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

AC Inspection as Found

Carlisle SynTec Inc. Motor Shop.
1201 Scott Street
Senatobia, MS 38668

FolderID: 153346
FormID: 21172332

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	LJFT310S029
Description:	2 Hp Motor

Manufacturer:	GE
Product Number:	5KS145SAA269A
Serial Number:	LJFT310S029
HP/kW:	2 (HP)
RPM:	1730 (RPM)
Frame:	145T
Voltage:	230 / 460
Current:	5.4/2.7 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	08/31/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **49 - Good**

Overall Condition

1.	Report Date	**08/01/2024**	
2.	Nameplate Picture		P2

3.	Photos of all six sides of the machine.		P3

	4.	Describe the Overall Condition of the Equipment as Received ***Good***	

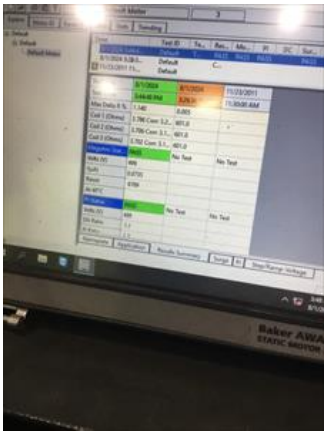
Initial Mechanical/Electrical

	5.	Does Shaft Turn Freely?	**(Y) Yes**
	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	7.	Does Shaft Have Visible Damage?	**(No) No**
	8.	Assembled Shaft Runout	**0.001 Inches**
	9.	Assembled Shaft End Play	**0.001 inches**
	10.	Air Gap Variation <10%	**no provision for measurement**
	11.	Lead Condition	**(P) Pass**

12.	Lead Length	**20 Inches**	
	From Jbox		
13.	Does it have Lugs?, If so what is the Stud Size?	**(No) No**	
14.	Lead Numbers	**9**	
15.	Frame Condition	**good**	
16.	Fan Condition	**(N) NA**	
17.	Broken or Missing Components	**none**	

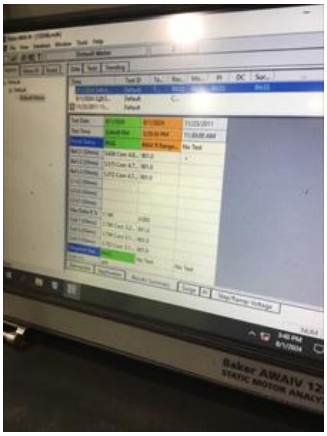
Initial Electrical Inspection

18.	Insulation Resistance/Megger	**2789 Megohms**	P18

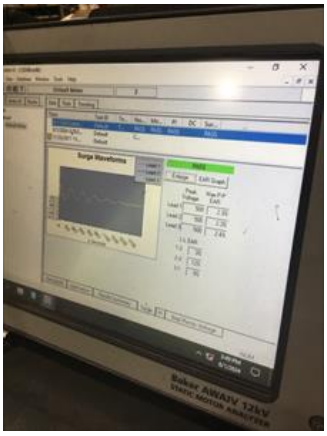


19.	Winding Resistance		P19

1-2	1-3	2-3
5.636	**5.575**	**5.572**



20.	Perform Surge Test	**(P) Pass**	P20



21.	Number of Stator Slots	**36**
22.	Stator Condition	**passed**
23.	Stator Thermistors/Ohms	**na**
24.	Stator Overloads/Ohms	**na**

Mechanical Inspection

25.	Drive End Bearing Brand	**c and u 6205z**	
26.	Drive End Bearing Number-	**6205z**	
27.	Drive End Bearing Qty.	**1**	
28.	Drive End Bearing Type	**(Ball) Ball Bearing**	
29.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
30.	Drive End Bearing Insulation or Grounding Device?	**none**	
31.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**	
32.	Drive End Bearing Condition	**good**	P32

33.	Opposite Drive End Bearing Brand	**c&u**
34.	Opposite Drive End Bearing Number-	**6205z**
35.	Opposite Drive End Bearing Qty.	**1**
36.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
37.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
38.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**

40.	Opposite Drive End Bearing Condition	**good**	P40

41.	Drive End Seal	**yes**
42.	Opposite Drive End Seal	**none**

Rotor Inspection

43.	Rotor Type/Material	**(Aluminum Bar) Aluminum Barred Rotor**
44.	Growler Test	**(Pass) Pass**
45.	Number of Rotor Bars	**48**
46.	Rotor Condition	**good**
47.	List the Parts needed for the Repair Below ***2-6205 2rs bearings***	
48.	Signature of Technician that Disassembled Motor	**JR Going**

Mechanical Fits- Rotor

49.	Shaft Runout		
50.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
51.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
52.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
53.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
54.	Drive End Bearing Shaft Fit Condition		
55.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees

56.	Opposite Drive End Bearing Shaft Fit Condition		
57.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

58.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
59.	Drive End - Endbell Bearing Fit Condition		
60.	Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
61.	Opposite Drive End - Endbell Bearing Fit Condition		
62.	Bearing Cap Condition		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
63.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
64.	List Machine Work Needed Below		
65.	Technician		

Root Cause of Failure

66.	Failure locations	
	No failure	
67.	Root cause of failure	