Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition As Found

Almatis Inc/RCP Bauxite (10014)
4701 Alcoa Road
Bauxite, AR 72011

FolderID: 100914
FormID: 15984879

AC Recondition - Rev. 2

Location:	LR Motor Shop
Serial Number:	S9084777-001003 HN
Description:	7.5HP RELIANCE 900RPM 256T

Hi-Speed Job Number:	100914
Manufacturer:	Reliance
Product Number:	ECP2401T-4
Spec/ID #:	ECP2401T-4
Serial Number:	S9084777-001003 HN
HP/kW:	7.5 (HP)
RPM:	880 (RPM)
Frame:	256T
Voltage:	460
Current:	10.5
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **4 - High** **2 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture P37

3. Photos of all six sides of the machine. P44

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4. Describe the Overall Condition of the Equipment as Received P54

Fan cover broken and needs to be replaced

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Initial Mechanical/Electrical

5.	Does Shaft Turn Freely?		
6.	Does Shaft Have Visible Damage?	**(No) No**	P20

7.	Assembled Shaft Runout		
8.	Assembled Shaft End Play		
9.	Air Gap Variation <10%		
10.	Lead Condition		P53

11.	Lead Length	**8 Inches**
12.	Frame Condition	**pass**

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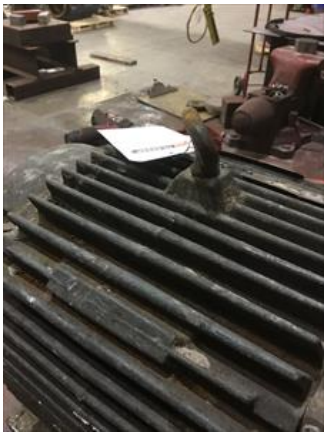
13. Fan Condition **(F) Fail** P91

14. Broken or Missing Components **Fan cover/Fan broken/needs to be replaced** P94

Eyebolt bent and needs to be replaced.



Initial Electrical Inspection

15. Insulation Resistance/Megger

16. Winding Resistance

1-2	1-3	2-3

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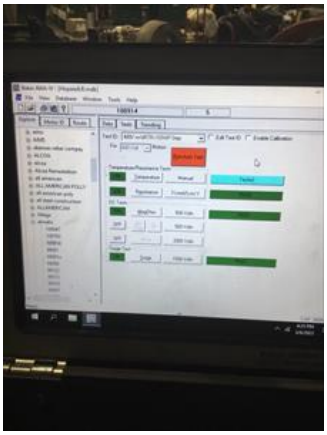
17.	Perform Surge Test	**(P) Pass**	P56



18.	Number of Stator Slots	
19.	Stator Condition	

Mechanical Inspection

20.	Drive End Bearing Brand	**Fag**	P15

21.	Drive End Bearing Number-	**6309**
22.	Drive End Bearing Qty.	**1**
23.	Drive End Bearing Type	**(Ball) Ball Bearing**
24.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
25.	Drive End Bearing Insulation or Grounding Device?	**none**
26.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**

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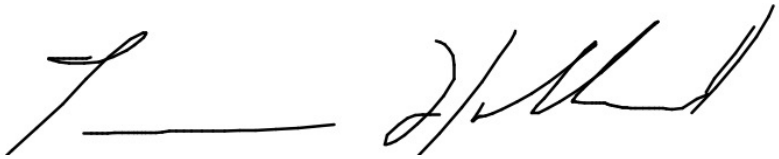
27.	Drive End Bearing Condition	**replace**
28.	Opposite Drive End Bearing Brand	**Fag**
29.	Opposite Drive End Bearing Number-	**6309**
30.	Opposite Drive End Bearing Qty.	**1**
31.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
32.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
33.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
34.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
35.	Opposite Drive End Bearing Condition	**replace**
36.	Drive End Seal	
37.	Opposite Drive End Seal	**dust seal**

Rotor Inspection

38.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
39.	Growler Test	
40.	Number of Rotor Bars	
41.	Rotor Condition	
42.	List the Parts needed for the Repair Below ***2 309 sleeves***	
43.	Signature of Technician that Disassembled Motor	**Terrence Holland**



Mechanical Fits- Rotor

44.	Shaft Runout		
45.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
46.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
47.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
48.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.7722	**1.772**	**1.7721**
49.	Drive End Bearing Shaft Fit Condition		**(P) Pass**
50.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.7717	**1.7716**	**1.7715**
51.	Opposite Drive End Bearing Shaft Fit Condition		**(F) Fail**
52.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

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53.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.9382	**3.9384**	**3.9384**	
54.	Drive End - Endbell Bearing Fit Condition			**(F) Fail**
55.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.9383	**3.9384**	**3.9383**	
56.	Opposite Drive End - Endbell Bearing Fit Condition			**(F) Fail**
57.	Bearing Cap Condition			P50
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		

58.	End Bell Air Seal Fits	
	Drive End Air Seal	Opposite Drive End Air Seal
59.	List Machine Work Needed Below	
	Sleeve both housing fits, and repair ode shaft bearing journal.	
60.	Technician	**Terrence Holland**

Dynamic Balance Report

61.	Rotor Weight and Balance Grade	
	Rotor Weight	Balance Grade
62.	Initial Balance Readings	
	Drive End	Opposite Drive End
63.	Final Balance Readings	
	Drive End	Opposite Drive End
64.	Technician	

Rewind

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65.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	
66.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
67.	Post Rewind Electrical Test- Insulation Resistance		
68.	Post Rewind Polarization Index		
69.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
70.	Post Rewind Surge Test		
71.	Post Rewind Hi-Pot		
72.	Technician		
Root Cause of Failure			
73.	Failure locations		
74.	Root cause of failure		
Mechanical Fits- Rotor - Post Repair			
75.	Shaft Runout Post Repair		
76.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
77.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
78.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
79.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
80.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
81.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
82.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
83.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees

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85.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
86.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
87.	End Bell Repair Sign-off		
Assembly			
88.	QC Check All Parts for Cleanliness Prior to Assembly		
89.	Photograph All Major Components prior to assembly		
90.	Final Insulation Resistance Test		
91.	Assembled Shaft Endplay		
92.	Assembled Shaft Runout		
93.	Test Run Voltage		
	Volts	Volts	Volts
94.	Test Run Amperage		
	Amps	Amps	Amps
95.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
96.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
97.	Ambient Temperature - Fahrenheit		
98.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
99.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
100.	Document Final Condition with Pictures after paint		
101.	Final Pics and QC Review		

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