

FLAME PROOF MOTORS Ex(d) TEFC 3 Phase Squirrel Cage Induction Motors - Frame size 80 to 315L

eff1

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

Ambient : 45°C
Duty : S1 (Continuous)

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

Table-MJ-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 eff1			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	MJ080413	1415	0.95	0.225	0.74	0.68	0.55	73.0	70.0	64.0	4.5	2.4	2.6	0.0061	31
0.55	0.75	80	MJ80	MJ080433	1420	1.33	0.377	0.74	0.64	0.50	78.0	78.0	70.0	5.0	2.8	3.0	0.0072	32
0.75	1.0	80	MJ80	MJ080453	1410	1.67	0.518	0.76	0.67	0.55	82.5	82.5	77.0	5.0	2.8	3.0	0.0082	33
*1.1	1.5	90L	MJ90	MJ09L423	1430	2.35	0.75	0.77	0.70	0.57	83.8	83.8	80.0	5.0	2.4	2.8	0.015	50
*1.5	2.0	100L	MJ100	MJ10L453	1430	3.1	1.02	0.80	0.74	0.60	85.0	85.0	82.0	6.5	2.6	3.0	0.026	63
*2.2	3.0	112M	MJ112	MJ11M433	1435	4.30	1.49	0.82	0.74	0.60	86.4	86.4	84.0	6.0	2.6	3.0	0.530	70
*3.7	5.0	132M	MJ132	MJ13M433	1445	7.10	2.49	0.82	0.78	0.63	88.3	88.3	86.0	6.5	2.7	3.0	0.113	105
*5.5	7.5	132M	MJ132	MJ13M473	1455	10.1	3.68	0.85	0.80	0.71	89.5	89.5	88.0	7.0	2.6	3.0	0.134	113
*7.5	10	160M	MJ160	MJ16M4A3	1455	13.8	5.02	0.84	0.82	0.73	90.1	90.1	88.0	6.5	2.5	2.8	0.141	142
9.3	12.5	160M	MJ160	MJ16M4C3	1460	17.0	6.20	0.84	0.82	0.73	90.5	90.5	88.0	6.5	2.5	2.8	0.177	146
11	15	160M	MJ160	MJ16M4K3	1460	19.7	7.34	0.85	0.83	0.76	91.5	91.5	89.5	7.0	2.7	2.9	0.204	158
*15	20	180L	MJ180	MJ18L433	1465	27.1	9.97	0.84	0.81	0.72	91.8	91.8	90.0	7.0	2.5	2.8	0.460	215
18.5	25	180L	MJ180	MJ18L473	1465	33.2	12.30	0.84	0.81	0.72	92.2	92.2	90.5	7.0	2.5	2.8	0.54	230
*22	30	200L	MJ200	MJ20L433	1470	38.9	14.60	0.85	0.80	0.72	92.6	92.6	91.0	7.0	2.6	3.0	0.86	305
30	40	200L	MJ200	MJ20L453	1470	52.0	19.88	0.86	0.85	0.80	93.2	93.2	91.0	7.0	2.6	2.6	0.93	319
37	50	225M	MJ225	MJ22M433	1470	63.0	24.50	0.87	0.85	0.77	93.6	93.6	91.6	7.0	2.6	2.6	1.60	430
45	60	250M	MJ250	MJ25M4A3	1470	75.8	29.82	0.88	0.86	0.78	93.9	93.9	91.9	7.0	2.6	2.6	2.83	530
55	75	250M	MJ250	MJ25M413	1480	93.5	36.20	0.87	0.85	0.78	94.2	94.2	92.8	7.0	2.5	2.6	2.83	53
75	100	280S	MJ280	MJ28S413	1480	122	49.40	0.88	0.86	0.80	94.7	94.7	93.0	7.0	2.2	2.5	5.00	705
90	120	280M	MJ280	MJ28M433	1480	150	59.20	0.88	0.86	0.80	95.0	95.0	93.2	7.0	2.2	2.5	6.00	725
110	150	315S	MJ315	MJ31S413	1485	185	72.10	0.87	0.85	0.79	95.2	95.2	93.2	6.0	2.2	2.5	8.70	1020
125	170	315M	MJ315	MJ31M4A3	1486	207	81.90	0.88	0.85	0.79	95.5	95.5	94.0	6.0	2.2	2.5	10.20	1090
132	180	315M	MJ315	MJ31M433	1486	218	86.50	0.88	0.86	0.80	95.5	95.5	94.0	6.0	2.2	2.5	10.20	1090
150	200	315L	MJ315	MJ31L4A3	1487	248	98.30	0.88	0.86	0.80	95.7	95.7	94.1	6.0	2.2	2.5	12.20	1270
160	215	315L	MJ315	MJ31L453	1487	264	104.8	0.88	0.87	0.80	95.8	95.8	94.2	6.0	2.2	2.5	12.20	1270
180	240	315L	MJ315	MJ31L463	1487	294	117.90	0.89	0.87	0.80	95.8	95.8	94.3	6.0	2.2	2.5	13.40	1340
**200	270	315L	MJ315	MJ31L473	1487	330	131.00	0.88	0.87	0.80	95.8	95.8	94.3	6.0	2.2	2.5	14.60	1400

Note: • Efficiency class 'eff1' will be punched on the name plate as per IS : 12615-2004 (Rev-1) from 0.37kW 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 ratings are suitable for 40°C ambient temperature.