

Job Information

94804 Job #: Date: October 17,

2018

Priority: Authorized OT: No Authorized by:

Customer Information

Name: Johnson Controls Reason:

Contact: Motor#: PO#:

Application: Special notes:

1Y16AA-3

Name Plate Information

Serial#:

Manufacturer: **TECO** Enclosure: Weather Protected **Enclosure Type image**

I (WPI)

Model#:

Service Factor: 4510SPLL Frame:

Horsepower/kW: 1561 Rated RPM: 3600

Rated Amps: 191 Rated Voltage: 4160

Phase: 3 Cycles: 60

Special design:

Yes

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301



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):

Bearings DE: Other Bearings DE make: SKF

Insulated: No Bearing DE Size: 6315

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6315

Bearings Retainer: Yes Thermal Protection: No

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

Seals ODE type:

Grease Amt DE: 0 Grease Cond. DE: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: N/A Seals Image:

Seals DE size:

Not
Available

Seals DE (inbound) condition :

N/A

Seals Image 2:

Not

Seals ODE size:

Seals ODE (inbound) condition

Shaft damage cause: Other Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:

Not Available

Water jacket: N/A



Fan: N/A



Endbell Image:

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



Other missing parts



Mechanical Inspection (Continued)

Air Gap Meaurements (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 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Wye Lug type:

Lug Condition: Good Terminal Lugs

Lug size:

Lug Attachment: —



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Other

Num rotor bars:

Num broken bars:

Rotor



Rotor Test Results

Visual: Fail Single phase: Fail

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:







AC Electrical Inspection (Continued)

Winding color: Like new W

Winding image

Winding Thermal Protection:

Yes

Winding condition: Solid

Winding Thermal

Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind

Not Available

Megs incoming:

Bad

Surge incoming:

Bad

Hi-pot incoming:

Bad

Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

Resistive imbalance

Incoming

0

0

0

0

Leads/jumpers:

Ok

Lead jumper Image.:



If other, leads/jumpers:



Conclusion

Component Failure

Drive Bearing had catastrophic failure

Cause of Failure

Comments

DE SHAFT Bearing FIT BAD ROTOR NEEDS TO BE RESTAKED STATOR HAS A Lot OF CORE REPAIR BOTH Bearing CAPS NEED REPAIR

Service Tech name: Robert Wiley

Service Tech signature:

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