Manufacturer	Bharat Bijlee Ltd.		Customer			
Type of motor	3 phase Induction Motor		BBL Enquiry reference No			
Quantity			Customer P.O.Number			
Application	CUSTOME	R TO FURNISH	W.O. No. / SAP No.			
Гag no.			Output kW / Pole	15	/	6P
BBL type Ref.		MD18L615	Frame size		MJ180	
Installation detail	ils	•	Applicable standards (latest edition)			
Area classificatio	n (Safe / Hazardous)	Hazardous area	Performance: IS/IEC 60034-1 Maintenance IS:900	FLP Mot	tors: 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				1		
Method of startin	g	DOL	Starting current (%FLC)	550		
Load speed (rpm))	CUSTOMER TO FURNISH	Starting torque (%FLT)	260		
Motor GD ² (kgm	²)	0.68	Pull out torque (%FLT)	230		
Load GD ^{2} (kgm ^{2}		CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	12	/	24
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				
Running Perform	nance	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			
Amblent temp./temp.rise by resistance (deg.C)		TEFC (TOTALLY ENCLOSED		-		
Enclosure		FAN COOLED)	Insulation class / utilisation class on DOL	F/B		
Full load aurmant (FLC) among		29.0	Rotor type (Squirrel Cage/ Slip ring)	Squirrel Cage		<u>an</u>
Full load current (FLC) amps. Full load speed (rpm)		965	Rotor type (Squirrer Cage/ Shp ring) Rotor voltage/rotor current (RV/RA) (Volts/Amps)			0
				Not applicable 108/146		
Full load torque (FLT) kg-m Efficiency in % at FL/0.75FL/0.5FL		15.1	Stator/rotor time constant (min)	0.90		
✔		90.0 90.0 87.0	Power factor at FL/0.75FL/0.5FL	0.80	0.75	0.62
Mechanical para	imeters	D <i>C</i>				•
Mounting		B5	Mounting dimensions	Refer GA drawing		0
Shaft extention		Single cylindrical	Direction of rotation viewed from DE	Clockwise		e
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		roof
Net weight of mo	otor (kg)	210	Paint shade	632 as per IS 5		S 5
			Earthing provision (two terminals on stator body)	Yes		
Bearings			Terminal box			
Coupling (Direct/	/flexible/Belt &					•
Pulley/Gearbox)		Direct	Terminal box location when viewed from DE	As per GA drawing		
Dimensions 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)	2R X 3C X 50 SQ N		<u> </u>
Bearing size DE/NDE		6310 2Z C3/6310 2Z C3	Earthing provision (one terminal in TB)	Yes		
Searing size DE/NDE0510 22 C5/0510 22 C5Type of lubricationLITHIUM SOAP BASE GREASE			INO OF MASE WITCHING COMPECTION/INTERPET OF	3 / DELTA / 6		
Accessories	711	LIIIUM SUAL DASE UKEASE	tomainala	ļ		/ U
	rs simplex (w/a controllar)		Arrow plate for direction of rotation			
RTDs - 3 numbers simplex(w/o controller)						
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-Box	x for Accessories					
	1					
Additional namer	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	
Project:	Contractor/Client		Date:	
Consultant	Package			