Vonufo d	Bijlee Rharat Biilaa I td		Customor			
Manufacturer	Bharat Bijlee Ltd.		Customer BBI Enguing reference No			
<b>Fype of motor</b> Quantity	3 phase Induction Motor		BBL Enquiry reference No Customer P.O.Number			
Application	CUSTOME	R TO FURNISH	W.O. No. / SAP No.			
Fag no.	CUSIOME		Output kW / Pole	22	/	8P
BBL type Ref.		MD22M835	Frame size		, MJ225	01
Installation detail	ls		Applicable standards (latest edition)			
	n (Safe / Hazardous)	Hazardous area	Performance: IS/IEC 60034-1 Maintenance IS:900	FLP Mote	ors: IS/IEC	60079-
		Dimensions: IS 1231/IS 2223/IS:8223				
Altitude (meters)		1000 or less	Vibrations: IS 12075			
			Noise level: IS 12065			
Hazardous area d	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%
$(\mathbf{EI} \mathbf{D}/\mathbf{T}_{\mathbf{v}\mathbf{p}\mathbf{o}} \cdot \mathbf{o}'/\mathbf{T}_{\mathbf{v}\mathbf{p}})$		Ex 'd'	Combined variation (absolute sum)	±10%		
Approving author	ity for hazardous area	If Mine application then DGMS else PESO				
Electrical param Starting perform						
Method of starting		DOL	Starting current (%FLC)	530		
Load speed (rpm)	0	CUSTOMER TO FURNISH	Starting torque (%FLT)	210		
Motor $GD^2$ (kgm <sup>2</sup>	-	2.41	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	·	Parabolic TS curve	Number of consecutive starts (hot/cold) (nos.) provided Load GD2 = Motor GD2	2/3		
Starting time at ra	ted voltage (sec)	PLEASE FURNISH ALL ABOVE DETAILS				
Running Perforn	ทสทกอ	DLIAILS				
Efficiency class		_	Duty and designation		Continuous	(S1)
<b>v</b>	mp.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)				
Full load current (FLC) amps.		43.0	Rotor type (Squirrel Cage/ Slip ring )	Squirrel Cage		•
Full load speed (rpm)		725	Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable		
Full load torque (FLT) kg-m		29.6	Stator/rotor time constant (min)	108/146		
•	t FL/0.75FL/0.5FL	90.0 89.0 87.0	Power factor at FL/0.75FL/0.5FL	0.79	0.77	0.69
Mechanical para	meters	B5	Mounting dimensions		ofor CA dra	wing
Mounting That automion		Single cylindrical	Mounting dimensions Direction of rotation viewed from DE	Refer GA drawing		0
Shaft extention Degree of protection		IP 55	Suitable for bidirectional rotation	Clockwise Yes		C
Method of cooling (TEFC/forced cooled/TESC)		TEFC (IC 411)	Paint type	Acid Alkali Proof		Proof
Net weight of mot	· · · ·	430	Paint shade	632 as per IS 5		
ver weight of motor (kg)			Earthing provision (two terminals on stator body)	Yes		
Bearings		<u> </u>	Terminal box	1		
Coupling (Direct/2 Pulley/Gearbox)	flexible/Belt &	Direct	Terminal box location when viewed from DE	As per GA drawing		
•	ulley (OD x width) mm		- Direction of cable entry		As per GA drawing	
Å	all/angular contact)	Ball /Ball	Cable size and type(Aluminium)	2R X 3C X 120 SQ MN		
<b>~</b> `						
Bearing size DE/N		6213 C3/6213 C3 SKF LGMT3- GREASE	Earthing provision (one terminal in TB)	Yes 3 / DELTA / 6		16
Гуре of lubricatio Accessories	/11	SILL TOM 12- OKEASE	tomainala		J / DELIA	/ U
	s simplex(w/o controller)		Arrow plate for direction of rotation			
	per bearing(w/o controller)		Double compression glands (main cable)			
	ngle phase 50z, 230V		Double compression glands (Space			
Space heaters - si			heater/Thermisters/RTDs)			
•						
Space heaters - sin Thermisters - PTC Additional T-Box			Brake (Type/voltage/torque)			

1) All performance values are subject to IS/IEC 60034-1 tolerances, unless otherwise specified.

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			