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

AC Inspection as Found

Rich's Products (0003227)
5885 Jetway Drive
Arlington, TN 38002

FolderID: 155798
FormID: 24789613

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	C2301031122

Description: 30 HP AC

Hi-Speed Job Number:	155798
Manufacturer:	Baldor
Product Number:	CEWDM4104T
Spec/ID #:	10-0000-1027
Serial Number:	C2301031122
HP/kW:	30 (HP)
RPM:	1760 (RPM)
Frame:	286TC
Voltage:	230 / 460
Current:	76/38 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Half
Coupling/Sheave:	None
Date Received:	06/11/2025
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	Yes
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** **12 - Good**

Overall Condition

1.	Report Date	**06/12/2025**

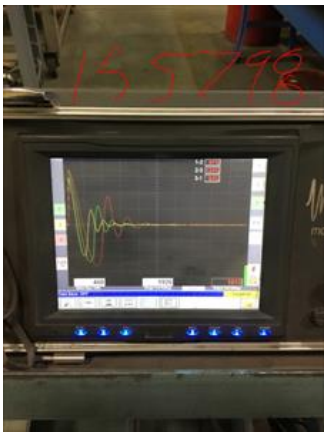
2. Nameplate Picture P2

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

	4.	Describe the Overall Condition of the Equipment as Received ***Failed electrical tests and requires rewind. No machine work.***		
●	5.	Is this a UL Listed Motor	**(No) No**	
●	6.	Is the motor water cooled or can be pressure checked before teardown	**(No) No**	
Initial Mechanical/Electrical				
●	7.	Does Shaft Turn Freely?	**(Y) Yes**	
●	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**	
	9.	Does Shaft Have Visible Damage?	**(No) No**	
●	10.	Assembled Shaft Runout	**0.0005 Inches**	
	11.	Assembled Shaft End Play	**0.001 inches**	
	12.	Air Gap Variation <10%	**No provisions for measurement**	
●	13.	Lead Condition	**(P) Pass**	
	14.	Lead Length	**12 Inches**	
●	15.	Does it have Lugs?, If so what is the Stud Size?	**(No) No**	
	16.	Lead Numbers	**1-9**	
●	17.	Are the Leads insulated with Chico or other material	**(No) No**	
	18.	Frame Condition	**Pass**	
●	19.	Fan Condition	**(P) Pass**	
●	20.	Does motor have internal fan?	**(No) No**	
	21.	Broken or Missing Components	**None**	
Initial Electrical Inspection				
	22.	Insulation Resistance/Megger	**0 Megohms**	P22

23.	Winding Resistance			P23
	1-2	1-3	2-3	

24.	Perform Surge Test	**(F) Fail**	P24



25.	Number of Stator Slots	**48**	
26.	Stator Condition	**Requires rewind**	P26

27.	Stator Thermistors/Ohms	**N/A**	
28.	Stator Overloads/Ohms	**N/A**	

Mechanical Inspection

29.	Drive End Bearing Brand	**SKF**	
30.	Drive End Bearing Number-	**6311 2rs C3**	

31.	Drive End Bearing Qty.	**1**	
32.	Drive End Bearing Type	**(Ball) Ball Bearing**	
33.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
34.	Drive End Bearing Insulation or Grounding Device?	**None**	
35.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**None**	
36.	Drive End Bearing Condition	**Normal wear**	P36

37.	Opposite Drive End Bearing Brand	**SKF**	
38.	Opposite Drive End Bearing Number-	**6309 2rs C3**	
39.	Opposite Drive End Bearing Qty.	**1**	
40.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
41.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
42.	Opposite Drive End Bearing Insulation or Grounding Device?	**None**	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Wavy Washer**	
44.	Opposite Drive End Bearing Condition	**Normal wear**	P44

45.	Drive End Seal	**Yes**	P45

VA45

19995

46.	Opposite Drive End Seal	**VA45**	

Rotor Inspection

47.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
48.	Growler Test	**(Pass) Pass**	
49.	Number of Rotor Bars	**38**	
50.	Rotor Condition	**Pass**	P50

51. List the Parts needed for the Repair Below

6311 2rs C3
6309 2rs C3
VA 45 x2
cr19995 seal

52.	Signature of Technician that Disassembled Motor	**Brandon Woodard**

Mechanical Fits- Rotor

53.	Shaft Runout	**0.001 inches**
54.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
0.001	**0.001**	**0.001**

55. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees
1.875	**1.875**	**1.875**

56. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees
1.875	**1.875**	**1.875**

57. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.1658	**1.1658**	**1.1658**

Tolerance is 2.1655-2.1660

58. Drive End Bearing Shaft Fit Condition **(P) Pass**

59. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.7722	**1.7722**	**1.7722**

Tolerance is 1.7718-1.7722

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

61. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Passs**

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit P62

0 Degrees	60 Degrees	120 Degrees
4.7251	**4.7251**	**4.7251**

Tolerance is 4.7244-4.7253

63. Drive End - Endbell Bearing Fit Condition **(P) Pass**

64. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
3.9377	**3.9377**	**3.9377**

Tolerance is 3.9370-3.9379

65. Opposite Drive End - Endbell Bearing Fit Condition **(P) Pass**

66. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
Pass	**N/A**

67. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Pass**

68. List Machine Work Needed Below

None

69. Technician **Brandon Woodard**

Root Cause of Failure

70. Failure locations

71. Root cause of failure