

### 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-2P

3000 rpm (2-Pole)

Rated Output		Frame size		Type Ref. B3 Construction	Operating Characteristics at Rated output									With DOL Starting		Pullout Torque to Rated Torque Ratio	Rotor GD <sup>2</sup> kgm <sup>2</sup>	Net Weight B3 Constrn. Kg
					Speed RPM	Current Amps.	Rated Torque Kg-m.	Power Factor			%Efficiency <b>eff1</b>			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	MJ0802A3	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	MJ0802B3	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	MJ080213	2830	1.64	0.258	0.82	0.74	0.62	77.5	77.3	74.0	5.0	2.5	2.8	0.0037	31
1.1	1.5	80	MJ80	MJ080233	2840	2.25	0.377	0.82	0.75	0.63	82.5	82.8	78.0	5.9	2.7	3.0	0.0051	32
*1.5	2.0	90L	MJ90	MJ09L243	2840	3.0	0.514	0.82	0.78	0.68	84.1	84.1	81.0	6.5	3.3	3.5	0.0091	50
*2.2	3.0	100L	MJ100	MJ10L213	2890	4.15	0.741	0.86	0.83	0.76	86.0	86.0	83.0	7.0	2.8	3.0	0.0188	62
*3.7	5.0	112M	MJ112	MJ11M233	2890	6.84	1.24	0.86	0.84	0.76	87.5	87.5	85.5	7.0	3.0	3.3	0.0530	70
*5.5	7.5	132M	MJ132	MJ13M253	2935	9.70	1.83	0.89	0.85	0.77	88.6	88.6	84.0	7.0	2.5	3.0	0.0820	114
*7.5	10	132M	MJ132	MJ13M293	2935	13.1	2.49	0.89	0.85	0.77	89.5	89.5	84.5	7.0	2.5	3.0	0.0980	120
9.3	12.5	160M	MJ160	MJ16M233	2930	16.2	3.09	0.89	0.85	0.76	90.0	90.0	86.0	7.0	2.4	2.9	0.1500	150
11	15	160M	MJ160	MJ16M253	2930	19.0	3.66	0.89	0.86	0.82	90.5	90.5	87.5	7.0	2.3	3.0	0.171	154
15	20	160M	MJ160	MJ16M263	2930	25.7	4.99	0.89	0.88	0.82	91.3	91.3	88.0	7.0	2.3	2.8	0.203	160
18.5	25	160L	MJ160	MJ16L293	2930	31.2	6.15	0.90	0.89	0.86	91.8	91.8	90.0	7.0	2.4	3.0	0.268	177
*22	30	180L	MJ180	MJ18L233	2935	37.7	7.70	0.88	0.88	0.83	92.2	92.2	90.0	7.0	2.3	2.7	0.34	231
30	40	200L	MJ200	MJ20L2A3	2955	50.5	9.89	0.89	0.86	0.80	93.0	93.0	91.0	7.0	2.5	2.6	0.61	320
37	50	200L	MJ200	MJ20L253	2955	62.0	12.2	0.89	0.86	0.80	93.3	93.3	91.5	7.0	2.4	2.5	0.61	320
45	60	225M	MJ225	MJ22M253	2970	75.0	14.8	0.89	0.87	0.83	93.7	93.7	92.0	7.0	2.3	2.7	1.13	449
*55	75	280S	MJ280	MJ28S213	2965	88.5	18.1	0.92	0.91	0.86	94.0	94.0	92.0	7.0	2.3	2.7	2.63	690
75	100	280M	MJ280	MJ28M233	2970	121	24.6	0.91	0.89	0.84	94.6	94.6	92.0	7.0	2.2	2.8	3.01	740
90	120	280M	MJ280	MJ28M253	2970	143	29.5	0.92	0.90	0.85	95.0	95.0	92.0	7.0	2.2	2.8	3.42	765
110	150	315S	MJ315	MJ31S233	2982	177	35.9	0.91	0.87	0.79	95.0	95.0	92.5	7.0	2.2	2.70	5.0	1050
125	170	315M	MJ315	MJ31M2A3	2982	201	40.8	0.91	0.87	0.78	95.3	94.4	92.5	7.0	2.2	2.70	5.0	1050
132	180	315M	MJ315	MJ31M233	2982	212	43.1	0.91	0.87	0.79	95.3	94.4	92.5	7.0	2.2	2.70	5.0	1050
150	200	315L	MJ315	MJ31L2A3	2982	243	49.0	0.90	0.85	0.77	95.6	94.8	93.8	7.0	2.2	2.70	6.2	1240
160	215	315L	MJ315	MJ31L253	2982	259	52.3	0.90	0.86	0.79	95.6	95.0	94.0	7.0	2.2	2.70	6.2	1240
180	240	315L	MJ315	MJ31L2B3	2982	291	58.8	0.90	0.86	0.79	95.6	95.2	94.3	7.0	2.2	2.70	7.7	1500
**200	270	315L	MJ315	MJ31L273	2982	323	65.3	0.90	0.86	0.79	95.7	95.4	94.5	7.0	2.2	2.70	7.7	1500

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 ratings are offered in higher frame size with 'eff1' efficiency level.  
(\*\*) These ratings are suitable for 40°C ambient temperature.