

INCREASED SAFETY MOTORS Ex(e) TEFC 3 Phase Squirrel Cage Induction Motors - Frame size 80 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-6P

1000 rpm (6-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	80	MI080613	910	1.05	0.396	0.70	0.60	0.48	70.0	70.0	68.0	3.0	2.1	2.3	0.0060	10	15
0.55	0.75	80	MI080633	915	1.50	0.59	0.71	0.62	0.48	72.0	72.0	68.0	4.0	2.2	2.5	0.0084	11	15
0.75	1.0	90S	MI09S633	925	1.93	0.79	0.72	0.61	0.50	75.0	75.0	72.0	4.0	2.0	2.5	0.0122	18	15
1.1	1.5	90L	MI09L653	930	2.75	1.15	0.72	0.61	0.50	77.3	77.3	73.0	4.0	2.0	2.6	0.0160	23	15
1.5	2.0	100L	MI10L633	935	3.6	1.56	0.72	0.60	0.52	79.6	79.6	75.0	4.5	2.0	2.5	0.025	31	15
2.2	3.0	112M	MI11M653	940	5.00	2.28	0.75	0.65	0.58	82.2	82.2	80.5	5.0	2.1	2.5	0.065	47	15
3.7	5.0	132S	MI13S633	950	8.00	3.80	0.76	0.68	0.51	85.1	85.1	82.0	5.5	2.0	2.5	0.130	62	10
5.5	7.5	132M	MI13M693	960	11.2	5.58	0.78	0.71	0.60	86.8	86.8	79.0	6.0	2.5	2.7	0.193	81	10
7.5	10.0	160M	MI16M633	960	14.7	7.61	0.80	0.74	0.64	88.5	88.5	86.5	5.4	2.0	2.5	0.276	102	12
9.3	12.5	160L	MI16L663	960	18.1	9.44	0.80	0.74	0.64	89.3	89.3	88.0	5.5	2.1	2.5	0.34	119	12
11	15	160L	MI16L673	965	21.3	11.1	0.80	0.77	0.70	89.7	89.7	88.0	6.0	2.0	2.5	0.40	129	12
15	20	180L	MI18L613	965	28.8	15.1	0.80	0.75	0.62	90.5	90.5	89.0	5.5	2.6	2.3	0.68	176	10
18.5	25	200L	MI20L613	975	34.0	18.5	0.83	0.78	0.70	91.3	91.3	89.0	6.0	2.6	2.3	1.00	234	10
22	30	200L	MI20L633	975	40.5	22.0	0.82	0.77	0.69	91.8	91.8	90.0	6.0	2.6	2.3	1.20	251	10
30	40	225M	MI22M643	975	52.5	30.0	0.86	0.84	0.80	92.6	92.6	90.0	7.0	2.5	2.2	2.45	355	12
37	50	250M	MI25M633	980	63.0	36.8	0.88	0.85	0.79	93.0	93.0	92.0	6.0	2.5	2.3	3.72	528	12
45	60	280S	MI28S613	980	80.7	44.7	0.83	0.80	0.70	93.5	93.5	92.0	6.0	2.5	2.4	5.11	592	12
55	75	280M	MI28M633	980	96.0	54.7	0.85	0.83	0.73	93.8	93.8	92.0	6.0	2.4	2.4	6.16	640	12
75	100	315S	MI31S613	985	130	74.10	0.85	0.82	0.75	94.6	94.6	93.5	6.0	2.4	2.5	10.70	940	16
90	120	315M	MI31M633	987	157	88.80	0.84	0.81	0.72	94.8	94.8	93.5	6.0	2.3	2.5	12.40	1005	16
110	150	315M	MI31M653	988	189	108.4	0.85	0.82	0.73	95.0	95.0	94.0	6.0	2.3	2.5	15.50	1110	16
125	170	315L	MI31L6A3	988	215	123.2	0.85	0.82	0.73	95.2	95.2	94.0	6.0	2.3	2.5	18.00	1295	16
132	180	315L	MI31L673	988	227	130.0	0.85	0.82	0.73	95.2	95.2	94.0	6.0	2.3	2.5	18.00	1295	16
150	170	315L	MI31L6B3	988	258	147.8	0.85	0.82	0.73	95.2	95.2	94.0	6.0	2.3	2.5	21.50	1425	16
**160	215	315L	MI31L693	988	275	158.0	0.85	0.82	0.73	95.2	95.2	94.0	6.0	2.3	2.5	21.50	1425	16
180	240	355L	MI35L613	990	309	177	0.85	0.80	0.72	95.3	95.3	93.5	6.0	2.0	2.5	28.7	1670	10
200	270	355L	MI35L6A3	990	343	196.7	0.85	0.80	0.72	95.3	95.3	93.5	6.0	2.0	2.5	35.5	1780	10
**250	335	355L	MI35L633	990	428	246	0.85	0.80	0.72	95.7	95.7	93.6	6.0	2.0	2.5	35.5	1780	10

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.

(**) Temperature rise limited to class F.