

### **Job Information**

Job #: 95513 Date: May 9, 2019

Priority: — Authorized OT: No Authorized by:

**Customer Information** 

Name: Alcoa Remediation Reason:

Contact: Motor#: PO#:

Application: – Special notes:

**Name Plate Information** 

Manufacturer: Louis Allis Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled
Serial#: TYPE: CJ4B Model#: 19325J1M48

111 21 00 1B Wodow: 100200 1111 10

Service Factor: Frame: 365T

Horsepower/kW: 75 Rated RPM: 1775

Rated Amps: 182/91 Rated Voltage: 230/460

Phase: 3 Cycles: 60

No

Nameplate DE ODE F1 F2 Top



Special design:









## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): Water

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

Shaft grounding device

present?: Contaminant Image:

Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 6313-2RSP

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6213-2ZR

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: 1/2 Grease Cond. DE: Other

Grease Amt ODE: 1/2 Grease Cond. ODE: Other

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:





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: 11 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: — 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Lug size:

Lug Attachment: —

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# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 28

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: Other If other, stator failure:

Stator Image:





## **AC Electrical Inspection (Continued)**

Winding color: Still has color Winding image Winding Thermal Protection: No

Winding condition: Solid

Winding Thermal Protection DE:

Winding Thermal \_\_\_\_\_

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 0.00 0.00 0.00

Leads/jumpers: Ok

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: 6313-2RSP

Shaft runout(TIR-Inbound): 0.001 Bearing ODE Size: 6213-2ZR

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: 5.5127 Foot flatness: Pass

4.7245

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

variation)?

Endbell ODE insulated?: -

Endbell ODE size:

Endbell DE insulated?:



### Conclusion

**Component Failure** 

**Cause of Failure** 

#### **Comments**

The motor was full of water causing the bearings to prematurely fail. Recommend reconditioning

(Arabelly

Service Tech name: Chris Wiley

Service Tech signature: