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In Synchronization with the Future

ISO14001 ISO9001 ISO45001

MC MY ML Series

Single Phase TEFC
Aluminum Induction Motors

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General Information:

Single phase aluminium motors come with following series:

ML dual capacitors series come with starting capacitor and running capacitor.

MC series come with single starting capacitor.

MY series come with single running capacitor.

ML and MC series motors come with build in centrifugal switch which suitable for high starting torque application. MY series motor is mainly used for low starting torque application.

Technical Specifications

- IP55 protection, class F insulation, B-level temperature rise, S1 duty.
- Rated voltage 220V.
- Rated frequency 50Hz.
- Operation ambient temperature: -20°C~40°C.
- Operation altitude ≤1000m.
- Cooling method: IC411/IC416.

Mounting Arrangements:

Types	Basic Type of Construction	Derived Types of Construction				
MC MY ML 56-112	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
MC MY ML 56-112	IM B35 IM 2001	IM V15 IM 2011	IM V36 IM 2031	* IM 2051	* IM 2061	* IM 2071
MC MY ML 56-112	IM B34 IM 2101	* IM 2111	* IM 2131	* IM 2151	* IM 2161	* IM 2171
MC MY ML 56-112	IM B5 IM 3001	IM V1 IM 3011	IM V3 IM 3031			
MC MY ML 56-112	IM B14 IM 3601	IM V18 IM 3611	IM V19 IM 3631			

Basic types of construction may be used in all derived types of construction.
1) "*" means not-defined mounting by IEC 60034-7.
2) for the types of construction IM V6, IM B6, IM B8 inquiry is necessary.

MC Series Technical Specifications

Rated Output kW	IEC Frame	Rated Speed r/m	Full Load Current I_n(A) 220V	Full Load Eff. η%	Power Factor cosφ	Locked Current/ Rated Current I_L/I_n	Locked Torque/ Rated Torque T_L/T_n	Maximum Torque/ Rated Torque T_b/T_n	Starting Capacitor (250v) uF	Weight kg
2 Pole										
0.18	71	2750	1.90	60	0.72	6.3	3.0	1.8	75	6.2
0.25	71	2770	2.40	64	0.74	6.3	3.0	1.8	75	6.3
0.37	80	2800	3.36	65	0.77	6.3	2.8	1.8	100	8.3
0.55	80	2810	4.65	68	0.79	6.2	2.8	1.8	150	9
0.75	90S	2820	5.94	70	0.82	6.1	2.5	1.8	200	12.5
1.10	90L	2820	8.40	72	0.83	7.2	2.5	1.8	300	14
1.50	100LA	2830	11.00	74	0.84	7.2	2.5	1.8	400	22.5
2.20	100LB	2830	15.70	75	0.85	7.7	2.2	1.8	2×300	25.5
3.00	112M	2840	21.20	76	0.85	7.1	2.2	1.8	2×300	26
4 Pole										
0.12	71	1350	1.90	50	0.58	4.8	3.0	1.8	75	6.1
0.18	71	1370	2.50	53	0.62	4.8	2.8	1.8	75	6.7
0.25	80	1400	3.10	58	0.63	4.8	2.8	1.8	100	8.9
0.37	80	1410	4.20	62	0.64	5.0	2.5	1.8	100	9.6
0.55	90S	1420	5.55	66	0.68	5.2	2.5	1.8	150	12.5
0.75	90L	1420	6.87	68	0.73	5.5	2.5	1.8	200	15
1.10	100LA	1430	9.50	71	0.74	6.4	2.5	1.8	400	23
1.50	100LB	1430	12.50	73	0.75	6.4	2.5	1.8	400	27
2.20	112M	1440	17.80	74	0.76	6.8	2.2	1.8	2×300	35

MY Series Technical Specifications

Rated Output kW	IEC Frame	Rated Speed r/m	Full Load Current I_n(A) 220V	Full Load Eff. η%	Power Factor cosφ	Locked Current/ Rated Current I_L/I_n	Locked Torque/ Rated Torque T_L/T_n	Maximum Torque/ Rated Torque T_b/T_n	Running Capacitor (450v) uF	Weight kg
2 Pole										
0.09	56	2730	0.79	56	0.92	3.2	0.5	1.7	6	3.2
0.12	56	2730	0.99	60	0.92	3.5	0.5	1.7	6	3.4
0.18	63	2740	1.37	65	0.92	3.7	0.4	1.7	6	3.9
0.25	63	2740	1.87	66	0.92	3.7	0.4	1.7	8	4.4
0.37	71	2750	2.73	67	0.92	3.7	0.4	1.7	12	6.2
0.55	71	2760	3.90	70	0.92	3.9	0.4	1.7	16	6.3
0.75	80	2780	5.14	72.1	0.92	3.9	0.3	1.7	30	8.3
1.10	80	2790	7.02	75	0.95	4.3	0.3	1.7	35	9
1.50	90S	2800	9.30	77.2	0.95	4.8	0.3	1.7	40	13
2.20	90L	2800	13.20	79.7	0.95	4.8	0.3	1.7	40	15
4 Pole										
0.06	56	1330	0.61	50	0.9	3.3	0.5	1.7	6	3.2
0.09	56	1340	0.87	52	0.9	2.9	0.5	1.7	6	3.4
0.12	63	1350	1.06	57	0.9	3.2	0.4	1.7	6	4
0.18	63	1360	1.54	59	0.9	3.3	0.4	1.7	8	4.5
0.25	71	1370	2.01	61.5	0.9	3.4	0.4	1.7	12	6.1
0.37	71	1370	2.77	66	0.9	3.4	0.4	1.7	16	7
0.55	80	1380	3.88	70	0.92	3.5	0.4	1.7	25	9.5
0.75	80	1380	5.14	72.1	0.92	3.7	0.3	1.7	30	10
1.10	90S	1390	7.02	75	0.95	4.0	0.3	1.7	40	13
1.50	90L	1400	9.30	77.2	0.95	4.6	0.3	1.7	40	16
2.20	100L	1360	13.6	75	0.98	5.5	0.3	1.7	70	19.2

ML Series Technical Specifications

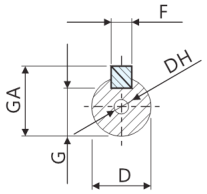
Rated Output kW	IEC Frame	Rated Speed r/m	Full Load Current I_n(A) 220V	Full Load Eff. η%	Power Factor cosφ	Locked Current/ Rated Current I_L/I_n	Locked Torque/ Rated Torque T_L/T_n	Maximum Torque/ Rated Torque T_b/T_n	Starting Capacitor (250v) uF	Running Capacitor (450v) uF	Weight kg
2 Pole											
0.37	71	2750	2.73	67.0	0.92	5.5	1.7	1.7	75	16	6.2
0.55	71	2760	3.90	70.0	0.92	5.5	1.7	1.7	75	16	6.3
0.75	80	2800	5.15	72.1	0.92	5.7	1.8	1.7	100	25	8.3
1.10	80	2800	7.20	75.0	0.92	5.6	1.8	1.7	150	25	9.0
1.50	90S	2800	9.30	77.2	0.95	6.0	1.7	1.7	300	40	12.5
2.20	90L	2800	13.20	79.7	0.95	6.2	1.7	1.7	300	40	14.0
3.00	100L1	2820	17.60	81.5	0.95	6.4	1.7	1.7	400	55	20.5
3.70	112M	2820	21.20	82.6	0.96	6.5	1.7	1.7	400	50	26.0
4 Pole											
0.25	71	1370	2.03	62.0	0.92	5.4	1.7	1.7	75	10	6.3
0.37	71	1370	2.77	66.0	0.92	5.4	1.7	1.7	75	12	7.2
0.55	80	1400	3.90	70.0	0.92	5.4	1.8	1.7	100	25	8.9
0.75	80	1400	5.15	72.1	0.92	5.5	1.8	1.7	150	30	9.6
1.10	90S	1400	7.20	75.0	0.92	5.7	1.7	1.7	200	35	13
1.50	90L	1400	9.30	77.2	0.95	6.0	1.7	1.7	200	40	16
2.20	100LA	1410	13.20	79.7	0.95	6.1	1.7	1.7	400	50	23
3.00	100LB	1420	17.60	81.5	0.95	6.4	1.7	1.7	400	50	27
3.70	112M	1430	21.20	82.6	0.96	6.5	1.7	1.7	400	50	35

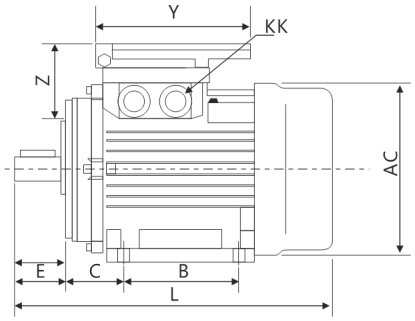
Bearings

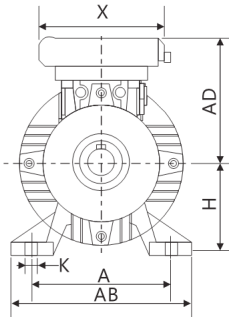
Frame Size	Driving End	Non-driving End	Oil Seal
56	6201 2Z/C3	6201 2Z/C3	φ12×φ22×5
63	6201 2Z/C3	6201 2Z/C3	φ12×φ22×7
71	6202 2Z/C3	6202 2Z/C3	φ15×φ25×7
80	6204 2Z/C3	6204 2Z/C3	φ20×φ30×7
90	6205 2Z/C3	6205 2Z/C3	φ25×φ37×7
100	6206 2Z/C3	6206 2Z/C3	φ30×φ42×7
112	6206 2Z/C3	6206 2Z/C3	φ30×φ42×7

B3, B35, B5 Mounting and Overall Dimensions

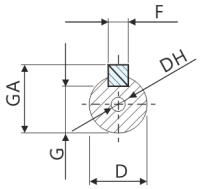
B3

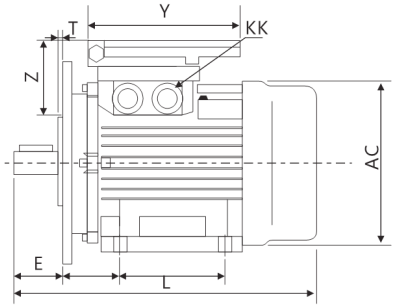


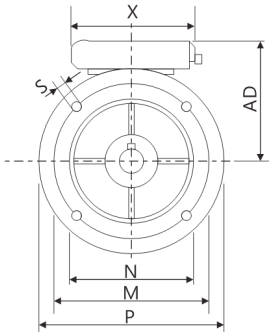




B35







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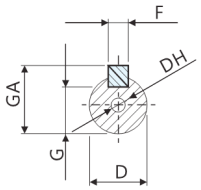
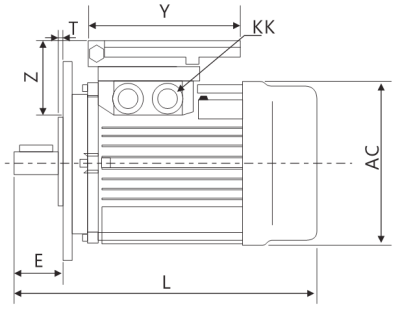
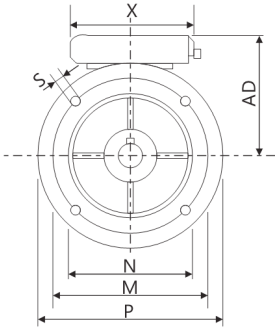


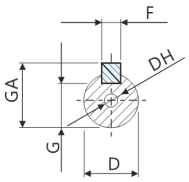


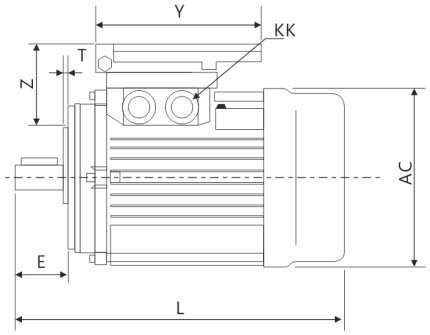


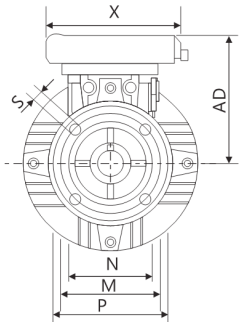
Frame Size	Mounting and Overall Dimensions (mm)																				XxYxZ(mm)
	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	GA	
56	90	110	110	96	71	36	9	M4×12	20	3	7.2	56	7	M18×1.5	193	100	80	120	7	3	10.2	97X124x46
63	100	122	122	99	80	40	11	M4×12	23	4	8.5	63	7	M18×1.5	218	115	95	140	9	3	12.5	97X124x46
71	112	136	138	110	90	45	14	M5×12	30	5	11	71	7	M18×1.5	251	130	110	160	9	3.5	16	111X128x50
80	125	154	157	152	100	50	19	M6×16	40	6	15.5	80	10	M20×1.5	286	165	130	200	12	3.5	21.5	176X126x68
90S	140	174	175	158	100	56	24	M8×19	50	8	20	90	10	M20×1.5	335	165	130	200	12	3.5	27	176X126x68
90L	140	174	175	158	125	56	24	M8×19	50	8	20	90	10	M20×1.5	350	165	130	200	12	3.5	27	176X126x68
100L	160	194	196	177	140	63	28	M10×22	60	8	24	100	12	M20×1.5	422	215	180	250	15	4	31	176X126x68
112M	190	224	220	184	140	70	28	M10×22	60	8	24	112	12	M20×1.5	434	215	180	250	15	4	31	176X126x68

B14, B34 Mounting and Overall Dimensions

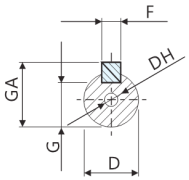
B14

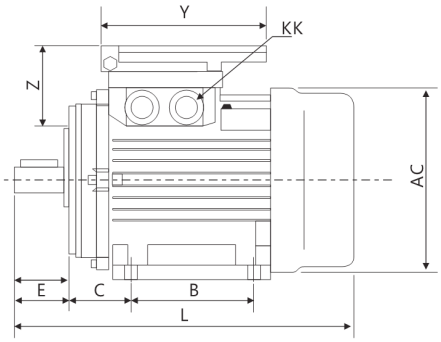


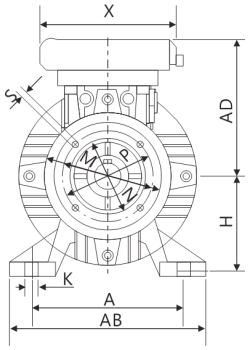




B34



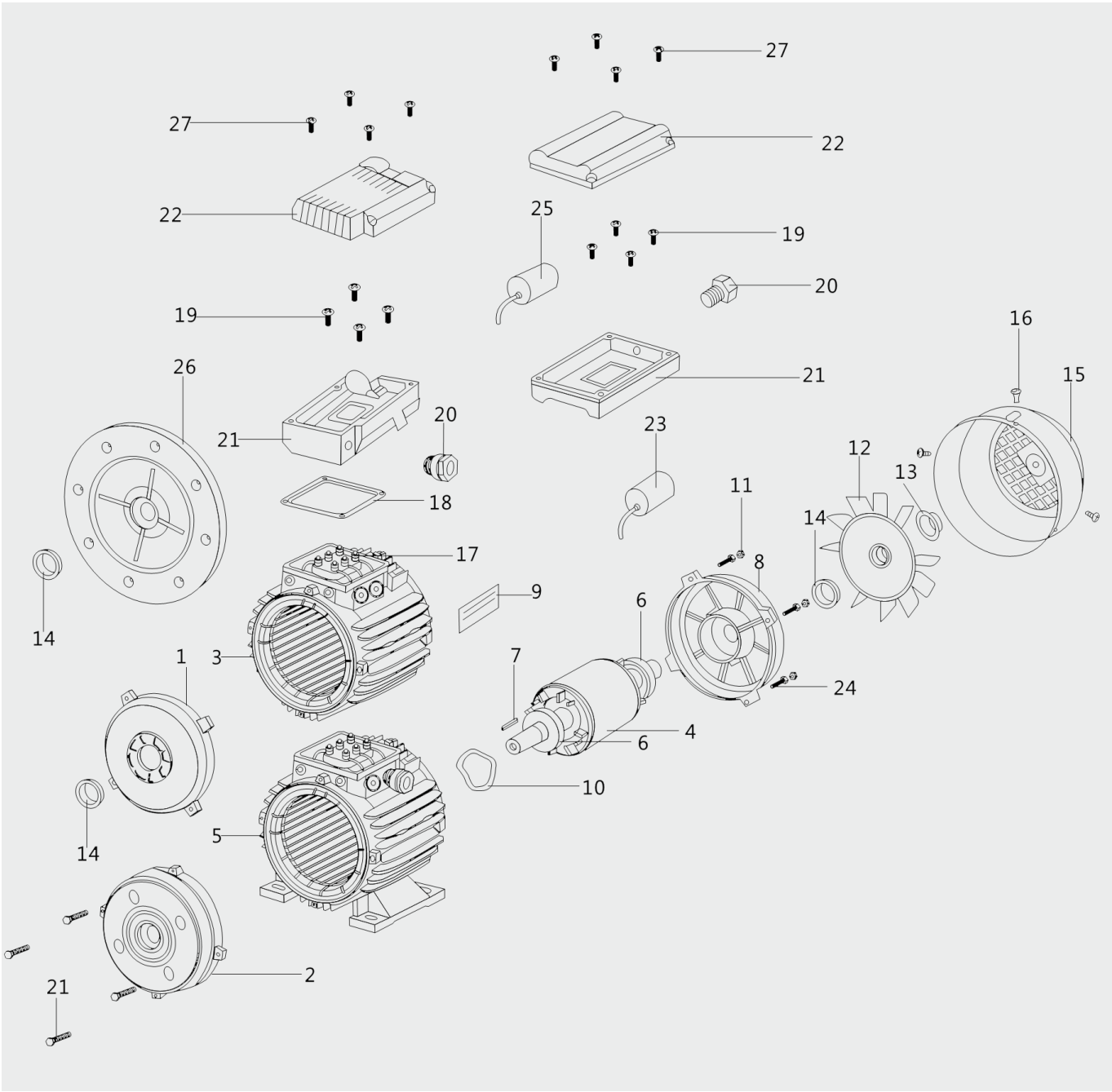




Frame Size	Mounting and Overall Dimensions (mm)																					XxYxZ(mm)
	A	AB	AC	AD	B	C	D	DH	E	F	G	H	R	K	KK	L	M	N	P	S	T	GA	
56	90	110	110	96	71	36	9	M4×12	20	3	7.2	56	0±1.0	7	M18×1.5	193	65	50	80	M5	3	10.2	97×124×46
63	100	122	122	99	80	40	11	M4×12	23	4	8.5	63	0±1.0	7	M18×1.5	218	75	60	90	M5	3	12.5	97×124×46
71	112	136	138	110	90	45	14	M5×12	30	5	11	71	0±1.0	7	M18×1.5	251	85	70	105	M6	3.5	16	111×128×50
80	125	154	157	152	100	50	19	M6×16	40	6	15.5	80	0±1.5	10	M20×1.5	286	100	80	120	M6	3.5	21.5	176×126×68
90S	140	174	175	158	100	56	24	M8×19	50	8	20	90	0±1.5	10	M20×1.5	335	115	95	140	M8	3.5	27	176×126×68
90L	140	174	175	158	125	56	24	M8×19	50	8	20	90	0±1.5	10	M20×1.5	350	115	95	140	M8	3.5	27	176×126×68
100L	160	194	196	177	140	63	28	M10×22	60	8	24	100	0±1.5	12	M20×1.5	422	130	110	160	M8	4	31	176×126×68
112M	190	224	220	184	140	70	28	M10×22	60	8	24	112	0±1.5	12	M20×1.5	434	130	110	160	M8	4	31	176×126×68

R=0 distance from flange to shaft shoulder

Motor Spare Parts List/Drawing



1. B3 End shield
2. B14 Flange
3. Stator With Housing
4. Rotor With Shaft
5. Stator With Housing
6. Bearings
7. Key
8. NDE End Shield
9. Name Plate
10. Spring Washer
11. Screws
12. Cooling Fan
13. Circlip
14. Oil Seal
15. Fan Cover
16. Screws
17. Termianl Board
18. Terminal Box Seal
19. Screws
20. Cable Gland
21. Terminal Box Base
22. Terminal Box Cover
23. Capacitor
24. Screws
25. Starting Capacitor
26. B5 Flange
27. Screws

WONDER

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