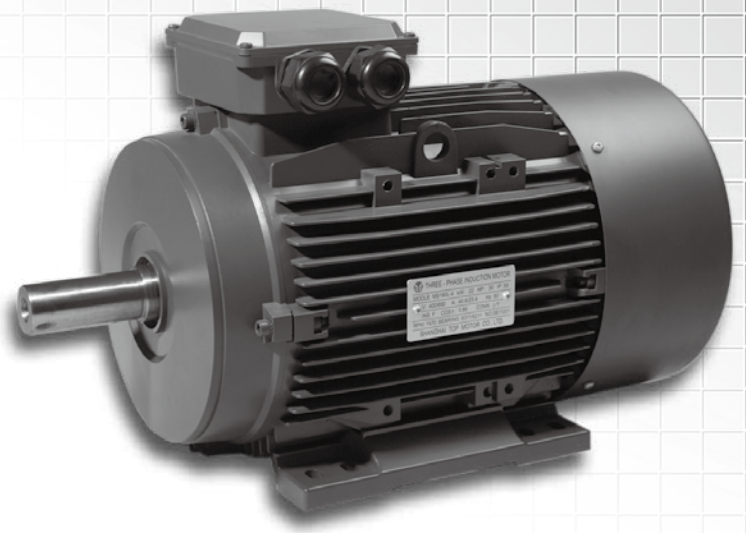
MS Series

Three-Phase Asynchronous Motors

Aluminum Housing

MS series aluminum housing three-phase asynchronous motors with latest design in entirety are made of selected quality materials and conform to the IEC standard.

MS motors have good performance, safety and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time light weight and simple construction. These series motors can be used for general drive.



MS Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	Tst/Tn (Times)	Tmax/Tn (Times)	Tmin/Tn (Times)	Ist/In (Times)	Noise dB(A)	W.T (kg)	Moment of inertia (kg*m^2)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
MS561–2	0.09	0.63	0.37	0.21	0.61	0.35	0.20	0.58	0.34	0.19	2800	55.6	49.6	39.2	0.67	2.4	2.6	2.2	3.5	58	2.80	0.000102
MS562–2	0.12	0.68	0.39	0.23	0.65	0.37	0.22	0.62	0.36	0.21	2840	65.6	61.8	53.2	0.71	2.3	2.6	2.1	4.3	58	2.90	0.000128
MS563–2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61	4.00	0.000142
MS631–2	0.18	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	2780	66.5	64.2	56.8	0.77	2.3	2.5	2.4	4.1	61	4.00	0.000150
MS632–2	0.25	1.19	0.69	0.40	1.14	0.65	0.38	1.09	0.63	0.36	2780	69.8	68.8	62.8	0.79	2.6	2.5	2.4	4.3	61	4.20	0.000171
MS633–2	0.37	1.72	1.00	0.57	1.65	0.95	0.55	1.58	0.91	0.53	2750	71.4	71.2	65.9	0.79	2.8	2.6	2.6	4.7	62	4.70	0.000203
MS711–2	0.37	1.70	0.99	0.57	1.63	0.94	0.54	1.56	0.90	0.52	2830	71.3	70.4	65.2	0.8	2.8	2.9	2	5.9	64	5.20	0.000314
MS712–2	0.55	2.52	1.46	0.84	2.41	1.39	0.80	2.31	1.34	0.77	2815	71.6	71	66.1	0.8	2.7	2.7	1.8	6	64	6.20	0.000384
MS713–2	0.75	3.25	1.88	1.08	3.11	1.79	1.04	2.98	1.72	0.99	2820	73.8	73.9	70.3	0.82	3.0	3.0	2.0	6.6	65	7.20	0.000476
MS800–2	0.55	2.38	1.38	0.79	2.28	1.31	0.76	2.18	1.26	0.73	2810	73.1	73.4	69.7	0.83	2.7	2.5	1.9	5.3	64	7.30	0.000752
MS801–2	0.75	3.15	1.83	1.05	3.02	1.73	1.01	2.89	1.67	0.96	2830	75.2	75.6	72.2	0.83	3	2.8	2	6.2	67	8.70	0.000880
MS802–2	1.1	4.40	2.55	1.47	4.21	2.42	1.40	4.04	2.33	1.35	2840	79	79.8	77.7	0.83	2.6	3.1	2.6	6.1	67	10.50	0.001072
MS803–2	1.5	5.70	3.30	1.90	5.46	3.14	1.82	5.23	3.02	1.74	2820	81.2	82.5	81.3	0.85	3.2	3	2.5	7.2	70	11.20	0.001329
MS90S–2	1.5	5.73	3.32	1.91	5.48	3.15	1.83	5.25	3.04	1.75	2850	80.8	81.2	78.9	0.85	2.8	3.3	2.6	7.7	72	12.00	0.001579
MS90M–2	1.85	7.04	4.08	2.35	6.73	3.87	2.24	6.45	3.73	2.15	2850	82.1	82.6	80.7	0.84	4.2	3.6	2.9	7.8	72	13.30	0.001846
MS90L1–2	2.2	8.19	4.74	2.73	7.84	4.51	2.61	7.51	4.34	2.50	2860	82.9	83.4	81.4	0.85	3.7	3.9	3.3	8.8	72	14.50	0.002123
MS90L2–2	3	11.1	6.43	3.70	10.6	6.11	3.54	10.2	5.89	3.39	2830	82.4	83.5	82.3	0.86	4.4	4.2	3.5	8	74	15.00	0.002491
MS100L1–2	3	10.9	6.32	3.64	10.4	6.00	3.48	10.0	5.78	3.33	2875	83.9	84.5	83	0.86	2.8	3.2	2	8.1	76	20.00	0.003475
MS100L2–2	4	13.8	7.99	4.60	13.2	7.59	4.40	12.6	7.31	4.22	2870	85.5	86.5	85.8	0.89	3.2	3.4	2.2	8.8	77	24.00	0.004247
MS112M–2	4	13.2	7.63	4.40	12.6	7.25	4.20	12.1	6.99	4.03	2870	85.6	87.0	86.8	0.93	2.6	2.85	1.75	8.1	77	26.00	0.005845
MS112L–2	5.5	18.0	10.4	6.00	17.2	9.9	5.74	16.5	9.5	5.50	2890	87.1	88	87.6	0.92	3.1	3.3	2	9.4	78	29.30	0.007429
MS132S1–2	5.5	18.5	10.7	6.17	17.7	10.2	5.90	17.0	9.8	5.65	2900	86.6	87.4	86.5	0.90	2.25	3.1	1.5	7.9	80	38.40	0.011224
MS132S2–2	7.5	24.6	14.2	8.19	23.5	13.5	7.84	22.5	13.0	7.51	2900	88.0	88.8	88.3	0.91	2.4	3.25	1.5	8.5	80	41.30	0.013838
MS132M1–2	9.2	30.8	17.8	10.3	29.5	17.0	9.83	28.3	16.3	9.42	2930	88	88	86.4	0.89	2	2.2	1.2	7.5	81	48.20	0.016551
MS132M2–2	11	36.3	21.0	12.1	34.7	20.0	11.6	33.3	19.2	11.1	2930	88.4	88.6	87.5	0.9	2	2.2	1.2	7.5	83	52.50	0.018641
MS160M1–2	11	36.4	21.1	12.1	34.8	20.0	11.6	33.4	19.3	11.1	2920	88.8	89.4	88.6	0.89	2.6	2.95	1.85	7.1	86	76.00	0.041164
MS160M2–2	15	49.3	28.5	16.4	47.2	27.1	15.7	45.2	26.1	15.1	2910	89.1	90.0	89.6	0.90	2.2	2.8	1.8	6.4	86	83.00	0.048985
MS160L–2	18.5	59.3	34.4	19.8	56.8	32.6	18.9	54.4	31.5	18.1	2930	90.3	90.9	90.3	0.91	2.9	3.05	1.65	8.4	86	92.30	0.059935
MS180M–2	22	71.3	41.3	23.8	68.2	39.2	22.7	65.3	37.8	21.8	2950	90	90.2	89.7	0.9	2	2.2	1.2	7.5	88	121.0	0.090185
MS200L1–2	30	95.9	55.5	32.0	91.8	52.8	30.6	87.9	50.8	29.3	2950	91.2	90.6	88.5	0.9	2	2.2	1.2	7.5	90	144.0	0.114999
MS200L2–2	37	117.3	67.9	39.1	112.2	64.5	37.4	107.5	62.2	35.8	2940	92	92.1	91.4	0.9	2	2.2	1.2	7.5	90	170.0	0.136738

MS Series IE1 Efficiency Motors Technical Data (at 50Hz)

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff			Power factor	Tst/Tn (Times)	Tmax/Tn (Times)	Tmin/Tn (Times)	Ist/In (Times)	Noise dB(A)	W.T (kg)	Moment of inertia (kg*m²)
		220V	380V	660V	230V	400V	690V	240V	415V	720V		100%	75%	50%								
MS561-4	0.06	0.54	0.31	0.18	0.52	0.30	0.17	0.50	0.29	0.17	1400	52.8	47.7	38.7	0.55	3.1	3.2	3	3.2	50	2.90	0.000190
MS562-4	0.09	0.71	0.41	0.24	0.68	0.39	0.23	0.65	0.38	0.22	1400	56.2	51.7	43.1	0.59	2.3	2.5	2.8	3.1	50	3.20	0.000240
MS563-4	0.12	0.89	0.51	0.30	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52	3.70	0.000265
MS631-4	0.12	0.89	0.51	0.30	0.85	0.49	0.28	0.81	0.47	0.27	1390	58.5	54.3	45.6	0.61	2.65	2.8	2.7	3.2	52	3.70	0.000273
MS632-4	0.18	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	1365	64.2	62.5	55.9	0.64	2.8	2.55	2.4	3.6	52	4.40	0.000338
MS633-4	0.25	1.45	0.84	0.48	1.39	0.80	0.46	1.33	0.77	0.44	1370	68.3	67.5	62.1	0.66	2.7	2.7	2.4	3.9	54	5.00	0.000408
MS711-4	0.25	1.38	0.80	0.46	1.32	0.76	0.44	1.27	0.73	0.42	1395	65.1	63.1	55.8	0.73	2	2.15	1.6	4.2	55	5.10	0.000561
MS712-4	0.37	1.90	1.10	0.63	1.82	1.05	0.61	1.74	1.01	0.58	1390	68.6	68.2	62.9	0.74	2.25	2.35	1.95	4.6	55	6.10	0.000714
MS713-4	0.55	2.81	1.63	0.94	2.69	1.54	0.90	2.57	1.49	0.86	1390	71.9	71.6	66.8	0.72	2.8	2.8	2.4	4.8	57	7.20	0.000920
MS801-4	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	1400	70.9	70.5	65.5	0.74	2.25	2.55	1.95	4.9	58	8.30	0.001350
MS802-4	0.75	3.36	1.94	1.12	3.21	1.85	1.07	3.08	1.78	1.03	1390	74.4	76.0	73.9	0.79	2.5	2.55	2.05	5.4	58	9.70	0.001793
MS803-4	1.1	4.90	2.84	1.63	4.69	2.69	1.56	4.49	2.60	1.50	1390	74.6	75.7	73.3	0.79	2.9	2.9	2.4	5.9	60	11.70	0.002236
MS90S-4	1.1	4.90	2.83	1.63	4.68	2.69	1.56	4.49	2.60	1.50	1400	75.5	76.7	74.4	0.78	2.9	2.7	2.15	6	61	11.70	0.002443
MS90L1-4	1.5	6.48	3.75	2.16	6.20	3.56	2.07	5.94	3.44	1.98	1410	79.6	80.2	78.0	0.76	3.4	3.3	2.7	6.9	61	15.00	0.003152
MS90L2-4	2.2	9.76	5.65	3.25	9.33	5.37	3.11	8.94	5.17	2.98	1410	78.9	79.4	77	0.75	3.8	2.6	3.2	7.2	63	17.60	0.004002
MS100L1-4	2.2	8.71	5.05	2.90	8.34	4.79	2.78	7.99	4.62	2.66	1420	82.0	83.3	82.3	0.81	2.4	2.7	2.15	6.3	64	19.20	0.005977
MS100L2-4	3	11.5	6.64	3.82	11.0	6.31	3.66	10.5	6.08	3.51	1430	83.7	84.8	83.8	0.82	2.6	3	2.15	6.8	64	22.50	0.007591
MS100L3-4	4	15.2	8.80	5.07	14.5	8.36	4.85	13.9	8.06	4.65	1430	84.2	85.5	85.3	0.82	2.2	2.3	1.5	7	65	27.30	0.009626
MS112M-4	4	14.9	8.60	4.95	14.2	8.17	4.74	13.6	7.88	4.54	1440	84.7	86.0	85.4	0.83	2.5	2.9	2.05	7.1	65	29.00	0.012079
MS112L-4	5.5	20.4	11.8	6.81	19.5	11.2	6.51	18.7	10.8	6.24	1435	85.9	87.1	86.6	0.82	2.5	2.95	2.2	7.2	68	35.70	0.014229
MS132S-4	5.5	19.6	11.4	6.54	18.76	10.8	6.25	18.0	10.4	5.99	1445	86.4	87.8	87.7	0.85	2.15	2.85	1.75	7.5	71	39.00	0.024846
MS132M-4	7.5	25.9	15.0	8.62	24.7	14.2	8.24	23.7	13.7	7.90	1450	87.6	88.8	88.5	0.87	2.1	2.9	1.65	8.6	71	48.60	0.033131
MS132L1-4	9.2	31.3	18.1	10.4	30.0	17.2	10.0	28.7	16.6	9.6	1450	88.6	89.5	89.1	0.87	2.8	2.4	2	8.4	74	56.50	0.039339
MS132L2-4	11	37.3	21.6	12.4	35.6	20.5	11.9	34.2	19.8	11.4	1450	90.1	91.1	91	0.86	3	2.5	2	8.9	74	64.00	0.045478
MS160M-4	11	39.7	23.0	13.2	37.9	21.8	12.6	36.4	21.0	12.1	1450	87.7	89.6	90.3	0.83	2.05	2.25	1.55	6.1	75	73.00	0.077369
MS160L1-4	15	51.9	30.1	17.3	49.7	28.5	16.6	47.6	27.5	15.9	1455	88.7	90.0	90.2	0.86	2.2	2.45	1.4	7.3	75	88.50	0.101156
MS160L2-4	18.5	63.1	36.5	21.0	60.4	34.7	20.1	57.9	33.5	19.3	1460	90.5	91	90.6	0.85	2.2	2.2	1.4	7.5	78	97.50	0.127587
MS180M-4	18.5	62.4	36.1	20.8	59.7	34.3	19.9	57.2	33.1	19.1	1460	90.5	90.7	89.9	0.86	2.2	2.2	1.4	7.5	80	118.0	0.155064
MS180L-4	22	73.8	42.7	24.6	70.6	40.6	23.5	67.6	39.1	22.5	1460	91	91.3	90.6	0.86	2.2	2.2	1.4	7.5	80	128.0	0.173293
MS200L-4	30	99.5	57.6	33.2	95.2	54.7	31.7	91.2	52.8	30.4	1470	92	92.2	91.6	0.86	2.2	2.2	1.4	7.5	83	153.0	0.224084
MS631-6	0.09	0.75	0.44	0.25	0.72	0.41	0.24	0.69	0.40	0.23	890	50.7	47.6	39.8	0.62	2	2.2	1.9	2.9	50	4.20	0.000418
MS632-6	0.12	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	895	53.7	50.9	43.2	0.60	2.3	2.2	2.1	2.8	50	4.50	0.000517
MS711-6	0.18	1.11	0.64	0.37	1.06	0.61	0.35	1.02	0.59	0.34	905	63.0	61.6	55.4	0.67	2.15	2.4	2	3.5	52	5.60	0.000841
MS712-6	0.25	1.56	0.90	0.52	1.49	0.86	0.50	1.43	0.83	0.48	885	62.6	62.0	55.8	0.67	2.05	2.3	2.05	3.2	52	6.10	0.000965
MS713-6	0.37	2.32	1.34	0.77	2.22	1.28	0.74	2.13	1.23	0.71	890	65.4	64.4	58.2	0.64	2.3	2.5	2.3	3.4	54	6.80	0.001151
MS801-6	0.37	2.06	1.19	0.69	1.97	1.13	0.66	1.89	1.09	0.63	920	68.1	67.7	62.2	0.69	1.95	2.25	1.8	3.7	56	8.10	0.001560
MS802-6	0.55	2.74	1.59	0.91	2.62	1.51	0.87	2.51	1.45	0.84	920	72.5	73.0	69.3	0.73	2.25	2.45	2.05	4.3	56	9.60	0.002098
MS803-6	0.75	3.65	2.11	1.22	3.49	2.01	1.16	3.34	1.93	1.11	910	72.9	74.2	71.3	0.74	2.2	2.4	2.1	4.1	58	10.00	0.002635
MS90S-6	0.75	3.83	2.22	1.28	3.67	2.11	1.22	3.52	2.03	1.17	920	72.5	73.3	70.0	0.71	1.8	2.2	1.7	4.1	59	11.30	0.003061
MS90L1-6	1.1	5.47	3.17	1.82	5.23	3.01	1.74	5.01	2.90	1.67	910	73.5	75.2	72.9	0.72	1.95	2.25	1.85	4.2	59	14.40	0.004067
MS90L2-6	1.5	7.12	4.12	2.37	6.81	3.92	2.27	6.53	3.78	2.18	900	74.7	77	75.5	0.74	2.1	2.3	1.9	4.2	60	15.50	0.005147
MS100L1-6	1.5	6.77	3.92	2.26	6.47	3.72	2.16	6.20	3.59	2.07	935	78.5	79.9	78.2	0.74	2.05	2.35	1.8	5	61	18.80	0.007913
MS100L2-6	2.2	9.87	5.71	3.29	9.44	5.43	3.15	9.04	5.23	3.01	950	77	78.4	77.8	0.76	2.2	2.2	1.3	6	63	22.80	0.011194
MS112M-6	2.2	9.3	5.38	3.10	8.89	5.11	2.96	8.52	4.93	2.84	925	79.2	81.8	81.7	0.78	1.9	2.25	1.75	4.7	64	25.00	0.013777
MS112L-6	3	12.9	7.49	4.31	12.4	7.12	4.13	11.9	6.86	3.95	950	79	80.9	80.9	0.77	2.2	2.2	1.3	6	64	30.00	0.018246
MS132S-6	3	12.5	7.22	4.16	11.9	6.86	3.98	11.4	6.61	3.81	955	82.5	84.5	84.3	0.77	1.7	2.15	1.45	5.3	64	35.00	0.029932
MS132M1-6	4	16.2	9.39	5.40	15.5	8.92	5.17	14.9	8.59	4.95	965	85.2	85.8	84.4	0.76	2.3	2.9	1.6	6.6	68	47.60	0.037337
MS132M2-6	5.5	21.5	12.4	7.16	20.6	11.8	6.9	19.7	11.4	6.6	960	85.9	87.2	86.8	0.78	2.5	2.7	1.7	6.7	68	50.70	0.049025
MS132L-6	7.5	30.1	17.4	10.0	28.8	16.5	9.6	27.6	15.9	9.2	960	85	86.4	86.4	0.77	2	2	1.3	6.5	68	57.20	0.060782
MS160M-6	7.5	30.3	17.6	10.1	29.0	16.7	9.7	27.8	16.1	9.3	970	86.8	87.6	86.7	0.75	2.1	2.7	1.65	6.1	68	69.0	0.084476
MS160L-6	11	42.5	24.6	14.2	40.7	23.4	13.6	39.0	22.5	13.0	965	87.2	88.6	88.6	0.78	2.25	2.35	1.5	6.9	73	86.0	0.118152
MS180L-6	15	54.6	31.6	18.2	52.2	30.0	17.4	50.1	28.9	16.7	970	89	89	88.6	0.81	2	2.2	1.3	6.5	77	124.0	0.254063
MS200L1-6	18.5	66.6	38.6	22.2	63.7	36.6	21.2	61.0	35.3	20.3	975	90	90.2	89.5	0.81	2	2.2	1.3	6.5	80	141.0	0.303941
MS200L2-6	22	77.3	44.7	25.8	73.9	42.5	24.6	70.9	41.0	23.6	975	90	90.2	89.4	0.83	2	2.2	1.3	6.5	80	152.0	0.353160
MS711-8	0.09	0.97	0.56	0.32	0.93	0.54	0.31	0.89	0.52	0.30	680	44.9	39.6	31.1	0.54	2.3	2.6	2.2	2.4	50	5.60	0.000717
MS712-8	0.12	1.15	0.67	0.38	1.10	0.63	0.37	1.06	0.61	0.35	680	51.7	47.1	38.4	0.53	2.5	2.75	2.5	2.7	50	6.00	0.000841
MS713-8	0.18	1.51	0.88	0.50	1.45	0.83	0.48	1.39	0.80	0.46	670	55.8	52.5	44.4	0.56	2.3	2.5	2.4	2.8	52	6.90	0.001026
MS801-8	0.18	1.24	0.72	0.41	1.18	0.68	0.39	1.13	0.66	0.38	705	64.4	61.3	53.9	0.59	2.2	2.65	2	3.6	52	9.40	0.002098
MS802-8	0.25	1.64	0.95	0.55	1.57	0.90	0.52	1.51	0.87	0.50	700	66.3	64.3	57.8	0.60	2.1	2.5	2.05	3.5	52	10.10	0.002500
MS90S-8	0.37	2.37	1.37	0.79	2.26	1.30	0.75	2.17	1.25	0.72	690	66.3	65.4	59.6	0.62	1.55	2	1.5	3.2	56	12.50	0.003061
MS90L-8	0.55	3.26	1.89	1.09	3.12	1.79	1.04	2.99	1.73	1.00	680	69.0	69.9	65.8	0.64	1.6	1.95	1.6	3.3	56	15.30	0.004067
MS100L1-8	0.75	3.88	2.24	1.29	3.71	2.13	1.24	3.55	2.06	1.18	700	75.2	74.8	70.8	0.68	2.1	2.55	1.95	4.4	59	17.20	0.006043
MS100L2-8	1.1	5.16	2.99	1.72	4.94	2.84	1.65	4.73	2.74	1.58	685	74.6	76.7	75.1	0.75	1.8	2.15	1.65	4.1	59	19.50	0.007503
MS112M-8	1.5	7.24	4.19	2.41	6.93	3.98	2.31	6.64	3.84	2.21	700	78.3	78.9	76.4	0.69	2.2	2.5	2.1	4.5	61	25.50	0.013491
MS132S-8	2.2	10.0	5.81	3.35	9.6	5.52	3.20	9.20	5.32	3.07	705	78.8	80.7	79.6	0.73	1.8	2.25	1.65	4.5	64	34.20	0.028992
MS132M-8	3	13.0	7.51	4.33	12.4	7.14	4.14	11.9	6.88	3.96	705	80.9	82.6	81.9	0.75	2.1	2.5	1.8	5.1	64	40.00	0.038042
MS160M1-8	4	18.0	10.4	5.99	17.2	9.88	5.73	16.5	9.53	5.49	710	81.7	83.0	82.0	0.72	1.8	2.25	1.5	4.7	68	59.00	0.067231
MS160M2-8	5.5	23.4	13.5	7.79	22.4	12.9	7.45	21.4	12.4	7.14	715	84.6	85.7	84.9	0.73	2.15	2.55	1.6	5.2	68	69.00	0.090636
MS160L-8	7.5	30.3	17.5	10.1	29.0	16.67	9.66	27.8	16.1	9.26	715	85.8	87.1	86.7	0.76	2.15	2.45	1.4	5.4	68	87.00	0.124073
MS180L-8	11	45.2	26.2	15.1	43.3	24.9	14.4	41.5	24.0	13.8	715	87.4	87.2	85.7	0.73	1.9	2.2	1.2	6	76	124.0	0.261094
MS200L-8	15	58.9	34.1	19.6	56.3	32.4	18.8	54.0	31.2	18.0	725	88.0	88.0	86.9	0.76	1.9	2.2	1.2	6	79	154.3	0.339098
MS200L2-8	18.5	71.0	41.1	23.7	67.9	39.0	22.6	65.1	37.6	21.7	730	90.0	90.0	88.8	0.76	1.9	2.2	1.2	6	79	175.0	0.409410

MS2 Series IE2 Efficiency Motors Technical Data (at 400V/50Hz)

Model	Power (kW)	Current(A)			Current(A)			Current(A)			Speed (r/min)	Eff. (%)	Power Factor (cos ф)	Tst/Tn (Times)	Tmax/Tn (Times)	Tmin/Tn (Times)	Ist/In (Times)	Noise dB(A)	W.T (kg)	Inertia kg*m²
		220V	380V	660V	230V	400V	690V	240V	415V	720V										
MS2 713–2	0.75	3.23	1.86	1.08	3.07	1.77	1.02	2.96	1.71	0.99	2810	77.4	0.79	3.4	3.5	3	5.8	65	7.5	0.000480
MS2 801–2	0.75	3.15	1.82	1.05	2.99	1.73	1.00	2.88	1.66	0.96	2840	77.4	0.81	3.3	3.5	2.7	6.9	67	8.9	0.000852
MS2 802–2	1.1	4.43	2.56	1.48	4.21	2.43	1.40	4.06	2.34	1.35	2860	79.6	0.82	3.5	3.7	2.8	7.2	67	10.6	0.001109
MS2 803–2	1.5	5.99	3.46	2.00	5.69	3.29	1.90	5.49	3.17	1.83	2860	81.3	0.81	3.7	3.8	2.9	7.7	70	13	0.001430
MS2 90S–2	1.5	5.85	3.38	1.95	5.56	3.21	1.85	5.36	3.09	1.79	2860	81.3	0.83	4.5	3.5	2.7	8.2	72	13.2	0.001430
MS2 90L1–2	2.2	8.38	4.84	2.79	7.96	4.60	2.66	7.68	4.43	2.56	2870	83.2	0.83	4.5	4.1	2.7	7.4	72	16.1	0.002181
