Manufacturer	Bijlee Bharat Bijlee Ltd.		Customer			
	3 phase Induction Motor		BBL Enquiry reference No			
Quantity	5 phase multion wrotor		Customer P.O.Number			
Application	CUSTOME	R TO FURNISH	W.O. No. / SAP No.			
Tag no.	COSTONIE		Output kW / Pole	45	1	8P
BBL type Ref.		MD28M855	Frame size		, MJ280	01
Installation detai	i i i i i i i i i i i i i i i i i i i	111120111033	Applicable standards (latest edition)		1113 200	
	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		T4	Frequency (Hz) and permissible variation	50 ±5%		5%
Type of Explosion protection (ELD/Type 'e'/Type 'n')		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)		550	
Load speed (rpm)	0	CUSTOMER TO FURNISH	Starting current (%FLC) Starting torque (%FLT)	220		
Motor GD ² (kgm ²		6.86	Pull out torque (%FLT)		220	
Load GD ² (kgm ²)	•	CUSTOMER TO FURNISH	Locked rotor withstand time (hot/cold) (sec)	15		30
)			15	/	30
Load torque-speed 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 Perform	nance			Т		
Efficiency class		_	Duty and designation	Continuous (S1)		(S1)
Ambient temp./ter	mp.rise by resistance (deg.C)	45 / 75	CDF/Equivalent starts per hour/FI		-	
Enclosure		TEFC (TOTALLY ENCLOSED FAN COOLED)	Insulation class / utilisation class on DOL	F/B		
Full load current (FLC) amps.		86.1	Rotor type (Squirrel Cage/ Slip ring)	Squirrel Cage		ige
Full load speed (rpm)		730	Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable		ble
Full load torque (FLT) kg-m		60	Stator/rotor time constant (min)	144/194		
•	t FL/0.75FL/0.5FL	92.0 92.0 91.0	Power factor at FL/0.75FL/0.5FL	0.79	0.75	0.65
Mechanical para	meters					•
Aounting		B5	Mounting dimensions	Refer GA drawing		0
Shaft extention	•	Single cylindrical	Direction of rotation viewed from DE	Clockwise		e
Degree of protect	10 n	IP 55	Suitable for bidirectional rotation	Yes		
Method of cooling (TEFC/forced cooled/TESC)		TEFC (IC 411)	Paint type	Acid Alkali Proof		
Net weight of mot	tor (kg)	725	Paint shade	632 as per IS 5		S 5
			Earthing provision (two terminals on stator body)) Yes		
Bearings			Terminal box	T		
Coupling (Direct/: Pulley/Gearbox)	flexible/Belt &	Direct	Terminal box location when viewed from DE	As per GA drawing		
Dimenssions of p	ulley (OD x width) mm	-	Direction of cable entry	As per GA drawing		awing
earings (roller/ball/angular contact)		Ball /Ball	Cable size and type(Aluminium)	2R X 3C X 120 SQ MN		
Bearing size DE/N	ring size DE/NDE 6317 C3/63		<u>NO OLONASE/ WINCING CONTECTION/INTIGELOI</u>		Yes	
Гуре of lubricatio					3 / DELTA / 6	
Accessories		•		•		
RTDs - 3 number	s 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 - PTC	\mathbf{C}		Brake (Type/voltage/torque)			
•			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	
Project:	Contractor/Client		Date:	
Consultant	Package			