

YF series

**Totally enclosed air over
(TEAO)**

**Low Voltage Three-phase
Squirrel-Cage Induction Motor**



WY-YF = Cast Iron Frame
MS-YF = Aluminium Frame

- High Efficiency
- Energy-Saving
- IP55 Protection
- IEC Dimension
- Low noise



Introduction

This catalogue details the complete range of YF series motors. YF motors are three phase totally enclosed air over (TEAO) induction motors suitable for general purpose applications in machines and mainly in fans. YF motors come in two types of frame, WY-YF being the cast-iron frame and MS-YF being the aluminium frame.

The efficiency of YF motors reaches the IE1 standard and is suitable for continuous S1 duty, which means that YF motors can operate under constant load, lasting long enough to allow the machine to reach thermal equilibrium. Please contact with ATT when the motor is to operate under any other type of duty.

All YF motors are supplied with class F insulation and checking the permissible limit of temperature rise against that of class B to improve the insulation reliability. Additional protection is provided by installation of a thermistor from frame size 160 upward, to continuously protect the winding.

All YF motors are built to comply with the requirements for European "CE" marking and International Electrotechnical Commission – IEC 60034 (including 60034-1, 60034-5, 60034-7, 60034-8, 60034-9, 60034-11, 60034-12 and 60034-14). Compliance with IEC60034 means that these motors also comply with many standards from other countries that are based on IEC60034.

Voltage / Frequency

Standard voltages and frequencies are 220-240V / 380, 415V at 50Hz for 2.2kW and below, 380, 415V / 660-720V at 50Hz for 3kW and above, and other voltages such as 220-380V, 440-480V at 60Hz. Voltage tolerance is $\pm 5\%$ and frequency tolerance is 1%. Voltage beyond these limits will cause a high winding temperature rise. Other voltages can be made on request.

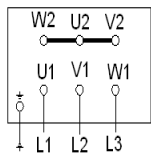
Connection/Starting

The standard terminal connection for 2.2kW and below is 220-240 volt delta / 380, 415 volt star. These motors are normally connected in star connection and suitable for Direct-On-Line starting.

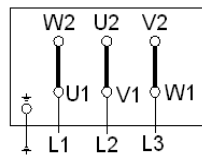
For motors 3kW and above, the standard terminal connection is 380, 415 volt delta / 660-720 volt star and suitable for both autotransformer and star-delta starting.

Connection Diagram

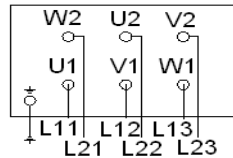
Three phase motors with cage rotor



Star connection

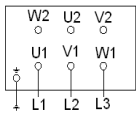


Delta connection

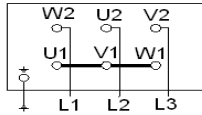


Connection to star-delta Starter

Multi-speed motors in Dahlander connection (Tapped Winding)

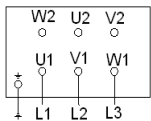


Low speed

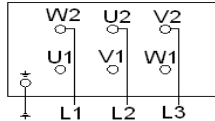


High speed

Multi-speed motors with 2 separate windings



Low speed



High speed

Direction of Rotation

Terminal box location (viewed from drive end)	Sequential connection of L1, L2 and L3	Direction of rotation
Right	U1 V1 W1	Clockwise
	V1 U1 W1	Counter-clockwise
Left	V1 U1 W1	Clockwise
	U1 V1 W1	Counter-clockwise

Bearing for WY

Frame Size	Driving End		Non-Driving End	
	2 Pole	4.6.8 Pole	2 Pole	4.6.8 Pole
63	6201-ZZ-C3	6201-ZZ-C3	6201-ZZ-C3	6201-ZZA-C3
71	6202-ZZ-C3	6202-ZZ-C3	6202-ZZ-C3	6202-ZZA-C3
80	6204-ZZ-C3	6204-ZZ-C3	6204-ZZ-C3	6204-ZZA-C3
90	6205-ZZ-C3	6205-ZZ-C3	6205-ZZ-C3	6205-ZZA-C3
100	6206-ZZ-C3	6206-ZZ-C3	6206-ZZ-C3	6206-ZZA-C3
112	6306-ZZ-C3	6306-ZZ-C3	6206-ZZ-C3	6206-ZZA-C3
132	6208-ZZ-C3	6208-ZZ-C3	6208-ZZ-C3	6208-ZZA-C3
160	6209-ZZ-C3	6209-ZZ-C3	6209-ZZ-C3	6209-ZZA-C3
180	6311-C3	6311-C3	6211-C3	6211-C3
200	6312-C3	6312-C3	6212-C3	6212-C3
225	6312-C3	6313-C3	6312-C3	6312-C3
250	6313-C3	6314-C3	6313-C3	6313-C3
280	6314-C3	6317-C3	6314-C3	6314-C3
315	6317-C3	N319	6317-C3	6319-C3
355	6319-C3	NU322	6319-C3	6322-C3



PERFORMANCE DATA - WY-YF (50Hz)

Rated		Pole	Frame Size	Rated Speed (RPM)	Current			Power Factor COSφ	Efficiency %	I _{LR} /I _{FL}	Rated Torque Nm	T _{LR} /T _{FL}	T _M /T _{FL}	Moment of Inertia J Kgm ²	Weight Kg
KW	HP				380V (A)	400V (A)	415V (A)								
0.12	0.16	4	63-1	1320	0.44	0.42	0.40	0.72	57.0	4.4	0.94	2.1	2.2	0.00009	11
		2	63-1	2730	0.53	0.50	0.48	0.80	65.0	5.5	0.66	2.2	2.2	0.00030	10
0.18	0.24	4	63-2	1320	0.62	0.59	0.57	0.73	60.0	4.4	1.41	2.1	2.2	0.00010	11
		6	71-1	865	0.74	0.70	0.68	0.66	56.0	4.0	2.00	1.9	2.0	0.00110	13
		8	80-1	645	0.88	0.84	0.81	0.61	51.0	3.3	2.66	1.8	2.0	0.00180	16
		2	63-2	2730	0.69	0.66	0.64	0.81	68.0	5.5	0.90	2.2	2.2	0.00040	11
0.25	0.33	4	71-1	1350	0.79	0.75	0.72	0.74	65.0	5.2	1.77	2.1	2.2	0.00110	14
		6	71-2	865	0.95	0.90	0.87	0.68	59.0	4.0	2.78	1.9	2.0	0.00120	14
		8	80-2	645	1.15	1.10	1.06	0.61	54.0	3.3	3.70	1.8	2.0	0.00210	17
		2	71-1	2750	1.00	0.94	0.90	0.81	70.0	6.1	1.28	2.2	2.2	0.00050	14
0.37	0.5	4	71-2	1340	1.10	1.06	1.02	0.75	67.0	5.2	2.64	2.1	2.2	0.00120	14
		6	80-1	885	1.29	1.23	1.18	0.70	62.0	4.7	3.99	1.9	2.0	0.00160	15
		8	90S	670	1.60	1.50	1.45	0.60	62.0	4.0	5.27	1.9	2.3	0.00300	24
		2	71-2	2790	1.40	1.32	1.27	0.82	73.0	6.1	1.86	2.2	2.3	0.00063	14
0.55	0.75	4	80-1	1390	1.50	1.40	1.36	0.75	71.0	5.2	3.78	2.4	2.3	0.00130	15
		6	80-2	885	1.78	1.70	1.63	0.72	65.0	4.7	5.93	1.9	2.1	0.00200	16
		8	90L	670	2.20	2.10	2.00	0.60	63.0	4.0	7.84	2.0	2.3	0.00400	26
		2	80-1	2845	1.83	1.74	1.66	0.83	75.0	6.1	2.52	2.2	2.3	0.00083	15
0.75	1	4	80-2	1380	2.00	1.90	1.80	0.76	73.0	6.0	5.19	2.3	2.3	0.00150	16
		6	90S	915	2.30	2.20	2.10	0.72	69.0	5.5	7.83	2.0	2.1	0.00300	23
		8	100L-1	680	2.40	2.30	2.20	0.67	71.0	4.0	10.46	2.0	2.2	0.00630	33
		2	80-2	2840	2.60	2.50	2.35	0.84	77.0	7.0	3.70	2.2	2.3	0.00100	16
1.1	1.5	4	90S	1390	3.00	2.90	2.70	0.77	75.0	6.0	7.56	2.3	2.3	0.00200	22
		6	90L	915	3.20	3.04	2.92	0.73	72.0	5.5	11.48	2.0	2.1	0.00400	25
		8	100L-2	680	3.40	3.20	3.10	0.69	73.0	5.0	15.22	1.8	2.2	0.00970	34
		2	90S	2840	3.50	3.30	3.20	0.84	79.0	7.0	5.04	2.2	2.3	0.00120	22
1.5	2	4	90L	1390	3.70	3.50	3.40	0.79	78.0	6.0	10.30	2.3	2.3	0.00300	27
		6	100L	910	4.00	3.70	3.62	0.75	76.0	5.5	15.57	2.0	2.1	0.00690	33
		8	112M	700	4.40	4.20	4.05	0.69	75.0	5.0	19.62	2.0	2.5	0.01200	39
		2	90L	2840	4.90	4.60	4.40	0.85	81.0	7.0	7.40	2.2	2.3	0.00140	25
2.2	3	4	100L-1	1410	5.20	4.90	4.70	0.81	80.0	7.0	14.85	2.3	2.3	0.00540	34
		6	112M	940	5.57	5.30	5.08	0.76	79.0	6.5	22.47	2.0	2.1	0.00710	39
		8	132S	710	6.00	5.70	5.43	0.71	78.0	6.0	29.50	1.8	2.5	0.02900	62
		2	100L	2830	6.40	6.00	5.80	0.87	83.0	7.5	10.00	2.2	2.3	0.00290	33
3	4	4	100L-2	1410	6.80	6.50	6.15	0.82	82.0	7.0	20.25	2.3	2.3	0.00670	35
		6	132S	960	7.50	7.00	6.80	0.76	81.0	6.5	29.84	2.1	2.1	0.02740	56
		8	132M	710	7.90	7.50	7.15	0.73	79.0	6.0	40.30	1.8	2.4	0.03800	66
		2	112M	2880	7.59	7.21	6.95	0.88	84.2	7.5	12.27	2.2	2.3	0.00500	40
3.7	5	4	112M	1430	8.18	7.77	7.49	0.82	83.8	7.0	24.71	2.3	2.3	0.00910	44
		6	132M-1	960	9.05	8.60	8.29	0.76	81.7	6.5	36.80	2.3	2.8	0.03430	71
		8	160M-1	720	9.53	9.05	8.73	0.73	80.8	6.0	49.07	1.9	2.2	0.06490	94
		2	112M	2890	8.10	7.70	7.33	0.88	85.0	7.5	13.26	2.2	2.3	0.00500	40
4	5.5	4	112M	1440	8.70	8.30	7.90	0.82	84.0	7.0	26.71	2.3	2.3	0.00910	44
		6	132M-1	960	10.00	9.50	9.05	0.76	82.0	6.5	39.79	2.1	2.1	0.03430	71
		8	160M-1	720	10.30	9.80	9.32	0.73	81.0	6.0	53.05	1.9	2.0	0.06490	94
		2	132S-1	2910	11.00	10.50	10.00	0.88	86.0	7.5	18.05	2.2	2.3	0.01040	59
5.5	7.5	4	132S	1445	12.00	11.00	11.00	0.83	85.0	7.0	36.35	2.3	2.3	0.02050	61
		6	132M-2	960	13.00	12.00	11.80	0.77	84.0	6.5	54.71	2.1	2.1	0.04310	75
		8	160M-2	720	13.60	12.90	12.30	0.74	83.0	6.0	72.94	2.0	2.0	0.08210	106
		2	132S-2	2905	15.00	14.30	13.60	0.88	87.0	7.5	24.65	2.2	2.3	0.01210	62
7.5	10	4	132M	1445	16.00	15.00	14.50	0.84	87.0	7.0	49.56	2.3	2.3	0.02960	73
		6	160M	970	17.00	16.00	15.40	0.77	86.0	6.5	73.83	2.0	2.1	0.08000	108
		8	160L	720	18.00	17.00	16.30	0.75	85.5	6.0	99.47	2.0	2.0	0.11410	128
		2	160M-1	2935	22.00	20.90	19.90	0.89	88.0	7.5	36.10	2.2	2.3	0.03700	107
11	15	4	160M	1460	23.00	22.00	21.00	0.84	88.0	7.0	72.70	2.2	2.3	0.07240	113
		6	160L	970	24.00	23.00	21.70	0.78	87.5	6.5	109.40	2.0	2.1	0.10180	131
		8	180L	730	25.00	24.00	22.60	0.76	87.5	6.6	147.50	2.2	2.8	0.18700	170
		2	160M-2	2935	29.00	27.00	26.20	0.89	89.0	7.5	49.23	2.2	2.3	0.04320	117
15	20	4	160L	1460	30.00	28.00	27.00	0.85	89.0	7.5	99.14	2.2	2.3	0.09290	133
		6	180L	970	31.00	29.00	28.00	0.81	89.0	7.0	149.20	2.0	2.1	0.16700	171
		8	200L	730	35.00	32.00	31.70	0.76	88.0	6.6	201.14	2.2	2.8	0.32500	220

Data are subjected to revisions without any prior notice.

I_{LR}/I_{FL} = Locked Rotor Current / Rated Current

T_M/T_{FL} = Pull-up Torque / Rated Torque

T_{LR}/T_{FL} = Locked Rotor Torque / Rated Torque



PERFORMANCE DATA - WY-YF (50Hz)

