

### **Job Information**

Job #: 96955 Date: June 16, 2020

Priority: — Authorized OT: No Authorized by:

### **Customer Information**

Name: FutureFuel Reason:

Contact: Motor#: PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: Baldor Enclosure: Totally Enclosed Enclosure Type image

Non-Ventilated

Serial#: 07K7784275G1 Model#:

Service Factor: Frame: 215TC

Horsepower/kW: 7.5 Rated RPM: 3500-1840

Rated Amps: 8.4-2.9 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design: No

Nameplate DE ODE F1 F2 Top







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## **Mechanical Inspection**

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE:

Inspect bolt holes and fasteners. Validate correct fasteners.

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

> Shaft rotation: Bi-directional Contaminant(s) Amt: Quart

Shaft grounding device No

Worn

Contaminant Image: present?:

Insulated: Bearing DE Size: 6307 No

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Bearing ODE Size: Ball 6206

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type:

Bearing Type Image



Bearing Make Image



Bearing Retainer Image

Bearings DE make:

SKF



Thermal Protection



Lubrication Type: Grease Thermal Protection device DE: -

Lubrication brand inbound: Mobile Polyrex EM Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full Grease Cond. DE: Other

Grease Amt ODE: Full 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:





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: 6 Terminal Markings:

Length of leads: 8in 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:

Lug Attachment: —

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# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 28

Num broken bars:

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: Coil head 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: 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: 6307

Shaft runout(TIR-Inbound): Bearing ODE Size: 6206

Retainer condition: Good

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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: Shaft damage: OK None

Seals ODE type: N/A

Bushings/sleeves DE: Ok Seals ODE size:

Bushings/sleeves ODE: Ok Seals ODE (inbound) condition:

> Endbell fits/damage: Foot/Flange condition: Good Ok

Endbell DE size: 3.1509 BAD Foot flatness: **Pass** 

Endbell DE insulated?:

2.4415

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

Endbell ODE insulated?:

Endbell ODE size:



### Conclusion

#### **Component Failure**

Windings blown and de end bell is over sized

#### **Cause of Failure**

Windings shorted

#### **Comments**

Recommend rewind, new bearings and machine work

Service Tech name: Chris Wiley

Service Tech signature:

Chill Calify