

## Job Information

Job #: 94974

Date: December 11, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Lexicon

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Rueland

Enclosure : Totally Enclosed  
Non-Ventilated

Enclosure Type image

Serial#: 823471A-5

Model#: 3888-XH8787C

Service Factor:

Frame: WEF324S

Horsepower/kW: 20

Rated RPM: 1800

Rated Amps:

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): Carbon

Shaft rotation: —

Contaminant(s) Amt: Cup

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: SKF

Insulated: No

Bearing DE Size: 6311 2RS

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6311 2RS

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image

Bearing Make Image

Bearing Retainer Image

Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: 0

Grease Cond. DE: New

Grease Amt ODE: 0

Grease Cond. ODE: New

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:



### WEST TENNESSEE

7030 Ryburn Drive  
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Phone 901-873-5300  
Fax 901-873-5301

### CENTRAL ARKANSAS

6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
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## Mechanical Inspection (Continued)

Brg. Image:



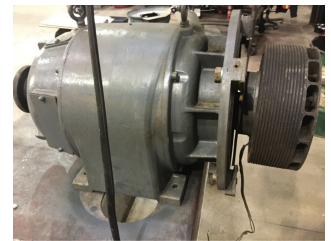
Bushings/sleeves image:



Water jacket: N/A

Fan: N/A

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             |

Endbell Image:



Other missing parts

## 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:

Length of leads: 12"

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

Size of leads:

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:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —





## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars:

Num broken bars:



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ok

If other, stator condition:

Failure location: Other

If other, stator failure:

Stator Image:



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## AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

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	0.529	0.531	0.530	0.3

Leads/jumpers: Ok

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Worn

Bearings Retainer: No

Type of grounding device:

Bearing DE Size: 6311 2RS

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6311 2RS

Retainer condition: —



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Slinger

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.:

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Slinger

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size:

Foot flatness: Pass

Endbell DE insulated?: —

Does Air Gap Meet Customer or EASA spec(<10% variation)?

Endbell ODE size:

—

Endbell ODE insulated?: —

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MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

ODE SHAFT EXTENSION, DE & ODE Journal's Worn, ODE EB housing worn, brake hub bad, brake mounting broken

### Cause of Failure

### Comments

Retest windings after wash to see if merger increases, if slip ring can't be removed rotor will have to be rewound regardless. Needs new shaft and brake hub and brake mounting bracket made. ODE EB housing repair

Brake needs (2) 6014 2RS bearings

Service Tech name: Lynn McDonald

Service Tech signature:

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