Rated KW	Rated HP	Pole	Frame Size	Rated Speed (RPM)	Current			Power Factor COS ϕ	Efficiency %	I _{LR} /I _{FL}	Rated Torque Nm	T _{LR} /T _{FL}	T _M /T _{FL}	Moment of Inertia J Kg m^2	Weight Kg
					380 (A)	400 (A)	415 (A)								
18.5	25	2	160L	2935	35.00	33.00	31.70	0.90	90.0	7.5	60.71	2.2	2.3	0.05250	134
		4	180M	1470	36.00	34.00	32.60	0.86	90.5	7.5	122.27	2.2	2.3	0.13500	167
		6	200L-1	975	38.00	36.00	34.40	0.81	90.0	7.0	184.00	2.1	2.1	0.30200	216
		8	225S	730	40.00	38.00	36.20	0.76	90.0	6.6	248.74	2.2	3.0	0.48100	270
22	30	2	180M	2940	41.00	39.00	37.10	0.90	90.0	7.5	72.20	2.0	2.3	0.07100	169
		4	180L	1470	42.00	40.00	38.00	0.86	91.0	7.5	145.40	2.2	2.3	0.13600	181
		6	200L-2	975	45.00	42.00	40.70	0.83	90.0	7.0	218.83	2.1	2.1	0.34200	225
		8	225M	730	47.00	44.00	42.50	0.78	90.5	6.6	295.00	2.0	2.9	0.53100	295
30	40	2	200L-1	2945	56.00	53.00	50.70	0.90	91.2	7.5	98.45	2.0	2.3	0.11900	220
		4	200L	1470	58.00	55.00	52.50	0.86	92.0	7.2	198.27	2.2	2.3	0.24500	232
		6	225M	980	58.00	55.00	52.50	0.84	91.5	7.0	298.40	2.0	2.1	0.52500	286
		8	250M	730	63.00	60.00	57.00	0.79	91.0	6.6	402.27	1.9	2.8	0.80900	370
37	50	2	200L-2	2945	68.00	64.00	61.50	0.90	92.0	7.5	121.43	2.0	2.3	0.13300	239
		4	225S	1475	70.00	66.00	63.00	0.87	92.5	7.2	244.54	2.2	2.3	0.39000	287
		6	250M	980	71.00	68.00	64.20	0.86	92.0	7.0	368.00	2.1	2.1	0.80700	380
		8	280S	735	78.00	74.00	70.60	0.79	91.5	6.6	496.14	2.0	2.4	1.38100	475
45	60	2	225M	2950	81.00	77.00	73.30	0.90	92.3	7.5	147.68	2.0	2.3	0.22100	297
		4	225M	1475	85.00	80.00	77.00	0.87	92.8	7.2	297.41	2.2	2.3	0.45000	322
		6	280S	980	86.00	82.00	77.80	0.86	92.5	7.0	447.60	2.1	2.7	1.33400	465
		8	280M	735	95.00	90.00	86.00	0.79	92.0	6.6	603.41	2.0	2.4	1.72100	555
		10	315S	590	100.00	95.00	92.00	0.75	91.5	6.2	728.31	1.5	2.0	5.10000	890
		2	250M	2965	100.00	95.00	90.50	0.90	92.5	7.5	180.50	2.0	2.3	0.30500	380
55	75	4	250M	1475	103.00	98.00	93.20	0.87	93.0	7.2	363.50	2.2	2.3	0.64000	385
		6	280M	980	105.00	100.00	95.00	0.86	92.8	7.0	547.10	2.1	2.7	1.59800	540
		8	315S	735	115.00	110.00	104.00	0.81	92.8	6.6	737.50	1.8	2.2	4.59000	905
		10	315M	590	122.00	115.00	111.00	0.75	92.0	6.2	890.16	1.5	2.0	6.10000	965
75	100	2	280S	2965	134.00	127.00	121.20	0.90	93.0	7.5	246.14	2.0	2.3	0.58400	510
		4	280S	1485	140.00	133.00	127.00	0.87	93.8	7.2	495.68	2.2	2.3	1.04500	510
		6	315S	935	142.00	135.00	128.50	0.86	93.5	7.0	746.00	2.0	2.4	3.94000	861
		8	315M	735	150.00	145.00	136.00	0.81	93.0	6.6	1005.68	1.8	2.2	5.36000	981
		10	315L-1	590	163.00	155.00	150.00	0.76	92.5	6.2	1213.86	1.5	2.0	6.90000	1040
90	125	2	280M	2965	160.00	152.00	145.00	0.91	93.8	7.5	295.36	2.0	2.3	0.66500	540
		4	280M	1485	167.00	159.00	151.00	0.87	94.2	7.2	594.82	2.2	2.3	1.39600	600
		6	315M	935	170.00	160.00	154.00	0.86	93.8	7.0	895.20	2.0	2.4	4.58000	940
		8	315L-1	735	180.00	170.00	163.00	0.82	93.8	6.6	1206.80	1.8	2.3	6.11000	1070
110	150	10	315L-2	590	191.00	182.00	176.00	0.77	93.0	6.2	1456.63	1.5	2.0	7.20000	1130
		2	315S	2975	196.00	186.00	177.00	0.91	94.0	7.1	361.00	1.8	2.2	1.13000	920
		4	315S	1485	201.00	191.00	182.00	0.88	94.5	6.9	717.00	2.1	2.2	2.98000	930
		6	315L-1	935	207.00	197.00	187.00	0.86	94.0	6.7	1094.10	2.0	2.4	5.23000	1110
		8	315L-2	735	220.00	205.00	199.00	0.82	94.0	6.4	1475.00	1.9	2.3	6.55000	1160
132	180	10	355M-1	590	229.90	218.40	210.50	0.78	93.2	6.0	1780.32	1.3	2.0	9.40000	1820
		2	315M	2975	234.00	222.00	212.00	0.91	94.5	7.1	433.20	1.8	2.2	1.75000	970
		4	315M	1485	241.00	229.00	218.00	0.88	94.8	6.9	872.40	2.1	2.2	3.48000	1010
		6	315L-2	935	245.00	233.00	222.00	0.87	94.2	6.7	1312.96	2.0	2.3	5.54000	1175
		8	355M-1	745	261.00	248.00	239.00	0.82	93.7	6.4	1691.90	1.8	2.0	12.90000	1800
		10	355M-2	590	275.00	261.30	251.80	0.78	93.5	6.0	2136.39	1.3	2.0	9.50000	1910
160	215	2	315L-1	2975	280.00	266.00	253.00	0.92	94.6	7.1	525.10	1.8	2.2	2.01000	1080
		4	315L-1	1485	288.00	273.00	261.00	0.89	94.9	6.9	1057.45	2.1	2.2	3.96000	1070
		6	355M-1	990	292.30	277.70	267.70	0.88	94.5	6.7	1543.27	1.9	2.0	9.27000	1690
		8	355M-2	745	314.70	299.00	288.20	0.82	94.2	6.4	2050.79	1.8	2.0	14.30000	1890
		10	355L	590	333.30	316.70	305.20	0.78	93.5	6.0	2589.29	1.3	2.0	9.60000	1993
200	270	2	315L-2	2975	348.00	331.00	315.00	0.92	94.8	7.1	656.36	1.8	2.2	2.27000	1170
		4	315L-2	1485	360.00	342.00	326.00	0.89	95.0	6.9	1321.82	2.1	2.2	4.47000	1170
		6	355M-2	990	364.60	346.40	333.90	0.88	94.7	6.7	1929.09	1.9	2.0	10.80000	1870
		8	355L	745	387.40	368.10	354.80	0.83	94.5	6.4	2563.49	1.8	2.0	15.90000	2040
250	340	2	355M-2	2975	433.20	411.60	396.70	0.92	95.3	7.1	802.44	1.6	2.2	3.29600	1690
		4	355M	1490	442.90	420.70	405.50	0.90	95.3	6.9	1602.18	2.1	2.2	7.64000	1720
		6	355L	990	454.80	432.10	416.50	0.88	94.9	6.7	2411.36	1.9	2.0	11.80000	1980
315	430	2	355L-2	2990	544.20	516.90	498.30	0.92	95.6	7.1	1006.00	1.6	2.2	3.95000	1850
		4	355L	1490	556.30	528.40	509.30	0.90	95.6	6.9	2018.75	2.1	2.2	8.70200	1950

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T_M/T_{FL} = Pull-up Torque / Rated Torque

T_{LR}/T_{FL} = Locked Rotor Torque / Rated Torque



PERFORMANCE DATA - WY-YF (60Hz)

Rated		Pole	Frame Size	Rated Speed (RPM)	Current					Power Factor COS ϕ	Eff %	I _{LR} /I _{FL}	Rated Torque Nm	T _{LR} /T _{FL}	T _M /T _L	Moment of Inertia J Kgm ²	Weight Kg
KW	HP				220 (A)	380 (A)	440 (A)	460 (A)	480 (A)								
0.12	0.16	4	63-1	1580	0.76	0.44	0.38	0.36	0.35	0.72	57.0	4.4	0.73	2.1	2.2	0.00009	11
0.18	0.24	2	63-1	3280	0.92	0.53	0.46	0.44	0.42	0.80	65.0	5.5	0.52	2.2	2.2	0.00030	10
		4	63-2	1580	1.07	0.62	0.54	0.51	0.49	0.73	60.0	4.4	1.09	2.1	2.2	0.00010	11
		6	71-1	1040	1.28	0.74	0.64	0.61	0.59	0.66	56.0	4.0	1.65	1.9	2.0	0.00110	13
		8	80-1	770	1.52	0.88	0.76	0.73	0.70	0.61	51.0	3.3	2.23	1.8	2.0	0.00180	16
0.25	0.33	2	63-2	3280	1.19	0.69	0.60	0.57	0.55	0.81	68.0	5.5	0.73	2.2	2.2	0.00040	11
		4	71-1	1620	1.37	0.79	0.68	0.65	0.63	0.74	65.0	5.2	1.47	2.1	2.2	0.00110	14
		6	71-2	1040	1.64	0.95	0.82	0.79	0.75	0.68	59.0	4.0	2.30	1.9	2.0	0.00120	14
0.37	0.5	8	80-2	770	1.99	1.15	0.99	0.95	0.91	0.61	54.0	3.3	3.10	1.8	2.0	0.00210	17
		2	71-1	3280	1.73	1.00	0.86	0.83	0.79	0.81	70.0	6.1	1.08	2.2	2.2	0.00050	14
		4	71-2	1610	1.90	1.10	0.95	0.91	0.87	0.75	67.0	5.2	2.19	2.1	2.2	0.00120	14
0.55	0.75	6	80-1	1060	2.23	1.29	1.11	1.07	1.02	0.70	62.0	4.7	3.33	1.9	2.0	0.00160	15
		8	90S	800	2.76	1.60	1.38	1.32	1.27	0.60	62.0	4.0	4.42	1.9	2.3	0.00300	24
		2	71-2	3350	2.42	1.40	1.21	1.16	1.11	0.82	73.0	6.1	1.57	2.2	2.3	0.00063	14
		4	80-1	1670	2.59	1.50	1.30	1.24	1.19	0.75	71.0	5.2	3.14	2.4	2.3	0.00130	15
0.75	1	6	80-2	1060	3.08	1.78	1.54	1.47	1.41	0.72	65.0	4.7	4.95	1.9	2.1	0.00200	16
		8	90L	800	3.80	2.20	1.90	1.82	1.74	0.60	63.0	4.0	6.56	2.0	2.3	0.00400	26
		2	80-1	3410	3.16	1.83	1.58	1.51	1.45	0.83	75.0	6.1	2.10	2.2	2.3	0.00083	15
		4	80-2	1660	3.46	2.00	1.73	1.65	1.58	0.76	73.0	6.0	4.31	2.3	2.3	0.00150	16
1.1	1.5	6	90S	1100	3.97	2.30	1.99	1.90	1.82	0.72	69.0	5.5	6.51	2.0	2.1	0.00300	23
		8	100L-1	820	4.15	2.40	2.07	1.98	1.90	0.67	71.0	4.0	8.73	2.0	2.2	0.00630	33
		2	80-2	3410	4.49	2.60	2.25	2.15	2.06	0.84	77.0	7.0	3.08	2.2	2.3	0.00100	16
		4	90S	1670	5.18	3.00	2.59	2.48	2.38	0.77	75.0	6.0	6.29	2.3	2.3	0.00200	22
1.5	2	6	90L	1100	5.53	3.20	2.76	2.64	2.53	0.73	72.0	5.5	9.55	2.0	2.1	0.00400	25
		8	100L-2	820	5.87	3.40	2.94	2.81	2.69	0.69	73.0	5.0	12.81	1.8	2.2	0.00970	34
		2	90S	3000	6.05	3.50	3.02	2.89	2.77	0.84	79.0	7.0	4.77	2.2	2.3	0.00120	22
		4	90L	1670	6.39	3.70	3.20	3.06	2.93	0.79	78.0	6.0	8.58	2.3	2.3	0.00300	27
2.2	3	6	100L	1100	6.91	4.00	3.46	3.30	3.17	0.75	76.0	5.5	13.02	2.0	2.1	0.00690	33
		8	112M	840	7.60	4.40	3.80	3.64	3.48	0.69	75.0	5.0	17.05	2.0	2.5	0.01200	39
		2	90L	3410	8.46	4.90	4.23	4.05	3.88	0.85	81.0	7.0	6.16	2.2	2.3	0.00140	25
		4	100L-1	1690	8.98	5.20	4.49	4.30	4.12	0.81	80.0	7.0	12.43	2.3	2.3	0.00540	34
3	4	6	112M	1130	9.62	5.57	4.81	4.60	4.41	0.76	79.0	6.5	18.59	2.0	2.1	0.00710	39
		8	132S	850	10.36	6.00	5.18	4.96	4.75	0.71	78.0	6.0	24.72	1.8	2.5	0.02900	62
		2	100L	3410	11.06	6.40	5.53	5.29	5.07	0.87	83.0	7.5	8.40	2.2	2.3	0.00290	33
		4	100L-2	1690	11.75	6.80	5.87	5.62	5.38	0.82	82.0	7.0	16.95	2.3	2.3	0.00670	35
3.7	5	6	132S	1130	12.96	7.50	6.48	6.20	5.94	0.76	81.0	6.5	25.35	2.1	2.1	0.02740	56
		8	132M	850	13.65	7.90	6.82	6.53	6.25	0.73	79.0	6.0	33.70	1.8	2.4	0.03800	66
		2	112M	3470	12.94	7.49	6.47	6.19	5.93	0.88	85.0	7.5	10.18	2.2	2.3	0.00500	40
		4	112M	1730	13.91	8.05	6.95	6.65	6.37	0.82	84.0	7.0	20.42	2.3	2.3	0.00910	44
4	5.5	6	132M-1	1150	15.98	9.25	7.99	7.64	7.32	0.76	82.0	6.5	30.72	2.1	2.1	0.03430	71
		8	160M-1	860	16.46	9.53	8.23	7.87	7.55	0.73	81.0	6.0	41.08	1.9	2.0	0.06490	94
		2	112M	3470	13.99	8.10	7.00	6.69	6.41	0.88	85.0	7.5	11.00	2.2	2.3	0.00500	40
		4	112M	1730	15.03	8.70	7.51	7.19	6.89	0.82	84.0	7.0	22.08	2.3	2.3	0.00910	44
5.5	7.5	6	132M-1	1150	17.27	10.00	8.64	8.26	7.92	0.76	82.0	6.5	33.21	2.1	2.1	0.03430	71
		8	160M-1	860	17.79	10.30	8.90	8.51	8.15	0.73	81.0	6.0	44.41	1.9	2.0	0.06490	94
		2	132S-1	3490	19.00	11.00	9.50	9.09	8.71	0.88	86.0	7.5	15.05	2.2	2.3	0.01040	59
		4	132S	1730	20.73	12.00	10.36	9.91	9.50	0.83	85.0	7.0	30.36	2.3	2.3	0.02050	61
7.5	10	6	132M-2	1150	22.46	13.00	11.23	10.74	10.29	0.77	84.0	6.5	45.67	2.1	2.1	0.04310	75
		8	160M-2	860	23.49	13.60	11.75	11.24	10.77	0.74	83.0	6.0	61.07	2.0	2.0	0.08210	106
		2	132S-2	3490	25.91	15.00	12.96	12.39	11.88	0.88	87.0	7.5	20.52	2.2	2.3	0.01210	62
		4	132M	1730	27.64	16.00	13.82	13.22	12.67	0.84	87.0	7.0	41.40	2.3	2.3	0.02960	73
7.5	10	6	160M	1160	29.36	17.00	14.68	14.04	13.46	0.77	86.0	6.5	61.74	2.0	2.1	0.08000	108
		8	160L	860	31.09	18.00	15.55	14.87	14.25	0.75	85.5	6.0	83.28	2.0	2.0	0.11410	128

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PERFORMANCE DATA - WY-YF (60Hz)

Rated Power		Pole	Frame Size	Rated Speed (RPM)	Current					Power Factor COSφ	Eff %	I _{LR} /I _{FL}	Rated Torque Nm	T _{LR} /T _{FL}	T _M /T _F	Moment of Inertia J Kgm ²	Weight Kg
KW	HP				220 (A)	380 (A)	440 (A)	460 (A)	480 (A)								
11	15	2	160M-1	3520	38.00	22.00	19	18.17	17.42	0.89	88.0	7.5	29.84	2.2	2.3	0.03700	107
		4	160M	1750	39.73	23.00	19.86	19.00	18.21	0.84	88.0	7.0	60.02	2.2	2.3	0.07240	113
		6	160L	1160	41.46	24.00	20.73	19.83	19.00	0.78	87.5	6.5	90.55	2.0	2.1	0.01080	131
		8	180L	880	43.18	25.00	21.59	20.65	19.79	0.76	87.5	6.6	119.36	2.2	2.8	0.18700	170
15	20	2	160M-2	3520	50.09	29.00	25.05	23.96	22.96	0.89	89.0	7.5	40.69	2.2	2.3	0.04320	117
		4	160L	1750	51.82	30.00	25.91	24.78	23.75	0.86	90.5	7.5	81.85	2.2	2.3	0.13500	133
		6	180L	1160	53.55	31.00	26.77	25.61	24.54	0.81	89.0	7.0	123.48	2.0	2.1	0.16700	171
		8	200L	880	60.46	35.00	30.22	28.91	27.71	0.76	88.0	6.6	162.77	2.2	2.8	0.32500	220
18.5	25	2	160L	3520	60.46	35.00	30.22	28.91	27.71	0.90	90.0	7.5	50.19	2.2	2.3	0.05250	134
		4	180M	1760	62.18	36.00	31.09	29.74	28.50	0.86	90.5	7.5	100.37	2.2	2.3	0.13500	167
		6	200L-1	1170	65.64	38.00	32.82	31.39	30.08	0.81	90.0	7.0	150.99	2.1	2.1	0.30200	216
		8	225S	880	69.09	40.00	34.55	33.04	31.67	0.76	90.0	6.6	200.75	2.0	3.0	0.48100	270
22	30	2	180M	3530	70.82	41.00	35.41	33.87	32.46	0.90	90.0	7.5	59.51	2.0	2.3	0.07100	169
		4	180L	1760	72.55	42.00	36.27	34.70	33.25	0.86	91.0	7.5	119.36	2.2	2.3	0.13600	181
		6	200L-2	1170	77.73	45.00	38.86	37.17	35.63	0.83	90.0	7.0	179.55	2.1	2.1	0.34200	225
		8	225M	880	81.18	47.00	40.59	38.83	37.21	0.78	90.5	6.6	238.73	2.0	2.9	0.53100	295
30	40	2	200L-1	3530	96.73	56.00	48.36	46.26	44.33	0.90	91.2	7.5	81.15	2.0	2.3	0.11900	220
		4	200L	1760	100.18	58.00	50.09	47.91	45.92	0.86	92.0	7.2	162.77	2.2	2.3	0.24500	232
		6	225M	1180	100.18	58.00	50.09	47.91	45.92	0.84	91.5	7.0	242.77	2.0	2.1	0.52500	286
		8	250M	880	108.82	63.00	54.41	52.04	49.88	0.79	91.0	6.6	325.53	1.9	2.8	0.80900	370
37	50	2	200L-2	3530	117.46	68.00	58.73	56.17	53.83	0.90	92.0	7.5	100.09	2.0	2.3	0.13300	239
		4	225S	1770	120.9	70.00	60.46	57.83	55.42	0.87	92.5	7.2	199.61	2.2	2.3	0.39000	287
		6	250M	1170	122.64	71.00	61.32	58.65	56.21	0.86	92.0	7.0	301.98	2.1	2.1	0.80700	380
		8	280S	880	134.73	78.00	67.36	64.44	61.75	0.79	91.5	6.6	401.49	2.0	2.4	1.38100	475
45	60	2	225M	3560	139.91	81.00	69.96	66.91	64.13	0.90	92.3	7.5	120.70	2.0	2.3	0.22100	297
		4	225M	1770	146.82	85.00	73.41	70.22	67.29	0.87	92.8	7.2	242.77	2.2	2.3	0.45000	322
		6	280S	1170	148.55	86.00	74.27	71.04	68.08	0.86	92.5	7.0	367.27	2.1	2.7	1.33400	465
		8	280M	880	164.09	95.00	82.05	78.48	75.21	0.79	92.0	6.6	488.30	2.0	2.4	1.72100	555
		10	315S	710	172.73	100.00	86.36	82.61	79.17	0.75	91.5	6.2	605.22	1.5	2.0	5.10000	890
55	75	2	250M	3560	172.73	100.00	86.36	82.61	79.17	0.90	92.5	7.5	147.53	2.0	2.3	0.30500	380
		4	250M	1770	177.91	103.00	88.96	85.09	81.54	0.87	93.0	7.2	296.72	2.2	2.3	0.64000	385
		6	280M	1180	181.36	105.00	90.68	86.74	83.13	0.86	92.8	7.0	445.08	2.1	2.7	1.59800	540
		8	315S	880	198.64	115.00	99.32	95.00	91.04	0.81	92.8	6.6	596.81	1.8	2.2	4.59000	905
		10	315M	710	210.73	122.00	105.37	100.78	96.58	0.75	92.0	6.2	739.71	1.5	2.0	6.10000	965
75	100	2	280S	3560	231.45	134.00	115.73	110.70	106.08	0.90	93.0	7.5	201.17	2.0	2.3	0.58400	510
		4	280S	1780	241.81	140.00	120.91	115.65	110.83	0.87	93.8	7.2	402.35	2.2	2.3	1.04500	510
		6	315S	1120	245.27	142.00	122.64	117.30	112.42	0.86	93.5	7.0	639.44	2.0	2.4	3.94000	861
		8	315M	880	259.09	150.00	129.55	123.91	118.75	0.81	93.0	6.6	813.84	1.8	2.2	5.36000	981
		10	315L-1	710	281.55	163.00	140.77	134.65	129.05	0.76	92.5	6.2	1008.70	1.5	2.0	6.90000	1040
90	125	2	280M	3560	276.36	160.00	138.18	132.18	126.67	0.91	93.8	7.5	241.41	2.0	2.3	0.66500	540
		4	280M	1780	288.46	167.00	144.23	138.00	132.21	0.87	94.2	7.2	482.81	2.2	2.3	1.39600	600
		6	315M	1122	293.64	170.00	146.82	140.44	134.58	0.86	93.8	7.0	765.96	2.0	2.4	4.58000	940
		8	315L-1	880	310.91	180.00	155.46	148.70	142.50	0.82	93.8	6.6	976.60	1.8	2.3	6.11000	1070
		10	315L-2	710	329.91	191.00	165.00	157.78	151.21	0.77	93.0	6.2	1210.44	1.5	2.0	7.20000	1130
110	150	2	315S	3570	338.55	196.00	169.27	161.91	155.17	0.91	94.0	7.1	294.23	1.8	2.2	1.13000	920
		4	315S	1780	347.18	201.00	173.60	166.04	159.12	0.88	94.5	6.9	590.11	2.1	2.2	2.98000	930
		6	315L-1	1120	357.55	207.00	178.77	171.00	163.88	0.86	94.0	6.7	937.85	2.0	2.4	5.23000	1110
		8	315L-2	880	380	220.00	190.00	181.74	174.17	0.82	94.0	6.4	1193.63	1.9	2.3	6.55000	1160
132	180	2	315M	3570	404.18	234.00	202.09	193.30	185.25	0.91	94.5	7.1	353.07	1.8	2.2	1.75000	970
		4	315M	1780	416.27	241.00	208.14	199.09	190.79	0.88	94.8	6.9	708.13	2.1	2.2	3.48000	1010
		6	315L-2	1120	423.18	245.00	211.60	202.39	193.96	0.87	94.2	6.7	1125.42	2.0	2.3	5.54000	1175
160	215	2	315L-1	3570	483.64	280.00	241.82	231.30	221.67	0.92	94.6	7.1	427.97	1.8	2.2	2.01000	1080
		4	315L-1	1780	497.46	288.00	248.72	237.91	228.00	0.89	94.9	6.9	858.34	2.1	2.2	3.96000	1070
200	270	2	315L-2	3570	601.09	348.00	300.55	287.48	275.50	0.92	94.8	7.1	534.96	1.8	2.2	2.27000	1170
		4	315L-2	1780	621.81	360.00	310.91	297.39	285.00	0.89	95.0	6.9	1072.92	2.1	2.2	4.47000	1170

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I_{LR}/I_{FL} = Locked Rotor Current / Rated Current

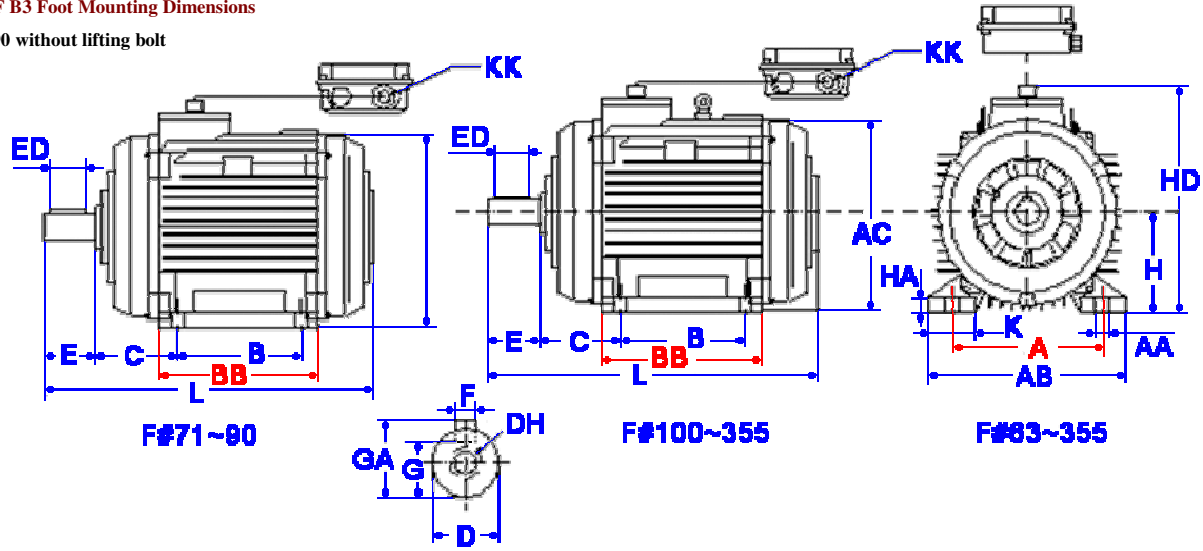
T_M/T_{FL} = Pull-up Torque / Rated Torque

T_{LR}/T_{FL} = Locked Rotor Torque / Rated Torque



WY-YF B3 Foot Mounting Dimensions

F#63-90 without lifting bolt



Frame Size	Poles	Mounting dimensions(mm)										Overall Dimension(mm)										
		A	B	C	D	E	F	G	H	K	AA	AB	AC	AD	BB	KK	ED	DH	GA	HA	HD	L
63	2,4	100	80	40	11j6	23	4	8.5	63	7	28.5	135	130	70	101	M16x1.5	15	M4X10	12,5	10	180	183
71	2,4,6	112	90	45	14j6	30	5	11	71	7	24	150	150	124	108	M16x1.5	20	M5X13	16	11	195	210
80	2,4,6,8	125	100	50	19j6	40	6	15.5	80	10	34	165	175	145	135	M25X1.5	32	M6X16	21.5	12	220	240
90S	2,4,6,8	140	100	56	24j6	50	8	20	90	10	36	180	195	155	140	M25X1.5	32	M8X20	27	12	250	262
90L	2,4,6,8	140	125	56	24j6	50	8	20	90	10	36	180	195	155	165	M25X1.5	32	M8X20	27	12	250	287
100L	2,4,6,8	160	140	63	28j6	60	8	24	100	12	40	205	215	180	185	M25X1.5	40	M10X25	31	14	270	326
112M	2,4,6,8	190	140	70	28j6	60	8	24	112	12	45	230	240	190	185	M32X1.5	40	M10X25	31	15	300	340
132S	2,4,6,8	216	140	89	38k6	80	10	33	132	12	55	270	275	210	190	M32X1.5	56	M12X30	41	18	345	398
132M	2,4,6,8	216	178	89	38k6	80	10	33	132	12	55	270	275	210	230	M32X1.5	56	M12X30	41	18	345	436
160M	2,4,6,8	254	210	108	42k6	110	12	37	160	15	65	320	330	255	274	M40X1.5	85	M16X36	45	20	420	536
160L	2,4,6,8	254	254	108	42k6	110	12	37	160	15	65	320	330	255	318	M40X1.5	85	M16X36	45	20	420	580
180M	2,4,6,8	279	241	121	48k6	110	14	42.5	180	15	70	355	380	280	315	M40X1.5	80	M16X36	51.5	22	455	593
180L	2,4,6,8	279	279	121	48k6	110	14	42.5	180	15	70	355	380	280	355	M40X1.5	80	M16X36	51.5	22	455	631
200L	2,4,6,8	318	305	133	55m6	110	16	49	200	19	70	395	420	305	5	M50X1.5	100	M20X42	59	25	505	681
225S	4,8	356	286	149	60m6	140	18	53	225	19	75	435	470	335	375	M50X1.5	125	M20X40	64	28	560	724
225M	2	356	311	149	55m6	110	16	49	225	19	75	435	470	335	400	M50X1.5	100	M20X40	59	28	560	719
225M	4,6,8	356	311	149	60m6	140	18	53	225	19	75	435	470	335	400	M50X1.5	125	M20X40	64	28	560	749
250M	2	406	349	168	60m6	140	18	53	250	24	80	490	510	370	450	M63X1.5	125	M20X42	64	30	615	825
250M	4,6,8	406	349	168	65m6	140	18	58	250	24	80	490	510	370	450	M63X1.5	125	M20X42	69	30	615	825
280S	2	457	368	190	65m6	140	18	58	280	24	85	550	580	410	490	M63X1.5	100	M20X42	69	45	680	888
280S	4,6,8	457	368	190	75m6	140	20	67.5	280	24	85	550	580	410	535	M63X1.5	100	M20X42	79.5	35	680	888
280M	2	457	419	190	65m6	140	18	58	280	24	85	550	580	410	540	M63X1.5	100	M20X42	69	35	680	939
280M	4,6,8	457	419	190	75m6	140	20	67.5	280	24	85	550	580	410	535	M63X1.5	100	M20X42	79.5	35	680	939
315S	2	508	406	216	65m6	140	18	58	315	28	116	635	645	530	680	M63X1.5	110	M20X46	69	45	845	978
315S	4,6,8,10	508	406	216	80m6	170	22	71	315	28	116	635	645	530	675	M63X1.5	140	M20X46	85	45	845	1008
315M	2	508	457	216	65m6	140	18	58	315	28	116	635	645	530	680	M63X1.5	110	M20X46	69	45	845	1029
315M	4,6,8,10	508	457	216	80m6	170	22	71	315	28	116	635	645	530	675	M63X1.5	140	M20X46	85	45	845	1059
315L	2	508	508	216	65m6	140	18	58	315	28	116	635	645	530	680	M63X1.5	110	M20X46	69	45	845	1080
315L	4,6,8,10	508	508	216	80m6	170	22	71	315	28	116	635	645	530	675	M63X1.5	140	M20X46	85	45	845	1110
355M	2	610	560	254	75m6	140	20	67.5	355	28	120	730	720	655	710	M63X1.5	160	M20X46	79.5	52	1010	1208
355M	4,6,8,10	610	560	254	95m6	170	25	86	355	28	120	730	720	655	775	M63X1.5	140	M24X46	100	49	1010	1238
355L	2	610	630	254	75m6	140	20	67.5	355	28	120	730	720	655	840	M63X1.5	160	M20X46	79.5	52	1010	1278
355L	4,6,8,10	610	630	254	95m6	170	25	86	355	28	120	730	720	655	775	M63X1.5	140	M24X46	100	49	1010	1308

Data are subjected to revisions without any prior notice.



PERFORMANCE DATA - MS-YF (50Hz)

Rated Power		Pole	Frame Size	Rated Speed (RPM)	Current			Power Factor COSφ	Efficiency %	I _{LR} /I _{FL}	Rated Torque (Nm)	T _{LR} /T _{FL}	T _M /T _F _L	Moment of Inertia J Kgm ²	Weight Kg
KW	HP				380V (A)	400V (A)	415V (A)								
0.06	0.08	4	56-1	1330	0.28	0.27	0.26	0.65	50.0	4.0	0.43	1.4	2.0	0.000064	3.2
0.09	0.12	2	56-1	2710	0.39	0.37	0.36	0.70	50.0	4.0	0.32	1.8	2.0	0.000053	3.2
		4	56-2	1330	0.37	0.36	0.34	0.73	50.0	4.0	0.65	1.8	2.0	0.000070	3.4
0.12	0.16	2	56-2	2710	0.47	0.45	0.43	0.70	55.0	4.0	0.42	1.8	2.0	0.000057	3.4
		4	63-1	1340	0.44	0.42	0.41	0.72	57.0	4.4	0.86	1.8	2.0	0.000117	4.0
0.18	0.24	2	63-1	2720	0.58	0.55	0.53	0.73	65.0	5.5	0.66	2.2	2.2	0.000100	3.9
		4	63-2	1340	0.65	0.61	0.59	0.73	58.0	4.4	1.28	1.8	2.0	0.000136	4.5
		6	71-1	860	0.74	0.70	0.68	0.66	56.0	4.0	2.00	1.9	2.0	0.000432	6.4
		8	80-1	645	0.88	0.84	0.80	0.61	51.0	2.9	2.67	1.8	2.0	0.001146	8.3
0.25	0.33	2	63-2	2720	0.76	0.72	0.69	0.76	66.0	5.5	0.88	2.2	2.2	0.000113	4.4
		4	71-1	1345	0.79	0.75	0.72	0.74	65.0	5.2	1.78	2.1	2.2	0.000423	6.1
		6	71-2	860	0.95	0.90	0.87	0.68	59.0	4.0	2.78	1.9	2.0	0.000468	6.5
		8	80-2	645	1.15	1.10	1.06	0.61	54.0	2.9	3.70	1.8	2.0	0.001263	9.0
0.37	0.5	2	71-1	2760	0.99	0.94	0.91	0.81	70.0	6.1	1.28	2.2	2.2	0.000348	6.2
		4	71-2	1340	1.12	1.06	1.02	0.75	67.0	5.2	2.64	2.1	2.2	0.000468	6.7
		6	80-1	885	1.30	1.23	1.19	0.70	62.0	4.7	3.99	2.0	2.1	0.001268	8.5
		8	90S	670	1.56	1.48	1.43	0.61	59.0	3.2	5.27	1.9	2.3	0.003160	12.0
0.55	0.75	2	71-2	2820	1.40	1.33	1.28	0.82	73.0	6.1	1.86	2.2	2.3	0.000400	6.3
		4	80-1	1390	1.57	1.49	1.44	0.75	71.0	5.3	3.78	2.2	2.5	0.001146	8.9
		6	80-2	885	1.79	1.70	1.63	0.72	65.0	4.7	5.94	2.0	2.1	0.001392	9.2
		8	90L	670	2.21	2.10	2.02	0.61	62.0	3.2	7.84	2.0	2.3	0.003794	15.0
0.75	1	2	80-1	2845	1.83	1.74	1.68	0.83	75.0	6.1	2.52	2.4	2.5	0.000916	8.3
		4	80-2	1380	2.05	1.95	1.88	0.76	73.0	5.3	5.19	2.3	2.5	0.001263	9.6
		6	90S	915	2.29	2.18	2.10	0.72	69.0	5.5	7.83	2.0	2.2	0.003160	12.0
		8	100LA	685	2.43	2.31	2.22	0.67	70.0	4.7	10.46	1.8	2.2	0.004311	19.0
1.1	1.5	2	80-2	2840	2.58	2.45	2.37	0.84	77.0	7.0	3.70	2.5	2.5	0.000990	9.0
		4	90S	1390	2.85	2.71	2.61	0.77	76.2	6.0	7.56	2.3	2.5	0.002761	12.5
		6	90L	915	3.18	3.02	2.91	0.73	72.0	5.5	11.48	2.0	2.2	0.003794	14.0
		8	100LB	690	3.36	3.20	3.08	0.69	72.0	5.0	15.22	1.8	2.2	0.005095	21.8
1.5	2	2	90S	2840	3.43	3.26	3.14	0.84	79.0	7.0	5.04	2.7	2.8	0.002462	12.5
		4	90L	1390	3.72	3.54	3.41	0.78	78.5	6.0	10.30	2.3	2.5	0.003283	15.0
		6	100L	920	4.00	3.80	3.66	0.75	76.0	5.5	15.57	2.1	2.2	0.004605	19.5
		8	112M	730	4.40	4.18	4.03	0.69	75.0	5.0	19.62	2.0	2.5	0.006949	29.0
2.2	3	2	90L	2840	4.85	4.61	4.45	0.85	81.0	7.0	7.40	2.5	2.8	0.002815	14.0
		4	100LA	1415	5.03	4.78	4.61	0.82	80.0	7.0	14.85	2.3	2.5	0.005419	19.2
		6	112M	935	5.57	5.29	5.10	0.76	79.0	6.5	22.47	2.2	2.2	0.006949	28.0
		8	132S	710	6.04	5.73	5.53	0.71	78.0	6.0	29.59	1.8	2.5	0.012912	39.0
3	4	2	100L	2870	6.31	6.00	5.78	0.87	83.0	7.5	9.98	2.2	2.5	0.002930	20.5
		4	100LB	1415	6.73	6.39	6.16	0.82	82.6	7.0	20.25	2.3	2.5	0.006704	23.0
		6	132S	960	7.40	7.03	6.78	0.76	81.0	6.5	29.84	2.2	2.8	0.012912	38.0
		8	132M	710	7.90	7.51	7.24	0.73	79.0	6.0	40.35	1.8	2.4	0.016082	45.0
3.7	5	2	112M	2880	7.59	7.21	6.95	0.88	84.2	7.5	12.27	2.2	2.3	0.003021	26.0
		4	112M	1430	8.18	7.77	7.49	0.82	83.8	7.0	24.71	2.3	2.3	0.009418	29.0
		6	132MA	960	9.05	8.60	8.29	0.76	81.7	6.5	36.80	2.3	2.8	0.016082	45.0
4	5.5	2	112M	2880	8.12	7.72	7.44	0.88	85.0	7.5	13.26	2.3	2.3	0.003021	26.0
		4	112M	1430	8.70	8.26	7.96	0.83	84.2	7.0	26.71	2.3	2.5	0.009418	29.0
		6	132MA	960	9.75	9.26	8.93	0.76	82.0	6.5	39.79	2.4	2.9	0.016082	45.0
5.5	7.5	2	132SA	2910	11.00	10.50	10.10	0.88	86.0	7.5	18.05	2.3	2.5	0.006496	40.0
		4	132S	1445	11.70	11.20	10.80	0.83	85.7	7.0	36.35	2.3	2.5	0.029500	43.5
		6	132MB	960	12.90	12.30	11.80	0.77	84.0	6.5	54.71	2.4	2.8	0.019174	54.0
7.5	10	2	132SB	2905	14.90	14.16	13.64	0.88	87.0	7.5	24.66	2.2	2.4	0.007838	44.0
		4	132M	1445	15.60	14.80	14.30	0.84	87.0	7.0	49.57	2.3	2.5	0.029600	53.5

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I_{LR}/I_{FL} = Locked Rotor Current / Rated Current

T_M/T_{FL} = Pull-up Torque / Rated Torque

T_{LR}/T_{FL} = Locked Rotor Torque / Rated Torque



PERFORMANCE DATA - MS-YF (60Hz)

Rated Power		Pole	Frame Size	Rated Speed (RPM)	Current					Power Factor COS ϕ	Eff %	I _{LR} /I _{FL}	Rated Torque (Nm)	T _{LR} /T _{FL}	T _M /T _F	Moment of Inertia J Kgm ²	Weight Kg
KW	HP				220 (A)	380 (A)	440 (A)	460 (A)	480 (A)								
0.06	0.08	4	56-1	1600	0.48	0.28	0.24	0.23	0.22	0.65	50.0	4.0	0.48	1.4	2.0	0.000064	3.2
0.09	0.12	2	56-1	3250	0.67	0.39	0.34	0.32	0.31	0.70	50.0	4.0	0.33	1.8	2.0	0.000053	3.2
		4	56-2	1600	0.64	0.37	0.32	0.31	0.29	0.73	50.0	4.0	0.72	1.8	2.0	0.000070	3.4
0.12	0.16	2	56-2	3250	0.81	0.47	0.41	0.39	0.37	0.70	55.0	4.0	0.44	1.8	2.0	0.000057	3.4
		4	63-1	1610	0.76	0.44	0.38	0.36	0.35	0.72	57.0	4.4	0.86	1.8	2.0	0.000117	4.0
0.18	0.24	2	63-1	3260	1.00	0.58	0.50	0.48	0.46	0.73	65.0	5.5	0.63	2.2	2.2	0.000100	3.9
		4	63-2	1610	1.11	0.64	0.55	0.53	0.51	0.73	58.0	4.4	1.28	1.8	2.0	0.000136	4.5
		6	71-1	1030	1.28	0.74	0.64	0.61	0.59	0.66	56.0	4.0	2.00	1.9	2.0	0.000432	6.4
		8	80-1	774	1.52	0.88	0.76	0.73	0.70	0.61	51.0	2.9	2.67	1.8	2.0	0.001146	8.3
0.25	0.33	2	63-2	3260	1.31	0.76	0.66	0.63	0.60	0.76	66.0	5.5	0.88	2.2	2.2	0.000113	4.4
		4	71-1	1610	1.36	0.79	0.68	0.65	0.63	0.74	65.0	5.2	1.78	2.1	2.2	0.000423	6.1
		6	71-2	1030	1.64	0.95	0.82	0.78	0.75	0.68	59.0	4.0	2.78	1.9	2.0	0.000468	6.5
		8	80-2	770	1.99	1.15	0.99	0.95	0.91	0.61	54.0	2.9	3.70	1.8	2.0	0.001263	9.0
0.37	0.5	2	71-1	3310	1.71	0.99	0.86	0.82	0.78	0.81	70.0	6.1	1.28	2.2	2.2	0.000348	6.2
		4	71-2	1610	1.93	1.12	0.97	0.93	0.89	0.75	67.0	5.2	2.64	2.1	2.2	0.000468	6.7
		6	80-1	1060	2.25	1.30	1.12	1.07	1.03	0.70	62.0	4.7	3.99	2.0	2.1	0.001268	8.5
		8	90S	800	2.69	1.56	1.35	1.29	1.24	0.61	59.0	3.2	5.27	1.9	2.3	0.003160	12.0
0.55	0.75	2	71-2	3380	2.42	1.40	1.21	1.16	1.11	0.82	73.0	6.1	1.86	2.2	2.3	0.000400	6.3
		4	80-1	1670	2.71	1.57	1.36	1.30	1.24	0.75	71.0	5.3	3.78	2.2	2.5	0.001146	8.9
		6	80-2	1060	3.09	1.79	1.55	1.48	1.42	0.72	65.0	4.7	5.94	2.0	2.1	0.001392	9.2
		8	90L	800	3.82	2.21	1.91	1.83	1.75	0.61	62.0	3.2	7.84	2.0	2.3	0.003794	15.0
0.75	1	2	80-1	3410	3.16	1.83	1.58	1.51	1.45	0.83	75.0	6.1	2.52	2.4	2.5	0.000916	8.3
		4	80-2	1670	3.54	2.05	1.77	1.69	1.62	0.76	73.0	5.3	5.19	2.3	2.5	0.000126	9.6
		6	90S	1100	3.96	2.29	1.98	1.89	1.81	0.72	69.0	5.5	7.83	2.0	2.2	0.003160	12.0
		8	100LA	820	4.20	2.43	2.10	2.01	1.92	0.67	70.0	4.7	10.46	1.8	2.2	0.005095	19.0
1.1	1.5	2	80-2	3410	4.46	2.58	2.23	2.13	2.04	0.84	77.0	7.0	3.70	2.5	2.5	0.000990	9.0
		4	90S	1670	4.92	2.85	2.46	2.35	2.26	0.77	76.2	6.0	7.56	2.3	2.5	0.002761	12.5
		6	90L	1100	5.49	3.18	2.75	2.63	2.52	0.73	72.0	5.5	11.48	2.0	2.2	0.003794	14.0
		8	100LB	830	5.80	3.36	2.90	2.78	2.66	0.69	72.0	5.0	15.22	1.8	2.2	0.005095	21.8
1.5	2	2	90S	3410	5.92	3.43	2.96	2.83	2.72	0.84	79.0	7.0	5.04	2.7	2.8	0.002462	12.5
		4	90L	1670	6.43	3.72	3.21	3.07	2.95	0.78	78.5	6.0	10.3	2.3	2.5	0.003283	15.0
		6	100L	1100	6.91	4.00	3.45	3.30	3.17	0.75	76.0	5.5	15.57	2.1	2.2	0.004605	19.5
		8	112M	880	7.60	4.40	3.80	3.63	3.48	0.69	75	5.0	19.62	2.0	2.5	0.006949	29.0
2.2	3	2	90L	3410	8.38	4.85	4.19	4.01	3.84	0.85	81.0	7.0	7.40	2.5	2.8	0.002815	14.0
		4	100LA	1700	8.69	5.03	4.34	4.16	3.98	0.82	80.0	7.0	14.85	2.3	2.5	0.005419	19.2
		6	112M	1120	9.62	5.57	4.81	4.60	4.41	0.76	79.0	6.50	22.47	2.2	2.2	0.006949	28.0
		8	132S	850	10.43	6.04	5.22	4.99	4.78	0.71	78.0	6.0	29.59	1.8	2.5	0.012912	39.0
3	4	2	100L	3440	10.90	6.31	5.45	5.21	5.00	0.87	83.0	7.5	9.98	2.2	2.5	0.002930	20.5
		4	100LB	1700	11.62	6.73	5.81	5.56	5.33	0.82	82.6	7.0	20.25	2.3	2.5	0.006704	23.0
		6	132S	1150	12.78	7.40	6.39	6.11	5.86	0.76	81.0	6.5	29.84	2.2	2.8	0.012912	38.0
		8	132M	850	13.65	7.90	6.82	6.53	6.25	0.73	79.0	6.0	40.35	1.8	2.4	0.016082	45.0
3.7	5	2	112M	3460	13.11	7.59	6.56	6.27	6.01	0.88	85.0	7.5	13.26	2.3	2.3	0.003021	26.0
		4	112M	1720	14.13	8.18	7.06	6.76	6.48	0.82	84.0	7.0	26.71	2.3	2.5	0.009418	29.0
		6	132MA	1150	15.63	9.05	7.82	7.48	7.16	0.76	82.0	6.5	39.79	2.4	2.9	0.016082	45.0
4	5.5	2	112M	3460	14.03	8.12	7.01	6.71	6.43	0.88	85.0	7.5	13.26	2.3	2.3	0.003021	26.0
		4	112M	1720	15.03	8.70	7.51	7.19	6.89	0.83	84.2	7.0	26.71	2.3	2.5	0.009418	29.0
		6	132MA	1150	16.84	9.75	8.42	8.05	7.72	0.76	82.0	6.5	39.79	2.4	2.9	0.016082	45.0
5.5	7.5	2	132SA	3500	19.00	11.00	9.50	9.09	8.71	0.88	86.0	7.5	18.05	2.2	2.5	0.006496	40.0
		4	132S	1730	20.21	11.70	10.10	9.67	9.26	0.83	85.7	7.0	36.35	2.3	2.5	0.029500	43.5
		6	132MB	1150	22.28	12.90	11.14	10.66	10.21	0.77	84.0	6.5	54.71	2.4	2.8	0.019174	54.0
7.5	10	2	132SB	3500	25.74	14.90	12.87	12.31	11.80	0.88	87.0	7.5	24.66	2.2	2.4	0.007838	44.0
		4	132M	1750	26.95	15.60	13.47	12.89	12.35	0.84	87.0	7.0	49.57	2.3	2.5	0.029600	53.5

