

## **Job Information**

Job #: 143115 Date: August 11, 2020

Priority: Authorized OT: No Authorized by:

## **Customer Information**

Name: Process &. Power Reason:

Contact: Motor#: PO#:

Application: Special notes:

## **Name Plate Information**

Serial#:

Manufacturer: Siemens Enclosure: Totally Enclosed **Enclosure Type image** 

Model#:

Fan Cooled

Service Factor: Frame:

Horsepower/kW: 50 Rated RPM: 3570

Rated Amps: 120/60 Rated Voltage: 230/460

Phase: 3 Cycles: 60

Special design:

No

Nameplate DE ODE F1 F2 Top













WEST TENNESSEE



# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): Other

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

Shaft grounding device

present?: Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Fell Apart Bearings DE make: Other

Insulated: No Bearing DE Size: 6212 c4

Bearings ODE: Worn Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 6210 c4

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



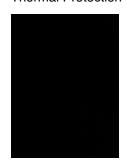
Bearing Make Image



Bearing Retainer Image



Thermal Protection





# **Mechanical Inspection (Continued)**

Lubrication Type: Grease Thermal Protection device DE: -

Lubrication brand inbound: Unknown Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: N/A Grease Cond. DE: Charred

Grease Amt ODE: 1/2 Grease Cond. ODE: Charred

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: None Shaft Image:



# **Mechanical Inspection (Continued)**

Brg. Image:

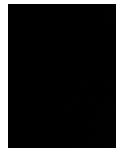


Bushings/sleeves image:



Water jacket:

Ok



Fan:

Ok

Frame cond.:

Good



Endbell type: Single piece

Missing parts?

Motor Mount Position:

☐ J-Box cover

O-rings

Horizontal/Flange mount

☐ J-Box

☐ HH cover

Glands

☐ None

Other missing parts

Fan cover

Endbell Image:





## **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: 12 Terminal Markings: 1-12

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 56" Markings Identified By Color:

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

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: Terminal Lugs

Lug size:

Lug Attachment:







# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 22

Num broken bars: 0

Rotor

### **Rotor Test Results**

**Rotor Condition:** 

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ground If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







# **AC Electrical Inspection (Continued)**

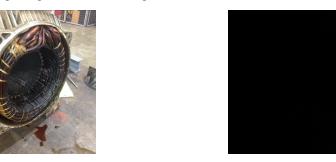
Winding color: Dull black Winding image Winding Thermal Protection: No

Winding condition: Charred

Winding Thermal \_\_\_ Protection DE:

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

Leads/jumpers: Ok Lead jumper Image. :

If other, leads/jumpers:





## Conclusion

Component Failure	Com	oon	ient	raii	lure
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Bearing/winding

#### **Cause of Failure**

Bearing failed and caused the winding to short

### Comments

2 wavy washers #1 end

Service Tech name: Shawn

Service Tech signature:

An