

## Job Information

Job #: 97218

Date: August 19, 2020

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Phelps

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Siemens

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#:

Model#:

Service Factor: 1.15

Frame: 444T

Horsepower/kW: 125

Rated RPM: 1785

Rated Amps: 143

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

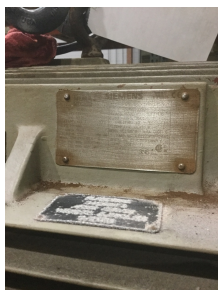
DE

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: Bi-directional Contaminant(s) Amt: None

Shaft grounding device present?: No

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: NSK

Insulated: No Bearing DE Size: NU318

Bearings ODE: Worn Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 6316

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



### WEST TENNESSEE

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## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: Full

Grease Cond. DE: Charred

Grease Amt ODE: Full

Grease Cond. ODE: Charred

Seals DE type: Slinger

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: None

Shaft Image:



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## 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?

☒ J-Box cover ☐ O-rings ☒ J-Box

☐ HH cover ☐ Glands ☐ None

Endbell Image:



Other missing parts





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## 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: 11 22 33

Length of leads: 24"

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

Size of leads: #6

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:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —

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## AC Electrical Inspection (Continued)

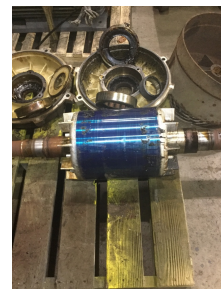
Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

Rotor



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ok

If other, stator condition:

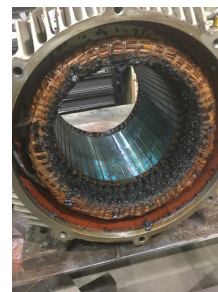
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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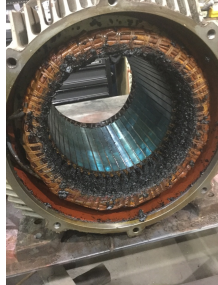
## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: No

Winding condition : Solid

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

Stator test results: Salvageable

Megs incoming: Good

Surge incoming: Good

Hi-pot incoming: Good

### Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	0.00	0.00	0.00	0.00

Leads/jumpers: Ok

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: NU318

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6316

Retainer condition: —



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## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: N/A

If DE undersized, amt.: 3.5443

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.: 3.1500

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 7.4815

Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 6.6939

—

Endbell ODE insulated?: No

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## Conclusion

### Component Failure

### Cause of Failure

### Comments

Found flutting moisture corrosion and electric erosion in ode bearing found rust and moisture corrosion in de bearing

Service Tech name: Robert Wiley

Service Tech signature:

A handwritten signature in black ink that reads 'Robert Wiley'.

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