

## Job Information

Job #: 94779

Date: October 4, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: AIM

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Siemens

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: E120818165472300  
6

Model#: 1LA9166-4KA99-  
ZT00

Service Factor:

Frame:

Horsepower/kW: 30 kW

Rated RPM: 4170

Rated Amps: 70

Rated Voltage: 370

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?: No

Contaminant(s): None

Shaft rotation: —

Contaminant(s) Amt: None

Shaft grounding device present?: Yes

Type of grounding device: Aegis

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: SKF

Insulated: No

Bearing DE Size: NU208 EC

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Roller

Bearing ODE Size: 6209 ZZ

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: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: 0

Grease Cond. DE: Other

Grease Amt ODE: 0

Grease Cond. ODE: Charred

Seals DE type: Other

Seals Image:

Seals DE size:

Seals DE (inbound) condition :



Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: Other

Shaft Image:



### WEST TENNESSEE

7030 Ryburn Drive  
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Phone 901-873-5300  
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### CENTRAL ARKANSAS

6812 Lindsey Rd.  
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## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: Broken

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

Endbell Image:



Other missing parts

## 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: 3

Terminal Markings:

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  
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: —

Lug type:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 36

Num broken bars: 0

Rotor



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ground

If other, stator condition:

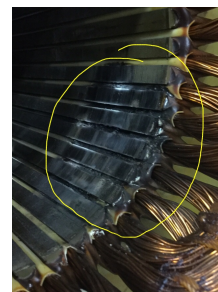
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: Yes

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

Leads/jumpers: Ok

If other, leads/jumpers:

## Conclusion

### Component Failure

ODE bearing failed, ODE bearing journal is bad, windings grounded

### Cause of Failure

ODE has no grease zert to add grease to lube the bearing

### Comments

The ODE endbell bearing can't be PM'd.

Service Tech name: Lynn McDonald

Service Tech signature:

A handwritten signature in black ink that reads 'Lynn McDonald'.**WEST TENNESSEE**

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