Manufacturer	jlee Data sheet 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		V.O. No. / SAP No.			
Tag no.				Dutput kW / Pole	15	1	4P
BBL type Ref.		MD16L4K3		Frame size		, MJ160	
Installation deta	ils			pplicable standards (latest edition)			
Area classificatio	on (Safe / Hazardous)	Hazardous area		Performance: IS/IEC 60034-1 Maintenance IS:900	FLP Mote	ors: IS/IEC 6	0079-
Location: indoor/outdoor/deck				Dimensions: IS 1231/IS 2223/IS:8223			
Altitude (meters)		1000 or less	V	/ibrations: IS 12075			
			N	Noise level: IS 12065			
Hazardous area	details		S	Supply conditions and permissible variations (grid	l supply)		
Area classificatio	on GAS (Zone 1/Zone 2)	ZONE I		Number of phases		Three	
Gas group				Voltage (Volts) and permisible variation	$415 \pm 10\%$		%
Temp.class				Frequency (Hz) and permissible variation	50 ±5%		6
$\frac{\mathbf{CI} \mathbf{D}}{\mathbf{T}_{\mathbf{V}}} = \frac{\mathbf{D}}{\mathbf{T}_{\mathbf{V}}}$	-	Ex 'd'		Combined variation (absolute sum)	±10%		
Approving authority for hazardous area		If Mine application then I else PESO	DGMS				
Electrical param							
Starting perform							
Method of starting				tarting current (%FLC)	600		
Load speed (rpm)		CUSTOMER TO FURNISH		starting torque (%FLT)	210		
Motor GD^2 (kgm ²)		0.235	P	Pull out torque (%FLT)		250	
Load GD ² (kgm ²)		CUSTOMER TO FURN	NISH L	Locked rotor withstand time (hot/cold) (sec)	8	/	16
Load torque-speed curve		Parabolic LS 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 A DETAILS	ABOVE				
Running Perform	nance				_		
Efficiency class		-		Duty and designation	Continuous (S1)		
Ambient temp./temp.rise by resistance (deg.C)		45 / 75		CDF/Equivalent starts per hour/FI	_		
Enclosure		TEFC (TOTALLY ENCLOSED FAN COOLED)		nsulation 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		
~	t FL/0.75FL/0.5FL	90.2 90.5 9	90.0 P	Power factor at FL/0.75FL/0.5FL	0.84	0.83	0.79
Mechanical para	imeters						•
Mounting				Aounting dimensions	Refer GA drawing		
Shaft extention				Direction of rotation viewed from DE	Clockwise		
Degree of protect	uon	IP 55		ble for bidirectional rotation Yes		Yes	
Method of cooling (TEFC/forced cooled/TESC)		TEFC (IC 411)		aint type	Acid Alkali Proof		
Net weight of motor (kg)		156		aint shade	632 as per IS 5		
				Earthing provision (two terminals on stator body)		Yes	
Bearings			7	Terminal box			
Coupling (Direct	/flexible/Belt &	Direct	Т	Cerminal box location when viewed from DE	As	per GA drav	ving
Pulley/Gearbox)							
Dimenssions 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 G	GREASE	aminala		3 / DELTA /	6
Accessories	• • •						
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) Double compression glands (Space			
Space heaters - single phase 50z, 230V			h	eater/Thermisters/RTDs)			
Thermisters - PT				Brake (Type/voltage/torque)			
Additional T-Box Additional namer	x for Accessories						

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			