Data are subjected to revisions without any prior notice.

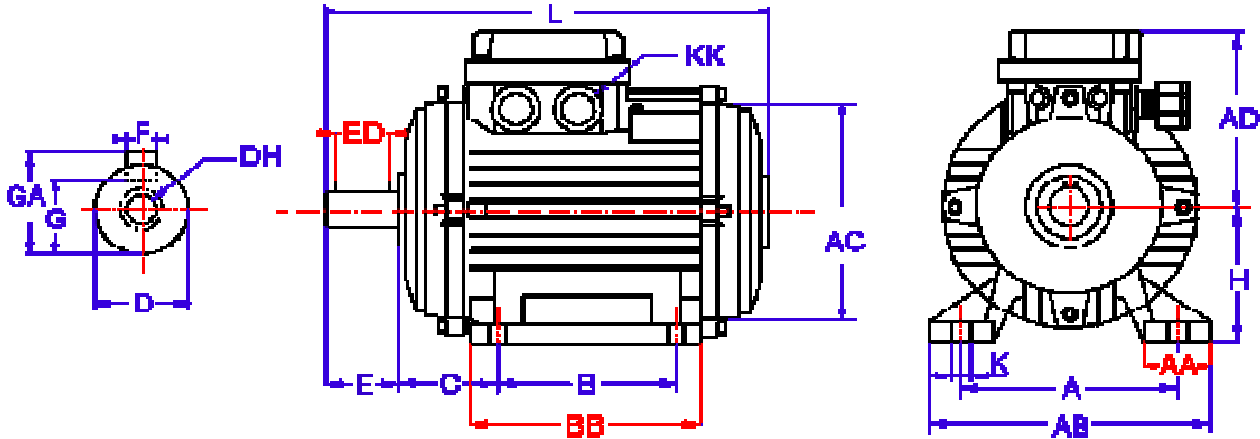
I_{LR}/I_{FL} = Locked Rotor Current / Rated Current

T_{LR}/T_{FL} = Locked Rotor Torque / Rated Torque

T_M/T_{FL} = Pull-up Torque / Rated Torque

MS B3 Foot Mounting Dimensions

F#56~90 without lifting bolt



Frame Size	Pole	Mounting Dimensions (mm)																		
		A	AA	AB	AC	AD	B	C	D	DH	E	ED	F	G	H	K	KK	L	GA	BB
56	2,4	90	22	110	110	96	71	36	9	M4X10	20	14	3	7.2	56	7	M18X1.5	163	10.2	91
63	2,4,6	100	22	122	122	99	80	40	11	M4X10	23	15	4	8.5	63	7	M18X1.5	183	12.5	100
71	2,4,6,8	112	25	136	138	109	90	45	14	M5X13	30	20	5	11	71	7	M18X1.5	210	16	108
80	2,4,6,8	125	29	154	157	112	100	50	19	M6X16	40	30	6	15.5	80	10	M20X1.5	239	21.5	126
90S	2,4,6,8	140	34	174	175	120	100	56	24	M8X20	50	40	8	20	90	10	M20X1.5	262	27	128
90L	2,4,6,8	140	34	174	175	120	125	56	24	M8X20	50	40	8	20	90	10	M20X1.5	284	27	128
100L	2,4,6,8	160	40	194	196	139	140	63	28	M10X25	60	45	8	24	100	12	M20X1.5	326	31	175
112M	2,4,6,8	190	38	224	220	156	140	70	28	M10X25	60	45	8	24	112	12	M25X1.5	340	31	175
132S	2,4,6,8	216	49	256	260	185	140	89	38	M12X30	80	60	10	33	132	12	M25X1.5	398	41	180
132M	2,4,6,8	216	49	256	260	185	178	89	38	M12X30	80	60	10	33	132	12	M25X1.5	436	41	218

Frame Size	Bearing		Oil Seal
	Drive End	Non-Driving End	
56	6201-ZZ-C3	6201-ZZ-C3	φ12 X φ22 X 5
63	6201-ZZ-C3	6201-ZZ-C3	φ12 X φ22 X 7
71	6202-ZZ-C3	6202-ZZ-C3	φ15 X φ25 X 7
80	6204-ZZ-C3	6204-ZZ-C3	φ20 X φ30 X 7
90	6205-ZZ-C3	6205-ZZ-C3	φ25 X φ37 X 7
100	6206-ZZ-C3	6206-ZZ-C3	φ30 X φ42 X 7
112	6206-ZZ-C3	6206-ZZ-C3	φ30 X φ42 X 7
132	6208-ZZ-C3	6208-ZZ-C3	φ40 X φ58 X 8

Data are subjected to revisions without any prior notice.

Standard Specification and features

Item	Standard Specifications
Type of Motor	Totally-enclosed Air-over squirrel cage induction motor
Design standards	IEC 60034-1
Voltage & Frequency	Standard stock available are : 220-240/380-415V/50Hz for 2.2KW & below 380-415/660-720V/50Hz for 3KW & above other voltages such as 200V, 346V, 440V, 460V & 60Hz etc can be supplied upon request
Power conditions	±5 % of Rated voltage and ± 1% Frequency ± 1% Phase unbalance
Time duty	Continuous S1, MCR (S.F:1.0)
Cooling method	Non-ventilated, Air-over.
Method of starting	Full voltage direct on line starting or star-delta starting
Mounting	Horizontal foot mounting, flange mounting : B3; B5; B14; B34; B35;V15;V36
Insulation class and Temperature rise	Adopting class F insulation and checking permissible limits of temperature rise against that of class B to improve the insulation reliability
Rotor winding	Squirrel cage, aluminum conductor with end-ring and wafer blades integrally cast
Environmental Conditions	Place : Non-hazardous, Shaded Ambient temperature : -20°C to 40°C Relative humidity : Less than 90% RH(non-condensation) Altitude : Up to 1,000 metres above sea level
Drive method	Belt service
Direction of Rotation	Standard motors are suitable for operation in either direction of rotation Direction of rotation of motor can be reversed by interchanging any two of the power lines
Test procedure	IEC and full voltage measuring starting operation
Shaft	Carbon steel, round shaft with key
Bearing	Grease pre-packed shielded ball bearing
Lubrication	Lithium-base grease (Shell Alvania R3)
Painting	Phenolic rust-proof base plus lacquer surface finish; Painting in blue colour
Nameplate	Aluminium for MS, Stainless steel for WY
Grounding Terminal	NE set inside the terminal base

Motors can be customised in accordance to customers' requirements:

- | | | |
|---------------------------|---|---|
| 1. IP56 | 7. Corrosive-proof | 13. Grease relief for frames down to 100L |
| 2. IP65, 66 | 8. PTC thermister for heater thermal protection | 14. Sun Canopy |
| 3. Class H Insulation | 9. Anti-condensation Heater | 15. Brake Motor |
| 4. Multi-Speed | 10. Special Shaft Extension | 16. TENV Motors |
| 5. Special Paint Finished | 11. Inverter duty application | 17. Extend Lead Wires |
| 6. Special volt/hz | 12. Double ended Shaft | 18. High Temp Resistance |



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