

MOTORS FOR HARSH AREAS

IMPROVED EFFICIENCY

FLAME PROOF MOTORS Ex(d) TEFC 3 Phase Squirrel Cage Induction Motors - Frame size 80 to 280S/M

eff2

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

Ambient : 45°C
Duty : S1 (Continuous)

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

Table-MD-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
					Speed RPM	Current Amps.	Rated Torque Kg-m.	Power Factor			%Efficiency eff2			Starting Current to Rated Current Ratio	Starting Torque to Rated Torque Ratio			
kW	HP	IEC	BBL	FL				3/4L	1/2L	FL	3/4L	1/2L						
*0.37	0.50	80	MJ80	MD0802A3	2880	0.81	0.125	0.85	0.78	0.70	75.0	72.0	67.0	6.0	2.7	3.0	0.0037	31
*0.55	0.75	80	MJ80	MD0802B3	2860	1.25	0.187	0.82	0.74	0.62	75.0	73.0	68.0	5.5	2.7	3.0	0.0037	31
0.75	1.0	80	MJ80	MD080213	2830	1.65	0.258	0.82	0.74	0.62	77.0	76.0	72.0	5.0	2.5	2.8	0.0037	31
1.1	1.5	80	MJ80	MD080233	2840	2.35	0.377	0.82	0.75	0.63	79.0	79.0	76.0	5.9	2.7	3.0	0.0051	32
*1.5	2.0	90L	MJ90	MD09L233	2825	3.00	0.517	0.86	0.83	0.76	80.6	78.0	74.0	5.5	2.7	3.0	0.0071	48
2.2	3.0	90L	MJ90	MD09L253	2830	4.36	0.757	0.85	0.82	0.74	82.5	80.0	76.0	6.0	3.0	3.0	0.0093	50
3.7	5.0	100L	MJ100	MD10L213	2900	7.05	1.25	0.86	0.80	0.70	85.0	83.0	78.0	6.5	2.8	3.0	0.0188	62
*5.5	7.5	132M	MJ132	MD13M233	2920	10.1	1.84	0.88	0.85	0.77	86.0	85.0	80.0	6.5	2.3	3.0	0.069	104
*7.5	10	132M	MJ132	MD13M253	2920	13.7	2.50	0.88	0.84	0.76	87.0	86.0	82.0	6.5	2.5	3.0	0.082	114
9.3	12.5	132M	MJ132	MD13M293	2920	16.5	3.10	0.89	0.85	0.76	88.0	86.0	83.0	6.5	2.4	2.9	0.098	120
11	15	160M	MJ160	MD16M213	2920	19.3	3.67	0.89	0.88	0.85	89.0	88.0	86.0	5.8	2.0	3.0	0.134	145
15	20	160M	MJ160	MD16M253	2920	25.9	5.00	0.90	0.89	0.85	89.5	89.0	87.0	6.0	2.0	3.0	0.171	154
18.5	25	160L	MJ160	MD16L273	2920	31.6	6.17	0.90	0.88	0.86	90.5	90.0	88.0	6.5	2.0	3.0	0.225	168
*22	30	180L	MJ180	MD18L213	2930	37.5	7.31	0.89	0.87	0.80	91.5	90.5	88.0	6.5	2.2	2.7	0.30	220
30	40	200L	MJ200	MD20L233	2955	51.2	9.89	0.88	0.85	0.79	92.6	92.0	89.5	6.5	2.5	2.5	0.52	260
37	50	200L	MJ200	MD20L253	2955	62.9	12.2	0.88	0.85	0.79	93.0	92.5	91.0	6.5	2.5	2.5	0.61	320
45	60	225M	MJ225	MD22M233	2960	74.5	14.8	0.90	0.87	0.83	93.3	92.8	91.0	6.0	2.5	2.5	1.04	420
55	75	250M	MJ250	MD25M213	2960	89.0	18.1	0.92	0.91	0.86	93.3	92.8	91.5	6.5	2.1	2.6	2.11	570
75	100	280S	MJ280	MD28S213	2970	122	24.6	0.91	0.89	0.84	94.0	93.0	91.0	6.0	1.9	2.7	2.63	690
90	120	280M	MJ280	MD28M233	2970	145	29.5	0.92	0.90	0.85	94.0	93.0	91.0	6.0	1.9	2.7	3.01	740

Note: • All motors conform to Efficiency class 'eff2' as per IS : 12615-2004 (Rev-1) • 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.