

#### **Job Information**

Job #: 97308 Date: September 9,

2020

Priority: — Authorized OT: No Authorized by:

**Customer Information** 

Name: Afco Steel Reason:

Contact: Motor#: PO#:

Application: – Special notes:

**Name Plate Information** 

Manufacturer: Leeson Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled

Serial#: 669095 Model#: G150033.60

Service Factor: 1.25 Frame: 256T

Horsepower/kW: 20 Rated RPM: 3540

Rated Amps: 46.2/23.1 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?: No Contaminant(s): None

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

Shaft grounding device

present?:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 6309

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6308

Bearings Retainer: Yes 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: 1/2 Grease Cond. DE: Gritty

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

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals ODE type: N/A

Seals ODE size:

Shaft damage cause:

Seals ODE (inbound) condition

Seals DE (inbound) condition:

None

Shaft Image:



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Brg. Image:



Bushings/sleeves image:



Water jacket:

N/A

Fan: C

Ok

Frame cond.:

Good



Endbell Image:



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Single piece

Missing parts?

☐ 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: 12 Terminal Markings:

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 7.5

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

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

0

Rotor



#### **Rotor Test Results**

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: Failure 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 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

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: 6309

Shaft runout(TIR-Inbound): Bearing ODE Size: 6308

Retainer condition: -

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Seals DE condition :	Worn	Brg. Seats DE:	Good	
Seals DE type:	Slinger	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:	ОК	
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:	Lip worn	Foot flatness:	Pass	
Endbell DE insulated?:	_	Does Air Gap Meet Cu	Does Air Gap Meet Customer or EASA spec(<10%	
Endbell ODE size:	Lip worn	variation)?		

Endbell ODE insulated?:



#### Conclusion

Component F	ailure
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Bearings

#### **Cause of Failure**

Contaminated grease/worn housing fits.

#### Comments

Bearings failed because of contaminated grease and worn housing fits.

Service Tech name: Terrence Holland

Service Tech signature: