

Job Information

Job #: 139445 Date: April 5, 2019

Priority: — Authorized OT: No Authorized by:

Customer Information

Name: City of Bartlett rec center Reason: Motor inspection

Contact: Motor#: PO#:

Application: – Special notes:

Name Plate Information

Manufacturer: Us Enclosure: Open Drop Proof Enclosure Type image

(ODP)

Serial#: Model#:

Service Factor: Frame: 404tp

Horsepower/kW: 100 Rated RPM: 1775

Rated Amps: 241.5/120.6 Rated Voltage: 230/460

Phase: 3 Cycles:

Special design: No

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301



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:

Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 7222

Bearings ODE: Worn Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 6212zz

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Seals Image 2:



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: Other

Seals DE type: N/A Seals Image:

Seals DE size:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition

Seals DE (inbound) condition:

:

Shaft damage cause: None Shaft Image:

0

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Mechanical Inspection (Continued)





Bushings/sleeves image:



Water jacket:

N/A

Fan:

N/A

Frame cond.:

Good



-an:

Motor Mount Position:

Horizontal/Foot 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 Meaurements (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: 9 Terminal Markings:

Length of leads: 12 inches REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 8 AWG 1-Blue 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Lug type: Standard

Lug Condition: Good Terminal Lugs

Lug size: 8 AWG

Lug Attachment: —



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 58

Num broken bars: 0

Rotor



Rotor Test Results

Rotor Condition:

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

Winding color: Still has color Winding image Winding Thermal Protection: No

Winding condition: Solid

Winding Thermal ___ Protection DE:

Winding Thermal Protection ODE:

Stator test results: Salvageable



Megs incoming: Good Surge incoming: Good 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:





Conclusion

Component Failure

Cause of Failure

Low megs. Almost grounded could have caused electrical vibration

Comments

Motor has really low megs. Ran a hi pot test and came back as failed. Needs to be washed and baked and retested

Service Tech name: Dan Mahan

Service Tech signature:

