Man	Dhana4 Dillas T 4.1		Customer			
Manufacturer Type of motor	Bharat Bijlee Ltd.3 phase Induction Motor		Customer BBL Enquiry reference No			
Quantity	5 phase multion wrotor		BBL Enquiry reference No Customer P.O.Number			
Application	CUSTOME	R TO FURNISH	W.O. No. / SAP No.			
Fag no.	COSTONIE		Output kW / Pole	1.1		4P
BBL type Ref.		MD09L433	Frame size	1.1	, MJ90	
Installation deta		11120711-133	Applicable standards (latest edition)		1413 / 0	
		Hazardous area		FLP Motors	· IS/IEC 6	0079-
Area classification (Safe / Hazardous) Location: indoor/outdoor/deck		Indoor	Dimensions: IS 1231/IS 2223/IS:8223			0017
Altitude (meters)		1000 or less	Vibrations: IS 12075			
minude (meters)			Noise level: IS 12075			
Hazardous area	details		Supply conditions and permissible variations (grid	supply)		
-	on 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	$50 \pm 5\%$		
Type of Explosion protection		Ex 'd'	Combined variation (absolute sum)	±10%		0
(EL D/Type 'e'/Type 'e') Approving authority for hazardous area		If Mine application then DGMS else PESO			<u> </u>	
Electrical param	neters					
Starting perform	ance					
Method of startin	g	DOL	Starting current (%FLC)	420		
Load speed (rpm)	)	CUSTOMER TO FURNISH	Starting torque (%FLT)	230		
Motor $GD^2$ (kgm <sup>2</sup> )		0.012	Pull out torque (%FLT)	270		
Load GD <sup><math>^2</math></sup> (kgm <sup><math>^2</math></sup>	•	CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	15	/	30
			Number of consecutive starts (hot/cold) (nos.)			
Load torque-speed curve		Parabolic TS curve PLEASE FURNISH ALL ABOVE	provided Load GD2 = Motor GD2	2/3		
Starting time at ra	ated voltage (sec)	DETAILS				
Running Perform	nance					
Efficiency class		_	Duty and designation	Continuous (S1)		51)
Ambient temp./temp.rise by resistance (deg.C)		45 / 75	CDF/Equivalent starts per hour/FI			
(deg.e)		TEFC (TOTALLY ENCLOSED				
Enclosure		FAN COOLED)	Insulation class / utilisation class on DOL	F/B		
Full load current (FLC) amps.		2.5	Rotor type (Squirrel Cage/ Slip ring )	Squirrel Cage		e
Full load speed (rpm)		1410	Rotor voltage/rotor current (RV/RA) (Volts/Amps)			, 
Full load torque (		0.76	Stator/rotor time constant (min)	84/113		
<b>A</b>	t FL/0.75FL/0.5FL	78.0 77.0 72.0	Power factor at FL/0.75FL/0.5FL	0.80	0.73	0.61
Mechanical para		70.0 77.0 72.0		0.00	0.75	0.01
Mounting		B3	Mounting dimensions	Refe	r GA draw	ving
Shaft extention		Single cylindrical	Direction of rotation viewed from DE	Refer GA drawing Clockwise		
	tion	IP 55	Suitable for bidirectional rotation	Yes		
Degree of protection						
Method of coolin	g (TEFC/forced cooled/TESC)	TEFC (IC 411)	Paint type	Acid Alkali Proof		
Net weight of mo	otor (kg)	48	Paint shade	63'	2 as per IS	5
			Earthing provision (two terminals on stator body)	Yes		~
Bearings			<i>Terminal box</i>			
Coupling (Direct	/flexible/Belt &					
Pulley/Gearbox)		Direct	Terminal box location when viewed from DE	As per GA drawing		
•	oulley (OD x width) mm	_	Direction of cable entry	Δε η	er GA drav	ving
<b>A</b>						
Bearings (roller/ball/angular contact)		Ball /Ball	Cable size and type(Aluminium)	1R X 3C X 6 SQ MM		
Bearing size DE/NDE		6205 2Z C3/6205 2Z C3	Earthing provision (one terminal in TB)	Yes		
Type of lubrication	on	LITHIUM SOAP BASE GREASE	El tomoinala	3 / STAR / 3		
Accessories		Г		1		
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/Thermisters/RTDs)			
Thermisters - PT	С		Brake (Type/voltage/torque)			
Additional T-Boy	x for Accessories					
Additional name	olate					

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			