Manufacturer	Bharat Bijlee Ltd.		Customer			
Type of motor	3 phase Induction Motor		BBL Enquiry reference No			
Quantity	CUCTOME		Customer P.O.Number			
Application CUSTOMER TO FURNISH		W.O. No. / SAP No.	1.5	1	4D	
Fag no.		MD09L453	Output kW / Pole	1.5	/ MJ90	4P
BBL type Ref. Installation detai	 ;1 _a	NID09L433	Frame size		WIJ9 0	
	n (Safe / Hazardous)	Hazardous area	Applicable standards (latest edition)Performance: IS/IEC 60034-1 Maintenance IS:900	EI D Mot	ors: IS/IEC 6	0070
Location: indoor/		Indoor	Dimensions: IS 1231/IS 2223/IS:8223	FLF MOU	JIS. 15/1EC 0	0079-
Altitude (meters)		1000 or less	Vibrations: IS 12075			
Annuae (meters)			Noise level: IS 12075			
Hazardous area	dotails		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	%
Temp.class		T5	Frequency (Hz) and permissible variation	50	±10	
Type of Explosion	n protection	Ex 'd'	Combined variation (absolute sum)	50	±10%	/0
$(\mathbf{EID}/\mathbf{T}_{\mathbf{M}}) \sim \mathbf{a} /\mathbf{T}_{\mathbf{M}}$	ao 'n')				1070	
Approving author	rity for hazardous area	If Mine application then DGMS else PESO				
Flootrical narraw	otors					
Electrical param Starting perform						
Method of startin		DOL	Starting current (0/ FI C)		500	
	0	CUSTOMER TO FURNISH	Starting current (%FLC) Starting torque (%FLT)		250	
Load speed (rpm) $(2 - 2)$			Starting torque (%FLT)			
Motor GD^2 (kgm ²)	,	0.016	Pull out torque (%FLT)		300	• -
Load GD ² (kgm ²	() ()	CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	15	/	30
Load torque-spee	ed curve	Parabolic TS curve	Number of consecutive starts (hot/cold) (nos.)		2/3	
Louis torque spec			provided Load GD2 = Motor GD2			
Starting time at ra	ated voltage (sec)	PLEASE FURNISH ALL ABOVE	E			
		DETAILS				
Running Perform	nance	1				
Efficiency class		-	Duty and designation	Continuous (S1)		S1)
Ambient temp./temp.rise by resistance (deg.C)		45 / 75	CDF/Equivalent starts per hour/FI			
Enclosure		TEFC (TOTALLY ENCLOSED	Insulation class / utilisation class on DOL	F/B		
		FAN COOLED)				
ull load current (FLC) amps.		3.3	Rotor type (Squirrel Cage/ Slip ring)	Squirrel Cage		
Full load speed (rpm)		1410	Rotor voltage/rotor current (RV/RA) (Volts/Amps)			le
Full load torque (FLT) kg-m		1.04	Stator/rotor time constant (min)		84/113	
•	t FL/0.75FL/0.5FL	80.0 79.0 75.0	Power factor at FL/0.75FL/0.5FL	0.80	0.72	0.58
Mechanical para	imeters			_		
Mounting		B8	Mounting dimensions	Refer GA drawing		0
Shaft extention		Single cylindrical	Direction of rotation viewed from DE	Clockwise		
Degree of protection		IP 55	Suitable for bidirectional rotation	Yes		
Method of coolin	g (TEFC/forced cooled/TESC)	TEFC (IC 411)	Paint type	A	cid Alkali Pr	oof
		```´				
Net weight of motor (kg)		50	Paint shade		532 as per IS	5
<b></b>			Earthing provision (two terminals on stator body)		Yes	
Bearings			Terminal box	1		
Coupling (Direct/	'flexible/Belt &	Direct	Terminal box location when viewed from DE	As	per GA drav	wing
Pulley/Gearbox)					•	C
Dimenssions of p	ulley (OD x width) mm	-	Direction of cable entry	As	per GA drav	wing
Bearings (roller/b	all/angular contact)	Ball /Ball	Cable size and type(Aluminium)	1R X 3C X		) MM
Bearing size DE/NDE		6205 2Z C3/6205 2Z C3	Earthing provision (one terminal in TB)	Yes		
Type of lubricatio	on	LITHIUM SOAP BASE GREASE	tomminala		3 / STAR / 2	5
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)			
Space heaters - si	ingle phase 50z, 230V		Double compression glands (Space			
•			heater/Thermisters/RTDs)			
Thermisters - PTO			Brake (Type/voltage/torque)			
Additional T Roy	t for Accessories					
Additional namep	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			