

Job Information

Job #: 140408

Date: August 13, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Lucy Woodstock

Reason:

Contact:

Motor#: 140408

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Reliance

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 01MAN27138 G 001 VX

Model#:

Service Factor: 1.15

Frame: 445TSC

Horsepower/kW: 150

Rated RPM: 3575

Rated Amps: 163

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Grease

Shaft rotation: CCW

Contaminant(s) Amt: Other

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): .001

Bearings DE: Worn

Bearings DE make: SKF

Insulated: No

Bearing DE Size: 6313c3

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6313c3

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: Good

Thermal Protection Type: —

Bearing Type Image



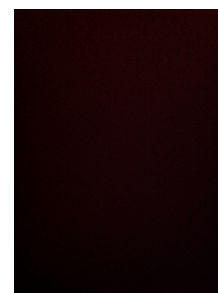
Bearing Make Image



Bearing Retainer Image



Thermal Protection



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)

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: Other

Seals Image:

Seals DE size:

Seals DE (inbound) condition : Replace



Seals ODE type: Other

Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition : Replace



Shaft damage cause: None

Shaft Image:

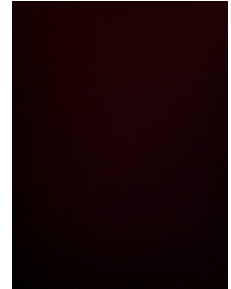


Mechanical Inspection (Continued)

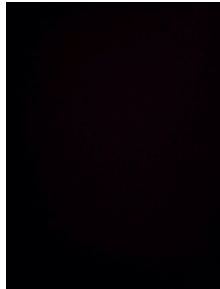
Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- | | | |
|---|----------------------------------|---|
| <input checked="" type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input checked="" type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover | <input type="checkbox"/> Glands | <input type="checkbox"/> None |

Other missing parts

Endbell Image:



Mechanical Inspection (Continued)

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

AC Electrical Inspection

Number of leads: 3

Terminal Markings: T1-T2-T3

Length of leads: 12"

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads: 3/0

1-Blue
2-White
3-Orange
4-Yellow

5-Black
6-No color assigned
7-No color assigned
8-Red

P1-No color assigned
P2-Brown

Lead condition: Good

Lug type: 3/8

Connections As Received: Open

Lug Condition: Good

Lug size: Reg

Lug Attachment: Acceptable

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 38

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type: Mush

Stator condition: Ok

If other, stator condition: Good

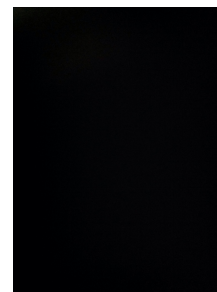
Failure location: Other

If other, stator failure: N/A

Stator Image:



Failure Image:



AC Electrical Inspection (Continued)

Winding color: Painted

Winding image

Winding Thermal Protection: Yes

Winding condition : Brittle

Winding Thermal
Protection DE: —

Winding Thermal
Protection ODE: —

Stator test results: Salvageable



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	0.019882	0.01986	01799	0.4

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

Bearing an seals

Cause of Failure

Too much grease was being pumped into the bearings which can cause bearing too fail as well a the empro seals

Comments

Wash an bake the winding recheck then dip stator again in the regular varnish tank too secure the winding
Two new bearing size is 6313C3
Two new empro seals

Service Tech name: Michael

Service Tech signature:

WEST TENNESSEE

7030 Ryburn Drive
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