Manufacturer Fype of motor	Bharat Bijlee Ltd.3 phase Induction Motor		Customer BBL Enquiry reference No			
Quantity			Customer P.O.Number			
Application			W.O. No. / SAP No.			
Fag no.			Output kW / Pole	1.5	/	2P
BBL type Ref.		MD09L235	Frame size		MJ90	
Installation detai	ils		Applicable standards (latest edition)			
Area classificatio	n (Safe / Hazardous)	Hazardous area		FLP Moto	ors: IS/IEC 6	0079-
Location: indoor/	· · · · · · · · · · · · · · · · · · ·	Indoor	Dimensions: IS 1231/IS 2223/IS:8223			
Altitude (meters)		1000 or less	Vibrations: IS 12075			
			Noise level: IS 12065			
Hazardous area	details	I	Supply conditions and permissible variations (grid	supply)		
-	n GAS (Zone 1/Zone 2)	ZONE I	Number of phases		Three	
Gas group		IIA, IIB	Voltage (Volts) and permisible variation	415	±10	%
Femp.class		T5	Frequency (Hz) and permissible variation	50	±50	
rype or Explosio	n protection	Ex 'd'	Combined variation (absolute sum)	50	±10%	/0
(EL D/Tyme 'o'/Tyme 'o') Approving authority for hazardous area		If Mine application then DGMS else PESO			1070	
Electrical param		•		·		
Starting perform				1		
Method of starting		DOL	Starting current (%FLC)	550		
Load speed (rpm)		CUSTOMER TO FURNISH	Starting torque (%FLT)		270	
Motor GD <sup>2</sup> (kgm <sup>2</sup>	(2)	0.0071	Pull out torque (%FLT)		300	
Load $GD^2$ (kgm <sup>2</sup>		CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	15	/	30
		Parabolic TS curve	Number of consecutive starts (hot/cold) (nos.)		2/3	_ ~
Load torque-spee			provided Load GD2 = Motor GD2		273	
Starting time at ra	ated voltage (sec)	PLEASE FURNISH ALL ABOVE DETAILS				
Running Perform	nance					
Efficiency class		-	Duty and designation	Continuous (S1)		51)
Ambient temp./te	mp.rise by resistance (deg.C)	45 / 75	CDF/Equivalent starts per hour/FI		_	
Enclosure		TEFC (TOTALLY ENCLOSED FAN COOLED)			F/B	
Full load current	(FLC) amps.	3.0	Rotor type (Squirrel Cage/ Slip ring )	Squirrel Cage		
Full load speed (r	pm)	2825	Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable		le
Full load torque (FLT) kg-m		0.52	Stator/rotor time constant (min)	84/113		
	t FL/0.75FL/0.5FL	80.6 78.0 74.0	Power factor at FL/0.75FL/0.5FL	0.86	0.83	0.76
Mechanical para		00.0 70.0 71.0		0.00	0.05	0.70
Mounting		B5	Mounting dimensions	Re	fer GA draw	vina
Shaft extention		Single cylindrical	Direction of rotation viewed from DE	Refer GA drawing		•
	tion		Suitable for bidirectional rotation	Clockwise		
Degree of protect		IP 55	Suitable for Didiffectional fotation	Yes		
Method of coolin	g (TEFC/forced cooled/TESC)	TEFC (IC 411)	Paint type	Acid Alkali Proof		oof
Net weight of mo	otor (kg)	48	Paint shade	632 as per IS 5		5
Roaninas			Earthing provision (two terminals on stator body) <i>Terminal box</i>		Yes	
Bearings	$f_{0} = \frac{1}{10} = \frac$					
Coupling (Direct/	nexible/ Dell &	Direct	Terminal box location when viewed from DE	As	per GA drav	ving
Pulley/Gearbox) Dimenssions of p	ulley (OD x width) mm	_	Direction of cable entry	As per GA drawing		
Ĩ	all/angular contact)	Ball /Ball	Cable size and type(Aluminium)			
<b>U</b>				1R X 3C X 6 SQ MM		
Bearing size DE/NDE		6205 2Z C3/6205 2Z C3	Earthing provision (one terminal in TB)	Yes		2
Type of lubrication	ЛП 	LITHIUM SOAP BASE GREASE	tomainala		3 / STAR / 2	3
Accessories	· · · · · · · · · · · · · · · · · · ·					
	rs simplex(w/o controller)		Arrow plate for direction of rotation			
BTDs - 1 number per bearing(w/o controller)			Double compression glands (main cable)Double compression glands (Space			
•	ingle phase 50z, 230V		heater/Thermisters/RTDs)			
Thermisters - PTO	С		Brake (Type/voltage/torque)			
Additional T-Box	x for Accessories					
Additional namep	olate					
1		-				

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	

			Revison	
<b>Project:</b>	Contractor/Client		Date:	
Consultant	Package			