Job Information

Job #: 142226 Date: April 1, 2020

Priority: — Authorized OT: No Authorized by: Terry

Customer Information

Name: TVA Reason: Vibrating

Contact: Motor#: PO#:

Application: — Special notes:

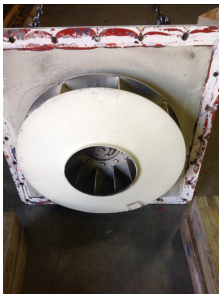
Name Plate Information

Manufacturer:	GE	Enclosure :	Open Drop Proof (ODP)
Serial#:	Zss512225	Model#:	5ks365ss112
Service Factor:	1.15	Frame:	365TDZ
Horsepower/kW:	75	Rated RPM:	3560
Rated Amps:	88.4	Rated Voltage:	460
Phase:	3	Cycles:	
Special design:	No		

Enclosure Type image

Nameplate

DE

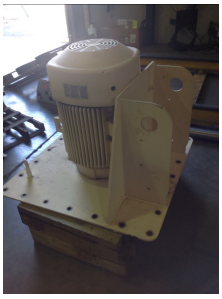


ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?:	Yes	Contaminant(s):	Grease
Shaft rotation:	CW	Contaminant(s) Amt:	Full
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:	314
Bearings ODE:	Worn	Bearings ODE make:	SKF
Bearing Type:	Ball	Bearing ODE Size:	213
Bearings Retainer:	Yes	Thermal Protection:	Yes
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:	N/A
Lubrication brand inbound:	Mobile Polyrex EM	Thermal Protection device ODE:	N/A
Lubrication brand outbound:	Mobile Polyrex EM		
Grease Amt DE:	Full	Grease Cond. DE:	Watery
Grease Amt ODE:	Full	Grease Cond. ODE:	Watery
Seals DE type:	N/A	Seals Image:	
Seals DE size:			
Seals DE (inbound) condition :			
		Seals Image 2:	
Seals ODE type:	N/A		
Seals ODE size:			
Seals ODE (inbound) condition :			
Shaft damage cause:	None	Shaft Image:	

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
- [x] J-Box
- [ ] HH cover
- [ ] Glands
- [ ] None

Endbell Image:

Other missing parts

Full j box

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: 3

Length of leads: 18 inches

Size of leads: Awg4

Lead condition: Good

Lug type: Regular

Lug Condition: Good

Lug size: 3/8 whole

Lug Attachment: Acceptable

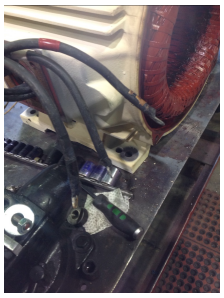
Terminal Markings: 1-3

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

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

Connections As Received: 1-3 all black

Terminal



Lugs

AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:	32
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: In slot

If other, stator failure:

Stator Image:

Failure Image:

AC Electrical Inspection (Continued)

Winding color:	Painted
Winding condition :	Solid
Winding Thermal Protection DE:	Good
Winding Thermal Protection ODE:	—
Stator test results:	Rewind

Winding image

Winding Thermal Protection: Yes

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	0.5	0.5	0.5	0.5

Leads/jumpers: Ok

If other, leads/jumpers:

Lead jumper Image. :

Conclusion

Component Failure

Bearings and fan has bad vibrations

Cause of Failure

Over greased and bad vibrations

Comments

The bearings on the rotor were over greased causing grease to flow into the windings. Bearing sounded like a slight clicking noise in ode. Fan is also likely to have vibrations causing bearing defect.

Service Tech name: Terry f

Service Tech signature: