MS SERIES (IE1)

THREE PHASE STANDARD EFFICIENCY
ALUMINUM INDUCTION MOTORS

MS series is three phase induction aluminum motor with fixed feet. Efficiency indicator reaches IE1 standard. Mounting dimensions is according to IEC standard.

Characteristics for all WONDER standard 3-Phase asynchronous motors

- Widely applied in general machinery and industries such as pumps & water treatment, road machinery, petroleum, chemical, metallurgy, cement and paper-milling.
- IP55 protection, Class F insulation, B Temperature rise, S1 duty,
- Rated voltage 400V, Rated frequency 50Hz.
- Operation conditions: ambient temperature:-20℃～40℃, altitude≤1000m.
- Y-connection for motors up to 3kW and △-connection for 4kW and above
- Cooling method is IC411.

MOUNTING ARRANGEMENTS

Types	Basic type of costruction	derivde types of construction				
MS56-132	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
MS56-132	IM B35 IM2001	IM V15 IM 2011	IM V36 IM 2031	* IM 2051	* IM 2061	* IM 2071
MS56-132	IM B34 IM 2101	* IM 2111	* IM 2131	* IM 2151	* IM 2161	* IM 2171
MS56-132	IM B5 IM 3001	IM V1 IM 3011	IM V6 IM 3031			
MS56-132	IM B14 IM 3601	IM V18 IM 3611	IM V19 IM 3631			

basics types of construction may be used inall derived types of constructon
(*)non-definde mounting by IEC 60034-7
1) for the types of construction IM V6,IM B6,IM B8 inquiry is mecessary.

TECHNICAL SPECIFICATIONS

IE1

Motor Type	Rated Output Power kW	Current 400V A	Rated speed R/min	Eff Full load 100%	Eff 3/4 load 75%	Eff 1/2 load 50%	Full-load Power factor cosφ	Locked Rotor Current Is/In	Locked Rotor Torque Ms/MN	Break Down Torque MK/MN	Rated torque N·M	J kgm²	Net Weight kg
2-POLE/3000RPM													
MS5612	0.09	0.37	2710	50.0*	49.7	45.0	0.70	4.0	1.8	2.0	0.32	-	3.2
MS5622	0.12	0.45	2710	55.0*	56.2	53.2	0.70	4.0	1.8	2.0	0.42	-	3.4
MS6312	0.18	0.55	2720	65.0*	64.5	59.6	0.73	5.5	2.2	2.2	0.63	-	3.9
MS6322	0.25	0.72	2720	66.0*	65.6	61.4	0.76	5.5	2.2	2.2	0.88	-	4.4
MS6332	0.33	0.84	2720	70.0*	70.3	67.1	0.81	6.1	2.2	2.2	1.30	-	4.7
MS7112	0.37	0.94	2760	70.0*	70.9	68.9	0.81	6.1	2.2	2.2	1.28	0.0005	6.2
MS7122	0.55	1.33	2820	73.0*	73.9	71.9	0.82	6.1	2.2	2.3	1.86	0.00063	6.3
MS7132	0.75	1.78	2820	74.0	74.2	71.4	0.82	6.1	2.2	2.3	2.54	0.00076	6.5
MS8012	0.75	1.76	2845	74.0	74.2	71.4	0.83	6.1	2.4	2.5	2.52	0.00083	8.3
MS8022	1.1	2.49	2840	76.0	76.8	75.3	0.84	7.0	2.5	2.5	3.7	0.0010	9.0
MS8032	1.5	3.35	2840	77.0	78.1	76.6	0.84	7.0	2.5	2.5	5.04	0.0012	10.0
MS90S2	1.5	3.30	2840	78.0	78.7	76.7	0.84	7.0	2.7	2.8	5.04	0.0012	12.5
MS90L2	2.2	4.67	2840	80.0	80.8	79.5	0.85	7.0	2.5	2.8	7.4	0.0014	14.0
MS90LB2	3.0	6.22	2840	81.0	81.4	79.4	0.86	7.0	2.5	2.8	10.09	0.00145	16.0
MS100L2	3.0	6.07	2870	82.0	82.1	80.3	0.87	7.5	2.2	2.5	9.98	0.0029	20.5
MS100LC2	4.0	7.81	2880	84.0	84.8	84.1	0.88	7.5	2.3	2.5	13.26	0.0039	28.0
MS112M2	4.0	7.81	2880	84.0	84.8	84.1	0.88	7.5	2.3	2.3	13.26	0.0050	26.0
MS112MC2	5.5	10.6	2900	85.0	85.0	83.5	0.88	7.5	2.3	2.3	18.17	0.0069	33.0
MS132S1-2	5.5	10.6	2910	85.0	85.0	83.5	0.88	7.5	2.2	2.5	18.11	0.0104	40.0
MS132S2-2	7.5	14.3	2905	86.3	86.6	85.6	0.88	7.5	2.2	2.4	24.66	0.0121	44.0
MS132MC2	11	20.3	2910	87.8	87.4	85.9	0.89	7.5	2.2	2.4	36.10	0.0178	65.0
4-POLE/1500RPM													
MS5614	0.06	0.34	1330	46.0*	42.0	35.5	0.55	4.0	1.4	2.0	0.43	-	3.2
MS5624	0.09	0.41	1330	50.0*	49.2	43.0	0.63	4.0	1.8	2.0	0.65	-	3.4
MS6314	0.12	0.42	1340	57.0*	57.1	52.6	0.72	4.4	1.8	2.0	0.86	-	4.0
MS6324	0.18	0.61	1340	58.0*	59.5	56.4	0.73	4.4	1.8	2.0	1.28	-	4.5
MS6334	0.22	0.75	1340	58.0*	58.4	54.7	0.73	4.4	1.8	2.0	1.57	-	4.9
MS7114	0.25	0.75	1345	65.0*	65.1	61.3	0.74	5.2	2.1	2.2	1.78	0.0011	6.1
MS7124	0.37	1.06	1340	67.0*	68.2	65.7	0.75	5.2	2.1	2.2	2.64	0.0012	6.7
MS7134	0.55	1.49	1390	71.0*	72.4	70.6	0.75	5.3	2.2	2.5	3.78	0.0016	8.2
MS8014	0.55	1.49	1390	71.0*	72.4	70.6	0.75	5.3	2.2	2.5	3.78	0.0013	8.9
MS8024	0.75	1.96	1380	72.6	73.3	71.2	0.76	5.3	2.3	2.5	5.19	0.0015	9.6
MS8034	1.1	2.76	1390	75.7	77.3	76.1	0.76	6.0	2.3	2.5	7.56	0.0019	12.2
MS90S4	1.1	2.72	1390	75.7	77.3	76.1	0.77	6.0	2.3	2.5	7.56	0.002	12.5
MS90L4	1.5	3.56	1390	78.0	79.4	78.3	0.78	6.0	2.3	2.5	10.31	0.003	15.0
MS90LB4	2.2	4.84	1415	80.0	80.8	79.5	0.82	7.0	2.3	2.5	14.85	0.0039	19.5
MS100LA4	2.2	4.90	1415	80.0	80.8	79.5	0.81	7.0	2.3	2.5	14.85	0.0054	19.2
MS100LB4	3.0	6.44	1415	82.0	82.6	81.1	0.82	7.0	2.3	2.5	20.25	0.0067	23.0
MS100LC4	4.0	8.29	1430	83.9	84.6	83.5	0.83	7.0	2.3	2.5	26.71	0.0069	25.9
MS112M4	4.0	8.29	1440	83.9	84.6	83.5	0.83	7.0	2.3	2.5	26.71	0.0091	29.0
MS112MC4	5.5	11.3	1445	85.0	85.6	84.6	0.83	7.0	2.3	2.5	36.35	0.0117	37.5
MS132S4	5.5	11.3	1445	85.0	85.6	84.6	0.83	7.0	2.3	2.5	36.35	0.0205	43.5
MS132M4	7.5	14.9	1445	86.4	87.0	86.3	0.84	7.0	2.3	2.5	49.57	0.0296	53.5
MS132MC4	11.0	21.5	1460	87.9	87.9	86.6	0.84	7.0	2.2	2.3	71.95	0.0326	75.6

*Defined by wonder
Efficiencies according to the indirect method of IEC60034-2-1:2007 with stray load losses determined from measurement.

TECHNICAL SPECIFICATIONS

Motor Type	Rated Output Power kW	Current 400V A	Rated speed r/min	Eff Full load 100%	Eff 3/4 load 75%	Eff 1/2 load 50%	Full-load Power factor cosφ	Locked Rotor Current Is/In	Locked Rotor Torque Ms/Mn	Break Down Torque Mk/Mn	Rated torque N·M	J kgm²	Net Weight kg
6-POLE/1000RPM													
MS6316	0.09	0.46	860	48.0*	43.9	34.0	0.59	4.0	1.9	2	1.0	-	4.5
MS6326	0.12	0.57	860	51.5*	48.0	40.2	0.59	4.0	1.9	2	1.33	-	5.6
MS7116	0.18	0.70	860	56.0*	55.9	50.5	0.66	4.0	1.9	2	2.0	0.0011	6.4
MS7126	0.25	0.90	860	59.0*	59.2	55.0	0.68	4.0	1.9	2	2.78	0.0012	6.5
MS8016	0.37	1.23	885	62.0*	61.2	56.4	0.70	4.7	2.0	2.1	3.99	0.0016	8.5
MS8026	0.55	1.70	885	65.0*	65.2	61.8	0.72	4.7	2.0	2.1	5.94	0.002	9.2
MS90S6	0.75	2.15	915	70.0	70.8	68.3	0.72	5.5	2.0	2.2	7.83	0.003	12.0
MS90L6	1.1	2.98	915	72.9	73.8	71.6	0.73	5.5	2.0	2.2	11.48	0.004	14.0
MS100L6	1.5	3.82	920	75.5	76.8	75.1	0.75	5.5	2.1	2.2	15.57	0.0069	19.5
MSI12M6	2.2	5.33	935	78.4	79.3	77.8	0.76	6.5	2.2	2.2	22.47	0.0071	28.0
MSI32S6	3.0	7.12	960	80.0	80.3	78.6	0.76	6.5	2.2	2.8	29.84	0.0274	38.0
MSI32M1-6	4.0	9.32	960	81.5	81.8	80.2	0.76	6.5	2.4	2.9	39.79	0.0343	45.0
MSI32M2-6	5.5	12.4	960	83.3	84.0	83.1	0.77	6.5	2.4	2.8	54.71	0.0431	54.0

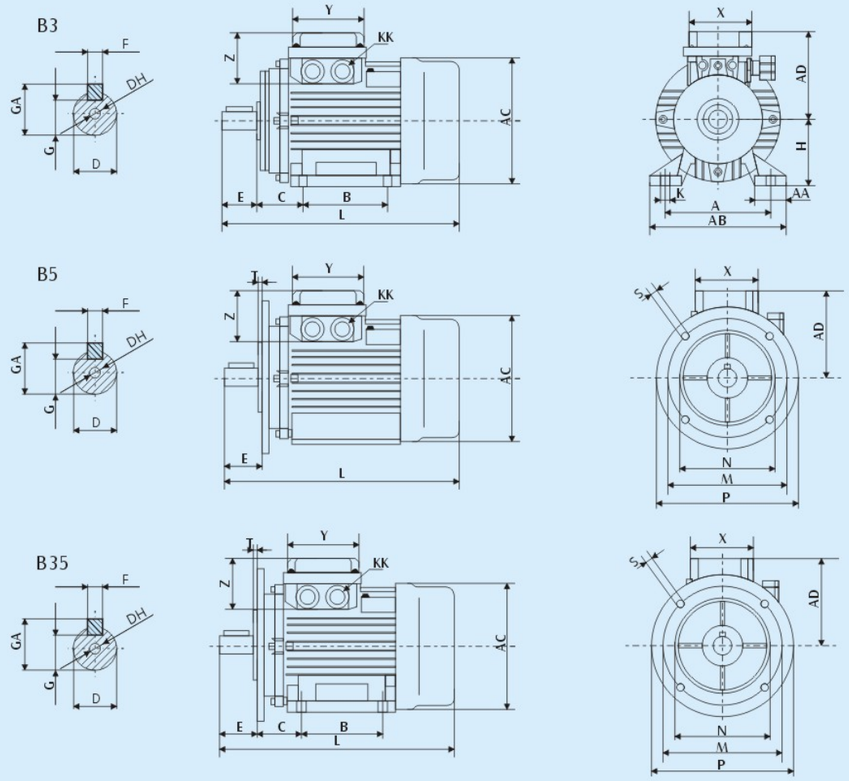
*Defined by wonder
Efficiencies according to the indirect method of IEC60034-2-1:2007
with stray load losses determined from measurement.

8-POLE/750RPM

MS7118	0.09	0.68	635	39.0*	35.9	29.3	0.49	2.9	1.8	2.0	1.35	-	6.5
MS7128	0.12	0.74	635	48.0*	45.8	39.5	0.49	2.9	1.8	2.0	1.80	-	7.5
MS8018	0.18	0.84	645	51.0*	50.5	44.7	0.61	2.9	1.8	2.0	2.67	0.0018	8.3
MS8028	0.25	1.10	645	54.0*	53.9	48.4	0.61	2.9	1.8	2.0	3.7	0.0021	9.0
MS90S8	0.37	1.41	670	62.0*	61.8	57.1	0.61	3.2	1.9	2.3	5.27	0.0030	12.0
MS90L8	0.55	2.07	670	63.0*	63.3	59.2	0.61	3.2	2.0	2.3	7.84	0.0040	15.0
MSI00LA-8	0.75	2.42	680	66.7	66.5	62.2	0.67	4.7	1.8	2.2	10.46	0.0063	16.4
MSI00LB-8	1.1	3.29	680	69.9	70.8	68.0	0.69	5.0	1.8	2.2	15.22	0.0097	21.8
MSI12M8	1.5	4.30	700	73.0	73.1	70.1	0.69	5.0	2.0	2.5	19.62	0.012	29.0
MSI32S8	2.2	5.88	710	76.1	76.3	73.9	0.71	6.0	1.8	2.5	29.59	0.029	39.0
MSI32M8	3.0	7.59	710	78.2	79.1	77.4	0.73	6.0	1.8	2.4	40.35	0.038	45.0

*Defined by wonder
Efficiencies according to the indirect method of AS/NZS1359.5:2004(MEPS2)
with stray load losses determined from measurement.

MOUNTING AND OVERALL DIMENSIONS

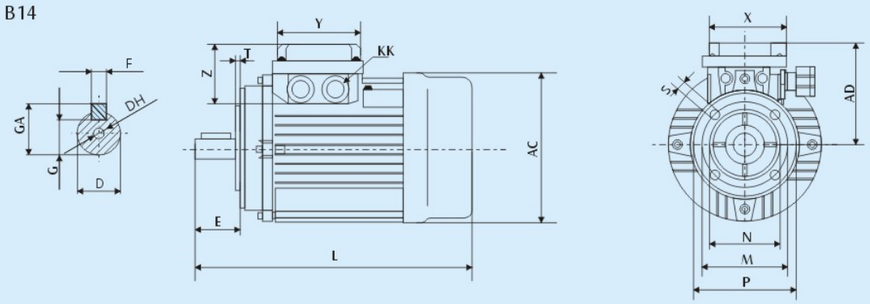


Frame size	Mounting dimensions(mm) A	AA	AB	AC	AD	B	C	D	DH	E	F	G	H	R	K	KK	Overall dimensions(mm) L	M	N	P	S	T	GA	XxYxZ(mm)
MS56	90	22.5	110	110	96	71	36	9	M4×10	20	3	7.2	56	0±1.5	7	M18×1.5	183	100	80	120	7	3	10.2	92x92x38
MS63	100	26	122	122	99	80	40	11	M4×10	23	4	8.5	63	0±1.5	7	M18×1.5	218	115	95	140	9	3	12.5	92x92x38
MS71	112	26	136	138	109	90	45	14	M5×12	30	5	11	71	0±1.5	7	M18×1.5	251	130	110	160	9	3.5	16	103x103x38
MS80	125	30	154	157	112	100	50	19	M6×16	40	6	15.5	80	0±1.5	10	M20×1.5	286	165	130	200	12	3.5	21.5	110x110x35.5
MS90S	140	34	174	175	120	100	56	24	M8×19	50	8	20	90	0±1.5	10	M20×1.5	320	165	130	200	12	3.5	27	110x110x35.5
MS90L	140	34	174	175	120	125	56	24	M8×19	50	8	20	90	0±1.5	10	M20×1.5	335	165	130	200	12	3.5	27	110x110x35.5
MSI00L	160	39	194	196	139	140	63	28	M10×22	60	8	24	100	0±2.0	12	M20×1.5	377	215	180	250	15	4	31	110x110x35.5
MSI12M	190	39	224	220	156	140	70	28	M10×22	60	8	24	112	0±2.0	12	M20×1.5	395	215	180	250	15	4	31	144x144x44
MSI32S	216	48	256	260	185	140	89	38	M12×28	80	10	33	132	0±2.0	12	M25×1.5	472	265	230	300	15	4	41	144x144x44
MSI32M	216	48	256	260	185	178	89	38	M12×28	80	10	33	132	0±2.0	12	M25×1.5	510	265	230	300	15	4	41	144x144x44

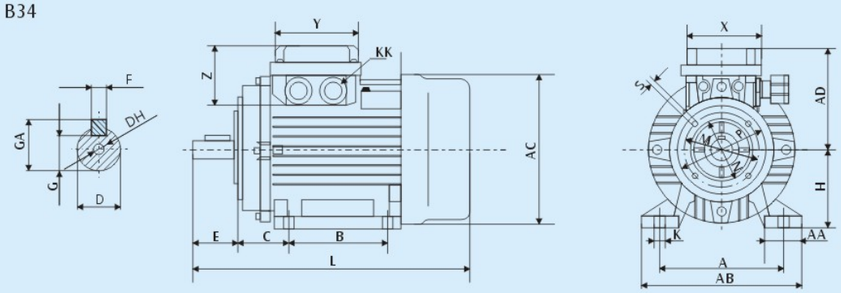
R=0 distance from flange to shaft shoulder

MOUNTING AND OVERALL DIMENSIONS

B14



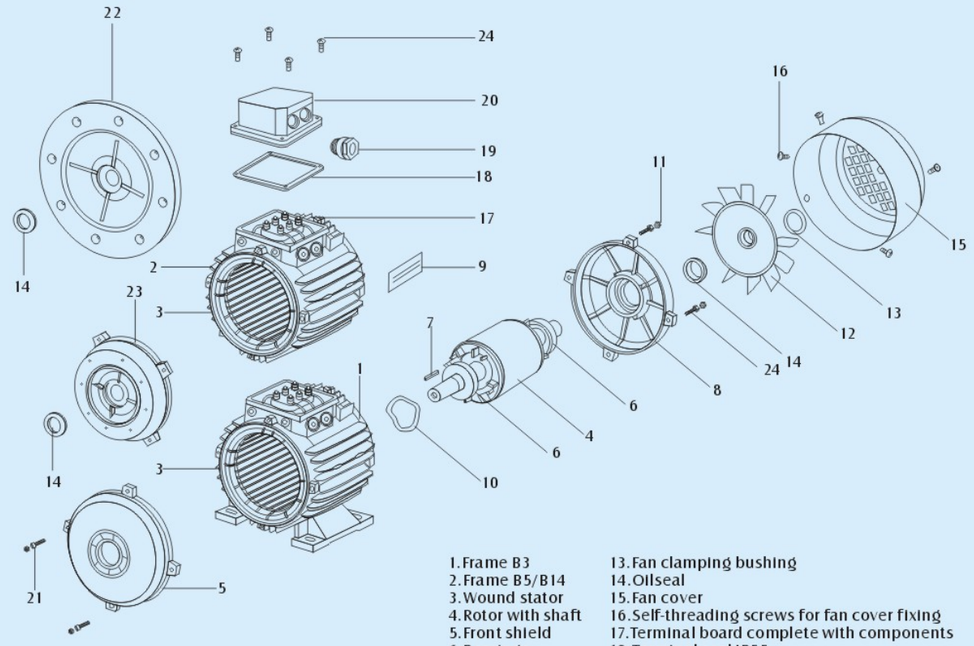
B34



Frame size	Mounting dimensions(mm)															Overall dimensions(mm)							XxYxZ(mm)
	A	AA	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	GA	
MS56	90	22.5	110	110	96	71	36	9	M4×10	20	3	7.2	56	7	M18×1.5	189	65	50	80	M5	3	10.2	92x92x38
MS63	100	26	122	122	99	80	40	11	M4×10	23	4	8.5	63	7	M18×1.5	218	75	60	90	M5	3	12.5	92x92x38
MS71	112	26	136	138	109	90	45	14	M5×12	30	5	11	71	7	M18×1.5	250	85	70	105	M6	3.5	16	103x103x38
MS80	125	30	154	157	112	100	50	19	M6×16	40	6	15.5	80	10	M20×1.5	278	100	80	120	M6	3.5	21.5	110x110x35.5
MS90S	140	34	174	175	120	100	56	24	M8×19	50	8	20	90	10	M20×1.5	335	115	95	140	M8	3.5	27	110x110x35.5
MS90L	140	34	174	175	120	125	56	24	M8×19	50	8	20	90	10	M20×1.5	335	115	95	140	M8	3.5	27	110x110x35.5
MS100L	160	39	194	196	139	140	63	28	M10×22	60	8	24	100	12	M20×1.5	377	130	110	160	M8	4	31	110x110x35.5
MS112M	190	39	224	220	156	140	70	28	M10×22	60	8	24	112	12	M20×1.5	395	130	110	160	M8	4	31	144x144x44
MS132S	216	48	256	260	185	140	89	38	M12×28	80	10	33	132	12	M25×1.5	472	165	130	200	M10	4	41	144x144x44
MS132M	216	48	256	260	185	178	89	38	M12×28	80	10	33	132	12	M25×1.5	510	165	130	200	M10	4	41	144x144x44

注：R=0 为凸缘配合面到轴伸肩的距离。
R=0 distance from flange to shaft shoulder

MOTOR SPARE PART LIST/DRAWING



1. Frame B3
2. Frame B5/B14
3. Wound stator
4. Rotor with shaft
5. Front shield
6. Bearings
7. Key
8. NDE shield
9. Name plate
10. Spring washer
11. Rods and nuts
12. Cooling fan
13. Fan clamping bushing
14. Oilseal
15. Fan cover
16. Self-threading screws for fan cover fixing
17. Terminal board complete with components
18. Terminal seal IP55
19. Cable gland
20. Terminal box IP55 (cover)
21. Mounting studs screws
22. Flange B5
23. Flange B14
24. Screws for terminal box fixing IP55

Frame size	Driving End Bearings	Non driving End Bearings	Oil Seal
56	6201 2RS/C3	6201 2RS/C3	Φ12× Φ22×5
63	6201 2RS/C3	6201 2RS/C3	Φ12× Φ22×7
71	6202 2RS/C3	6202 2RS/C3	Φ15× Φ25×7
80	6204 2RS/C3	6204 2RS/C3	Φ20× Φ30×7
90	6205 2RS/C3	6205 2RS/C3	Φ25× Φ37×7
100	6206 2RS/C3	6206 2RS/C3	Φ30× Φ42×7
112	6206 2RS/C3	6206 2RS/C3	Φ30× Φ42×7
132	6208 2RS/C3	6208 2RS/C3	Φ40× Φ58×8