

Job Information

Job #: 140524

Date: August 30, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Big River Steel

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Rossi

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#:

Model#:

Service Factor: 1.15

Frame: 160

Horsepower/kW: 15

Rated RPM: 1765

Rated Amps: 19

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: Yes



Nameplate

DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): None

Shaft rotation: — Contaminant(s) Amt: None

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: 6309-2z C3

Bearings ODE: Fell Apart Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 6309-2z C3

Bearings Retainer: No Thermal Protection: No

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: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 1/4

Grease Cond. DE: Other

Grease Amt ODE: 1/4

Grease Cond. ODE: Other

Seals DE type: Other

Seals Image:

Seals DE size: 45-60-8



Seals DE (inbound) condition : Bad

Seals ODE type: Other

Seals Image 2:

Seals ODE size: 45-60-8



Seals ODE (inbound) condition : Bad

Shaft damage cause: None

Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: N/A

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: 6 Terminal Markings: W1,V1,u1,w2,v2,u2

Length of leads:

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

Size of leads:

1-Blue	5-Black	P1-No color assigned
2-White	6-No color assigned	P2-Brown
3-Orange	7-No color assigned	
4-Yellow	8-Red	

Lead condition: —

Lug type:

Connections As Received: 460

Lug Condition: Good

Terminal

Lugs

Lug size:



Lug Attachment: —

AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars:	28
Num broken bars:	0



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: 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: 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	555	555	556	0.3

Leads/jumpers: Ok

Lead jumper Image. :



If other, leads/jumpers:

Conclusion

Component Failure

Encoder bad, ode Bearing bad

Cause of Failure

Ode Bearing locked up exploded in motor.

Comments

Need new encoder. Rhi 593, part# 731823-01, ser#46992, Supply 9..30V.dc, Output 1024 per htl, manufacture Leine Line

Service Tech name: Kelly Felts

Service Tech signature:

