

Job Information

96365 Job #: Date: December 18,

2019

Priority: Authorized OT: No Authorized by:

Customer Information

Name: Arauco Reason:

Contact: Motor#: PO#:

Application: Special notes:

Name Plate Information

Manufacturer: Siemens Enclosure: Totally Enclosed **Enclosure Type image**

Fan Cooled Serial#: E05T0167ES1 Model#:

Service Factor: 1.15 Frame: 4

Horsepower/kW: 60 Rated RPM: 1775

Rated Amps: 71 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design:

No

Nameplate DE ODE F1 F2 Top









WEST TENNESSEE



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: Worn Bearings DE make: NACHI

Insulated: No Bearing DE Size: 6314

Bearings ODE: Worn Bearings ODE make: NACHI

Bearing Type: Ball Bearing ODE Size: 6314

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Lubrication Type: Grease Thermal Protection device DE: —

Lubrication brand inbound: Unknown Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: Full Grease Cond. DE: Hard

Grease Amt ODE: Full Grease Cond. ODE: Hard

Seals DE type: Slinger Seals Image:

Seals DE size: 2.7560

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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Brg. Image:



Water jacket: N/A Fan: Ok Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount Endbell type: Single piece

Missing parts? Endbell Image:

☐ J-Box cover ☐ O-rings ☐ J-Box

☐ HH cover ☐ Glands ☑ None

Other missing parts







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: 3 Terminal Markings:

Length of leads: 16 in 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: Lug type:

Lug Condition: Good Terminal Lugs

Lug size:

Lug Attachment: —





AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 40

Num broken bars: 0

Rotor



Rotor Test Results

Rotor Condition:

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: Bottom of slot If other, stator failure:

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

Winding color: Like new Winding image Winding Thermal Protection: No

Winding condition: Solid

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 0.00 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: 6314

Shaft runout(TIR-Inbound): 0.002 Bearing ODE Size: 6314

Retainer condition: Good

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Seals DE condition: Brittle Brg. Seats DE: Good

Seals DE type: Slinger If DE undersized, amt.:

Seals DE size: 2.7560 Brg. Seats ODE: Good

Seals DE (inbound) condition: If ODE undersized, amt.:

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: Bad Foot/Flange condition: Ok

Endbell DE size: 5.9091 Foot flatness: Pass

Endbell DE insulated?: —

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

5.9114

Endbell ODE insulated?: —

Endbell ODE size:



Conclusion

Component Failure

Cause of Failure

Comments

Winding is blown, both end bells are over sized, both bearings show signs of contamination, and the slinger seal is hard and brittle. Recommend reconditioning, new bearings, new slinger seal, rewind, and machine work on both end bells.

Chris Willey

Service Tech name: Chris Wiley

Service Tech signature: