

Job Information

Job #: 94648

Date: August 24, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Welspun

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Siemens

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: N820204824

Model#: 1LAO 163-4YA91-Z

Service Factor:

Frame: 160M

Horsepower/kW: 11

Rated RPM: 1775

Rated Amps: 18

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

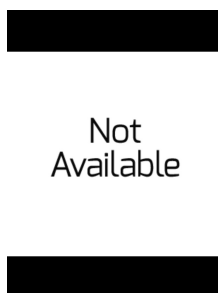
DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): .001

Bearings DE: Worn

Bearings DE make: SKF

Insulated: No

Bearing DE Size: 6209 C3

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6209 C3

Bearings Retainer: Yes

Thermal Protection: Yes

Retainer condition: Good

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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

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: 1/4

Grease Cond. DE: Gritty

Grease Amt ODE: 1/4

Grease Cond. ODE: Gritty

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:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: Ok

Not
Available

Fan: Ok

Not
Available

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

Fan and 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: U1,V1,W1-U2,V2,W2

Length of leads: 6"

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: Good

Lug type:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:



Not
Available

Lug Attachment: —

AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 37

Num broken bars: 0

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: Other

If other, stator failure:

Stator Image:



Failure Image:



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AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

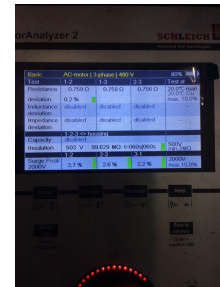
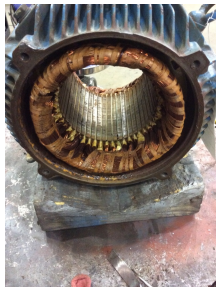
Winding Thermal Protection: No

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	0.759	0.758	0.756	0.2

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



Conclusion

Component Failure

Bearings.

Cause of Failure

Worn bearings and grease contamination.

Comments

Fan cover and fan blade did not come with the motor. All electrical and mechanical checks are good.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Terrence Holland', with a stylized, cursive script.