

INCREASED SAFETY MOTORS Ex(e) TEFC 3 Phase Squirrel Cage Induction Motors - Frame size 71 to 355L

eff1

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

Ambient : 45°C
Duty : S1 (Continuous)
Temp. Class : T1, T2 & T3

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

Table-MI-2P

3000 rpm (2-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 ² kgm ²	Net Weight B3 Constrn. Kg	Time tE for Temp. class T3 Sec
				Speed RPM	Current Amps.	Rated Torque Kg-m.	Power Factor			%Efficiency eff1			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	0.50	71	MI0712A3	2800	0.97	0.130	0.74	0.68	0.60	72.0	72.0	66.0	5.5	2.6	3.0	0.0019	7	15
0.55	0.75	71	MI071233	2805	1.29	0.190	0.79	0.72	0.58	75.0	75.0	72.0	5.0	2.7	3.0	0.0019	7	15
0.75	1.0	80	MI080213	2830	1.64	0.256	0.82	0.74	0.62	77.5	77.5	74.0	5.0	2.5	2.8	0.0037	10	12
1.1	1.5	80	MI080233	2840	2.25	0.377	0.82	0.75	0.63	82.8	82.5	78.0	5.9	2.7	3.0	0.0051	11	12
1.5	2.0	90S	MI09S243	2840	3.00	0.514	0.82	0.78	0.68	84.1	84.1	81.0	6.5	3.3	3.5	0.0091	22	10
2.2	3.0	90L	MI09L273	2840	4.40	0.755	0.82	0.78	0.68	85.6	85.6	84.0	6.5	3.3	3.5	0.0113	28	10
3.7	5.0	100L	MI10L233	2890	6.84	1.24	0.86	0.84	0.76	87.5	87.5	85.5	7.0	3.0	3.3	0.0212	34	8
5.5	7.5	132S	MI13S253	2935	9.70	1.83	0.89	0.85	0.77	88.6	88.6	84.0	7.0	2.5	3.0	0.0820	69	10
7.5	10.0	132S	MI13S293	2935	13.1	2.49	0.89	0.85	0.77	89.5	89.5	84.5	7.0	2.5	3.0	0.0980	77	10
9.3	12.5	160M	MI16M233	2930	16.2	3.09	0.89	0.85	0.76	90.0	90.0	86.0	7.0	2.4	2.9	0.150	108	8
11	15	160M	MI16M253	2390	19.0	3.66	0.89	0.86	0.82	90.5	90.5	87.5	7.0	2.3	3.0	0.171	117	8
15	20	160M	MI16M263	2390	25.7	4.99	0.89	0.88	0.82	91.3	91.3	88.0	7.0	2.3	2.8	0.203	122	8
18.5	25	160L	MI16L293	2390	31.2	6.15	0.90	0.89	0.86	91.8	91.8	90.0	7.0	2.4	3.0	0.268	141	7
22	30	180M	MI18M233	2935	37.7	7.70	0.88	0.88	0.83	92.2	92.2	90.0	7.0	2.3	2.7	0.34	177	8
30	40	200L	MI20L253	2955	50.5	9.89	0.89	0.86	0.80	93.0	93.0	91.0	7.0	2.5	2.6	0.61	274	8
37	50	200L	MI20L273	2955	62.0	12.2	0.89	0.86	0.80	93.3	93.3	91.5	7.0	2.4	2.5	0.64	279	7
45	60	225M	MI22M253	2970	75.0	14.8	0.89	0.87	0.83	93.7	93.7	92.0	7.0	2.3	2.7	1.13	361	12
55	75	250M	MI25M233	2965	88.5	18.1	0.92	0.91	0.86	94.0	94.0	92.0	7.0	2.3	2.7	2.60	600	12
*75	100	280M	MI28M233	2970	121	24.6	0.91	0.89	0.84	94.6	94.6	92.0	7.0	2.2	2.8	3.01	728	12
90	120	280M	MI28M253	2970	143	29.5	0.92	0.90	0.88	95.0	95.0	92.0	7.0	2.2	2.8	3.42	750	12
110	150	315S	MI31M2A3	2982	177	35.9	0.91	0.87	0.79	95.0	95.0	92.5	7.0	2.2	2.7	5.0	940	14
125	170	315M	MI31M2B3	2982	201	40.8	0.91	0.87	0.78	95.3	94.4	92.5	7.0	2.2	2.7	5.0	940	14
132	180	315M	MI31M233	2982	212	43.1	0.91	0.87	0.79	95.3	94.4	92.5	7.0	2.2	2.7	5.0	940	14
150	200	315L	MI31L2A3	2982	243	49.0	0.90	0.85	0.77	95.6	94.8	93.8	7.0	2.2	2.7	7.7	1100	14
160	215	315L	MI31L2B3	2982	259	52.3	0.90	0.86	0.79	95.6	95.0	94.0	7.0	2.2	2.7	7.7	1100	14
180	240	315L	MI31L2C3	2982	291	58.8	0.90	0.86	0.79	95.6	95.2	94.3	7.0	2.2	2.7	7.7	1100	14
**200	270	315L	MI31L273	2982	323	65.3	0.90	0.86	0.79	95.7	95.4	94.5	7.0	2.2	2.7	7.7	1100	14
250	335	355L	MI35L2A3	2985	398	81.6	0.91	0.89	0.83	96.0	95.8	95.0	7.0	1.6	2.4	14.7	1870	9
**315	425	355L	MI35L233	2985	500	102.8	0.91	0.89	0.83	96.2	96.1	95.2	7.0	1.6	2.4	14.7	1870	9

Note : • Efficiency class 'eff1' will be punched on the nameplate as per IS : 12615-2004 (Rev-1) from 0.37 kW to 160kW • All performance value are subject to IS tolerance as per IS : 325.
• Efficiency measurement are without seals. • (*) These motors are offered in higher frame size with 'eff1' efficiency level. These rating are suitable for 40°C.