

Job Information

Job #: 142345

Date: April 23, 2020

Priority: —

Authorized OT: No

Authorized by: Terry f

Customer Information

Name: Nucor Yamato

Reason: Inspection

Contact: Sonny

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Toshiba

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 881605

Model#:

Service Factor: 1.15

Frame:

Horsepower/kW: 52/104

Rated RPM: 500/100



Armature

Volts 230460

Amps

Fields

Volts

Amps

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: CW

Contaminant(s) Amt: None

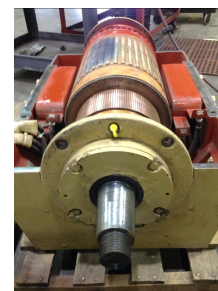
Shaft Condition: Good

Contaminant Image:

Shaft grounding device present?: No

Type of grounding device:

Shaft runout(TIR-Inbound):



Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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

WEST TENNESSEE

7030 Ryburn Drive
Millington, TN 38053
Phone 901-873-5300
Fax 901-873-5301

CENTRAL ARKANSAS

6812 Lindsey Rd.
Little Rock, AR 72206
Phone 501-375-9178
Fax 501-375-4254

Mechanical Inspection (Continued)

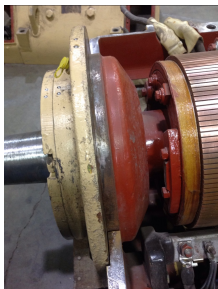
Brushholders

Number	4
Condition	Good
Size	
Spring type	Regular

Brushes

Number	8
Size	2831-e41
Shunt Len.	4 inches
Insulated	No
TermType	

Brg Image



Shaft Image



Brushing/sleeves



End bell



Water jacket: Ok

Fan: Ok

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Foot/Flange condition: Ok

Foot flatness: Pass



MILLINGTON, TN

LITTLE ROCK, AR

Mechanical Inspection (Continued)

Missing parts?

☒ J-Box cover

☐ O-rings

☒ J-Box

☒ HH cover

☐ Glands

☐ None

Other missing parts Two covers on d.e side and o.d.e side all 4 covers for brushes

Air Gap Measurements (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

Electrical Inspection

☐ Move armature imbalance to Assemble

Commutator: Salvageable

Winding Inspection

Meg Test IP to Flds: Good

Polarity Check IP to Flds: Yes

Meg Series to Shunt: Good

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DC Electrical Inspection

Brushes: Normal wear

Brush Image:



Brush holders: Salvageable Qty. 4

Insulators: Salvageable Qty. 4

Lead support stud: Salvageable Qty. 4

Alternate brush image:



Rocker ring: Salvageable Qty. 1

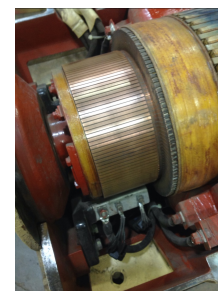
Commutator Type: Tig welded

Commutator images

Commutator Hardness: Good

Commutator Condition : Salvageable

Commutator Film: Ok



Armature type: Factory If other

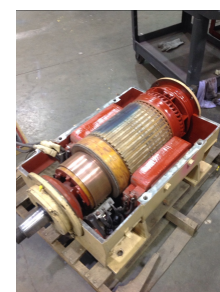
Failure mode: Ok If other

Failure location: Front V ring If other

Armature condition: Solid If other

Winding color: Like new

Armature images



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DC Electrical Inspection (Continued)

Armature Test Results

Megs: Good Hi-pot: Good Core loss: Good

Armature image



Fields condition

Series/Stab condition: Ok

Fields condition image:

Shunts condition: Ok

InterCoils condition: Ok



Fields test results

Series/Stab Meg: Ok

Hi Pot: Ok

Resistance: Ok

Shunts Meg: Ok

Hi Pot: Ok

Resistance: Ok

InterCoils Meg: Ok

Hi Pot: Ok

Resistance: Ok

Thermistors: In use

Field Test image

RTD: None

At

Thermostat: Open



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Leads/jumpers: Ok

Lead jumper Image:



Conclusion

Component Failure

None all looks and tested good

Cause of Failure


Inspection and clean up 52 kw D.C. Motor

Comments

Motor ran fine and passed a pdma test. All looks good

Service Tech name: Terry f

Service Tech
signature:

A handwritten signature in black ink, appearing to be 'Terry f', written in a stylized, cursive-like font.