

Job Information

Job #: 97024

Date: July 8, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Fabrication Services

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Reliance

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#:

Model#: PG0G0416A

Service Factor: 1.15

Frame: 405 TDZ

Horsepower/kW: 150

Rated RPM: 1770

Rated Amps: 180

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

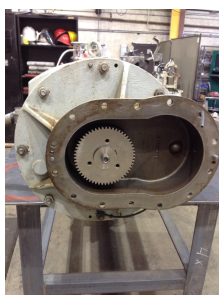
DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: —

Contaminant(s): None

Shaft rotation: —

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: FAG

Insulated: No

Bearing DE Size:

Bearings ODE: Worn

Bearings ODE make: FAG

Bearing Type: Ball

Bearing ODE Size:

Bearings Retainer: Yes

Thermal Protection: Yes

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Slinger

Seals Image:

Seals DE size:

Seals DE (inbound) condition :



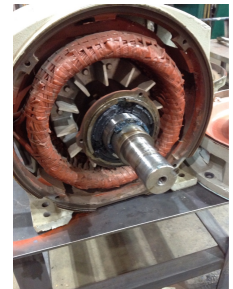
Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: None

Shaft Image:



WEST TENNESSEE

7030 Ryburn Drive
Millington, TN 38053
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CENTRAL ARKANSAS

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Phone 501-375-9178
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Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: N/A

Frame cond.: Good



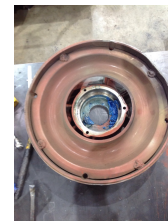
Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- | | | |
|--------------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover | <input type="checkbox"/> Glands | <input type="checkbox"/> None |

Endbell Image:



Other missing parts



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Mechanical Inspection (Continued)

Air Gap Measurements (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: 6

Terminal Markings:

Length of leads: 4'9"

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads:

1-Blue
2-White
3-Orange
4-Yellow

5-Black
6-No color assigned
7-No color assigned
8-Red

P1-No color assigned
P2-Brown

Lead condition: Good

Lug type:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —

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AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars:

Num broken bars:



Rotor Test Results

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:



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AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

Winding Thermal Protection: No

Winding condition : Charred

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

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: Yes

Type of grounding device: None

Bearing DE Size: NU 316

Shaft runout(TIR-Inbound): .002

Bearing ODE Size: 6316 2Z

Retainer condition: Good



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Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Slinger

If DE undersized, amt.:

Seals DE size: CR 534086

Brg. Seats ODE: Good

Seals DE (inbound) condition : Good

If ODE undersized, amt.:

Seals ODE condition : None

Shaft damage: OK

Seals ODE type: Isolators

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 6.6932

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 6.6931

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Cause of Failure

Insulation breakdown on motor windings.

Comments

The Insulation on the windings on the drive end side became worn. This allowed the windings to ground out against the motor frame. All machine fits measure within tolerances.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink that reads 'Terrence Holland'.

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