MS2 90L2–2	3	11.2	6.49	3.75	10.7	6.17	3.56	10.29	5.94	3.43	2880	84.6	0.83	4.5	4.1	3	9.7	74	20	0.002904
MS2 100L1–2	3	10.9	6.26	3.62	10.3	5.95	3.44	9.94	5.74	3.31	2900	84.6	0.86	3.7	3.7	2.6	9.6	76	22.7	0.003008
MS2 100L2–2	4	13.9	8.05	4.65	13.2	7.65	4.42	12.8	7.37	4.26	2890	85.8	0.88	3.6	3.4	2.6	9.5	77	26	0.003934
MS2 112M–2	4	14.1	8.14	4.70	13.4	7.73	4.47	12.9	7.46	4.30	2910	85.8	0.87	3.4	3.8	2.2	9.7	77	26.4	0.006266
MS2 112L–2	5.5	18.9	10.9	6.30	18.0	10.4	5.99	17.3	9.99	5.77	2920	87	0.88	4	4.3	3	11	78	32.1	0.007819
MS2 132S1–2	5.5	18.9	10.9	6.30	18.0	10.4	5.99	17.3	9.99	5.77	2920	87	0.88	3.9	4	2.1	9.9	80	42.3	0.012022
MS2 132S2–2	7.5	25.2	14.5	8.39	23.9	13.8	7.97	23.0	13.3	7.68	2910	88.1	0.89	3.5	3.7	1.9	9.5	80	46.2	0.014635
MS2 132M1–2	9.2	31.0	17.9	10.3	29.5	17.0	9.82	28.4	16.4	9.47	2900	88.7	0.88	3.5	3.9	2.4	9.8	81	51.6	0.016303
MS2 132M2–2	11	37.7	21.7	12.6	35.8	20.7	11.9	34.5	19.9	11.5	2930	89.4	0.86	3.5	3.9	2.4	11.5	83	54.5	0.019439
MS2 160M1–2	11	36.4	21.0	12.1	34.6	20.0	11.5	33.3	19.2	11.1	2940	89.4	0.89	3.2	3.2	2.2	9	86	79.2	0.048471
MS2 160M2–2	15	48.6	28.0	16.2	46.1	26.6	15.4	44.5	25.7	14.8	2930	90.3	0.9	3.2	3.2	2.2	9	86	96.6	0.059421
MS2 160L–2	18.5	58.9	34.0	19.6	55.9	32.3	18.6	53.9	31.1	18.0	2930	90.9	0.91	3.2	3.2	2.2	9	86	102.5	0.068807
MS2 180M–2	22	69.7	40.2	23.2	66.2	38.2	22.1	63.8	36.8	21.3	2950	91.3	0.91	2.5	2	1.4	8.1	91	128	0.095016
MS2 200L1–2	30	94.3	54.4	31.4	89.6	51.7	29.9	86.3	49.9	28.8	2950	92	0.91	2.5	3.3	1.3	8.8	94	158	0.122246
MS2 200L2–2	37	115.7	66.8	38.6	109.9	63.4	36.6	105.9	61.2	35.3	2960	92.5	0.91	2.8	3.5	1.3	9.6	94	181.3	0.148816
MS2 802–4	0.75	3.31	1.91	1.10	3.14	1.81	1.05	3.03	1.75	1.01	1410	79.6	0.75	3	2.9	2.4	5.8	58	11.1	0.002060
MS2 90S–4	1.1	5.01	2.89	1.67	4.76	2.75	1.59	4.59	2.65	1.53	1420	81.4	0.71	2.8	3.1	2.6	5.6	61	13.9	0.002873
MS2 90L–4	1.5	6.71	3.88	2.24	6.38	3.68	2.13	6.15	3.55	2.05	1420	82.8	0.71	3	3.1	2.7	6.2	61	16.9	0.003709
MS2 100L1–4	2.2	8.92	5.15	2.97	8.47	4.89	2.82	8.17	4.72	2.72	1440	84.3	0.77	3.3	3.6	2.9	7.6	64	22.4	0.007306
MS2 100L2–4	3	11.8	6.83	3.95	11.2	6.49	3.75	10.8	6.26	3.61	1440	85.5	0.78	3.4	3.6	3	7.4	64	26.4	0.009053
MS2 112M–4	4	15.0	8.66	5.00	14.3	8.23	4.75	13.7	7.93	4.58	1440	86.6	0.81	2.9	3.1	2.3	8.2	65	32.3	0.013305
MS2 132S–4	5.5	20.1	11.6	6.71	19.1	11.0	6.37	18.4	10.6	6.14	1450	87.7	0.82	2.6	3.4	2.2	8.7	71	43	0.027736
MS2 132M–4	7.5	26.5	15.3	8.83	25.2	14.5	8.39	24.3	14.0	8.09	1450	88.7	0.84	3.1	3.4	2.1	8.8	71	52.6	0.035864
MS2 132L–4	9.2	31.9	18.4	10.6	30.3	17.5	10.1	29.2	16.9	9.75	1450	89.2	0.85	2.9	3.2	2	8.8	74	59	0.041954
MS2 160M–4	11	38.4	22.2	12.8	36.5	21.0	12.2	35.1	20.3	11.7	1460	89.8	0.84	2.5	2.9	1.6	7.3	75	83	0.089630
MS2 160L1–4	15	51.9	29.9	17.3	49.3	28.4	16.4	47.5	27.4	15.8	1460	90.6	0.84	2.9	3	1.7	8.2	75	103.5	0.118354
MS2 160L2–4	18.5	62.8	36.3	20.9	59.7	34.4	19.9	57.5	33.2	19.2	1460	91.2	0.85	2.9	3	1.7	8.1	78	114.5	0.136633
MS2 180M–4	18.5	61.4	35.4	20.5	58.3	33.7	19.4	56.2	32.4	18.7	1460	91.2	0.87	2.4	3	1.8	7.8	80	119	0.155064
MS2 180L–4	22	71.8	41.5	23.9	68.2	39.4	22.7	65.8	38.0	21.9	1460	91.6	0.88	2.4	2.8	1.7	7.7	80	129	0.173293
MS2 200L–4	30	99.5	57.4	33.2	94.5	54.6	31.5	91.1	52.6	30.4	1470	92.3	0.86	3.2	3.7	2.3	9.5	83	169.2	0.242313
MS2 90S–6	0.75	3.77	2.18	1.26	3.58	2.07	1.19	3.45	1.99	1.15	935	75.9	0.69	2.4	2.6	2.2	4.7	59	13	0.003365
MS2 90L–6	1.1	5.37	3.10	1.79	5.10	2.95	1.70	4.92	2.84	1.64	940	78.1	0.69	2.7	2.7	2.3	5	59	16.4	0.004805
MS2 100L–6	1.5	6.87	3.97	2.29	6.53	3.77	2.18	6.29	3.63	2.10	960	79.8	0.72	2.9	3	2.3	6.2	61	21.6	0.009554
MS2 112M–6	2.2	9.44	5.45	3.15	8.96	5.18	2.99	8.64	4.99	2.88	950	81.8	0.75	2.5	2.6	2	5.6	64	29.5	0.016969
MS2 132S–6	3	12.5	7.20	4.16	11.8	6.84	3.95	11.4	6.59	3.81	960	83.3	0.76	2.2	2.6	1.7	6.1	64	35.2	0.029932
MS2 132M1–6	4	16.6	9.58	5.53	15.8	9.10	5.25	15.2	8.77	5.06	965	84.6	0.75	2.5	2.6	1.7	6.5	68	45	0.040259
MS2 132M2–6	5.5	22.7	13.1	7.58	21.6	12.5	7.20	20.8	12.0	6.94	965	86	0.74	3	2.9	1.9	7.2	68	53.5	0.053408
MS2 132L–6	7.5	30.2	17.4	10.1	28.7	16.6	9.56	27.6	16.0	9.21	970	87.2	0.75	3.7	3.1	2.2	8.2	68	66.2	0.068087
MS2 160M–6	7.5	30.6	17.7	10.2	29.1	16.8	9.69	28.0	16.2	9.34	970	87.2	0.74	2.8	2.9	1.6	7.1	68	72.6	0.089688
MS2 160L–6	11	42.9	24.8	14.3	40.8	23.6	13.6	39.3	22.7	13.1	970	88.7	0.76	2.9	2.7	1.6	7.3	73	89.5	0.122730
MS2 180L–6	15	53.0	30.6	17.7	50.4	29.1	16.8	48.5	28.0	16.2	975	89.7	0.83	2.2	2.7	1.2	8	79	130	0.254063
MS2 200L1–6	18.5	64.9	37.5	21.6	61.6	35.6	20.5	59.4	34.3	19.8	975	90.4	0.83	2.1	2.9	1.5	8.3	82	149	0.303941
MS2 200L2–6	22	76.7	44.3	25.6	72.9	42.1	24.3	70.3	40.6	23.4	975	90.9	0.83	2.2	3	1.6	8.9	82	167	0.353160