

Job Information

Job #: 142055

Date: March 9, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: KTG

Reason:

Contact:

Motor#: 142055

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Nema

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#: Dx9124123004

Model#:

Service Factor: 1.15

Frame: 445 tefc

Horsepower/kW: 150

Rated RPM: 1783

Rated Amps: 175

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?: No Contaminant(s): Grease

Shaft rotation: Bi-directional Contaminant(s) Amt: Cup

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: NTN

Insulated: No Bearing DE Size: Nu318

Bearings ODE: Worn Bearings ODE make: NTN

Bearing Type: Ball Bearing ODE Size: 6316C3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Bad Thermal Protection Type: —

Bearing Type Image



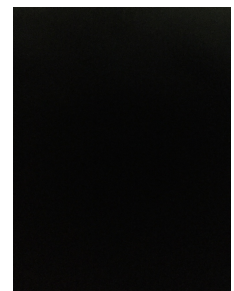
Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: N/A

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: Other

Seals Image:

Seals DE size:

Seals DE (inbound) condition : Bad



Seals ODE type: Other

Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition : Bad



Shaft damage cause: None

Shaft Image:

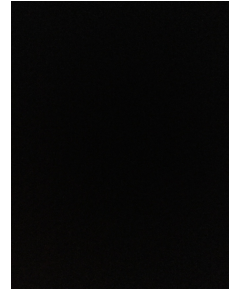


Mechanical Inspection (Continued)

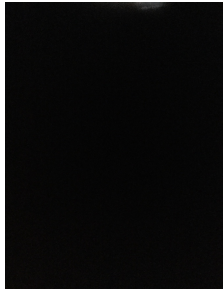
Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- | | | |
|---|----------------------------------|---|
| <input checked="" type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input checked="" type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover | <input type="checkbox"/> Glands | <input type="checkbox"/> None |

Other missing parts

Endbell Image:



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: 3

Terminal Markings: 1/2/3

Length of leads: 2'

REF: NEMA Std. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads: #1

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: Bad

Connections As Received: Open

Lug type: 3/8

Lug Condition: Warn

Lug size: #1

Lug Attachment: Replace

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 0

Num broken bars: 45

Rotor



Rotor Test Results

Visual: Fail

Growler: Pass

Single phase: Pass

Stator type: HISI

If other, stator type:

Stator condition: Phase-to-phase short

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: Still has color

Winding image

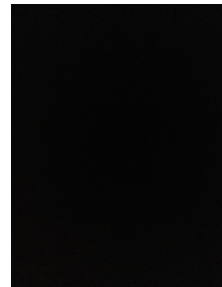
Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: —

Stator test results: Rewind



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

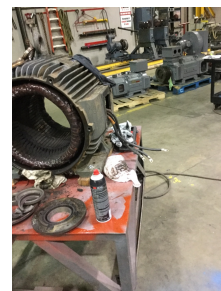
Resistive imbalance

Incoming

Leads/jumpers: Replace

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

Bearings windings fan seals

Cause of Failure

Bearing on the DE WENT DOWN AND CAUSE SEAL RETAINING CAPS AND JRLS TOO GO BAD WHICH CAUSED THE WINDING TOO GO BAD

Comments

Order two new impro seals
Order two new bearings (NU318) (6316C3)
Order two new carbon slingers
Order one new fan
Order new junction box an cover

Service Tech name: Michael Jordan

Service Tech signature:

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