

Job Information

Job #: 95390 Date: April 3, 2019

Priority: — Authorized OT: No Authorized by:

Customer Information

Name: Search Water and Sewer Reason:

Contact: Motor#: PO#:

Application: – Special notes:

Name Plate Information

Manufacturer: Reliance/Aqua Aero Enclosure: Open Drop Proof Enclosure Type image

(ODP)

Serial#: 6835071-1 Model#: P36G5050A

Service Factor: 1.15 Frame: 364LPZ

Horsepower/kW: 40 Rated RPM: 1180

Rated Amps: 49.4 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?: Yes Contaminant(s): Carbon

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device

present?: Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 3215-B-7VH

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6313-2Z-C3

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type 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: Gritty

Grease Amt ODE: Full Grease Cond. ODE: Gritty

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition

:

Shaft damage cause: None Shaft Image:





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

Missing two fan cover bolts



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: 11 inch 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: — Terminal Lugs

Lug size: NA

Lug Attachment: —

Fax 901-873-5301



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 60

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: In slot If other, stator failure:

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

Winding color: Shiny black Winding image Winding Thermal Protection: No

Winding condition: Cracks

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 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: 3215-B-TVH

Shaft runout(TIR-Inbound): 0.003 Bearing ODE Size: 6313-2Z-C3

Retainer condition: —

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Seals DE condition: None Brg. Seats DE: Good

Seals DE type: N/A If DE undersized, amt.:

Seals DE size: 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: Good Foot/Flange condition: Ok

Endbell DE size: 5.1189 Foot flatness: Pass

Endbell DE insulated?: —

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

variation)?

Endbell ODE size: 5.5140-5.5140-5.5139

BAD

Endbell ODE insulated?: -



Conclusion

Component Failure

Cause of Failure

Comments

Coils burned and melted into from being overloaded and the bearings failed due to contamination in the grease.

Chris Ellily

Service Tech name: Chris Wiley

Service Tech signature: