

AC Inspection as Found Process And Power 1721 Corporate Ave Memphis Tn, TN 38132

AC Inspection	on - Rev. 2	Hi-S
Location:	Shop	Man
Serial Numbe	Pro	
Description:200 HP AC Motor		HP/
		DDI

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

FolderID: 152819 FormID: 20408640

Hi-Speed Job Number:	152819
Manufacturer:	WEG
Product Number:	23827140
HP/kW:	200 (HP)
RPM:	1785 (RPM)
Frame:	280S/M
Voltage:	460
Current:	228 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.21
Enclosure:	TEFC
# of Leads:	6
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	05/16/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	Yes
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - High**

9 - Good

Overall Condition

1. Report Date 05/17/2024

Ο

2. Nameplate Picture



3. Photos of all six sides of the machine.









Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

P2

P3





	4.	Describe the Overall Condition of the Equipment as Received	Needs new bearings to recondition!	
Ini	itial I	Aechanical/Electrical	Needs new bearings to recondition:	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 Runout	0.008999999999999999999 Inches	
	9.	Assembled Shaft End Play	0.001 inches	
	10.	Air Gap Variation <10%	no provisions for measurement	
	11.	Lead Condition	(P) Pass	
	12.	Lead Length	78 Inches	P12



78" from edge of j box

	13.	Does it have Lugs?, If so what is	the Stud Size?		(Yes) Yes	P13
	•	1/2 in.				
	14.	Lead Numbers			T1-6	
	15.	Frame Condition			pass	
	16.	Fan Condition			(P) Pass	P16
	17	Heater Questity Batings				
	17.	Heater Quantity, Ratings	\/olto/\//otto	Doog/Egil		
		2	110/117	rass/rall		
	18.	Broken or Missing Components	110/11/	puss	None	
In	itial	Electrical Inspection				O
	19.	Insulation Resistance/Megger			92000 Megohms	 P19
		Marcol Burgolom Bargolom Burgolom Orgona Burgolom Orgona Burgolom Data Burgolom		Nagoban 1220 0.000 Park David State Park State Par		

20.	Winding Resistance				P20
	1-2	1-3	2-3		
	0.02601	0.026	0.02588		
	Mundiang Residuance 0-20 *C 				
21.	Perform Surge Test			(P) Pass	P21
22.	Number of Stator Slots			48	D00
23.				μασσ	F23
24.	Stator Thermistors/Ohms			n/a	
25.	Stator Overloads/Ohms			n/a	-
wechai	nical inspection				0



35. Opposite Drive End Bearing Number-



	1	Opposite Drive End Bearing Qty.
	(Ball) Ball Bearing	7. Opposite Drive End Bearing Type
	(Grease) Grease Lubricated	 Opposite Drive End Lubrication Type
	none	Opposite Drive End Bearing Insulation or Grounding Device?
P40	springs/ snap ring	0. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?





Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

P35

6316 C3

Brandon Woodard

P41



42.	Drive End Seal	VA 95	
43.	Opposite Drive End Seal	VA 80	
Rotor I	nspection		0
44.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast	
45.	Growler Test	(Pass) Pass	
46.	Number of Rotor Bars	40	
47.	Rotor Condition	Pass	P47

47. Rotor Condition



48. List the Parts needed for the Repair Below 6319 C3 6316 C3 VA 95

49. Signature of Technician that Disassembled Motor



Mechanical Fits- Rotor Ο 50. Shaft Runout 0.002 inches 51. Rotor Runout Drive End Bearing Fit Rotor Body Opposite Drive End Bearing 0.002 0.002 0.002

	52.	Coupling Fit Closest to Bearing He	ousing		
		0 Degrees	90 Degrees	120 Degrees	
		3.5	3.5	3.5	
	53.	Coupling Fit Closest to the end of	the Shaft		
		0 Degrees	60 Degrees	120 Degrees	
		3.5	3.5	3.5	
	54.	Drive End Bearing Shaft Fit			P54
		0 Degrees	60 Degrees	120 Degrees	
		3.7408	3.7408	3.7408	
	Ψ.	Tolerance is 3.7403-3.7409			
	55.	Drive End Bearing Shaft Fit Cond	ition	(P) Pass	5
	56.	Opposite Drive End Bearing Shaft	t Fit		P56
		0 Degrees	60 Degrees	120 Degrees	
		3.1501	3.1501	3.1501	
	57.	Tolerance is 3.1497-3.1502	t Fit Condition	(P) Pass	3
	58	Shaft Air Seal Fits		(٢) ٣٥	,
	50.	Drive End Air Seel	Opposite Drive End Air Seal		
		Drive Litu Ali Sedi	opposite Drive Eriu Ali Seal		
		Paee	Pass		
B	locha	Pass	Pass		

59.	Drive End - Endbell Bearing Fit			P59
	0 Degrees	60 Degrees	120 Degrees	
	7.8753	7.8752	7.8754	
	Tolerance is 7.8740-7.87510002 ou	it of tolerance no machine work recomm	nend.	
60.	Drive End - Endbell Bearing Fit Co	ondition	(P) Pass	
61.	Opposite Drive End - Endbell Bear	ring Fit		P61
	0 Degrees	60 Degrees	120 Degrees	
	6.694	6.694	6.694	
62.	Opposite Drive End - Endbell Bear	ring Fit Condition	(P) Pass	
63.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	Pass	Pass		
64.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
05	N/A	N/A		
65.	List Machine Work Needed Below None			
66.	Technician		Brandon Woodard	

Root Cause of Failure	
67. Failure locations	
Drive end bearing	
68. Root cause of failure	
Old/lack of grease	