

## TEFC 3 Phase Squirrel Cage Induction Motors - Frame size 90S to 355L

**eff1**

Voltage : 415V ± 10%  
 Frequency : 50Hz ± 5%  
 Combined Variation : ± 10%

Ambient : 50°C  
 Duty : S1 (Continuous)

Ins. Class : F  
 Temp. Rise : B  
 Protection : IP55

**Table-8**

**750 rpm (8-Pole)**

Rated Output		Frame size	Type Ref. B3 Construction	Operating Characteristics at Rated output									With DOL Starting		Pullout Toque to Rated Toque Ratio	Rotor GD <sup>2</sup> kgm <sup>2</sup>	Net Weight B3 Constrn. kg
				Speed RPM	Current Amps.	Rated Torque Kg-m.	Power Factor			%Efficiency <b>eff1</b>			Starting Current to Rated Current Ratio	Starting Torque to Rated Torque Ratio			
kW	HP	IEC	FL				3/4L	1/2L	FL	3/4L	1/2L						
0.37	0.5	90S	MH09S813	700	1.22	0.515	0.63	0.52	0.41	66.8	60.0	52.0	2.7	1.8	2.1	0.011	11
0.55	0.75	90L	MH09L853	690	1.71	0.776	0.63	0.53	0.43	71.1	67.0	62.0	2.9	2.0	2.4	0.014	14
0.75	1.0	100L	MH10L813	685	1.94	1.07	0.73	0.63	0.50	73.8	73.8	67.0	3.0	1.7	2.0	0.023	18
1.1	1.5	100L	MH10L833	690	2.83	1.55	0.71	0.62	0.48	76.2	76.2	73.0	3.3	1.9	2.3	0.027	21
1.5	2.0	112M	MH11M813	705	3.82	2.07	0.70	0.62	0.50	77.9	77.9	75.0	3.8	1.7	2.2	0.051	25
2.2	3.0	132S	MH13S813	710	5.35	3.02	0.71	0.60	0.46	80.5	80.5	78.0	3.7	1.6	2.2	0.099	54
3.7	5.0	160M	MH16M813	720	8.00	5.01	0.78	0.74	0.65	83.0	83.0	78.0	4.4	1.8	2.0	0.217	88
5.5	7.5	160M	MH16M833	720	11.5	7.44	0.78	0.74	0.65	85.1	85.1	82.0	4.8	1.9	2.2	0.299	101
7.5	10	160L	MH16L873	715	15.5	10.2	0.78	0.74	0.65	86.4	86.4	84.0	5.5	2.1	2.2	0.40	119
9.3	12.5	180M	MH18M813	720	18.8	12.6	0.79	0.74	0.64	87.3	87.3	85.0	5.0	2.1	2.2	0.62	177
11	15	180L	MH18L833	720	22.0	14.9	0.79	0.74	0.64	88.1	88.1	87.0	5.0	2.1	2.2	0.72	182
15	20	200L	MH20L833	720	28.6	20.3	0.82	0.79	0.71	89.0	89.0	88.0	6.0	2.5	2.3	1.32	282
18.5	25	225S	MH22S823	725	36.3	24.9	0.79	0.77	0.69	89.8	89.8	88.0	5.5	2.1	2.2	2.10	334
22	30	225M	MH22M833	725	43.0	29.6	0.79	0.77	0.69	90.2	90.2	88.0	5.5	2.1	2.2	2.41	369
30	40	250M	MH25M813	730	55.5	40.0	0.82	0.78	0.68	91.5	91.5	89.0	6.0	2.5	2.2	3.72	472
37	50	280S	MH28S823	730	71.0	49.4	0.79	0.75	0.65	92.0	92.0	90.0	5.5	2.2	2.2	5.83	615
45	60	280M	MH28M853	730	86.0	60.0	0.79	0.75	0.65	92.4	92.4	90.0	5.5	2.2	2.2	6.86	665
55	75	315S	MH31S813	740	105.0	72.4	0.78	0.73	0.64	93.0	92.5	90.5	5.5	2.1	2.4	10.70	833
75	100	315M	MH31M833	740	143.0	98.7	0.78	0.73	0.64	93.5	93.5	92.0	5.5	2.1	2.4	12.40	912
90	120	315M	MH31M853	740	171.0	118.5	0.78	0.73	0.64	94.0	94.0	93.0	5.5	2.1	2.4	15.50	1010
110	150	315L	MH31L873	740	208.0	145.0	0.78	0.73	0.64	94.3	94.0	93.0	5.5	2.1	2.4	18.00	1170
125	170	315L	MH31L8A3	740	236.0	164.5	0.78	0.73	0.64	94.6	94.4	93.6	5.5	2.1	2.4	21.50	1340
132	180	315L	MH31L893	740	248.0	174.0	0.78	0.73	0.64	94.8	94.7	94.0	5.5	2.1	2.4	21.50	1340
150	200	355L	MH35L8A3	740	282.0	197.4	0.78	0.70	0.60	95	95.0	93.0	5.5	1.8	2.2	28.70	1670
160	215	355L	MH35L813	740	300.0	210.6	0.78	0.70	0.60	95	95.0	93.0	5.5	1.8	2.2	28.70	1670
180	240	355L	MH35L8B3	740	337.0	237.0	0.78	0.70	0.60	95.2	95.2	93.2	5.5	1.8	2.2	35.50	1780
200	270	355L	MH35L833	740	375.0	263.2	0.78	0.70	0.60	95.3	95.3	93.3	5.5	1.8	2.2	35.50	1780

Note: •Efficiency class 'eff1' will be punched on the nameplates as per IS:12615-2004 (Rev.1) for ratings from 0.37kW to 110kW  
 •All performance values are subject to tolerance as per IS:325 •Efficiency measurements are without seals