



MILLINGTON, TN

LITTLE ROCK, AR

Job Information

Job #: 96225

Date: November 8, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Greenbrier

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: P&H

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#: F6304530010

Model#: ZFB150/3DF160LB
R4X

Service Factor:

Frame:

Horsepower/kW: 8

Rated RPM: 850/3450

Rated Amps: 20/42

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

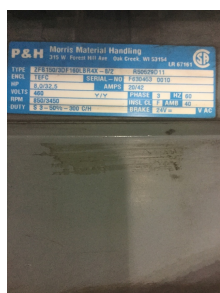
DE

ODE

F1

F2

Top

**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
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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):



Bearings DE: Worn Bearings DE make: NSK

Insulated: No Bearing DE Size: 6310

Bearings ODE: Worn Bearings ODE make: NSK

Bearing Type: Ball Bearing ODE Size: 6309

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

Grease Cond. DE: New

Grease Amt ODE: 0

Grease Cond. ODE: New

Seals DE type: Other

Seals Image:

Seals DE size: 55 80 8

Seals DE (inbound) condition : Bad



Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: None

Shaft Image:



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Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:

Not Available

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

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:

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:

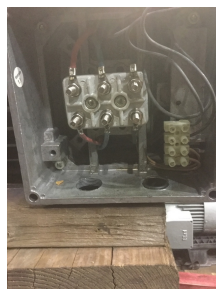
Connections As Received:

Lug Condition: Good

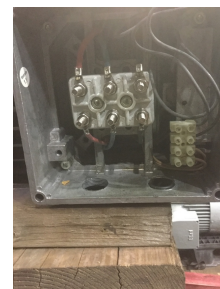
Lug size:

Lug Attachment: —

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 28

Num broken bars:

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

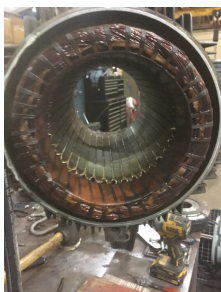
Stator condition: Ok

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:

Not
Available

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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: Salvageable

Megs incoming: Good

Surge incoming: Good

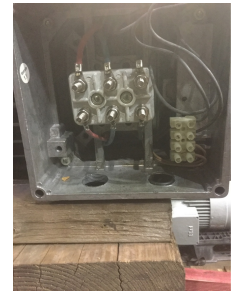
Hi-pot incoming: Good

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

Lead jumper Image. :



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: 6310

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6309

Retainer condition: —



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Mechanical Inspection (Continued)

Seals DE condition : Other

Brg. Seats DE: Good

Seals DE type: Other

If DE undersized, amt.: 1.9690

Seals DE size: 55=80=8

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.: 1.7721

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: Good

Foot/Flange condition: Ok

Endbell DE size: 4.3308

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 3.9380

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Cause of Failure

Comments

Bearings And Seal wash & bake. ODE BEARING SHOW SIGNS OF CONTAMINATION IN THE GREASE

Service Tech name: Robert Wiley

Service Tech signature:

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

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