

#### **Job Information**

96571 Job #: Date: February 19,

2020

Priority: Authorized OT: No Authorized by:

#### **Customer Information**

Name: **Almatis** Reason:

Contact: Motor#: PO#:

Application: Special notes:

## **Name Plate Information**

Manufacturer: **US Motors** Enclosure: Totally Enclosed **Enclosure Type image** 

Fan Cooled

Serial#: Model#:

Service Factor: 1.15 Frame: 365T

Horsepower/kW: 75 Rated RPM: 1780

Rated Amps: 172/86 Rated Voltage: 230/460

Phase: 3 Cycles: 60

Special design:

No

Nameplate DE ODE F1 F2 Top









Fax 901-873-5301



## **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: Koyo

Insulated: No Bearing DE Size: 6313

Bearings ODE: Fell Apart Bearings ODE make: Koyo

Bearing Type: Ball Bearing ODE Size: 6212

Bearings Retainer: No Thermal Protection: No

Retainer condition: — 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: 3/4 Grease Cond. DE: New

Grease Amt ODE: 0 Grease Cond. ODE: New

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: Broken Frame cond.: Good



Endbell type: Single piece

Missing parts? Endbell Image:

Horizontal/Foot mount



Motor Mount Position:

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:

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 12in

Markings Identified By Color:

P1-No color assigned 1-Blue 5-Black Size of leads:

P2-Brown 2-White 6-No color assigned

7-No color assigned 3-Orange

4-Yellow 8-Red Lead condition: Good

Connections As Received: Lug type:

Lug Condition: 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:** 

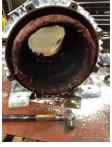
Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: Core edge If other, stator failure:

Stator Image: Failure Image:







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

Winding color: Dull black 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: No

Type of grounding device: Bearing DE Size: 6313

Shaft runout(TIR-Inbound): Bearing ODE Size: 6212

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: Bad Foot/Flange condition: Ok

Endbell DE size: 5.5136 Foot flatness: Pass

Endbell DE insulated?: —

4.3524

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

variation)?

Endbell ODE insulated?: -

Endbell ODE size:



## Conclusion

**Component Failure** 

**Cause of Failure** 

#### **Comments**

Both end bells are over sized, ODE bearing fail apart, fan is broke, and windings are blown. Recommend new bearings, reconditioning, rewind, new fan, and machine work on both end bells

My Elder

Service Tech name: Chris Wiley

Service Tech signature: