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

AC Recondition As Found

Arauco-Malvern MDF (10298)
1275 Willamette Rd
Malvern, AR 72104

FolderID: 100410
FormID: 14759512

AC Recondition - Rev. 2

Location:	LR MOTORSHOP
Serial Number:	L93
Description:	75HP SIEMENS 1800RPM 365T

Hi-Speed Job Number:	100410
Manufacturer:	Siemens
Product Number:	1LS23654FC21A
Serial Number:	L93
HP/kW:	75 (HP)
RPM:	1775 (RPM)
Frame:	365T
Voltage:	230 / 460
Current:	178.8/89.4
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:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** **5 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P21

3. Photos of all six sides of the machine.
4. Describe the Overall Condition of the Equipment as Received

   Serviceable

Initial Mechanical/Electrical

5. Does Shaft Turn Freely? **(Yes) Yes**

6.	Does Shaft Have Visible Damage?	**(No) No**	P12

7.	Assembled Shaft Runout		
8.	Assembled Shaft End Play		
9.	Air Gap Variation <10%		
10.	Lead Condition	**(P) Pass**	P32

11.	Lead Length	**22 Inches**	
12.	Frame Condition	**pass**	
13.	Fan Condition	**(P) Pass**	P53

14.	Broken or Missing Components		

Initial Electrical Inspection

15.	Insulation Resistance/Megger		

16.	Winding Resistance			
	1-2	1-3	2-3	
17.	Perform Surge Test		**(F) Fail**	P35

18.	Stator Condition	**rewind stator**	

Mechanical Inspection

19.	Drive End Bearing Number-	**6314 Z**	P8

20.	Drive End Bearing Qty.	**1**
21.	Drive End Bearing Type	**(Ball) Ball Bearing**
22.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
23.	Drive End Bearing Insulation or Grounding Device?	**none**
24.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
25.	Drive End Bearing Condition	**replace**
26.	Opposite Drive End Bearing Number-	**6210 NSE C3**
27.	Opposite Drive End Bearing Qty.	**1**

28.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	P50

29.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
30.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
31.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**yes**	P55

32.	Opposite Drive End Bearing Condition	**replace**	
33.	Drive End Seal		
34.	Opposite Drive End Seal		

Rotor Inspection

35.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

36.	Growler Test	**(Pass) Pass**	

37.	Number of Rotor Bars	
38.	Rotor Condition	**pass**
39.	List the Parts needed for the Repair Below	
40.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

41.	Shaft Runout	**0.001 inches**
42.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

43.	Coupling Fit Closest to Bearing Housing	

0 Degrees	90 Degrees	120 Degrees

44.	Coupling Fit Closest to the end of the Shaft	

0 Degrees	60 Degrees	120 Degrees

45.	Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
2.7563	**2.7563**	**2.7563**

46.	Drive End Bearing Shaft Fit Condition	**(P) Pass**
47.	Opposite Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
1.9687	**1.9687**	**1.9687**

48.	Opposite Drive End Bearing Shaft Fit Condition	**(P) Pass**
49.	Shaft Air Seal Fits	

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

50.	Drive End - Endbell Bearing Fit	

0 Degrees	60 Degrees	120 Degrees

51.	Drive End - Endbell Bearing Fit Condition	**(F) Fail**

Pitted

52.	Opposite Drive End - Endbell Bearing Fit	

0 Degrees	60 Degrees	120 Degrees

53.	Opposite Drive End - Endbell Bearing Fit Condition	**(F) Fail**

Lip worn in

54.	Bearing Cap Condition	

Drive End Bearing Cap	Opposite Drive End Bearing Cap

55. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

56. List Machine Work Needed Below

Both end bell housing fits. Top eye bolt hole has eyebolt broken off and needs to be drilled and tapped.

57. Technician **Terrence Holland**

Root Cause of Failure

58. Failure locations P6

Windings have blow hole on ode end of coil head

59. Root cause of failure