

Job Information

Job #: 95015

Date: December 17, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Aim

Reason:

Contact:

Motor#:

PO#:

Application: Radial Load

Special notes:

Name Plate Information

Manufacturer: Siemens

Enclosure : Totally Enclosed
Non-Ventilated

Enclosure Type image

Serial#: K781604301096

Model#: 1pp50904aa99zn0
1

Service Factor: 0.81

Frame:

Horsepower/kW: 1.8 kw

Rated RPM: 1705

Rated Amps: 4.8

Rated Voltage: 380-460

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): Dirt

Shaft rotation: CCW

Contaminant(s) Amt: Other

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): 0.001

Bearings DE: Worn

Bearings DE make: Koyo

Insulated: No

Bearing DE Size: 6205zc3

Bearings ODE: Worn

Bearings ODE make: Koyo

Bearing Type: Ball

Bearing ODE Size: 6004zc3

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image

Thermal Protection



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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: 0

Grease Cond. DE: Hard

Grease Amt ODE: 0

Grease Cond. ODE: Hard

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

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)

Brg. Image:



Water jacket: N/A

Fan: Broken

Frame cond.: Good



Motor Mount Position: Other

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:

Length of leads: 3 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: Y

Lug Condition: Good

Terminal

Lugs

Lug size: 14 AWG

Lug Attachment: Acceptable

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AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 28

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:



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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	12.9	13	12.9	0.1

Leads/jumpers: Ok

Lead jumper Image. :



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: 6205zc3

Shaft runout(TIR-Inbound): 0.001

Bearing ODE Size: 6004zc3

Retainer condition: —



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Mechanical Inspection (Continued)

Seals DE condition : None

Brg. Seats DE: Good

Seals DE type: N/A

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.:

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: 2.0478

Foot flatness: N/A

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(<10% variation)?

Endbell ODE size: 1.8510

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Bearings and fan coming apart

Cause of Failure

No lubrication and fan has spun on the shaft causing damage

Comments

Service Tech name: Trevor Hall

Service Tech signature:

A handwritten signature in black ink, appearing to read 'T. Hall', written over a white background.

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