

### **Job Information**

Job #: 141921 Date: March 23, 2020

Priority: — Authorized OT: No Authorized by:

## **Customer Information**

Name: Nucor Reason:

Contact: Motor#: PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: P&H Enclosure: Open Drop Proof Enclosure Type image

(ODP)

Serial#: Model#:

Service Factor: Frame:

Horsepower/kW: 100 Rated RPM: 1200

Rated Amps: Rated Voltage:

Phase: Cycles:

Special design: No

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301



# **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?: Yes Contaminant(s): None

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

Shaft grounding device No Contaminant Image:

Worn

present?:

Insulated: No Bearing DE Size: Nu222

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6222

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Make Image

Bearing Type Image



Bearing Retainer Image

Bearings DE make:

**FAG** 



Thermal Protection





# **Mechanical Inspection (Continued)**

Lubrication Type: Oil 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: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals DE (inbound) condition:

Seals Image 2:

Seals ODE size:

Seals ODE type:

Seals ODE (inbound) condition

Shaft damage cause: None

Shaft Image:



Fax 901-873-5301

Slinger



# **Mechanical Inspection (Continued)**

Brg. Image:



Bushings/sleeves image:



Water jacket:

Ok

Fan: Ok Frame cond.:

Good





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: Terminal Markings:

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

Markings Identified By Color:

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

P2-Brown 2-White 6-No color assigned

3-Orange 7-No color assigned

4-Yellow 8-Red Lead condition:

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:

Num broken bars:

Rotor

#### **Rotor Test Results**

Stator Image:

**Rotor Condition:** 

Visual: Single phase: **Pass** Growler: **Pass Pass** 

Stator type: If other, stator type: Factory

Stator condition: Ground If other, stator condition:

Failure location: In slot If other, stator failure:





# **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





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 Lead jumper Image. :

If other, leads/jumpers:





### Conclusion

### **Component Failure**

The winding is grounded and the bearings have excessive wear

#### **Cause of Failure**

Winding is grounded due to deterioration of the insulation and bearings are worn from contamination in the grease

#### **Comments**

Service Tech name:

Service Tech signature:

/lev >-