

Job Information

Job #: 95430

Date: April 5, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Welspun

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: AJAY

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#: 22255

Model#: 43PH25

Service Factor:

Frame:

Horsepower/kW: 25

Rated RPM: 3450

Rated Amps: 33

Rated Voltage: 480

Phase: 3

Cycles: 60

Special design: No



Nameplate

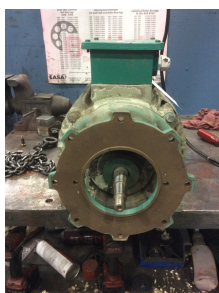
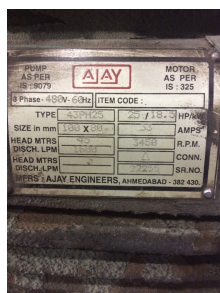
DE

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): .002

Bearings DE: Worn

Bearings DE make: SKF

Insulated: No

Bearing DE Size: 6310 2Z /C3

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6308 2Z/C3

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: Good

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: 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 : Worn



Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition :
:

Shaft damage cause: None

Shaft Image:



WEST TENNESSEE

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Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves 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

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: 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: Good

Lug size:

Lug Attachment: Acceptable

Terminal



Lugs



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:

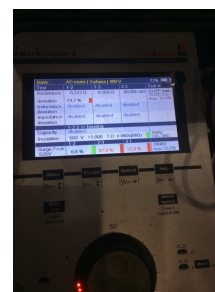
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

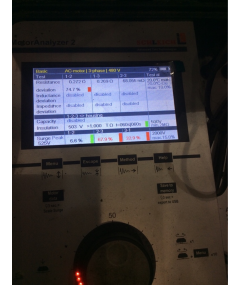
Winding Thermal Protection: No

Winding condition : Brittle

Winding Thermal Protection DE: —

Winding 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	0.2	0.2	68.0	74.7

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: 6310 2Z/C3

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6308 2Z/C3

Retainer condition: Good



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Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Slinger

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Undersized

Seals DE (inbound) condition :

If ODE undersized, amt.: +.007 (bad)

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Slinger

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: 1.9690

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 3.5446 (bad)

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

O.d.e. Bearing cage failed

Cause of Failure

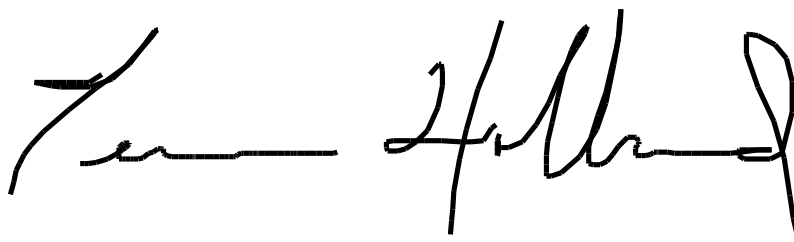
Shaft bearing journal was oversized, which caused premature bearing failure.

Comments

O.D.E. end bell housing fit has a lip worn in the surface and needs to be machined to tolerance. Windings require rewind as well.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Terrence Holland', written in a cursive style.**WEST TENNESSEE**

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