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

AC Recondition Repair Report

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ARKANSAS INDUSTRIAL MACHINERY
3804 N. NONA ST
NORTH LITTLE ROCK, AR 72118

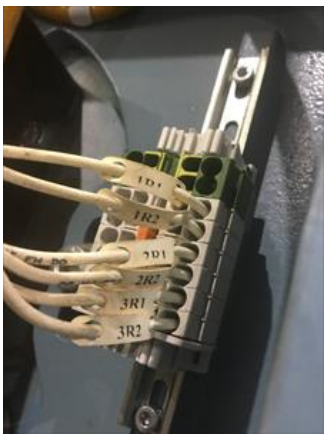
Priorities Found: **3 - High** **11 - Good**

General

1.	Job Number	**98063**	
2.	Report Date	**04/06/2021**	
3.	Customer		

Name Plate Information

4.	Manufacturer	**ABB**	P5



5.	Model	**M3BP315MLC41MB5/IM3001**	
6.	Serial Number	**3GF1F1553306960**	
7.	Horsepower		
8.	KW	**160**	
9.	Volts	**400**	
10.	Amps	**317**	
11.	RPM	**2183**	
12.	Frame	**315MLC**	
13.	Enclosure	**TEFC**	
14.	Cycles	**73.1**	
15.	Phase	**3**	
16.	Service Factor	**1.25**	
17.	Motor Mount Position		
Initial Inspection			
18.	Number of Leads	**6**	
19.	Lead Length		
20.	Lead Size		
21.	Lead Condition	**(P) Pass**	
22.	Lead Markings		
23.	Lug Size, Condition, and Type		
24.	Winding RTD's		
25.	Winding Rtd's Condition		
26.	Shaft Run Out		

27.	Does Shaft Turn Freely	**no**	
28.	Does Shaft Have Visible Damage	**yes**	P94

29.	Bearing Rtd's		
30.	Bearing Rtd's Condition		
31.	Contamination ***Grease contaminated.***		P104

32.	Frame Condition	**(P) Pass**	
33.	Fan Condition	**(P) Pass**	
34.	Broken or missing components ***D.E. Bearing cap***		P113

Initial Electric Test

	35.	Resistance to Ground		
	36.	Winding Resistance 1-2		
	37.	Winding Resistance 2-3		
	38.	Winding Resistance 1-3		
	39.	Resistive Imbalance		
	40.	Hi-Pot		
●	41.	Surge Test	**(F) Fail**	
	42.	Stator Condition	**good**	
	43.	Failure Location	**windings on the drive end.**	
Initial Rotor Inspection				
	44.	Rotor Type	**squirrel cage**	P4

	45.	Air Gap <10% Variation		
	46.	Number of Rotor Bars		
	47.	Number of Broken Rotor Bars	**0**	
●	48.	Growler Test	**(P) Pass**	
●	49.	Rotor Condition	**(P) Pass**	
Mechanical Inspection				
	50.	Bearing Manufacture	**SKF**	
	51.	Bearing DE Size	**6214 2Z**	
	52.	Bearing DE Type	**regular ball bearing**	
	53.	DE Bearing Qty.	**1**	
	54.	Bearing ODE Size	**6214 2Z**	P43

	55.	Bearing ODE Type	**regular ball bearing**	

	56.	ODE Bearing Qty.	**1**
	57.	Insulated Bearing	**no**
	58.	Lubrication Type	**grease**
🔴	59.	Grease Condition	**(F) Fail**
		Contaminated	
🟢	60.	Bearing Retainers	**(Y) Yes**
	61.	Shaft Grounding Device	**(NA) Not Applicable**
	62.	DE Seal	**(NA) Not Applicable**
	63.	DE Seal Type/Size	
	64.	ODE Seal	
	65.	ODE Seal Type/Size	

Root Cause of Failure

	66.	Component Failure	**D.E bearing caused rotor to drop.**
	67.	Cause of Failure	
		D.E.bearing failed.	
	68.	Comments	
	69.	Service Technician	**Terrence Holland**

Machine Fit Inspection Report

	70.	Shaft Run Out	
	71.	Initial Shaft Run Out	
	72.	Final Shaft Run Out	
🔴	73.	DE Bearing Shaft Fit	**(F) Fail**
	74.	DE Initial Shaft Bearing Fit Size 1	
	75.	DE Initial Shaft Bearing Fit Size 2	
	76.	DE Initial Shaft Bearing Fit Size 3	
	77.	DE Finial Shaft Bearing Fit Size 1	
	78.	DE Finial Shaft Bearing Fit Size 2	
	79.	DE Finial Shaft Bearing Fit Size 3	
🟢	80.	ODE Bearing Shaft Fit	**(P) Pass**
	81.	ODE Initial Shaft Bearing Fit Size 1	**2.7654 "**
	82.	ODE Initial Shaft Bearing Fit Size 2	**2.7655 "**
	83.	ODE Initial Shaft Bearing Fit Size 3	**2.7655 "**
	84.	ODE Finial Shaft Bearing Fit Size 1	
	85.	ODE Finial Shaft Bearing Fit Size 2	
	86.	ODE Finial Shaft Bearing Fit Size 3	
	87.	DE Air Seal Shaft Fit	
	88.	DE Initial Air Seal Shaft Size	
	89.	DE Final Air Seal Shaft Size	
	90.	ODE Air Seal Shaft Fit	
	91.	ODE Initial Air Seal Shaft Size	
	92.	ODE Final Air Seal Shaft Size	
🟢	93.	DE Endbell Fit	**(P) Pass**

	94.	DE Initial Endbell Fit Size 1	**4.9222 "**
	95.	DE Initial Endbell Fit Size 2	**4.922 "**
	96.	DE Initial Endbell Fit Size 3	**4.9221 "**
	97.	DE Final Endbell Fit Size 1	
	98.	DE Finial Endbell Fit Size 2	
	99.	DE Final Endbell Fit Size 3	
	100.	DE Endbell Fit Insulated	
	101.	DE Endbell Air Seal Fit	
	102.	Initial Endbell Air Seal Fit Size	
	103.	Finial Endbell Air Seal Fit Size	
	104.	ODE Endbell Fit	
	105.	ODE Initial Endbell Fit Size 1	**"**
	106.	ODE Initial Endbell Fit Size 2	
	107.	ODE Initial Endbell Fit Size 3	
	108.	ODE Final Endbell Fit Size 1	
	109.	ODE Final Endbell Fit Size 2	
	110.	ODE Final Endbell Fit Size 3	
	111.	ODE Endbell Fit Insulated	**(NA) Not Applicable**
	112.	ODE Endbell Air Seal Fit	
	113.	ODE Initial Endbell Seal Fit Size	
	114.	ODE Finial Endbell Seal Fit Size	
●	115.	Foot Flatness	**(NA) Not Applicable**
●	116.	Foot Condition	**(NA) Not Applicable**
●	117.	Flange Condition	**(P) Pass**
	118.	Service Technician	**Terrence Holland**

Replace broken d.e. bearing cap. Rewind stator and minor core repair. Repair d.e. shaft bearing journal and shoulder.

Balancing Report

	119.	Balance Type	
	120.	Balance Operating Speed	
	121.	Start Left End	
	122.	Start Right End	
	123.	Balancing Specification	
	124.	Finish Left End	
	125.	Finish Right End	
	126.	Service Technician	

Assembly and Final Test

	127.	Meggar Testing Reading	
	128.	Surge Test	
	129.	Hi-Pot	
	130.	Winding Resistance 1-2	
	131.	Winding Resistance 2-3	
	132.	Winding Resistance 1-3	

133.	Test Run Voltage Phase A
134.	Test Run Amps A
135.	Test Run Voltage Phase B
136.	Test Run Amps B
137.	Test Run Voltage Phase C
138.	Test Run Amps C
139.	DE Horizontal Vibration Reading
140.	DE Vertical Vibration Reading
141.	DE Axial Vibration Reading
142.	ODE Horizontal Vibration Reading
143.	ODE Vertical Vibration Reading
144.	ODE Axial Vibration Reading
145.	Ambient Temp at start of Test Run
146.	Temp at 5 minutes
147.	Temp at 10 minutes
148.	Temp at 15 minutes
149.	Temp at 20 minutes
150.	Temp at 25 minutes
151.	Temp at 30 minutes
152.	Temp at 35 minutes
153.	Temp at 40 minutes
154.	Temp at 45 minutes
155.	Temp at 50 minutes
156.	Temp at 55 minutes
157.	Temp at 60 minutes
158.	Motor Paint
159.	Service Technician