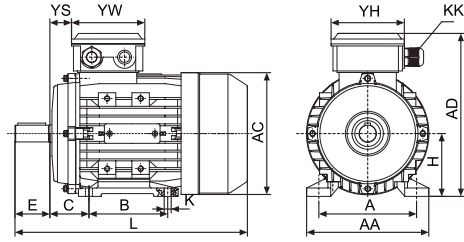
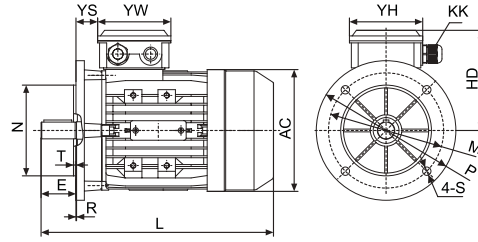




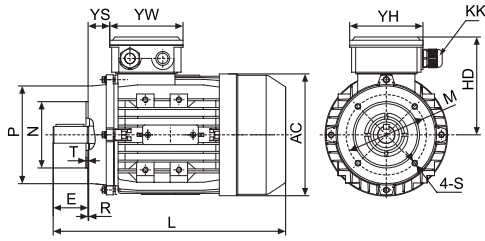
MSD series Three Phase Multi Speed Asynchronous Motors



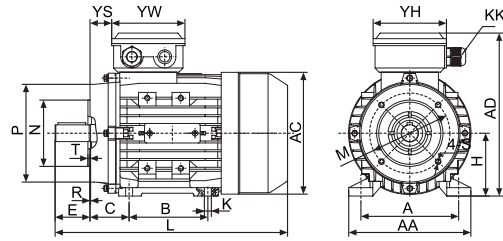
IM B3



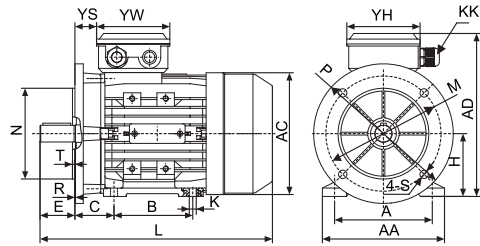
IM B5



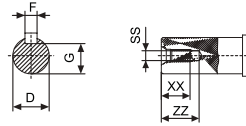
IM B14



IM B34



IM B35



Overall & Installation Dimensions

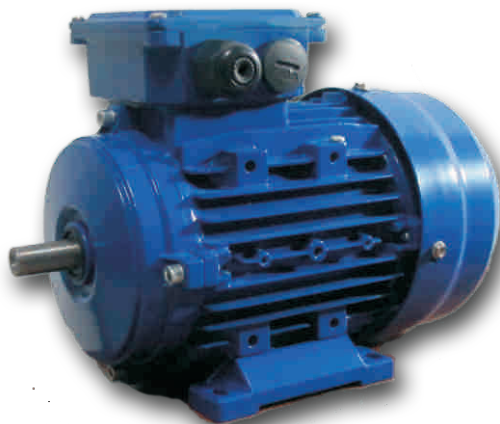
Frame	Foot Mounting				Shaft								General							
	H	A	B	C	D	E	F	G	K	SS	XX	ZZ	AA	AD	HD	AC	L	YS	YW	YH
56	56	90	71	36	ø9	20	3	7.2	5.8x8.8	M4	9	12	110	156	100	ø117	196	14	88	88
63	63	100	80	40	ø11	23	4	8.5	7x10	M4	10	14	120	171	108	ø130	220	14	94	94
71	71	112	90	45	ø14	30	5	11	7x10	M5	12	17	132	186	115	ø147	241(255)	20	94	94
80	80	125	100	50	ø19	40	6	15.5	10x13	M6	16	21	160	213	133	ø163	290	27	105	105
90S	90	140	100	56	ø24	50	8	20	10x13	M8	19	25	175	229	139	ø183	312	30	105	105
90L1/L2	90	140	125	56	ø24	50	8	20	10x13	M8	19	25	175	229	139	ø183	337/367	30	105	105
100	100	160	140	63	ø28	60	8	24	12x15	M10	22	30	198	252	152	ø205	369/387	26	105	105
112	112	190	140	70	ø28	60	8	24	12x15	M10	22	30	220	279	167	ø229	395	32	112	112
132S	132	216	140	89	ø38	80	10	33	12x15	M12	28	37	252	318	186	ø265	437	38	112	112
132M/L	132	216	178	89	ø38	80	10	33	12x15	M12	28	37	252	318	186	ø265	475/501	38	112	112
160M/L	160	254	210/254	108	ø42	110	12	37	15x19	M16	36	45	290	384	224	ø325	640	64	143	143
180M/L	180	279	241/279	121	ø48	110	14	42.5	15x25	M16	36	45	340	440	260	ø368	730	73	190	190

Frame	B5						B14						B5R						B14B						KK	
	M	N	P	T	S	R	N	M	P	T	S	R	M	N	P	T	S	R	N	M	P	T	S	R		
56	ø100	ø80	ø120	3.0	ø7	0	ø50	ø65	ø80	2.5	M5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	1-M16x1.5
63	ø115	ø95	ø140	3.0	ø10	0	ø60	ø75	ø90	2.5	M5	0	-	-	-	-	-	-	ø80	ø100	ø120	3.0	M6	0	-	1-M16x1.5
71	ø130	ø110	ø160	3.5	ø10	0	ø70	ø85	ø105	2.5	M6	0	ø115	ø95	ø140	3.5	ø10	0	ø95	ø115	ø140	3.0	M8	0	-	1-M20x1.5
80	ø165	ø130	ø200	3.5	ø12	0	ø80	ø100	ø120	3.0	M8	0	ø130	ø110	ø160	3.5	ø10	0	ø110	ø130	ø160	3.5	M8	0	-	1-M20x1.5
90	ø165	ø130	ø200	3.5	ø12	0	ø95	ø115	ø140	3.0	M8	0	ø130	ø110	ø160	3.5	ø10	0	ø110	ø130	ø160	3.5	M8	0	-	1-M20x1.5
100	ø215	ø180	ø250	4.0	ø15	0	ø110	ø130	ø160	3.5	M8	0	ø165	ø130	ø200	4.0	ø12	0	ø130	ø165	ø200	3.5	M10	0	-	2-M20x1.5
112	ø215	ø180	ø250	4.0	ø15	0	ø110	ø130	ø160	3.5	M8	0	ø165	ø130	ø200	4.0	ø12	0	ø130	ø165	ø200	3.5	M10	0	-	2-M20x1.5
132	ø265	ø230	ø300	4.0	ø15	0	ø130	ø165	ø200	4.0	M10	0	ø215	ø180	ø250	4.0	ø15	0	ø180	ø215	ø250	4.0	M12	0	-	2-M20x1.5
160	ø300	ø250	ø350	5.0	ø19	0	ø180	ø215	ø250	4.0	M12	0	-	-	-	-	-	-	-	-	-	-	-	-	-	2-M20x1.5

**This frame size has two housing sizes, the rated output is for normal "L" size, and increased output for the bigger "L" size (refer to the figures in the bracket("))



MSD series Three Phase Multi Speed Asynchronous Motors



Technical Data (at 400V 50Hz)

Model	Power(kW)		Speed(r/min)		Eff %		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		Ts/Tr(Times)		Ist/In(Times)		Tmax/Tr(Times)	
	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P
MSD71A 2/4	0.3	0.22	2750	1350	60	55	0.8	0.73	0.9	0.79	1.04	1.56	1.7	1.7	3.5	3.5	1.9	1.9
MSD71B 2/4	0.45	0.3	2790	1380	63	58	0.8	0.73	1.29	1.02	1.54	2.08	2	2	4	4	2	2
MSD80A 2/4	0.55	0.45	2800	1380	65	64	0.84	0.75	1.45	1.35	1.88	3.11	2	2	4.5	4.5	2.1	2.1
MSD80B 2/4	0.75	0.6	2800	1400	67	68	0.86	0.77	1.88	1.65	2.56	4.09	1.8	1.8	4.5	4.5	2	2
MSD90S 2/4	1.25	0.95	2820	1400	72	68	0.86	0.82	2.91	2.46	4.23	6.48	2	2	5	5	2	2
MSD90L 2/4	1.7	1.32	2830	1400	73	70	0.86	0.83	3.91	3.28	5.74	9	2	2	5	5	2	2
MSD100LA 2/4	2.4	1.84	2830	1410	73	76	0.86	0.83	5.52	4.21	8.1	12.46	2	2	5.5	5	2	2
MSD100LB 2/4	3.3	2.6	2840	1420	74	78	0.86	0.85	7.48	5.66	11.1	17.19	2	1.9	5.5	5	2	1.9
MSD112M 2/4	4.5	4	2860	1430	77	79	0.85	0.86	9.92	8.5	15.03	26.71	2	1.8	5.5	5	2.2	2
MSD132S 2/4	6	5	2860	1440	79	82	0.84	0.86	13.05	10.23	20.03	33.16	2	1.5	5.5	5.5	2.2	1.9
MSD132M 2/4	8	6.6	2870	1440	82	84	0.84	0.86	16.76	13.09	26.62	43.77	2	2	6	6	2.2	2.2
MSD160M 2/4	11	9	2920	1450	84	84	0.85	0.82	22.23	18.86	35.98	59.28	1.8	1.8	7	6	2	2
MSD160L 2/4	15	12	2920	1450	86	84	0.87	0.83	28.94	24.84	49.06	79.03	2	2	7	7	2.2	2.2

