



LT MOTORS DIVISION
AHMEDNAGAR
MOTOR TAG NO 125 PM 107 B
ENG CW PUMP

INDENT NO: QCMAN15440/100
PO NO: 80078096/ BRAHMAPUTR
PO DATE: 08/16/2010



MEDIUM VOLTAGE SQUIRREL CAGE INDUCTION
MOTOR

Datasheet No.

Rev-B

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PURCHASER'S DATA			
1. Site conditions			
2. Ambient temperature:		Atmospheric condition: Humid & highly corrosive	
minimum: 1 °C		Altitude: < 1000 m	
maximum: 39.8 °C		Location: Outdoor	
design: 40.0 °C			
3. Relative humidity: 93 %			
4. Technical particulars			
5. Motor tag no.: Not Applicable			
6. Driven equipment name: Centrifugal Pump			
7. Voltage: 415, +10%		11. Hazardous area classification: TEFC Safe Area	
8. Phase: 3		12. Gas group/Temp class: Refer Job spec	
9. Frequency: 50, +3%		13. Type of explosion protection: Refer Job spec	
10. Fault level: 50 KA		14. Type of ingress protection: IP55	
11. Method of starting: Direct On Line		15. Color shade: 632 AS PER IS: 5	
12. Winding connection: Delta		16. Thermistors: ☐ Required ☒ Not Required	
13. No. of terminals: 6		17. RTD: ☐ Not Required	
14. Cable size: 2x3C, 150 MM ²		18. STD: ☐ Required ☒ Not Required	
15. Cable type: Cu/Al cond. PVC Insulated		19. RTD/STD monitoring device: ☐ Required ☒ Not Required	
16. Temperature rise: 80			
17. Cooling: IC411 (TEFC)			
18. Insulation class: B/F with temp rise limited to Class B.		20. Applicable specification: EIL spec. 6-51-0032	
19.			

DRIVEN EQUIPMENT MANUFACTURER'S DATA			
1. Suggested motor rating: 110 kW		9. Torque required, starting: 8.9 mkg	
2. Manufacturer: M&P		maximum: 63.6 mkg	
3. BkW at full load: 84.1 kW		10. GD ² of eqpt., including flywheel: NA kgm ²	
4. kW at end of curve: 98.34 kW		excluding flywheel: 3.59 kgm ²	
5. Speed: 1485 RPM		11. Thrust, up: NA kg	
6. Rotation viewed from coupling end: CCW		down: NA kg	
7. Driven equipment: CENTRIFUGAL PUMP		12. Starting condition: Direct On Line	
8. Coupling type: Flexible Coupling			

MOTOR MANUFACTURER'S DATA			
1. Rating: 110 kW		17. Efficiency at, 75% voltage: 94.5 %	
2. Manufacturer: CROMPTON GREAVES LTD.		100% voltage: 94.5 %	
3. No. of poles: 4		18. Power factor at, starting: 0.80-0.85	
4. Frame designation: MD31SS		100% load: 0.92	
5. Full load speed: 1485 RPM		19. Moment of inertia, GD ² : 0.00 kgm ²	
6. Mounting: B3		20. NDE bearing type & no.: BALL/6319-C3	
7. Full load torque (FLT): 72.15 mkg		DE bearing type & no.: BALL/6319-C3	
8. Starting torque: 122.5 % of FLT		21. Type of lubrication: Lithium base grease gr	
9. Break down or pull out torque: 275 %		22. Weight of motor: 906 kg	
10. Full load current (FLC): 176.00 A		23. Thermistors, quantity: no.	
11. Starting current at 100% voltage: 600 % of FLC		make: type: NA	
12. Rotation viewed from coupling end: Clockwise from DE		24. RTD, quantity: no.	
13. Starting time at, 75% voltage: < 4 secs		make: type: NA	
100% voltage: < 2 secs		25. STD, quantity: no.	
14. Locked rotor withstand time (lock/hot) at, 75% voltage: 45/23 sec		make: type: NA	
100% voltage: 30/15 sec		26. Shaft voltage: V	
15. Space heater - voltage & power: SPACE HEATER 60W/2 (CE280/315)		27. Critical speed, 1 st /2 nd stage: > 125% RPM	
16. Applicable IS/IEC for hazardous area application: IS:1231, IS:12075, IS:12065, IS:325		28. Canopy (FRP): ☐ Required ☒ Not Required	
17.		29.	

1. Starting time calculations shall be based on operating conditions specified on Material Requisition eg. open valve condition/ closed valve condition, at no load/full load, as applicable.
2. All blank data shall be filled by vendor

Rev. No.	Date	Purpose	Prepared by	Checked by	Approved by
B	18.11.08	ISSUED WITH MR	MHR	SV	UAP
A	08.09.2008	ISSUED WITH MR	MHR	SV	UAP

NOTE: 1) ALL PERFORMANCE FIGURES ARE SUBJECT TO IS 325-1996 TOLERANCES.
2) FOR INVERTER DRIVEN MOTORS, MAX. ALLOWED %TED FOR VOLTAGE = 3% AND TEMPERATURE RISE IS LIMITED TO CLASS F LIMITS
3) FOR INVERTER DRIVEN MOTORS, VOLTAGE SPIKES ARE ALLOWED MAXIMUM 1500 V AND MIN. RISE TIME OF 0.1 MICROSECOND. CABLE LENGTH TO BE SELECTED ACCORDINGLY.

ISSUED BY: Arif Singh

LT MOTORS DIVISION, AHMEDNAGAR



REVIEW CODE

1 2 3

Signature

Signature & Name

