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CE

WY-YH series

**High Temperature Resistant
Low Voltage Three-phase
Squirrel-Cage Induction Motor**



**Certified by TÜV SÜD PSB : 2 hours at 300°C and 400°C
Complied with BS 7346 : Part 2 : 1990**

“Specification for powered smoke and heat exhaust ventilators”

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

Introduction

High Temperature Resistant Motors are specially designed for demanding and critical applications, such as fire emergencies in built-up areas. These motors play a life-saving role in the swift extraction and clearance of smoke and toxic fumes at high temperatures during emergencies to reduce casualties as well as facilitate the rescue operations.

These motors are compliant to BS 7346 : Part 2 : 1990 "Specifications for powered smoke and heat exhaust ventilators."

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

Class of performance in accordance to BS 7346 : Part 2 : 1990 Specifications for powered smoke and heat exhaust ventilators

Class	Temperature (°C)	Duration (hr)
A	150	5
B	250	2
C	300	0.5
D	300	1
E	400	2
F	600	1.5
G	650	1
H	840	Achieved in 0.5 hr (no rated duration)

Time Rating

Continuous rating S1 to IEC 60034 , BS 4999 and AS 1359 part 30 with follow-up emergency rating to 250°C for 180 mins, 300°C for 60 mins or even up to 400°C for 60 mins in accordance to BS 7346 : Part 2 : 1990.

Bearing and Lubrication System

Anti-friction ball-bearings with heat resistant silicon thickened grease.

Finish

Phenolic rustproof base plus lacquer surface finish painting in red colour.

Altitude

Standard motors: Max 1,000m above sea-level. Special requirements can be made upon request.



PERFORMANCE DATA

Motor types WY-YH, 50Hz (2P/3000rpm, 4P/1500rpm, 6P/1000rpm, 8P/750rpm, 10P/600rpm)

Rated Power KW	HP	Pole	Frame Size	Rated Speed (RPM)	Current			Power Factor COSØ	Efficiency %	Locked Current Rated Current	Rated Torque Nm	Locked Torque Rated Torque	Maximum Torque Rated Torque	Moment of Inertia J Kgm ²	Weight Kg
					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	0.9	2.1	2.2	0.00009	11
0.18	0.24	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
		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
0.25	0.33	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
		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
0.37	0.5	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
		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
0.55	0.75	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
		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
0.75	1	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
		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
1.1	1.5	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
		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
1.5	2	2	90S	2840	3.50	3.30	3.20	0.84	79.0	7.0	5.04	2.2	2.3	0.00120	22
		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
2.2	3	2	90L	2840	4.90	4.60	4.40	0.85	81.0	7.0	7.40	2.2	2.3	0.00140	25
		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
3	4	2	100L	2830	6.40	6.00	5.80	0.87	83.0	7.5	10.00	2.2	2.3	0.00290	33
		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
3.7	5	2	112M	2880	7.59	7.21	6.95	0.88	84.2	7.5	12.27	2.2	2.3	0.00500	40
		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
4	5.5	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	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	53.1	1.9	2.0	0.06490	94
5.5	7.5	2	132S-1	2910	11.00	10.50	10.00	0.88	86.0	7.5	18.1	2.2	2.3	0.01040	59
		4	132S	1445	12.00	11.00	11.00	0.83	85.0	7.0	36.4	2.3	2.3	0.02050	61
		6	132M-2	960	13.00	12.00	11.80	0.77	84.0	6.5	54.7	2.1	2.1	0.04310	75
		8	160M-2	720	13.60	12.90	12.30	0.74	83.0	6.0	72.9	2.0	2.0	0.08210	106
7.5	10	2	132S-2	2905	15.00	14.30	13.60	0.88	87.0	7.5	24.7	2.2	2.3	0.01210	62
		4	132M	1445	16.00	15.00	14.50	0.84	87.0	7.0	49.6	2.3	2.3	0.02960	73
		6	160M	970	17.00	16.00	15.40	0.77	86.0	6.5	73.8	2.0	2.1	0.08000	108
		8	160L	720	18.00	17.00	16.30	0.75	85.5	6.0	99.5	2.0	2.0	0.11410	128
11	15	2	160M-1	2935	22.00	20.90	19.90	0.89	88	7.5	36.10	2.2	2.3	0.0370	107
		4	160M	1460	23.00	22.00	21.00	0.84	88	7.0	72.70	2.2	2.3	0.0724	113
		6	160L	970	24.00	23.00	21.70	0.78	87.5	6.5	109.40	2.0	2.1	0.0108	131
		8	180L	730	25.00	24.00	22.60	0.76	87.5	6.6	147.50	2.2	2.8	0.1870	170
15	20	2	160M-2	2935	29.00	27.00	26.20	0.89	89	7.5	49.23	2.2	2.3	0.0432	117
		4	160L	1460	30.00	28.00	27.00	0.85	89	7.5	99.14	2.2	2.3	0.0929	133
		6	180L	970	31.00	29.00	28.00	0.81	89	7.0	149.20	2.0	2.1	0.1670	171



PERFORMANCE DATA

Motor types WY-YH, 50Hz (2P/3000rpm, 4P/1500rpm, 6P/1000rpm, 8P/750rpm, 10P/600rpm)

Rated Power		POLE	Frame	Rated	Current			Power	Efficiency	Locked Current	Rated	Locked Torque	Maximum Torque	Moment of	Weight
KW	HP		Size	Speed	380V	400V	415V	Factor		Rated Current	Torque	Rated Torque	Rated Torque	Inertia J	
				(RPM)	(A)	(A)	(A)	COSØ	%		Nm			Kgm ²	Kg
18.5	25	2	160L	2935	35.00	33.00	31.70	0.90	90	7.5	60.71	2.2	2.3	0.0525	134
		4	180M	1470	36.00	34.00	32.60	0.86	90.5	7.5	122.27	2.2	2.3	0.1350	167
		6	200L-1	975	38.00	36.00	34.40	0.81	90	7.0	184.00	2.1	2.1	0.3020	216
		8	225S	730	40.00	38.00	36.20	0.76	90	6.6	248.74	2.2	3.0	0.4810	270
22	30	2	180M	2940	41.00	39.00	37.10	0.90	90	7.5	72.20	2.0	2.3	0.0710	169
		4	180L	1470	42.00	40.00	38.00	0.86	91	7.5	145.40	2.2	2.3	0.1360	181
		6	200L-2	975	45.00	42.00	40.70	0.83	90	7.0	218.83	2.1	2.1	0.3420	225
		8	225M	730	47.00	44.00	42.50	0.78	90.5	6.6	295.00	2.0	2.9	0.5310	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	0.1190	220
		4	200L	1470	58.00	55.00	52.50	0.86	92	7.2	198.27	2.2	2.3	0.2450	232
		6	225M	980	58.00	55.00	52.50	0.84	91.5	7.0	298.40	2.0	2.1	0.5250	286
		8	250M	730	63.00	60.00	57.00	0.79	91	6.6	402.27	1.9	2.8	0.8090	370
37	50	2	200L-2	2945	68.00	64.00	61.50	0.90	92	7.5	121.43	2.0	2.3	0.1330	239
		4	225S	1475	70.00	66.00	63.00	0.87	92.5	7.2	244.54	2.2	2.3	0.3900	287
		6	250M	980	71.00	68.00	64.20	0.86	92	7.0	368.00	2.1	2.1	0.8070	380
		8	280S	735	78.00	74.00	70.60	0.79	91.5	6.6	496.14	2.0	2.4	1.3810	475
45	60	2	225M	2950	81.00	77.00	73.30	0.90	92.3	7.5	147.68	2.0	2.3	0.2210	297
		4	225M	1475	85.00	80.00	77.00	0.87	92.8	7.2	297.41	2.2	2.3	0.4500	322
		6	280S	980	86.00	82.00	77.80	0.86	92.5	7.0	447.60	2.1	2.7	1.3340	465
		8	280M	735	95.00	90.00	86.00	0.79	92	6.6	603.41	2.0	2.4	1.7210	555
		10	315S	590	100.00	95.00	92.00	0.75	91.5	6.2	728.31	1.5	2.0	5.1000	890
55	75	2	250M	2965	100.00	95.00	90.50	0.90	92.5	7.5	180.50	2.0	2.3	0.3050	380
		4	250M	1475	103.00	98.00	93.20	0.87	93	7.2	363.50	2.2	2.3	0.6400	385
		6	280M	980	105.00	100.00	95.00	0.86	92.8	7.0	547.10	2.1	2.7	1.5980	540
		8	315S	735	115.00	110.00	104.00	0.81	92.8	6.6	737.50	1.8	2.2	4.5900	905
		10	315M	590	122.00	115.00	111.00	0.75	92	6.2	890.16	1.5	2.0	6.1000	965
75	100	2	280S	2965	134.00	127.00	121.20	0.90	93	7.5	246.14	2.0	2.3	0.5840	510
		4	280S	1485	140.00	133.00	127.00	0.87	93.8	7.2	495.68	2.2	2.3	1.0450	510
		6	315S	935	142.00	135.00	128.50	0.86	93.5	7.0	746.00	2.0	2.4	3.9400	861
		8	315M	735	150.00	145.00	136.00	0.81	93	6.6	1005.68	1.8	2.2	5.3600	981
		10	315L-1	590	163.00	155.00	150.00	0.76	92.5	6.2	1213.86	1.5	2.0	6.9000	1040
90	125	2	280M	2965	160.00	152.00	145.00	0.91	93.8	7.5	295.36	2.0	2.3	0.6650	540
		4	280M	1485	167.00	159.00	151.00	0.87	94.2	7.2	594.82	2.2	2.3	1.3960	600
		6	315M	935	170.00	160.00	154.00	0.86	93.8	7.0	895.20	2.0	2.4	4.5800	940
		8	315L-1	735	180.00	170.00	163.00	0.82	93.8	6.6	1206.80	1.8	2.3	6.1100	1070
		10	315L-2	590	191.00	182.00	176.00	0.77	93	6.2	1456.63	1.5	2.0	7.2000	1130
110	150	2	315S	2975	196.00	186.00	177.00	0.91	94	7.1	361.00	1.8	2.2	1.1300	920
		4	315S	1485	201.00	191.00	182.00	0.88	94.5	6.9	717.00	2.1	2.2	2.9800	930
		6	315L-1	935	207.00	197.00	187.00	0.86	94	6.7	1094.10	2.0	2.4	5.2300	1110
		8	315L-2	735	220.00	205.00	199.00	0.82	94	6.4	1475.00	1.9	2.3	6.5500	1160
		10	355M-1	590	229.90	218.40	210.50	0.78	93.2	6.0	1780.32	1.3	2.0	9.4000	1820
132	180	2	315M	2975	234.00	222.00	212.00	0.91	94.5	7.1	433.20	1.8	2.2	1.7500	970
		4	315M	1485	241.00	229.00	218.00	0.88	94.8	6.9	872.40	2.1	2.2	3.4800	1010
		6	315L-2	935	245.00	233.00	222.00	0.87	94.2	6.7	1312.96	2.0	2.3	5.5400	1175
		8	355M-1	745	261.00	248.00	239.00	0.82	93.7	6.4	1691.90	1.8	2.0	12.9000	1800
		10	355M-2	590	275.00	261.30	251.80	0.78	93.5	6.0	2136.39	1.3	2.0	9.5000	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	2.0100	1080
		4	315L-1	1485	288.00	273.00	261.00	0.89	94.9	6.9	1057.45	2.1	2.2	3.9600	1070
		6	355M-1	990	292.30	277.70	267.70	0.88	94.5	6.7	1543.27	1.9	2.0	9.2700	1690
		8	355M-2	745	314.70	299.00	288.20	0.82	94.2	6.4	2050.79	1.8	2.0	14.3000	1890
		10	355L	590	333.30	316.70	305.20	0.78	93.5	6.0	2589.29	1.3	2.0	9.6000	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	2.2700	1170
		4	315L-2	1485	360.00	342.00	326.00	0.89	95	6.9	1321.82	2.1	2.2	4.4700	1170
		6	355M-2	990	364.60	346.40	333.90	0.88	94.7	6.7	1929.09	1.9	2.0	10.8000	1870
		8	355L	745	387.40	368.10	354.80	0.83	94.5	6.4	2563.49	1.8	2.0	15.9000	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	3.2960	1690
		4	355M	1490	442.90	420.70	405.50	0.90	95.3	6.9	1602.18	2.1	2.2	7.6400	1720
		6	355L	990	454.80	432.10	416.50	0.88	94.9	6.7	2411.36	1.9	2.0	11.8000	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	3.9500	1850



