

### **Job Information**

Job #: 94589 Date: August 3, 2018

Priority: — Authorized OT: No Authorized by:

### **Customer Information**

Name: A.I.T Reason:

Contact: Motor#: PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: Lincoln Enclosure: Open Drop Proof Enclosure Type image

(ODP)
Serial#: U3970920575 Model#: TD4593CD

Service Factor: 1.15 Frame: 284TSC

Horsepower/kW: 25 Rated RPM: 1750

Rated Amps: 64/32 Rated Voltage: 230/460

Phase: 3 Cycles: 60

Special design: Yes

Nameplate DE ODE F1 F2 Top















## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): None

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

Shaft grounding device

present?:

Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound): .001

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6310 2Z/C3

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6310 2Z/C3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Not Available

Seals Image 2:



## **Mechanical Inspection (Continued)**

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: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition

Seals DE (inbound) condition:

Shaft damage cause: None Shaft Image:

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# **Mechanical Inspection (Continued)**





Bushings/sleeves image:



Water jacket: Ok

Fan:

Ok

Frame cond.:

Good

Not Available

Not Available



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Endbell Image:

Single piece

Missing parts?

☐ J-Box cover

O-rings

☐ J-Box

☐ HH cover

Glands

✓ None

Other missing parts



### **Mechanical Inspection (Continued)**

#### 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:

Length of leads: 14" 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: – Not Available Available

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# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 44

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: Coil head If other, stator failure:

Stator Image: Failure Image:







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

Winding color: Like new Winding image

Winding Thermal Protection:

Yes

Winding condition:

Solid

Winding Thermal

Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind

Not Available

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:

If other, leads/jumpers:

Ok

Lead jumper Image.:



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2/ Mmsl



### Conclusion

**Component Failure** 

Coils.

**Cause of Failure** 

Insulation between the coils failed, grounding out the stator.

**Comments** 

Service Tech name: Terrence Holland

Service Tech signature:

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