

 Bharat Bijlee		Data sheet for motors									
Manufacturer	Bharat Bijlee Ltd.	Customer									
Type of motor	3 Phase Induction Motor	BBL Enquiry reference No									
Quantity		Customer P.O.Number									
Application	CUSTOMER TO FURNISH	W.O. No. / SAP No.									
Tag no.		Output kW / pole	1.1 / 8P								
BBL type tef.		Frame size	100L								
Installation details		Applicable standards (latest edition)									
Area classification (Safe / Hazardous)	Industrial safe area	Performance: IS/IEC 60034-1 Maintenance IS:900									
Location: indoor/outdoor/deck	Indoor	Dimensions: IS 1231/IS 2223/IS:8223									
Altitude (meters)	1000 or less	Vibrations: IS 12075									
		Noise level: IS 12065									
Hazardous area details		Supply conditions and permissible variations (grid supply)									
Area classification GAS (Zone 1/Zone 2)	N.A.	Number of phases	Three								
Gas group	N.A.	Voltage (Volts) and permissible variation	415 ±10%								
Temp.class	N.A.	Frequency (Hz) and permissible variation	50 ±5%								
Type of Explosion protection (FLP/Type 'e'/Type 'n')	N.A.	Combined variation (absolute sum)	±10%								
Approving authority for hazardous area	Not Applicable										
Electrical parameters											
Starting performance											
Method of starting	DOL	Starting current (%FLC)	300								
Load speed (rpm)	CUSTOMER TO FURNISH	Starting torque (%FLT)	190								
Motor GD ² (kgm ²)	0.027	Pull out torque (%FLT)	230								
Load GD ² (kgm ²)	CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	30 / 60								
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										
Running Performance											
Efficiency class	IE2	Duty and designation	Continuous (S1)								
Ambient temp./temp.rise by resistance (deg.C)	50 / 70	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.	3.09	Rotor type (Squirrel Cage/ Slip ring)	Squirrel Cage								
Full load speed (rpm)	680	Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable								
Full load torque (FLT) kg-m	1.58	Stator/rotor time constant (min)	108/146								
Efficiency in % at FL/0.75FL/0.5FL	70.8 70.8 67.0	Power factor at FL/0.75FL/0.5FL	0.70 0.61 0.50								
Mechanical parameters											
Mounting	B3	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	Acrylic								
Net weight of motor (kgs.)	20	Paint shade	RAL 5000								
		Earthing provision (two terminals on stator body)	Yes								
Bearings		Terminal box									
Coupling (Direct/flexible/Belt & Pulley/Gearbox)	Direct	Terminal box location when viewed from DE	As per GA drawing								
Dimensions 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 10 SQ MM OR 2R X 3C X 6 SQ MM								
Bearing size DE/NDE	6206 2Z C3 / 6205 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 / 6								
Accessories											
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											
Notes:											
1)All performance values are subject to IS/IEC 60034-1 tolerances, unless otherwise specified.											
2)Performance values are at rated voltage and rated frequency condition and for DOL starting condition.											
3)Motor GD ² = Load GD ² 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"											
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