Manufacturer	Bharat Bijlee Ltd.		Customer			
<b>Type of motor</b>	<b>3 phase Induction Motor</b>		BBL Enquiry reference No			
Quantity			Customer P.O.Number			
Application	CUSTOME	R TO FURNISH	W.O. No. / SAP No.			
Гag no.			Output kW / Pole	9.3	/	8P
BBL type Ref.		MD18L813	Frame size		MJ180	
Installation detail	ils	•	Applicable standards (latest edition)			
Area classificatio	on (Safe / Hazardous)	Hazardous area	Performance: IS/IEC 60034-1 Maintenance IS:900	FLP Mot	ors: IS/IEC	60079-
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)		ZONE I	Number of phases	Three		
Gas group		IIA, IIB	Voltage (Volts) and permisible variation	415 ±10%		0%
Temp.class		T5	Frequency (Hz) and permissible variation	50 ±5%		5%
rype or Explosion protection		Ex 'd'	Combined variation (absolute sum)	±10%		
Approving authority for hazardous area		If Mine application then DGMS else PESO				
Electrical param						
Starting perform				T		
Method of startin	0	DOL	Starting current (%FLC)	450		
Load speed (rpm)	)	CUSTOMER TO FURNISH	Starting torque (%FLT)	210		
Motor GD <sup>2</sup> (kgm	1 <sup>2</sup> )	0.62	Pull out torque (%FLT)	220		
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
Load torque-speed curve		Parabolic TS curve	Number of consecutive starts (hot/cold) (nos.) provided Load GD2 = Motor GD2	2/3		
Starting time at ra	ated voltage (sec)	PLEASE FURNISH ALL ABOVE DETAILS				
Running Perform	mance	DETAILS				
Efficiency class		_	Duty and designation	Continuous (S1)		(S1)
Ambient temp./temp.rise by resistance (deg.C)		45 / 75	CDF/Equivalent starts per hour/FI			
		TEFC (TOTALLY ENCLOSED				
Enclosure		FAN COOLED)	Insulation class / utilisation class on DOL	F/B		
Full load current (FLC) amps.		18.9	Rotor type (Squirrel Cage/ Slip ring )	Squirrel Cage		ge
Full load speed (rpm)		715	Rotor voltage/rotor current (RV/RA) (Volts/Amps)	<b>`</b>		ble
Full load torque (FLT) kg-m		12.7	Stator/rotor time constant (min)	108/146		
<b>A</b>	t FL/0.75FL/0.5FL	86.5 86.5 85.0	Power factor at FL/0.75FL/0.5FL	0.79	0.74	0.64
Mechanical para		•	•			
Aounting		B8	Mounting dimensions	R	efer GA dra	wing
Shaft extention		Single cylindrical	Direction of rotation viewed from DE	Clockwise		0
Degree of protect	tion	IP 55	Suitable for bidirectional rotation		Yes	
0 1	g (TEFC/forced cooled/TESC)	TEFC (IC 411)	Paint type	Acid Alkali Proof		roof
		,  ,				
Net weight of motor (kg)		205	Paint shade	632 as per IS 5		33
			Earthing provision (two terminals on stator body)		Yes	
Bearings			Terminal box			
Coupling (Direct	/flex1ble/Belt &	Direct	Terminal box location when viewed from DE	As	per GA dra	wing
Pulley/Gearbox)						
Dimenssions of pulley (OD x width) mm		- Ball /Ball	Direction of cable entry Cable size and type(Aluminium)	As per GA drawing 2R X 3C X 50 SQ M		<u> </u>
Bearings (roller/ball/angular contact)						
<u> </u>		6310 2Z C3/6310 2Z C3	Earthing provision (one terminal in TB)	Yes 3 / DELTA / 6		16
V 1	JII	LITHIUM SOAP BASE GREASE	taminala		J/ DELIA	/ U
Accessories	• 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 - si	ingle phase 50z, 230V		Double compression glands (Space heater/Thermisters/RTDs)			
Thermisters - PT	С		Brake (Type/voltage/torque)			
	x for Accessories					
Additional name						

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			