

Job Information

Job #: 138502 Date: November 8,

2018

Priority: 2 Authorized OT: No Authorized by: Andrew

Customer Information

Name: Associated Electrical Cooperative Reason:

Contact: Motor#: 138502 PO#:

Application: Direct Drive Special notes: A/C Vertical

Name Plate Information

Manufacturer: G.E. Enclosure: Weather Protected Enclosure Type image

II (WPII)

Serial#: ZSH 286000166 Model#: 5KV86603420501

Service Factor: Frame: 8660P60

Horsepower/kW: 2400 Rated RPM: 507

Rated Amps: 332 Rated Voltage: 4000

Phase: 3 Cycles: 60

Special design: No

Nameplate DE ODE F1 F2 Top















Mechanical Inspection

Type of grounding device:

Shaft runout(TIR-Inbound):

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 No Contaminant Image:

present?:

.001

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6040M

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 29434E

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Good Thermal Protection Type: RTD

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection





Mechanical Inspection (Continued)

Lubrication Type: Oil Thermal Protection device DE: Good

Lubrication brand inbound: Unknown Thermal Protection device ODE: Thermal Overloads

Lubrication brand outbound: Unknown

Grease Amt DE: Full Grease Cond. DE: Watery

Grease Amt ODE: 0 Grease Cond. ODE: Other

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals ODE type:

Seals ODE size:

Seals Image 2:

Slinger

Seals DE (inbound) condition:

Seals ODE (inbound) condition

Shaft damage cause: None Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket:

Ok

Fan: C

Ok

Frame cond.:

Good



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Endbell Image:

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: 1-6

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 30"

Markings Identified By Color:

P1-No color assigned 5-Black 1-Blue Size of leads: 4/0 P2-Brown

2-White 6-No color assigned

7-No color assigned 3-Orange

4-Yellow 8-Red Lead condition: Good

Connections As Received: Open Lug type: Reg

Lug Condition: Good Terminal Lugs

Lug size: 4/0

Lug Attachment: Acceptable



AC Electrical Inspection (Continued)

Rotor Type: Barred Aluminum

Ok

Num rotor bars: 0

Num broken bars: 0

Rotor



Rotor Test Results

Rotor Condition:

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type: Vertical

Stator condition: Ok If other, stator condition: Good

Failure location: Other If other, stator failure: Dirt

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

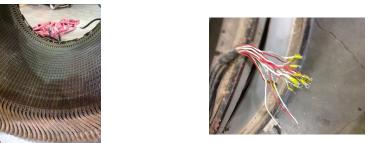
Winding color: Still has color Winding image Winding Thermal Protection: Yes

Winding condition: Solid

Winding Thermal Good Protection DE:

Winding Thermal Good 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 0.040460 0.040480 0.040430 0.1

Leads/jumpers: Ok Lead jumper Image. :

If other, leads/jumpers:





Conclusion

Component Failure

Clean up and bearings	
Cause of Failure	
Dirt	
Comments	
157-bars	

Service Tech name: Michael

Service Tech signature: