

#### **Job Information**

Job #: 94666 Date: August 29, 2018

Priority: — Authorized OT: No Authorized by:

### **Customer Information**

Name: Future Fuel Reason:

Contact: Motor#: PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: Siemens Enclosure: Explosion-proof Enclosure Type image

enclosures (EXPL/

Serial#: 1-51S9-LR61272-1 Model#: RGZZ

Service Factor: 1.0 Frame: 256T

Horsepower/kW: 15/7.5 Rated RPM: 1750/860

Rated Amps: 19/14.5 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?: Yes 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: 6209

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6208

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: — 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: 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: N/A

Seals DE size:

Seals DE (inbound) condition:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition

:

Shaft damage cause: None Shaft Image:





# **Mechanical Inspection (Continued)**

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







## **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: 1-6

Length of leads: 8" 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: Good 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Lug size:

Lug Attachment: —



# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

Rotor



#### **Rotor Test Results**

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Other If other, stator type:

Stator condition: Open If other, stator condition:

Failure location: Connection If other, stator failure:

Stator Image: Failure Image:







## **AC Electrical Inspection (Continued)**

Winding color: Like new Winding image Winding Thermal Protection: No

Winding condition: Solid

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 1.126 0.595 0.815 38.1

Leads/jumpers: Ok

If other, leads/jumpers:

sert Wilers



### Conclusion

**Component Failure** 

#### **Cause of Failure**

Shorted Connection and found false Brinelling in the bearings

#### **Comments**

DE AND ODE BEARING FITS BAD ON END Bells UNABLE TO MEASURE UL FITS DUE TO PAINT

Service Tech name: Robert Wiley

Service Tech signature: