

## Job Information

Job #: 95290

Date: February 26, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Welspun

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Brusatori

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 10028101

Model#: COD.  
VL1601L3W00002

Service Factor:

Frame: VL160L

Horsepower/kW: 49KW

Rated RPM: 1500/2400

Rated Amps: 93

Rated Voltage: 400

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):	None
Shaft rotation:	Bi-directional	Contaminant(s) Amt:	None
Shaft grounding device present?:	No		
Type of grounding device:	NA		
Shaft runout(TIR-Inbound):	.003		

Bearings DE:	Worn	Bearings DE make:	FAG
Insulated:	No	Bearing DE Size:	6211 2Z
Bearings ODE:	Worn	Bearings ODE make:	FAG
Bearing Type:	Ball	Bearing ODE Size:	6211 2Z
Bearings Retainer:	Yes	Thermal Protection:	No
Retainer condition:	Good	Thermal Protection Type:	—

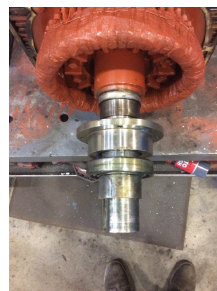
Bearing Type Image



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: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Isolators

Seals Image:

Seals DE size: 65-85-8

Seals DE (inbound) condition : Good



Seals ODE type: Isolators

Seals Image 2:

Seals ODE size: 15-30-5

Seals ODE (inbound) condition : Good



Shaft damage cause: None

Shaft Image:



### WEST TENNESSEE

7030 Ryburn Drive  
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Phone 901-873-5300  
Fax 901-873-5301

### CENTRAL ARKANSAS

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Phone 501-375-9178  
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## Mechanical Inspection (Continued)

Brg. Image:



Water jacket: N/A

Fan: Ok

Frame cond.: Good



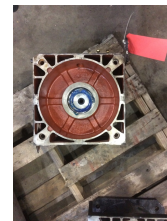
Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- |                                      |                                  |                                |
|--------------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover    | <input type="checkbox"/> Glands  | <input type="checkbox"/> 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: 3

Terminal Markings:

Length of leads: 10inch

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:

Lug Condition: Good

Lug size:

Lug Attachment: Acceptable

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 48

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: Other

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Painted

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

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: Yes

Type of grounding device: Na

Bearing DE Size: 6211 2Z

Shaft runout(TIR-Inbound): .003

Bearing ODE Size: 6211 2Z

Retainer condition: Good



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Isolators

If DE undersized, amt.:

Seals DE size: 65-85-8

Brg. Seats ODE: Good

Seals DE (inbound) condition : Worn

If ODE undersized, amt.:

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Slinger

Seals ODE size: 15-30-5

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition : Worn

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 3.9374

Foot flatness: Pass

Endbell DE insulated?: —

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 3.9390

—

Endbell ODE insulated?: No

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## Conclusion

### Component Failure

Drive end end bearing retainer cap rubbed against motor shaft.

### Cause of Failure

Possible misalignment

### Comments

Drive end bearing cap had wear marks and was rubbing against the drive end shaft which caused the rotor to lock up. Most probable cause is the motor may have had alignment issues.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Terrence Holland', with a stylized, cursive script.**WEST TENNESSEE**

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