

## Job Information

Job #: 95111

Date: January 11, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Lexicon

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Leroy Somer

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 736261013001

Model#: 3NLS180LG-T

Service Factor:

Frame: 180L

Horsepower/kW: 22.2

Rated RPM: 1760

Rated Amps: 35.7

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

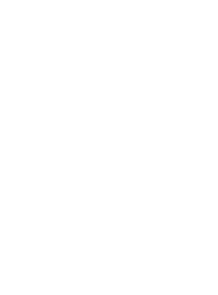
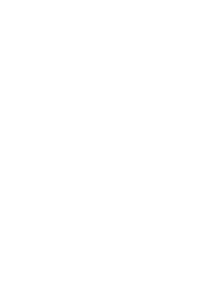
DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): None

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

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 6312 2RS

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6214 2Z/C3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



MILLINGTON, TN

LITTLE ROCK, AR

## 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: Slinger

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

### 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)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: Ok

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☐ None

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: 6

Terminal Markings:

Length of leads: 6"

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: Good

Lug size:

Lug Attachment: Acceptable

Terminal



Lugs





## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 54

Num broken bars: 0

Rotor



### 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:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

Winding Thermal Protection: Yes

Winding condition : Charred

Winding Thermal  
Protection DE: —Winding Thermal  
Protection ODE: —

Stator test results: Rewind



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

Leads/jumpers: Ok

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Damaged

Bearings Retainer: Yes

Type of grounding device: None

Bearing DE Size: 6312 2RS

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6214 2Z

Retainer condition: Good



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Other

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: 5.1188

Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 4.9214

—

Endbell ODE insulated?: No

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## Conclusion

### Component Failure

Shaft key way bad

### Cause of Failure

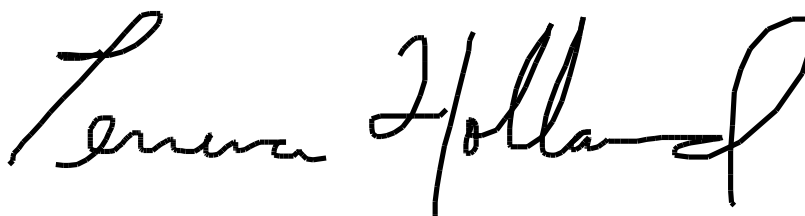
Windings overloaded

### Comments

Windings overloaded. D.E. Shaft key way wallowed.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink that reads 'Terrence Holland'.