

Job Information

Job #: 140307

Date: July 31, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Process Power

Reason:

Contact: Jennifer McClain

Motor#:

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: Ingersoll-Rand

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 23827140

Model#:

Service Factor: 1.21

Frame: 280S/M

Horsepower/kW: 200

Rated RPM: 1733

Rated Amps: 228

Rated Voltage: 460

Phase: 3

Cycles:

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): Carbon

Shaft rotation: Bi-directional Contaminant(s) Amt: Other

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6319

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6316-2Z

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



WEST TENNESSEE

7030 Ryburn Drive
Millington, TN 38053
Phone 901-873-5300
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6812 Lindsey Rd.
Little Rock, AR 72206
Phone 501-375-9178
Fax 501-375-4254



MILLINGTON, TN

LITTLE ROCK, AR

Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

Grease Cond. DE: Charred

Grease Amt ODE: 0

Grease Cond. ODE: Hard

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: Slinger

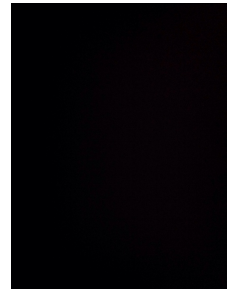
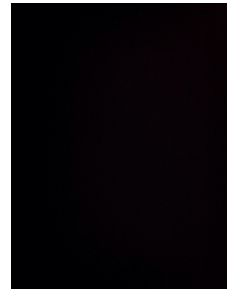
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: Other

Shaft Image:



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Mechanical Inspection (Continued)

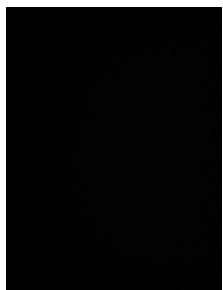
Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☐ None

Other missing parts

Endbell Image:



Missing one spring for outer retainer on ode end

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: T1/U1,T2/V1,T3/W1 T4/U2,T5/V2,T6/W2

Length of leads: 5ft

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

Size of leads: 50mm

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: Single hole

Connections As Received:

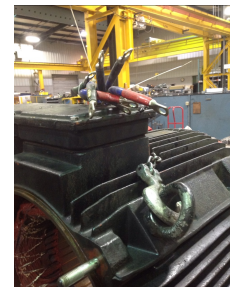
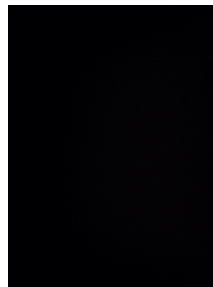
Lug Condition: Good

Terminal

Lugs

Lug size: 1/2 in

Lug Attachment: Acceptable



AC Electrical Inspection (Continued)

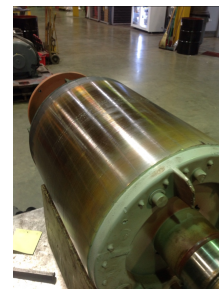
Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 40

Num broken bars:

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

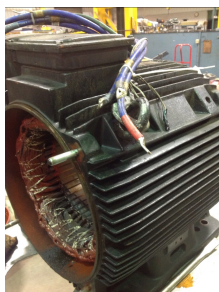
Stator condition: Ok

If other, stator condition:

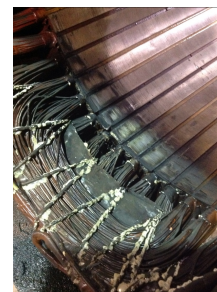
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



AC Electrical Inspection (Continued)

Winding color: Dull black

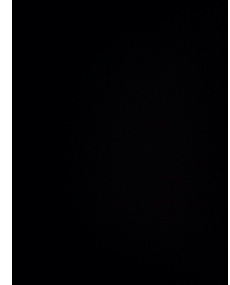
Winding image

Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal
Protection DE: —Winding Thermal
Protection ODE: —

Stator test results: Rewind



Megs incoming: Good

Surge incoming: Bad

Hi-pot incoming: Bad

Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

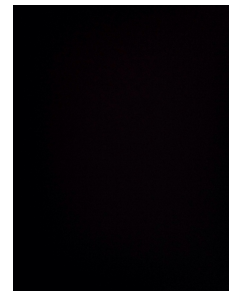
Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers: None



Conclusion

Component Failure

Blown in slot

Cause of Failure

Bearing failure

Comments

Drive end bearing failure causing rotor to drag and blow winding

Service Tech name: Jeremy Yarbrough

Service Tech signature:

A handwritten signature in black ink, appearing to read 'J Yarbrough', written in a cursive style.

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