

## Job Information

Job #: 94975

Date: December 19, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Welspun

Reason:

Contact: Ronnie Harris

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Siemens

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: E080215121777010  
04

Model#: 1la71334aa91-z

Service Factor: 1.15

Frame:

Horsepower/kW: 7.5hp

Rated RPM: 1760

Rated Amps: 12.8

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

DE

ODE

F1

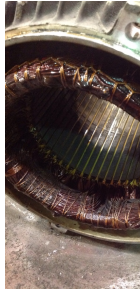
F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?:	No	Contaminant(s):	Grease
Shaft rotation:	Bi-directional	Contaminant(s) Amt:	Other
Shaft grounding device present?:	No	Contaminant Image:	
Type of grounding device:			
Shaft runout(TIR-Inbound):			
Bearings DE:	Worn	Bearings DE make:	Other
Insulated:	No	Bearing DE Size:	6208soc3
Bearings ODE:	Worn	Bearings ODE make:	Other
Bearing Type:	Ball	Bearing ODE Size:	6208soc3
Bearings Retainer:	No	Thermal Protection:	Yes
Retainer condition:	—	Thermal Protection Type:	Thermocouple

Bearing Type Image



Bearing Make Image



Bearing Retainer Image

Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: Thermistors

Lubrication brand inbound: Unknown

Thermal Protection device ODE: N/A

Lubrication brand outbound: Unknown

Grease Amt DE: 0

Grease Cond. DE: Charred

Grease Amt ODE: 0

Grease Cond. ODE: Other

Seals DE type: Other

Seals Image:

Seals DE size: 40-47-5

Seals DE (inbound) condition : Bad



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: Broken

Frame cond.: Good



Motor Mount Position: Horizontal/Flange mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☐ None

Endbell Image:



Other missing parts

Fan cover



## 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:

Length of leads: 8 inches

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

Size of leads: 14 AWG

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: Copper

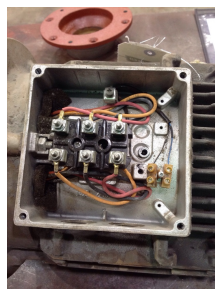
Connections As Received:

Lug Condition: Good

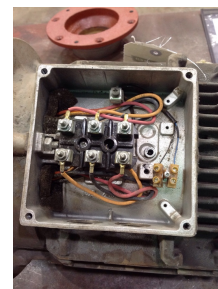
Lug size: 14 AWG

Lug Attachment: —

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars: 36

Num broken bars: 0

### 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:

**WEST TENNESSEE**

7030 Ryburn Drive  
Millington, TN 38053  
Phone 901-873-5300  
Fax 901-873-5301

**CENTRAL ARKANSAS**

6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## AC Electrical Inspection (Continued)

Winding color: Dull black

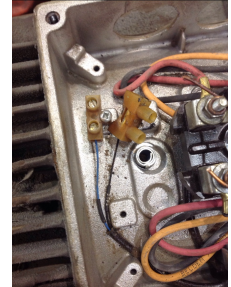
Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal  
Protection DE: GoodWinding Thermal  
Protection ODE: —

Stator test results: Rewind



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	1.223	1.190	1.198	2.1

Leads/jumpers: Ok

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: No

Type of grounding device:

Bearing DE Size: 6208soc3

Shaft runout(TIR-Inbound): 0.001

Bearing ODE Size: 6208soc3

Retainer condition: —



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Isolators

If DE undersized, amt.:

Seals DE size: 40-47-5

Brg. Seats ODE: Good

Seals DE (inbound) condition : Bad

If ODE undersized, amt.:

Seals ODE condition : None

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: Bad

Foot/Flange condition: Ok

Endbell DE size: 3.1703

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 3.1615

—

Endbell ODE insulated?: No

**WEST TENNESSEE**

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## Conclusion

### Component Failure

Bearings/windings/seal/both endbells

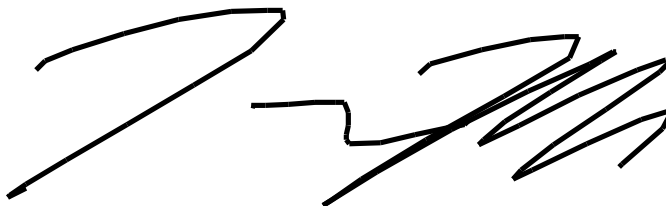
### Cause of Failure

No grease in bearings

### Comments

Service Tech name: Trevor Hall

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Trevor Hall', written over a white background.