

### **Job Information**

Job #: 140833 Date: October 4, 2019

Priority: — Authorized OT: No Authorized by:

### **Customer Information**

Name: Process and power Reason:

Contact: Motor#: 140833 PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: Ingersoll rand Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled
Serial#: Model#: TE1BFOXO\$

Service Factor: 1.21 Frame: 280S/M

Horsepower/kW: 200 Rated RPM: 1733

Rated Amps: 228 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design: No

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301



## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Contaminant(s): Other No

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

Shaft grounding device No

Contaminant Image: present?:

Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: Koyo

Insulated: Bearing DE Size: 319R No

Bearings ODE: Worn Bearings ODE make: Koyo

Bearing Type: Bearing ODE Size: Ball 6316ZZC3

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type:

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection





### **Mechanical Inspection (Continued)**

Lubrication Type: Grease Thermal Protection device DE: Good

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: 3/4 Grease Cond. ODE: New

Seals DE type: N/A Seals Image:

Seals DE size:

Seals DE (inbound) condition:

Seals ODE (inbound) condition

Seals ODE type: N/A

Seals ODE size:

Shaft damage cause:

Other

Shaft Image:

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# **Mechanical Inspection (Continued)**





Bushings/sleeves image:



Water jacket:

N/A

Fan:

Ok

Frame cond.:

Good



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Endbell Image:

Single piece

Missing parts?

☐ J-Box cover

O-rings

☐ J-Box

☐ HH cover

Glands

☐ None

Other missing parts



### **Mechanical Inspection (Continued)**

#### 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: 6 Terminal Markings:

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 5'

Markings Identified By Color:

P1-No color assigned 5-Black 1-Blue Size of leads: 2awg

P2-Brown 2-White 6-No color assigned 3-Orange 7-No color assigned

4-Yellow 8-Red Lead condition: Good

Connections As Received: Lug type:

Lug Condition: Good Terminal

Lug size:

Lug Attachment: Acceptable









# **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: Questionable If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







# **AC Electrical Inspection (Continued)**

Winding color: Like new Winding image

Winding Thermal Protection:

Yes

Winding condition:

Solid

Winding Thermal Protection DE:

Good

Winding Thermal

Protection ODE:

Stator test results: Rewind

Megs incoming:

Bad

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

0.107

0.0979

0.106

9

Leads/jumpers:

If other, leads/jumpers:

Other

Lead jumper Image.:





### Conclusion

| Component Failure   |
|---|
| Bearings and winding  |
| Cause of Failure  |
| Bearing failed causing the rotor to drag on the iron causing a short in the winding |
| Comments  |

Service Tech name: Stone Hubbard

Service Tech signature: