.81	38	985	91.1	0.78	36	0.37	245	73
22		200 MLB	980	91.6	0.81	45	985	91.8	0.79	42	0.43	260	73
30		225 SMB	985	92.6	0.83	59	985	92.9	0.82	55	0.64	320	67
37		250 SMA	985	93.5	0.84	72	990	93.8	0.81	67	1.16	415	68
45		280 SMA	988	94.2	0.85	87	991	94.4	0.83	81	1.85	570	66
55		280 SMB	988	94.6	0.85	105	991	94.8	0.83	99	2.2	610	66
75		315 SMA	991	94.9	0.84	145	993	95.0	0.79	140	3.2	820	68
90		315 SMB	991	95.4	0.85	169	993	95.5	0.82	160	4.1	910	68
110		315 SMC	990	95.5	0.84	211	992	95.6	0.82	197	4.9	980	68
132		315 MLA	990	95.7	0.84	250	992	95.8	0.82	236	5.8	1100	68
160		355 S	991	95.8	0.86	295	993	95.9	0.84	275	10.4	1500	75
200		355 SMA	991	95.8	0.86	370	993	95.9	0.83	350	12.5	1800	75
250		355 SMB	991	96.0	0.85	470	993	96.1	0.82	445	12.5	1800	75
315		355 MLA	990	96.2	0.85	590	992	96.2	0.82	560	14.6	2100	75
355		355 MLC	990	96.3	0.86	655	992	96.4	0.82	630	15.8	2100	78
250		400 M	991	96.0	0.85	470	993	96.1	0.82	445	12.5	2000	75
315		400 MA	990	96.2	0.85	590	992	96.2	0.82	560	14.6	2150	75
355		400 MB	990	96.3	0.86	655	992	96.4	0.82	630	15.8	2150	78
400		400 LKA	991	96.3	0.86	730	992	96.4	0.84	680	16.5	2800	80
450		400 LKB	992	96.5	0.86	825	993	96.5	0.83	790	19	3050	80
500		400 LKC	991	96.5	0.86	920	993	96.5	0.83	870	19	3050	80
1000 r/min = 6 poles													
High-output design													
14.5 ¹⁾	M2BA	160 LB	955	88.7	0.79	30.5	965	89.2	0.75	29.2	0.127	148	62
17.5 ¹⁾		180 LB	965	90.0	0.81	39	965	90.8	0.78	36.5	0.237	185	59
30		200 MLC	980	91.5	0.83	57	985	91.9	0.83	53	0.49	275	63
37		225 SMC	980	93.0	0.83	72	985	93.2	0.81	68	0.75	345	63
45		250 SMB	985	93.8	0.86	85	985	94.2	0.83	80	1.49	460	63
75		280 SMC	988	95.2	0.85	143	991	95.3	0.83	132	2.85	690	66

- 1) Temperature rise class F.
2) Voltage code letters E, S only.
3) Voltage code lettersn E, S only.
Motors with terminal box on top, code letter E on request.
4) Voltage code letters D, E, S only.
Motors with terminal box on top, code letter E on request.

Further details or special designs on request.

Please note that the frequency converter application in critical conditions may require special rotor design within 355 and 400 frame motors. We therefore recommend a separate checking.