

### **Job Information**

Job #: 140355 Date: August 7, 2019

Priority: — Authorized OT: No Authorized by: Terry f

### **Customer Information**

Name: Nucor Yamato Reason:

Contact: Sonny Motor#: PO#:

Application: – Special notes:

## **Name Plate Information**

Manufacturer: Lincoln Enclosure: Open Drop Proof Enclosure Type image

(ODP)

Serial#: 3833646 Model#: A717

Service Factor: Frame: 445ts

Horsepower/kW: 200 Rated RPM: 1780

Rated Amps: 223 Rated Voltage: 460

Phase: 3 Cycles:

No

Nameplate DE ODE F1 F2 Top



Special design:













# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

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

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

Shaft grounding device

present?: Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 318

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 315

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Not Available



## **Mechanical Inspection (Continued)**

Lubrication Type: Grease Thermal Protection device DE: Thermal Overloads

Lubrication brand inbound: Mobile Polyrex EM Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full Grease Cond. DE: Charred

Grease Amt ODE: Full Grease Cond. ODE: Charred

Seals DE type: N/A Seals Image:

Seals DE size:

Not

Available

Seals DE (inbound) condition:

Seals ODE (inbound) condition

Seals ODE type:

N/A

Seals Image 2:

Not Available

Seals ODE size:

Shaft damage cause: None Shaft Image:



# **Mechanical Inspection (Continued)**

Brg. Image:



Bushings/sleeves image:

Not Available

Water jacket:

Ok

Fan:

Ok

Frame cond.:

Good

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: 6 Terminal Markings: 1-6

Length of leads: 18inches REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 1 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: 1-6
Lug type: Regular

Lug Condition: Good Terminal Lugs

Lug size:

Not

Lug Attachment: — Available

Fax 901-873-5301



# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 58

Num broken bars: 0

Rotor



#### **Rotor Test Results**

**Rotor Condition:** 

Visual: Pass Growler: Pass Single phase: Pass

Stator type: HISI If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







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

Winding color: Dull black Winding image Winding Thermal Protection: Yes

Winding condition: Brittle

Winding Thermal Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind

Not Available

Megs incoming: Bad Surge incoming: Bad Hi-pot incoming: Bad

**Winding Resistance Incoming** 

Phases A to B Phases B to C Phases C to A Resistive imbalance

Incoming 0.5 0.5 0.5

Leads/jumpers: Ok Lead jumper Image. :

Not Stable Not Available



## Conclusion

### **Component Failure**

Bearings gritty ,windings shorted to ground

#### **Cause of Failure**

Short to ground bad surge test

#### Comments

Overloads .2 p1p2 Rewind short to ground

Service Tech name: Terry f

Service Tech signature:

