

Job Information

Job #: 97240

Date: August 25, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Bryce

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Emerson

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 44717-HI

Model#: 2590B451003

Service Factor:

Frame: 259AT

Horsepower/kW: 20

Rated RPM: 1750



Armature

Volts 500

Amps 35

Fields

Volts 300

Amps 1.35

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 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: N/A

Lubrication brand inbound: Unknown

Thermal Protection device ODE: N/A

Lubrication brand outbound: Unknown

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	2	Brushes	Number	2
	Condition	Good		Size	
	Size			Shunt Len.	
	Spring type			Insulated	Yes
				TermType	

Brg Image



Shaft Image



Brushing/sleeves



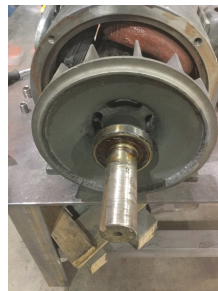
End bell



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

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. 2

Insulators: Salvageable Qty. 2

Lead support stud: Salvageable Qty.

Alternate brush image:



Rocker ring: Salvageable Qty.

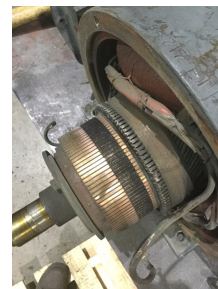
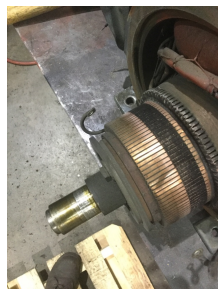
Commutator Type: Tig welded

Commutator images

Commutator Hardness: Good

Commutator Condition : Salvageable

Commutator Film: Ok



Armature type: Factory If other

Failure mode: Ok If other

Armature images



Failure location: Other If other Dirty

Armature condition: Solid If other

Winding color: Like new

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: In use

At

Thermostat: Open

Leads/jumpers: Ok

Lead jumper Image:



Conclusion

Component Failure

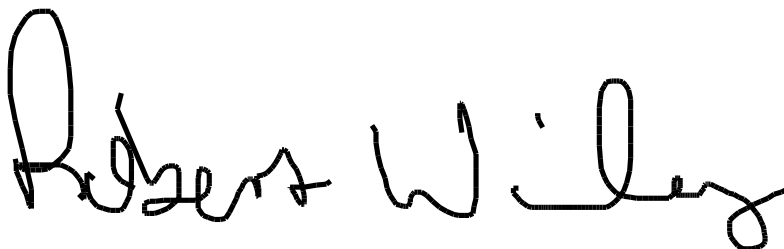
Cause of Failure

Comments

Wash and bake armature fields and interpoles . Polish comm. Found frosting in de and ode bearings.

Service Tech name: Robert Wiley

Service Tech
signature:

A handwritten signature in black ink that reads 'Robert Wiley'.