PERFORMANCE DATA

Motor types WY-YH, 60Hz (For 2, 4, 6, 8 P)

Rated Power KW	HP	Pole	Frame Size	Rated Speed (RPM)	Current					Power Factor COSØ	Efficiency %	Locked Current Rated Current	Rated Torque Nm	Locked Torque Rated Torque	Maximum Torque Rated Torque	Moment of Inertia J Kgm ²	Weight Kg
					220V (A)	380V (A)	440V (A)	460V (A)	480V (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
		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
0.37	0.5	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
		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
0.55	0.75	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
		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
0.75	1	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
		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
1.1	1.5	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
		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
1.5	2	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
		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
2.2	3	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
		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
3	4	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
		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
3.7	5	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
		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
4	5.5	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
		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
5.5	7.5	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
		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
7.5	10	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
		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

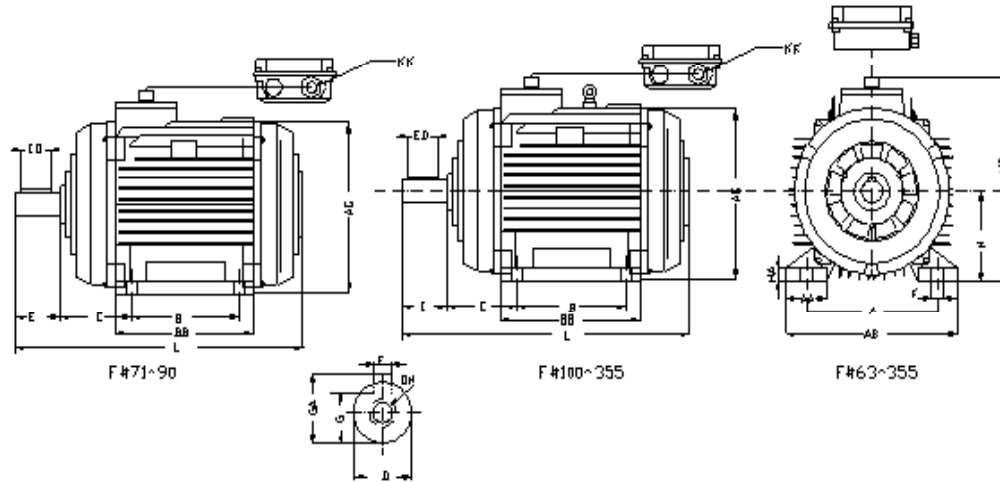


PERFORMANCE DATA

Motor types WY-YH, 60Hz (For 2, 4, 6, 8 & 10P)

Rated Power KW	Pole HP	Frame Size	Rated Speed (RPM)	Current					Power Factor COSφ	Efficiency %	Locked Current Rated Current	Rated Torque Nm	Locked Torque Rated Torque	Maximum Torque Rated Torque	Moment of Inertia J Kgm ²	Weight Kg	
				220V (A)	380V (A)	440V (A)	460V (A)	480V (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	167
		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

WY-YH 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

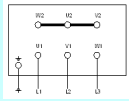
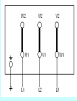
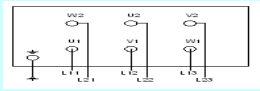

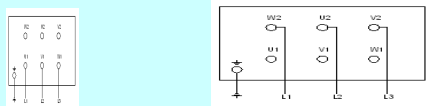
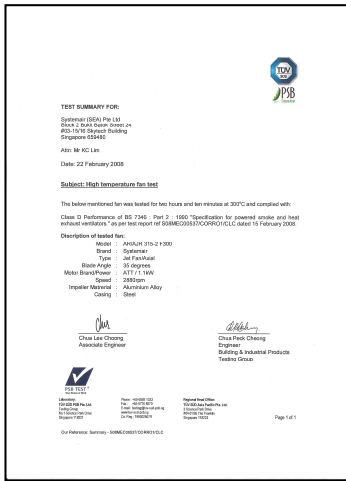
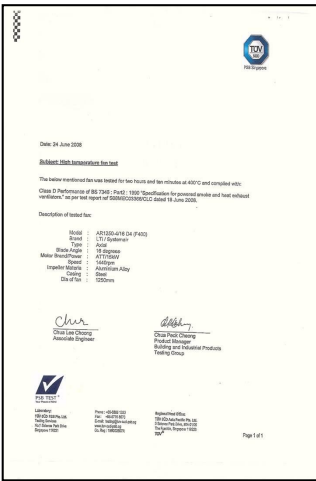

Voltage / Frequency

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 DIAGRAMS

A. Standard three phase motors with cage rotor:	
  	
<p style="text-align: center;"> Star connection Delta connection Connection to star-delta starter </p>	
B. Multi-speed motors:	
a. Tapped Winding:	b. With 2 separate windings:
	
<p style="text-align: center;"> Low speed High speed </p>	<p style="text-align: center;"> Low speed High speed </p>
<p style="color: red;">Motors can be customized on request:</p> <ol style="list-style-type: none"> 1. Multi Speed 2. Complete with Brake 3. Complete with PTC Thermister 4. IP 56, 65, 66 5. Special Paint Finish 6. Double Ended Shaft 7. Special Shaft Dimension 8. Special Volt / Hz 9. C/W Anti-condensation Heater 10. Extend Lead Wire 11. Corrosion-proof 12. Inverter Duty 	<p style="text-align: center;"> Certificate for 300°C Certificate for 400°C </p>
	 
 <div style="display: inline-block; vertical-align: middle;"> <h2 style="color: red;">Att Electric & Machinery Pte Ltd</h2> <p>6 Fifth Lok Yang Road, Singapore 629757 Tel : 65-6261 3579 Fax : 65-6261 1263 Email : att@attelec.com Web : www.attelec.com</p> </div>	
<p>WY-YH 2/2009</p>	