

## Job Information

Job #: 140493

Date: August 29, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: HSLR

Reason:

Contact:

Motor#: 140493

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Baldor

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: N02062425-N062/0271

Model#: 18T137X383

Service Factor: 1.00

Frame: 447T

Horsepower/kW: 150

Rated RPM: 1190

Rated Amps: 174

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): Dirt

Shaft rotation: Bi-directional

Contaminant(s) Amt: Cup

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device: Copper lug inside the t box

Shaft runout(TIR-Inbound): .001

Bearings DE: Worn

Bearings DE make: Timken

Insulated: No

Bearing DE Size: 6319-ZZ

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6314-ZZ

Bearings Retainer: Yes

Thermal Protection: Yes

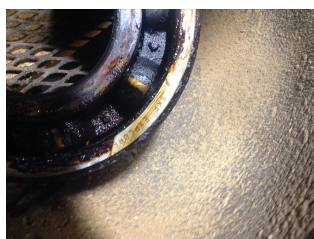
Retainer condition: Good

Thermal Protection Type: Thermocouple

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: Bad

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 1/4

Grease Cond. DE: Charred

Grease Amt ODE: 1/4

Grease Cond. ODE: Charred

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

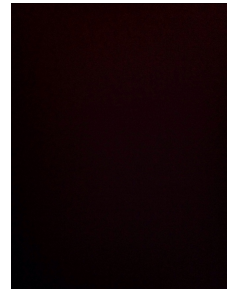
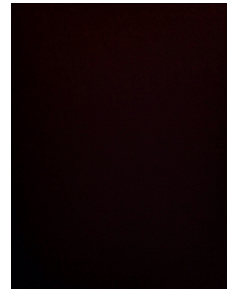
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:



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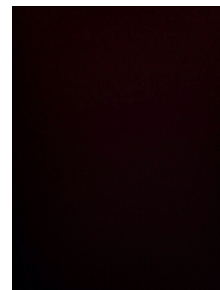


## Mechanical Inspection (Continued)

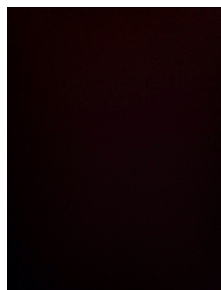
Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☒ 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: 1-2-3

Length of leads: 10"

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

Size of leads: 1/0

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: Worn

Lug type: N/A

Connections As Received: Open

Lug Condition: —

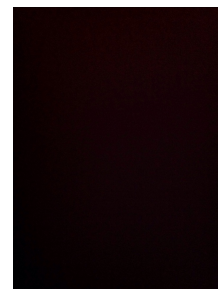
Lug size: N/A

Lug Attachment: Replace

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars: 59

Num broken bars: 0



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: HISI

If other, stator type:

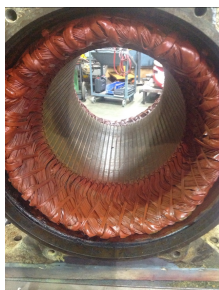
Stator condition: Other

If other, stator condition: Bad

Failure location: Other

If other, stator failure: Failed surge

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

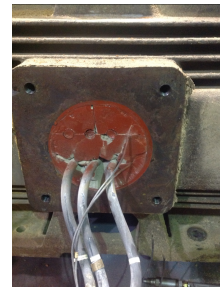
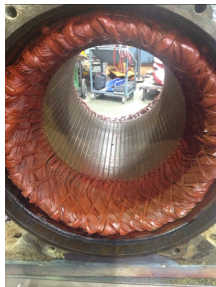
Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: Bad

Stator test results: Rewind



Megs incoming: Good

Surge incoming: Bad

Hi-pot incoming: Good

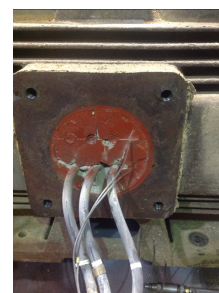
### Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	0.028	0.028	0.028	0.6

Leads/jumpers: Replace

Lead jumper Image. :

If other, leads/jumpers:





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## Conclusion

### Component Failure

Bearings and the winding

### Cause of Failure

Bearings on the drive end were over heating the overloads are bad and the winding failed the surge test

### Comments

Rewind the stator  
Replace the bearings  
Replace the bearings  
Replace the overloads

Service Tech name: Michael

Service Tech signature:

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