

## Job Information

Job #: 96242

Date: November 22, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Advanced Fluid

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Homa

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 75435

Model#:

Service Factor:

Frame:

Horsepower/kW: 64kw

Rated RPM: 1160

Rated Amps: 164/82

Rated Voltage: 230/460

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): Water

Shaft rotation: CCW Contaminant(s) Amt: Cup

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): Good

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 7313b

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 63102zc3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

## Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: Thermal Overloads

Lubrication brand inbound: Mobile Polyrex EM

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

Seals DE type: Other

Seals Image:

Seals DE size: 65mmx85mm

Seals DE (inbound) condition : Worn



Seals ODE type: Other

Seals Image 2:

Seals ODE size: 65mmx85mm

Seals ODE (inbound) condition : Worn



Shaft damage cause: None

Shaft Image:



## Mechanical Inspection (Continued)

Brg. Image:



Water jacket: Ok

Fan: N/A

Frame cond.: Good



Motor Mount Position: Vertical Flange mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☒ 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: 30"

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

Size of leads: 4 awg

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: Copper

Connections As Received:

Lug Condition: Good

Lug size: Same

Lug Attachment: —

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:

Stator condition: Coil-Coil short

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



#### 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

## AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: Good

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

Lead jumper Image. :

If other, leads/jumpers:



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: 7313b

Shaft runout(TIR-Inbound): 0.001

Bearing ODE Size: 63102zc3

Retainer condition: Good



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Other

If DE undersized, amt.:

Seals DE size: Worn

Brg. Seats ODE: Good

Seals DE (inbound) condition : Worn

If ODE undersized, amt.:

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Other

Seals ODE size: Worn

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition : Worn

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 5.5126

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 4.3312

—

Endbell ODE insulated?: No

**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





MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

Seals, bearings, windings

### Cause of Failure

Water in windings

### Comments

Service Tech name: Trevor Hall

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Trevor Hall', is written over a large, faint, light-gray watermark of the same signature.

#### 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