

AC Inspection as Found ARKEMA, INC. 2571 Fite Road Memphis, TN 38127

FolderID: 152680 FormID: 20240862



AC Inspection - Rev. 2	
Location:	MLMR Shop
Serial Number:	8207
Description:125	Hp Ac Motor

Hi-Speed Job Number:	152680
Manufacturer:	TECO Westinghouse
Product Number:	773B975G27
Serial Number:	8207
HP/kW:	125 (HP)
RPM:	1780 (RPM)
Frame:	444T
Voltage:	460
Current:	136 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.16
Enclosure:	TEFC
# of Leads:	3
J-box Included:	Half
Coupling/Sheave:	None
Date Received:	04/29/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 🔵 1 - High

🔵 18 - Good

Overall Condition

1. Report Date

04/30/2024

Ο



3. Photos of all six sides of the machine.







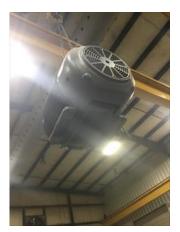


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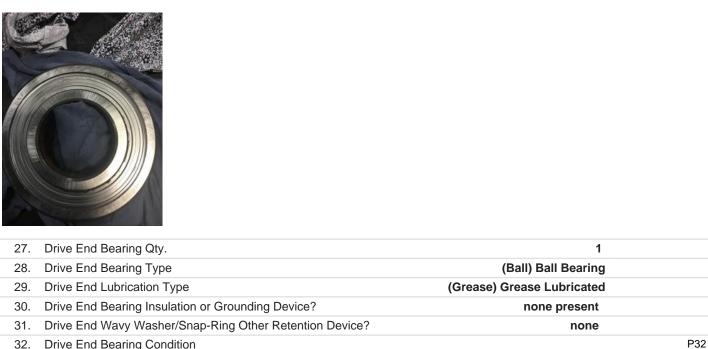
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4. Describe the Overall Condition of the Equipment as Received Initial Mechanical/Electrical 0 5. Does Shaft Turn Freely? (Y) Yes 6. Does the shaft require T.I.R in Lathe to identify additional repairs? (No) No 7. Does Shaft Have Visible Damage? (No) No 8. Assembled Shaft Ruout 0.0005 Inches 9. Assembled Shaft End Play 0.0005 inches 10. Air Gap Variation <10% 10 provision for measurement 11. Lead Condition (P) Pass 12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 38 hole 1-3 14. Lead Numbers 1-3 15. Frame Condition (P) Pass 16. Fan Condition (P) Pass 17. Broken or Missing Components 1-3 17. Broken or Missing Components 1-3 17. Broken or Missing Components 1-3					
 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 0.0005 Inches 9. Assembled Shaft End Play 0.0005 inches 10. Air Gap Variation <10% 10 provision for measurement 11. Lead Condition (P) Pass 12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 38 hole 14. Lead Numbers 1-3 15. Frame Condition (P) Pass P16 16. Fan Condition (P) Pass 17. Broken or Missing Components 		4.	Describe the Overall Condition of the Equipment as Received		
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 7. Does Shaft Have Visible Damage? (No) No 8. Assembled Shaft Runout 0.0005 Inches 9. Assembled Shaft End Play 0.0005 inches 10. Air Gap Variation <10% 11. Lead Condition (P) Pass 12. Lead Length 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 38 hole 14. Lead Numbers 1-3 15. Frame Condition (P) Pass P16 Fan Condition (P) Pass P16 Fane Condition (P) Pass P16 Fane Condition (P) Pass P16 To condition (P) Pass P16 P17. Broken or Missing Components 		5.	Does Shaft Turn Freely?	(Y) Yes	
 8. Assembled Shaft Runout 9. Assembled Shaft End Play 10. Air Gap Variation <10% 11. Lead Condition (P) Pass 12. Lead Length 13. Does it have Lugs?, If so what is the Stud Size? 38 hole 14. Lead Numbers 1-3 15. Frame Condition (P) Pass P16 		6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No	
 9. Assembled Shaft End Play 10. Air Gap Variation <10% 10 provision for measurement 11. Lead Condition (P) Pass 12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size?		7.	Does Shaft Have Visible Damage?	(No) No	
 10. Air Gap Variation <10% oprovision for measurement 11. Lead Condition (P) Pass 12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 3/8 hole 14. Lead Numbers 1-3 15. Frame Condition 16. Fan Condition (P) Pass P16 		8.	Assembled Shaft Runout	0.0005 Inches	
 11. Lead Condition (P) Pass 12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 3/8 hole 14. Lead Numbers 1-3 15. Frame Condition (P) Pass P16 16. Fan Condition (P) Pass P16 		9.	Assembled Shaft End Play	0.0005 inches	
12. Lead Length 16 Inches 13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 3/8 hole 1-3 14. Lead Numbers 1-3 15. Frame Condition (P) Pass 16. Fan Condition (P) Pass 17. Broken or Missing Components		10.	Air Gap Variation <10%	no provision for measurement	
13. Does it have Lugs?, If so what is the Stud Size? (Yes) Yes 38 hole 1-3 14. Lead Numbers 1-3 15. Frame Condition (P) Pass 16. Fan Condition (P) Pass 17. Broken or Missing Components		11.	Lead Condition	(P) Pass	
 38 hole 14. Lead Numbers 1-3 15. Frame Condition 16. Fan Condition (P) Pass P16 To condition To condition 		12.	Lead Length	16 Inches	
14. Lead Numbers 1-3 15. Frame Condition (P) Pass 16. Fan Condition (P) Pass P10 Image: State of the stat		13.	Does it have Lugs?, If so what is the Stud Size?	(Yes) Yes	
15. Frame Condition (P) Pass P16 16. Fan Condition (P) Pass P16 Image: State of the state of		•	3/8 hole		
16. Fan Condition (P) Pass P16 Image: Comparison of Missing Components Image: Component state of the st		14.		1-3	
The second se		15.			
		16.	Fan Condition	(P) Pass	P16
Initial Electrical Inspection		17.	Broken or Missing Components		
	In	itial E	Electrical Inspection		0

18.	Insulation Resistance/Megger		17145 Megohms	P18
Ja Marcell Testano Cantor Cantor				
19.	Winding Resistance			P19
	1-2	1-3	2-3	
	.0407	.0408	.0404	
20.			(P) Pass	
21.			72	
22.	Stator Condition			P22
23.	Stator Thermistors/Ohms		none present	
23.			none present	
	anical Inspection			
25.			SKF	
	<u> </u>			



32. Drive End Bearing Condition







33.	Opposite Drive End Bearing Brand	SKF	
34.	Opposite Drive End Bearing Number-	6313 C3ZZ	P34

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6319zz C3



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 present
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	none present

40. Opposite Drive End Bearing Condition







41. Drive End Seal

42. Opposite Drive End Seal

none present

none present

Rotor Inspection

43. Rotor Type/Material

(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast

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44.	Growler Test		(Pass) Pass	
45.	Number of Rotor Bars			
46.	Rotor Condition		acceptable	
47.	List the Parts needed for the Re	epair Below		
	6319ZZC3 bearing 6313ZZC3 bearing			
48.	Signature of Technician that Dis	sassembled Motor		
Mecha	nical Fits- Rotor			0
49.	Shaft Runout		0.001 inches	
50.	Rotor Runout			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
	0.002	2	2	
51.	Coupling Fit Closest to Bearing	Housing		
	0 Degrees	90 Degrees	120 Degrees	
	3.375	3.375	3.375	
52.	Coupling Fit Closest to the end	of the Shaft		
	0 Degrees	60 Degrees	120 Degrees	
	3.375	3.375	3.375	
53.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.7404	3.7404	3.7404	
	Tolerance is 3.7403-3.7409			
5 4.	Drive End Bearing Shaft Fit Cor	ndition	(P) Pass	P54



	55.	Opposite Drive End Bearing Shaf	t Fit		P55
		0 Degrees	60 Degrees	120 Degrees	
		2.5595	2.5595	2.5595	
		Tolerance is 2.5592-2.5597			
	56.	Opposite Drive End Bearing Shaf	t Fit Condition	(P) Pass	
	57.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		Pass	Pass		-
M		nical Fits- Bearing Housings			0
	58.	Drive End - Endbell Bearing Fit			
		0 Degrees 7.8771	60 Degrees 7.8771	120 Degrees 7.8774	
		7.8771 Tolerance is 7.8740-7.8751	7.8771	1.8/14	
	59.	Drive End - Endbell Bearing Fit C	ondition	(F) Fail	
	60.		onation	(1)1 an	
		Opposite Drive End - Endbell Bea			P60
		Opposite Drive End - Endbell Bea 0 Degrees	aring Fit	120 Degrees	P60
		0 Degrees	aring Fit 60 Degrees	120 Degrees 5.5127	P60
	•		aring Fit	120 Degrees 5.5127	P60
		0 Degrees 5.5127 Tolerance is 5.5118-5.5128	aring Fit 60 Degrees 5.5127	5.5127	P60
	- - - - - 	0 Degrees 5.5127 Tolerance is 5.5118-5.5128	aring Fit 60 Degrees 5.5127		P60
	- - - - - - - - - - - - - - - - - - -	0 Degrees 5.5127 Tolerance is 5.5118-5.5128	aring Fit 60 Degrees 5.5127	5.5127 (P) Pass	P60
		0 Degrees 5.5127 Tolerance is 5.5118-5.5128	aring Fit 60 Degrees 5.5127	5.5127 (P) Pass	P60

00			
63.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	Pass	Pass	
64.	List Machine Work Needeo	Below	P
	Bore and bush drive end. Drive end end bell is cracke	and needs repaired	
65.	Technician	Brandon Woodard	
oot C	ause of Failure		
oot C 66.	ause of Failure Failure locations		