

**Data sheet for motors**

<b>Manufacturer</b>	<b>Bharat Bijlee Ltd.</b>			<b>Customer</b>	
<b>Type of motor</b>	<b>3 Phase Induction Motor</b>			<b>BBL Enquiry reference No</b>	
<b>Quantity</b>				<b>Customer P.O.Number</b>	
<b>Application</b>	<b>CUSTOMER TO FURNISH</b>			<b>W.O. No. / SAP No.</b>	
Tag no.				Output kW / pole	0.37 / 2P
BBL type tef.				Frame size	MJ80
<b>Installation details</b>				<b>Applicable standards (latest edition)</b>	
Area classification (Safe / Hazardous)		Hazardous		Performance: IS15999-1 Maintenance IS:900	FLP Motors: IS/IEC 60079-1
Location: indoor/outdoor/deck		Indoor		Dimensions: IS 1231/IS 2223/IS:8223	
Altitude (meters)		1000 or less		Vibrations: IS 12075	
				Noise level: IS 12065	
<b>Hazardous area details</b>				<b>Supply conditions and permissible variations (grid supply)</b>	
Area classification GAS (Zone 1/Zone 2)		ZONE I		Number of phases	Three
Gas group		IIA, IIB		Voltage (Volts) and permissible variation	415 ±10%
Temp.class		T6		Frequency (Hz) and permissible variation	50 ±5%
Type of Explosion protection (FLP/Type 'e'/Type 'n')		Ex d		Combined variation (absolute sum)	±10%
Approving authority for hazardous area		If Coal Mine application then DGMS else PESO			
<b>Electrical parameters</b>					
<b>Starting performance</b>					
Method of starting		DOL		Starting current (%FLC)	600
Load speed (rpm)		CUSTOMER TO FURNISH		Starting torque (%FLT)	270
Motor GD <sup>2</sup> (kgm <sup>2</sup> )		0.0026		Pull out torque (%FLT)	300
Load GD <sup>2</sup> (kgm <sup>2</sup> )		CUSTOMER TO FURNISH		Locked rotor withstand time (hot/cold) (sec)	15 / 30
Load torque-speed curve		Parabolic TS curve		Number of consecutive starts (hot/cold) (nos.) provided Load GD2 = Motor GD2	2 / 3
Starting time at rated voltage (sec)		PLEASE FURNISH ALL ABOVE DETAILS			
<b>Running Performance</b>					
Efficiency class		IE2		Duty and designation	Continuous (S1)
Ambient temp./temp.rise by resistance (deg.C)		45 / 75		CDF/Equivalent starts per hour/FI	-
Enclosure		TEFC (TOTALLY ENCLOSED FAN COOLED)		Insulation class / utilisation class on DOL	F/B
Full load current (FLC) amps.		0.9		Rotor type (Squirrel Cage/ Slip ring )	Squirrel Cage
Full load speed (rpm)		2880		Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable
Full load torque (FLT) kg-m		0.13		Stator/rotor time constant (min)	90/122
Efficiency in % at FL/0.75FL/0.5FL		69.5 69.5 67.5		Power factor at FL/0.75FL/0.5FL	0.82 0.74 0.60
<b>Mechanical parameters</b>					
Mounting		B5		Mounting dimensions	Refer GA drawing
Shaft extention		Single cylindrical		Direction of rotation viewed from DE	Clockwise
Degree of protection		IP 55		Suitable for bidirectional rotation	Yes
Method of cooling (TEFC/forced cooled/TEFC)		TEFC (IC 411)		Paint type	Acid Alkali Proof
Net weight of motor (kgs.)		31		Paint shade	632 as per IS 5
				Earthing provision (two terminals on stator body)	Yes
<b>Bearings</b>					
<b>Terminal box</b>					
Coupling (Direct/flexible/Belt & Pulley/Gearbox)		Direct		Terminal box location when viewed from DE	As per GA drawing
Dimenssions of pulley (OD x width) mm		-		Direction of cable entry	As per GA drawing
Bearings (roller/ball/angular contact)		Ball /Ball		Cable size and type(Aluminium)	1R X 3C X 4 SQ MM
Bearing size DE/NDE		6204 2Z C3 / 6204 2Z C3		Earthing provision (one terminal in TB)	Yes
Type of lubrication		LITHIUM SOAP BASE GREASE		No of phases/Winding connection/number of terminals	3 / STAR / 3
<b>Accessories</b>					
RTDs - 3 numbers simplex (w/o controller)				Arrow plate for direction of rotation	
BTDs - 1 number per bearing (w/o controller)				Double compression glands (main cable)	
Space heaters - single phase 50z, 230V				Double compression glands (Space heater/thermistors/RTDs)	
Thermistors - PTC , 1 number per phase				Brake (Type/voltage/torque)	
Additional T-Box for Accessories					
Additional nameplate					
<b>Notes:</b>					
1)All performance values are subject to IS15999-1 tolerances, unless otherwise specified.					
2)Performance values are at rated voltage and rated frequency condition and for DOL starting condition.					
3)Motor GD <sup>2</sup> = Load GD <sup>2</sup> assumed wherever not mentioned.					
4)Where starting time is more than 10 seconds, provision of heavy duty relays is mandatory.					
5)Kilowatt rating is mandatory and HP is approximate.					
6) Accessories provided are marked as "YES" 7) Unused cable entry must be filled with suitably certified stopping plugs.					
				Prepared by	
				Approved by	
				Revision	
<b>Project:</b>		<b>Contractor/Client</b>		Date:	
<b>Consultant</b>		<b>Package</b>			

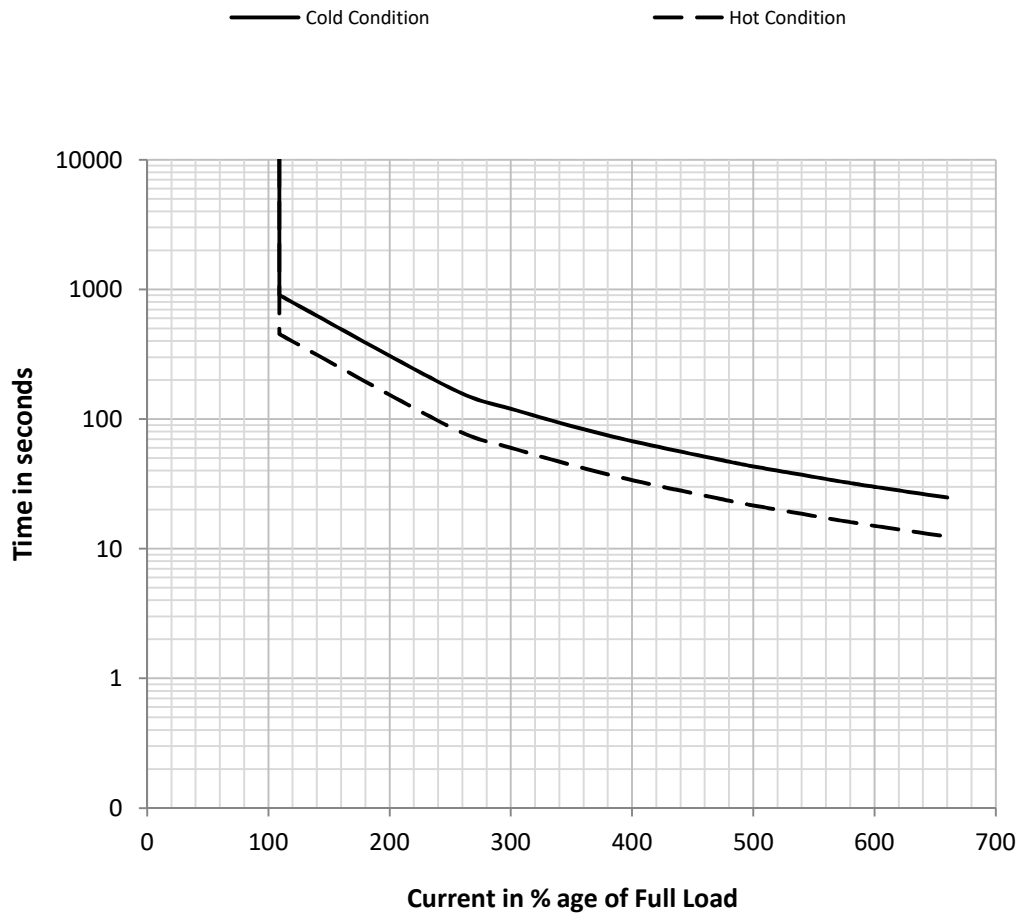




Customer : -	BBL Ref No.: -	Quantity : -
Consultant : -	Tag Nos. : --	
Project : -		

Output (kW)/Poles : 0.37 / 2P	Frame : MJ80
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**Thermal Withstand Time  
Vs Current Curve**



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Rev No.	Prepared By	Checked By	Date