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

AC Recondition As Found

Arkansas Electric Coop. (11681)
17400 highway 365 south
Little Rock, AR 72206

FolderID: 100497
FormID: 14924420

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	F0206185395

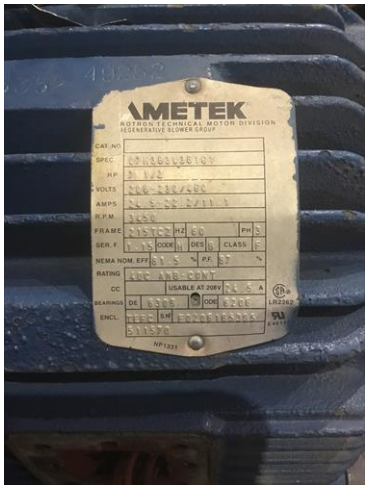
Description:7.5HP AMETEK BLOWER 3600RPM
215TCZ
AMETEK PART 511570

Hi-Speed Job Number:	100497
Manufacturer:	Baldor
Product Number:	511570
Spec/ID #:	07H383W361G1
Serial Number:	F0206185395
HP/kW:	7.5 (HP)
RPM:	3450 (RPM)
Frame:	215TCZ
Voltage:	230 / 460
Current:	22.2/11.1
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Half
Coupling/Sheave:	Propeller
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
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



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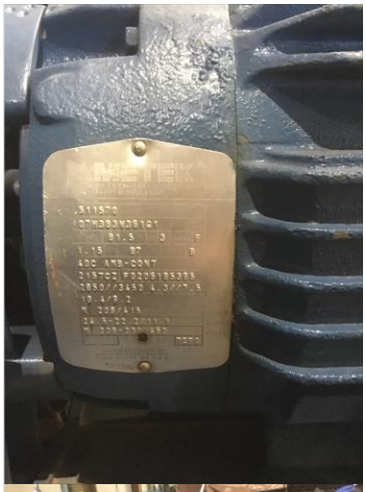

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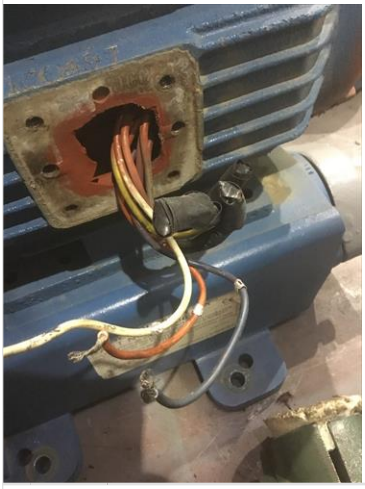
Needs 1 filter

	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received	
	5.	Distance from the end of the shaft to the Coupling/Sheave	
Initial Mechanical/Electrical			
●	6.	Does Shaft Turn Freely?	**(Yes) Yes**
	7.	Does Shaft Have Visible Damage?	**(No) No**
	8.	Assembled Shaft Runout	
	9.	Assembled Shaft End Play	
	10.	Air Gap Variation <10%	
●	11.	Lead Condition	**(P) Pass** P32



	12.	Lead Length	**12 Inches**
	13.	Frame Condition	**pass**

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14.	Fan Condition	**(F) Fail**	P54

15.	Broken or Missing Components		

Initial Electrical Inspection

16.	Insulation Resistance/Megger		
17.	Winding Resistance		

1-2	1-3	2-3

18.	Perform Surge Test	**(F) Fail**	
19.	Number of Stator Slots		
20.	Stator Condition	**Rewind**	P39

Mechanical Inspection

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21.	Drive End Bearing Number-	**6309ZZ**	P8

Fatigue

22.	Drive End Bearing Qty.	**1**
23.	Drive End Bearing Type	**(Ball) Ball Bearing**
24.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
25.	Drive End Bearing Insulation or Grounding Device?	**na**
26.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**no**
27.	Drive End Bearing Condition	**surface initiated fatigue**
28.	Opposite Drive End Bearing Number-	**6206ZZ** P47

29.	Opposite Drive End Bearing Qty.	**1**
30.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
31.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
32.	Opposite Drive End Bearing Insulation or Grounding Device?	**na**
33.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	P56

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34.	Opposite Drive End Bearing Condition	**pass**
35.	Drive End Seal	**na**
36.	Opposite Drive End Seal	**na**

Rotor Inspection

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

Mechanical Fits- Rotor

43.	Shaft Runout		
44.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
45.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
46.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
47.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.7718	**1.7718**	**1.7718**
48.	Drive End Bearing Shaft Fit Condition		**(P) Pass**
49.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.181	**1.181**	**1.181**

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50. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass** P49

51. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

52. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
3.9379	**3.9379**	**3.9379**

53. Drive End - Endbell Bearing Fit Condition **(P) Pass** P7

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54.	Opposite Drive End - Endbell Bearing Fit			P18
	0 Degrees	60 Degrees	120 Degrees	
	2.4404	**2.4404**	**2.4404**	
	.0005 undersized			

55.	Opposite Drive End - Endbell Bearing Fit Condition	**(F) Fail**
	.0005 undersized	

56.	Bearing Cap Condition		P30
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	pass	**na**	

57.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

58.	List Machine Work Needed Below	
	Ode end bell housing fit undersized	
59.	Technician	**RW**

Dynamic Balance Report

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60. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

61. Initial Balance Readings

Drive End	Opposite Drive End

62. Final Balance Readings

Drive End	Opposite Drive End

63. Technician

Rewind

64. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

65. Core Hot Spot Test

Pre-Burnout	Post-Burnout

66. Post Rewind Electrical Test- Insulation Resistance

67. Post Rewind Polarization Index

68. Post Rewind Winding Resistance

1-2	1-3	2-3

69. Post Rewind Surge Test

70. Post Rewind Hi-Pot

71. Technician

Root Cause of Failure

72. Failure locations

73. Root cause of failure

Turn to turn short

Mechanical Fits- Rotor - Post Repair

74. Shaft Runout Post Repair

75. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

76. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

77. Coupling Fit Closest to the end of the Shaft Post Repair

0 Degrees	60 Degrees	120 Degrees

78. Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

79. Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

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80.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
81.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
82.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
83.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
85.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
86.	End Bell Repair Sign-off		
Assembly			
87.	Photograph All Major Components prior to assembly		
88.	Final Insulation Resistance Test		
89.	Assembled Shaft Endplay		
90.	Assembled Shaft Runout		
91.	Test Run Voltage		
	Volts	Volts	Volts
92.	Test Run Amperage		
	Amps	Amps	Amps
93.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
94.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
95.	Ambient Temperature - Fahrenheit		
96.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
97.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
98.	Final Test Run Sign-off		
99.	Document Final Condition with Pictures after paint		P2200

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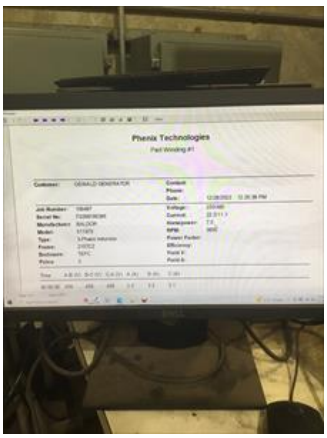

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100. Final Pics and QC Review **Terrence Holland** P2300

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