

 Bharat Bijlee		<i>Data sheet for motors</i>							
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		1.5	/ 6P	
BBL type tef.		2J10L633			Frame size		MJ100		
<i>Installation details</i>					<i>Applicable standards (latest edition)</i>				
Area classification (Safe / Hazardous)		Hazardous			Performance: IS/IEC 60034-1 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				
<i>Hazardous area details</i>					<i>Supply conditions and permissible variations (grid supply)</i>				
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		T5			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							
<i>Electrical parameters</i>									
<i>Starting performance</i>									
Method of starting		DOL			Starting current (%FLC)		450		
Load speed (rpm)		CUSTOMER TO FURNISH			Starting torque (%FLT)		200		
Motor GD ² (kgm ²)		0.0253			Pull out torque (%FLT)		250		
Load GD ² (kgm ²)		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							
<i>Running Performance</i>									
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.		3.63			Rotor type (Squirrel Cage/ Slip ring)		Squirrel Cage		
Full load speed (rpm)		935			Rotor voltage/rotor current (RV/RA) (Volts/Amps)		Not applicable		
Full load torque (FLT) kg-m		1.56			Stator/rotor time constant (min)		108/146		
Efficiency in % at FL/0.75FL/0.5FL		79.8	79.8	76.0	Power factor at FL/0.75FL/0.5FL		0.72	0.62 0.52	
<i>Mechanical parameters</i>									
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/TESC)		TEFC (IC 411)			Paint type		Acid Alkali Proof		
Net weight of motor (kgs.)		60			Paint shade		632 as per IS 5		
					Earthing provision (two terminals on stator body)		Yes		
<i>Bearings</i>					<i>Terminal box</i>				
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 16 SQ MM		
Bearing size DE/NDE		6206 2Z C3 / 6206 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		
<i>Accessories</i>									
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									
<i>Notes:</i>									
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"									
							Prepared by		
							Approved by		
							Revision		
Project:			Contractor/Client			Date:			
Consultant			Package						

