

Job Information

Job #: 94778

Date: October 3, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: St. Gobain

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Web

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#: 02DEZ11
1014223406

Model#: 40018ET3C449T-
W22

Service Factor: 1.15

Frame: L44719T

Horsepower/kW: 400

Rated RPM: 1790

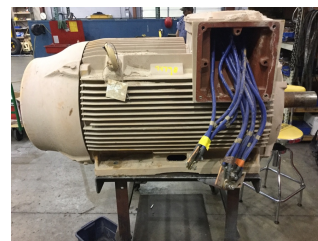
Rated Amps: 455

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?: No Contaminant(s): Grease

Shaft rotation: Bi-directional Contaminant(s) Amt: Cup

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: Other

Insulated: No Bearing DE Size: 6322 C3

Bearings ODE: Worn Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 6319 C4

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image

Bearing Retainer Image



Thermal Protection

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)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 1/2

Grease Cond. DE: Hard

Grease Amt ODE: 1/2

Grease Cond. ODE: Hard

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

Shaft 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

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

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: 12

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:

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: 1-6-7-12, 2-4-8-10, 3-5-9-11

Lug Condition: Good

Terminal

Lugs

Lug size:

Lug Attachment: Acceptable



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars: 58

Num broken bars: 0



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ground

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

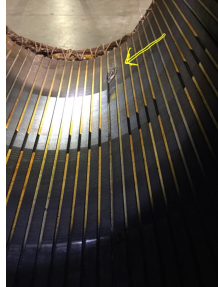
Winding image

Winding Thermal Protection: No

Winding condition : Solid

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:



MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

ODE bearing journal and bearing failed, windings, DE & ODE EB's Worn

Cause of Failure

With the journal and bearing failure the rotor rubbed the stator causing the laminations to overheat and burn the winding insulation

Comments

Could have been caused by a misalignment of motor

Service Tech name: Lynn McDonald

Service Tech signature:

A handwritten signature in black ink that reads 'Lynn McDonald'. The signature is written in a cursive, flowing style.

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