

Job Information

Job #: 97195 Date: August 14, 2020

Priority: — Authorized OT: No Authorized by:

Customer Information

Name: 3M Reason:

Contact: Motor#: PO#:

Application: – Special notes:

Name Plate Information

Manufacturer: General Electric Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled

Serial#: Model#:

Service Factor: 1.15 Frame:

Horsepower/kW: 100 Rated RPM: 595

Rated Amps: 134 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design: No

Nameplate DE ODE F1 F2 Top









Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device

present?:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 320 NU

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Roller Bearing ODE Size: 6315

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Bad Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Lubrication Type: Grease Thermal Protection device DE: -

Lubrication brand inbound: Unknown Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: Full Grease Cond. DE: Other

Grease Amt ODE: Full Grease Cond. ODE: Other

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition

:

Shaft damage cause: Other Shaft Image:





Brg. Image:



Water jacket: N/A Fan: Ok Frame cond.: Good





Motor Mount Position: Horizontal/Foot mount Endbell type: Single piece

Missing parts? Endbell Image:

☐ J-Box cover ☐ O-rings ☑ J-Box

☐ HH cover ☐ Glands ☐ None

Other missing parts







Air Gap Meaurements (N/A on Single Piece Endbell)

Does Air Gap Meet Customer or EASA spec(<10% variation)?

DE @ 0 ODE @ 0 -

DE @ 90 ODE @ 90

DE @ 180 ODE @ 180

DE @ 270 ODE @ 270

AC Electrical Inspection

Number of leads: 3 Terminal Markings:

Length of leads: 12in REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 1-Blue 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Worn 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: Warn Terminal Lugs

Lug size:

Lug Attachment: —





AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Ok

Num rotor bars:

Num broken bars:

Rotor



Rotor Test Results

Rotor Condition:

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

Winding color: Painted Winding image Winding Thermal Protection: No

Winding condition: Solid

Winding Thermal Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind

Megs incoming: Good Surge incoming: Good Hi-pot incoming: Good

Winding Resistance Incoming

Phases A to B Phases B to C Phases C to A Resistive imbalance

Incoming 0.00 0.00 0.00

Leads/jumpers: Ok Lead jumper Image. :

If other, leads/jumpers:

Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Broken Bearings Retainer: Yes

Type of grounding device: Bearing DE Size: 320NU

Shaft runout(TIR-Inbound): Bearing ODE Size: 6315

Retainer condition: Bad

ax 901-873-5301



Seals DE condition: None Brg. Seats DE: Good

Seals DE type: N/A If DE undersized, amt.:

Seals DE size: Brg. Seats ODE: Good

Seals DE (inbound) condition: If ODE undersized, amt.:

Seals ODE condition: None Shaft damage: OK

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition : Bushings/sleeves ODE: Ok

Endbell fits/damage: Bad Foot/Flange condition: Ok

Endbell DE size: 8.4670 Foot flatness: Pass

Endbell DE insulated?: —

Does Air Gap Meet Customer or EASA spec(<10%

variation)? Endbell ODE size: 6.3005

Endbell ODE insulated?: —



Conclusion

Component Failure

Bearings, shaft, end bells, DE bearing cap, windings

Cause of Failure

Shaft broke behind DE bearing cap

Comments

Recommend rewind, new bearings, new shaft, and machine work

Service Tech name: Chris Wiley

Service Tech signature:

Chris Chly