

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-4P

1500 rpm (4-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	MD0804A3	1415	0.98	0.255	0.76	0.70	0.58	70.00	68.0	64.0	4.5	2.4	2.6	0.0061	31
0.55	0.75	80	MJ80	MD080413	1405	1.3	0.381	0.81	0.70	0.56	74.0	71.0	67.0	4.0	2.4	2.6	0.0061	31
0.75	1.0	80	MJ80	MD080433	1405	1.75	0.52	0.78	0.70	0.58	77.0	76.0	72.0	4.5	2.8	3.0	0.0072	32
*1.1	1.5	90L	MJ90	MD09L433	1410	2.45	0.76	0.80	0.73	0.61	78.0	77.0	72.0	4.2	2.3	2.7	0.012	48
1.5	2.0	90L	MJ90	MD09L453	1410	3.25	1.03	0.80	0.72	0.58	80.0	79.0	75.0	4.8	2.5	3.0	0.016	50
2.2	3.0	100L	MJ100	MD10L433	1420	4.55	1.51	0.82	0.69	0.53	82.0	80.0	76.0	5.7	2.5	3.0	0.021	60
3.7	5.0	112M	MJ112	MD11M433	1430	7.30	2.52	0.83	0.76	0.65	85.0	85.0	82.0	6.0	2.6	3.0	0.053	70
*5.5	7.5	132M	MJ132	MD13M433	1445	10.4	3.71	0.85	0.80	0.68	86.0	85.0	83.0	6.0	2.2	3.0	0.113	105
7.5	10	132M	MJ132	MD13M473	1445	14.5	5.06	0.83	0.78	0.68	87.0	87.0	85.0	6.0	2.5	3.0	0.134	113
9.3	12.5	160M	MJ160	MD16M4A3	1450	17.1	6.25	0.86	0.82	0.77	88.0	88.0	87.0	6.0	2.0	2.5	0.141	136
11	15	160M	MJ160	MD16M4C3	1450	20.5	7.39	0.84	0.81	0.76	89.0	89.0	86.0	6.0	2.1	2.5	0.177	143
15	20	160L	MJ160	MD16L4K3	1450	27.6	10.08	0.84	0.83	0.79	90.2	90.5	90.0	6.0	2.1	2.5	0.235	156
*18.5	25	180L	MJ180	MD18L433	1460	33.2	12.30	0.85	0.82	0.72	91.2	91.2	90.0	6.0	2.4	2.5	0.46	215
22	30	180L	MJ180	MD18L473	1460	39.0	14.70	0.86	0.82	0.72	91.8	91.5	90.0	6.0	2.4	2.5	0.54	230
30	40	200L	MJ200	MD20L433	1465	51.5	19.90	0.88	0.84	0.77	92.0	92.0	90.0	6.0	2.6	2.5	0.86	305
37	50	225S	MJ225	MD22S413	1470	64.0	24.50	0.87	0.83	0.75	93.0	93.0	91.0	6.0	2.5	2.5	1.32	380
45	60	225M	MJ225	MD22M433	1470	76.5	29.80	0.88	0.84	0.75	93.2	93.2	91.0	6.0	2.5	2.5	1.60	430
55	75	250M	MJ250	MD25M413	1475	94.0	36.30	0.87	0.85	0.78	93.8	93.3	91.5	6.0	2.5	2.6	2.83	570
75	100	280S	MJ280	MD28S413	1480	124	49.40	0.89	0.89	0.83	94.2	94.0	93.0	6.0	2.2	2.5	5.00	705
90	120	280M	MJ280	MD28M433	1480	149	59.20	0.89	0.87	0.81	94.7	94.3	93.2	6.0	2.2	2.5	6.00	725

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.