Bharat Bijlee Manufacturer Bharat Bijlee Ltd.				Customer			
Type of motor	3 phase Induction Motor			BBL Enquiry reference No			
Quantity				Customer P.O.Number			
pplication CUSTOMER TO FURNISH				W.O. No. / SAP No.			
Tag no.				Output kW / Pole	11		6P
BBL type Ref.		MD16L673		Frame size		, MJ160	
Installation deta	ils			Applicable standards (latest edition)			
Area classificatio	on (Safe / Hazardous)	Hazardous area	l	Performance: IS/IEC 60034-1 Maintenance IS:900	FLP Moto	ors: IS/IEC 6	0079-
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 (gria	supply)		
Area classificatio	on GAS (Zone 1/Zone 2)	ZONE I		Number of phases		Three	
Gas group				Voltage (Volts) and permisible variation	415 ±10%		%
Temp.class				Frequency (Hz) and permissible variation	50 ±5%		6
Type of Explosion protection (ELD/Type 'e'/Type 'e')				bined variation (absolute sum) ±10%		±10%	
Approving authority for hazardous area		If Mine application there else PESO	n DGMS				
Electrical param							
Starting perform							
Method of starting		DOL		Starting current (%FLC)	600		
Load speed (rpm)		CUSTOMER TO FURNISH		Starting torque (%FLT)	200		
Motor GD^2 (kgm ²)		0.4		Pull out torque (%FLT)	250		
Load GD ² (kgm ²)		CUSTOMER TO FUI	RNISH	Locked rotor withstand time (hot/cold) (sec)	15	/	30
Load torque-speed curve		Parabolic LS curve		Number of consecutive starts (hot/cold) (nos.) provided Load GD2 = Motor GD2	2/3		
Starting time at rated voltage (sec)		PLEASE FURNISH ALL ABOVE DETAILS					
Running Perform	mance						
Efficiency class		-		Duty and designation	Continuous (S1)		51)
Ambient temp./te	emp.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.				Rotor type (Squirrel Cage/ Slip ring)	Squirrel Cage		
Full load speed (rpm)				Rotor voltage/rotor current (RV/RA) (Volts/Amps)	Not applicable		
Full load torque (FLT) kg-m				Stator/rotor time constant (min)	90/122		
~	tt FL/0.75FL/0.5FL	88.5 88.0	87.0	Power factor at FL/0.75FL/0.5FL	0.80	0.77	0.70
Mechanical para	ameters						•
Mounting				Mounting dimensions	Refer GA drawing		
Shaft extention	tion	Single cylindrical		Direction of rotation viewed from DE	Clockwise		
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		
Net weight of motor (kg)		169		Paint shade	632 as per IS 5		
D •				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 drawing		
Pulley/Gearbox)	11_{ov}						
umenssions of p	oulley (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 35 SQ MM		
Bearing size DE/NDE				Earthing provision (one terminal in TB)	Yes		
Type of lubrication	on	LITHIUM SOAP BASE	GREASE	tomainala		3 / DELTA /	6
Accessories	• 1 / / • • • • •						
RTDs - 3 numbers simplex(w/o controller)			Arrow plate for direction of rotation				
BTDs - 1 number per bearing(w/o controller) Space heaters - single phase 50z, 230V				Double compression glands (main cable) Double compression glands (Space			
•				heater/Thermisters/RTDs)			
Thermisters - PT				Brake (Type/voltage/torque)			
Additional T-Box	x for Accessories						
Additional namer							

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			