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

AC Recondition As Found

Kimberly Clark (10176-KCM)
500 Murphy Dr.
Maumelle, AR 72113

FolderID: 100155
FormID: 14283902

AC Recondition - Rev. 2

Location:	Shop
Serial Number:	29MN323320
Description:	40HP RELIANCE 1800RPM 324T

Hi-Speed Job Number:	100155
Manufacturer:	Reliance
Product Number:	P32G3320J G9
Serial Number:	29MN323320
HP/kW:	40 (HP)
RPM:	1775 (RPM)
Frame:	324T
Voltage:	460
Current:	49.5
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 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture P21

3. Photos of all six sides of the machine. P27

4. Describe the Overall Condition of the Equipment as Received P31

Serviceable

Initial Mechanical/Electrical			
	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No**
	7.	Assembled Shaft Runout	**0.001 Inches**
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	
	10.	Lead Condition	**(P) Pass**
	11.	Lead Length	
	12.	Frame Condition	**pass**

13. Fan Condition **(P) Pass** P53

14. Broken or Missing Components **fan cover bolt broken off. requires drill and tap**

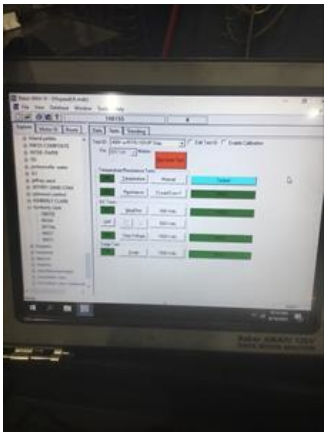
Initial Electrical Inspection

15. Insulation Resistance/Megger

16. Winding Resistance

1-2	1-3	2-3

17. Perform Surge Test **(P) Pass** P35



18. Stator Condition **saturated with oil** P39

Mechanical Inspection

19.	Drive End Bearing Number-	**6311**
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	**worn**
26.	Opposite Drive End Bearing Number-	**6311**
27.	Opposite Drive End Bearing Qty.	**1**
28.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
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?	
32.	Opposite Drive End Bearing Condition	**worn**
33.	Drive End Seal	
34.	Opposite Drive End Seal	

Rotor Inspection

35.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
36.	Growler Test	**(Pass) Pass**
37.	Number of Rotor Bars	
38.	Rotor Condition	**good**
39.	List the Parts needed for the Repair Below	
40.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

41. Shaft Runout

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

46. Drive End Bearing Shaft Fit Condition

47. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

48. Opposite Drive End Bearing Shaft Fit Condition

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		
52.	Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
53.	Opposite Drive End - Endbell Bearing Fit Condition		
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		
57.	Technician		

Dynamic Balance Report

58.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
59.	Initial Balance Readings		
	Drive End	Opposite Drive End	
60.	Final Balance Readings		
	Drive End	Opposite Drive End	
61.	Technician		

Rewind

62.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	
63.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
64.	Post Rewind Electrical Test- Insulation Resistance		
65.	Post Rewind Polarization Index		
66.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
67.	Post Rewind Surge Test		
68.	Post Rewind Hi-Pot		
69.	Technician		

Root Cause of Failure

70.	Failure locations		
71.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

72.	Shaft Runout Post Repair		
73.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
74.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
75.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
76.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
77.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
78.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
79.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

80.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
81.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
82.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
83.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
84.	End Bell Repair Sign-off		

Assembly

85.	Photograph All Major Components prior to assembly		
86.	Final Insulation Resistance Test		
87.	Assembled Shaft Endplay		
88.	Assembled Shaft Runout		
89.	Test Run Voltage		
	Volts	Volts	Volts

90.	Test Run Amperage		
	Amps	Amps	Amps
91.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
92.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
93.	Ambient Temperature - Fahrenheit		
94.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
95.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
96.	Final Test Run Sign-off		
97.	Document Final Condition with Pictures after paint		
98.	Final Pics and QC Review	**Terrence. Holland**	P2300