Technical Data (at 400V 50Hz)

Model	Power(kW)		Speed(r/min)		Eff %		Power Factor (CosΦ)		Current (A)		Rated Torque (N.M)		Ts/Tr(Times)		Ist/In(Times)		Tmax/Tr(Times)	
	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P	4P	8P
MSD80A 4/8	0.25	0.15	1380	680	58	40	0.77	0.6	0.81	0.9	1.73	2.11	2	2	4.5	3	2	2
MSD80B 4/8	0.45	0.25	1390	685	68	48	0.8	0.6	1.19	1.25	3.09	3.49	1.8	2	4.5	3	2	2
MSD90S 4/8	0.55	0.3	1400	690	68	50	0.83	0.61	1.41	1.42	3.75	4.15	1.8	2	4.5	3.5	2	2
MSD90L 4/8	0.8	0.45	1400	690	68	53	0.83	0.63	2.05	1.95	5.46	6.23	1.8	1.6	4	3	1.9	1.8
MSD100LA 4/8	1.25	0.6	1400	700	69	54	0.82	0.56	3.19	2.86	8.53	8.16	1.8	2	5	3.5	2	2
MSD100LB 4/8	1.76	0.88	1400	700	71	58	0.84	0.56	4.26	3.91	12	12	1.8	2	5.5	4	2	2
MSD112M 4/8	2.2	1.5	1420	700	75	64	0.82	0.61	5.16	5.54	14.8	20.46	2	2	6	4	2	2
MSD132S 4/8	3.3	2.2	1430	705	78	70	0.84	0.64	7.27	7.09	22.04	29.8	2	2	6	5	2	2
MSD132M 4/8	4.5	3	1430	705	82	77	0.85	0.65	9.32	8.65	30.05	40.64	2	2	6	5	2	2
MSD160MA 4/8	5.5	4	1440	710	82	77	0.81	0.69	11.95	10.87	36.48	53.8	2.1	1.7	7.6	4.6	2.3	2.2
MSD160MB 4/8	7.5	5	1440	710	82	79	0.89	0.78	14.83	11.71	49.74	67.25	1.7	1.6	6.6	4.5	2.3	2.1
MSD160L 4/8	10	7	1450	715	84	82	0.9	0.78	19.09	15.8	65.86	93.5	1.8	1.9	5.5	5	2.3	2.1

MSD series Three Phase Multi Speed Asynchronous Motors



Technical Data (at 400V 50Hz)

Model	Power (kW)		Speed (r/min)		Eff %		Power Factor (Cosφ)		Current (A)		Rated Torque (N.M)		Ts/Tr(Times)		Ist/In(Times)		Tmax/Tr(Times)	
	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P	4P	6P
MSD80A 4/6	0.3	0.22	1400	910	60	55	0.74	0.69	0.98	0.84	2.05	2.31	2	1.8	4.5	4	2	2
MSD80B 4/6	0.45	0.3	1410	920	63	58	0.75	0.7	1.37	1.07	3.05	3.11	2	1.8	4.5	4	2	2
MSD90S 4/6	0.66	0.45	1410	920	66	61	0.76	0.65	1.9	1.64	4.47	4.67	1.7	1.7	5	4.5	2	2
MSD90L 4/6	0.88	0.6	1420	930	70	64	0.77	0.67	2.36	2.02	5.92	6.16	1.7	1.7	5	4.5	2	2
MSD100LA 4/6	1.32	0.88	1420	940	72	67	0.85	0.75	3.11	2.3	8.88	8.94	1.8	1.8	6	5	2	2
MSD100LB 4/6	1.76	1.2	1430	950	74	70	0.85	0.75	4.04	3.3	11.75	12.06	1.8	1.8	6	5	2	2
MSD112M 4/6	2.2	1.5	1430	950	76	70	0.8	0.7	5.22	4.42	14.69	15	2	1.8	6	5	2.2	2.2
MSD132S 4/6	3.3	2.2	1440	960	82	78	0.81	0.72	7.17	5.65	21.9	21.9	2	2	7	6	2.2	2.2
MSD132M 4/6	4.5	3	1450	970	83	80	0.82	0.74	9.54	7.31	29.6	29.5	2	2	7	6	2.3	2.3
MSD160M 4/6	6.6	4.5	1460	970	84	81	0.84	0.78	13.5	10.3	43.2	44.3	1.8	1.8	7	6	2.3	2.3
MSD160L 4/6	8.8	6	1460	970	84	81	0.85	0.79	17.8	13.5	57.6	59.1	1.8	1.8	7	6	2.3	2.3

Technical Data (at 400V 50Hz)

Model	Power (kW)		Speed (r/min)		Eff %		Power Factor (Cosφ)		Current (A)		Rated Torque (N.M)		Ts/Tr(Times)		Ist/In(Times)		Tmax/Tr(Times)	
	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P	6P	8P
MSD80A 6/8	0.18	0.11	900	680	50	42	0.69	0.65	0.75	0.58	1.91	1.54	1.5	1.5	3.5	3	1.5	1.5
MSD80B 6/8	0.25	0.18	920	700	54	46	0.7	0.66	0.95	0.86	2.6	2.46	1.7	1.5	3.5	3	1.5	1.7
MSD90S 6/8	0.37	0.25	930	680	58	50	0.72	0.68	1.28	1.06	3.8	3.51	1.5	1.4	4	3	1.8	1.7
MSD90L 6/8	0.55	0.37	940	685	63	54	0.73	0.69	1.73	1.43	5.59	5.16	1.5	1.4	4	3	1.8	1.7
MSD100LA 6/8	0.75	0.55	950	700	69	63	0.74	0.74	2.12	1.7	7.54	7.5	1.5	1.4	5	4	2	1.8
MSD100LB 6/8	1.03	0.75	955	705	71	65	0.76	0.76	2.76	2.19	10.3	10.16	1.5	1.4	5	4	2	1.8
MSD112M 6/8	1.25	0.95	960	710	72	64	0.71	0.71	3.53	3.02	12.43	12.78	1.5	1.5	5	4	2	1.8
MSD132S 6/8	2.2	1.5	970	720	76	70	0.71	0.7	5.88	4.42	21.66	19.9	1.6	1.4	6	5.5	2.3	2
MSD132M 6/8	3	1.85	970	720	78	74	0.71	0.7	7.82	5.01	29.54	24.37	1.6	1.4	6	5.5	2.3	2
MSD160MA 6/8	3.7	2.6	970	720	78	75	0.74	0.71	9.25	7.05	36.43	34.49	1.8	1.5	6	5.5	2.5	1.9
MSD160MB 6/8	4.5	3.3	970	720	79	76	0.78	0.72	10.54	8.7	44.3	43.77	1.8	1.7	6	5.5	2.5	2
MSD160L 4/6	6	4.5	973	720	80	77	0.79	0.73	13.7	11.55	59.89	59.69	1.8	1.7	6	5.5	2.5	2

Technical Data (at 400V 50Hz)

Model	Power (kW)		Speed (r/min)		Eff %		Power Factor (Cosφ)		Current (A)		Rated Torque (N.M)		Ts/Tr(Times)		Ist/In(Times)		Tmax/Tr(Times)	
	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P	2P	8P
MSD80A 2/8	0.37	0.08	2760	660	65	33	0.76	0.48	1.08	0.73	1.28	1.16	1.7	2	3.5	2.5	1.9	2.1
MSD80B 2/8	0.55	0.11	2780	670	67	35	0.78	0.5	1.52	0.91	1.89	1.57	1.7	2	4	3	1.9	2.2
MSD90S 2/8	0.75	0.18	2800	670	67	43	0.79	0.52	2.05	1.16	2.56	2.57	1.8	2	4	3	2	2.3
MSD90L 2/8	1.1	0.3	2810	680	67	45	0.8	0.54	2.96	1.78	3.74	4.21	1.8	2	4	3.5	2	2.3
MSD100LA 2/8	1.5	0.37	2820	700	67	50	0.84	0.56	3.85	1.91	5.08	5.05	1.7	2.1	5	3.5	2	2.6
MSD100LB 2/8	2.2	0.55	2820	710	68	51	0.85	0.58	5.49	2.68	7.45	7.4	1.8	2.2	5	3.5	2	2.6
MSD112MA 2/8	2.6	0.75	2840	710	71	58	0.86	0.6	6.15	3.11	8.74	10.09	1.8	1.8	5.5	4	1.9	1.9
MSD112MB 2/8	3	0.9	2850	710	75	63	0.86	0.58	6.71	3.56	10.05	12.1	1.7	2	6.5	4.5	1.9	2.2
MSD132S 2/8	3.7	1.1	2890	710	81	65	0.83	0.57	7.94	4.29	12.22	14.8	1.7	1.7	7	5	1.9	1.9
MSD132M 2/8	5.5	1.5	2900	720	82	66	0.85	0.57	11.39	5.75	18.11	19.9	1.8	1.8	7	5	1.9	1.9
MSD160M 2/8	7.5	2.2	2900	720	80	73	0.87	0.58	15.55	7.5	24.7	29.18	2.3	2.5	7	5	2.3	2.5
MSD160L 2/8	9.5	3	2920	720	82	73	0.87	0.58	19.22	10.23	31.07	39.79	2.3	2.5	7	5	2.3	2.5

