

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-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
					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	MD080613	910	1.10	0.396	0.70	0.60	0.48	68.0	66.0	61.0	3.0	2.1	2.3	0.0060	31
0.55	0.75	80	MJ80	MD080633	915	1.56	0.590	0.71	0.62	0.48	69.0	70.0	64.0	4.0	2.2	2.5	0.0084	32
*0.75	1.0	90L	MJ90	MD09L633	925	2.00	0.790	0.72	0.61	0.50	73.0	70.0	69.0	3.4	2.0	2.5	0.0122	48
1.1	1.5	90L	MJ90	MD09L653	930	2.80	1.15	0.72	0.61	0.50	76.0	74.0	72.0	4.0	2.1	2.6	0.016	50
1.5	2.0	100L	MJ100	MD10L633	935	3.76	1.56	0.72	0.64	0.52	77.0	75.0	72.0	3.9	2.0	2.5	0.025	60
2.2	3.0	112M	MJ112	MD11M633	935	5.05	2.29	0.77	0.68	0.55	79.0	79.0	74.0	5.0	2.0	2.5	0.050	67
*3.7	5.0	132M	MJ132	MD13M633	950	8.00	3.80	0.76	0.63	0.49	85.0	84.0	82.0	5.5	2.0	2.5	0.130	108
5.5	7.5	132M	MJ132	MD13M673	960	11.5	5.58	0.78	0.71	0.59	85.0	83.0	78.0	5.5	2.5	2.75	0.183	113
7.5	10	160M	MJ160	MD16M633	960	14.8	7.61	0.80	0.74	0.64	88.0	88.0	86.0	5.4	2.0	2.5	0.276	149
9.3	12.5	160L	MJ160	MD16L663	960	18.4	9.44	0.80	0.74	0.64	88.0	88.0	87.0	5.5	2.1	2.5	0.34	160
11	15	160L	MJ160	MD16L673	965	21.6	11.1	0.80	0.77	0.70	88.5	88.0	87.0	6.0	2.0	2.5	0.40	169
15	20	180L	MJ180	MD18L613	965	29.0	15.1	0.80	0.75	0.62	90.0	90.0	87.0	5.5	2.6	2.3	0.68	210
18.5	25	200L	MJ200	MD20L613	975	34.0	18.5	0.83	0.78	0.70	91.0	91.0	88.0	5.8	2.6	2.3	1.00	275
22	30	200L	MJ200	MD20L633	975	40.5	22.0	0.83	0.78	0.70	91.0	91.0	88.0	5.8	2.6	2.3	1.20	290
30	40	225M	MJ225	MD22M623	975	52.3	30.0	0.87	0.84	0.76	91.8	91.0	88.0	6.0	2.3	2.2	2.10	430
37	50	250M	MJ250	MD25M603	975	63.5	37.0	0.88	0.85	0.82	92.5	92.5	91.0	6.0	2.5	2.3	3.51	560
45	60	280S	MJ280	MD28S613	980	80.7	44.7	0.83	0.80	0.70	93.5	92.5	92.0	6.0	2.5	2.3	5.11	615
55	75	280M	MJ280	MD28M633	980	96.0	54.7	0.85	0.81	0.72	93.5	93.0	92.0	6.0	2.3	2.3	6.16	665

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.