

### **Job Information**

96329 Job #: Date: December 18,

2019

Priority: Authorized OT: No Authorized by:

# **Customer Information**

Name: Arauco Reason:

Contact: Motor#: PO#:

Application: Special notes:

### Name Plate Information

Serial#:

Manufacturer: Reliance Enclosure: Open Drop Proof **Enclosure Type image** 

Model#:

(ODP) 2MA460269-G5-KY

Service Factor: 1.15 Frame: 444TS

Horsepower/kW: 100 Rated RPM: 1180

Rated Amps: 120 Rated Voltage: 460

Phase: 3 Cycles: 60

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 No

present?: Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6318 2Z/C3

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6213 2Z/C3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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: Full Grease Cond. DE: Hard

Grease Amt ODE: Full Grease Cond. ODE: Hard

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition

:

Shaft damage cause: None Shaft Image:





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? Endbell Image:

☑ J-Box cover ☐ O-rings ☑ J-Box

☐ HH cover ☐ Glands ☐ None

Other missing parts







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 Terminal Markings:

Length of leads: 17" 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

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: Good Terminal Lugs

Lug size:

Lug Attachment: Acceptable





# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

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: Other 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: Good

**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: 6318 2Z/C3

Shaft runout(TIR-Inbound): Bearing ODE Size: 6213 2Z/C3

Retainer condition: Good

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Seals DE condition: None Brg. Seats DE: Good

Seals DE type: N/A If DE undersized, amt.:

Seals DE size: Brg. Seats ODE: Good

Seals DE (inbound) condition: If ODE undersized, amt.: .0006

Seals ODE condition: None Shaft damage: OK

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition : Bushings/sleeves ODE: Ok

Endbell fits/damage: Good Foot/Flange condition: Ok

Endbell DE size: 7.4840 (bad) Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(<10%

variation)?

Endbell ODE insulated?: No

Endbell ODE size:

4.7244



### Conclusion

#### **Component Failure**

Bearings/housing and shaft fits.

#### Cause of Failure

Excessive amounts of debris inside the stator assembly.

#### Comments

Windings filled with excessive dirt/debris. O.D.E Shaft fit measures too small. D.E. End bell housing fit measures too large. Motor connection box missing and needs to be replaced.

Terme Holland

Service Tech name: Terrence Holland

Service Tech signature: