

LR Motor Shop Repairs

Job Number 103255

Prepared for Ring Container Technologies (11634)

9000 Frazier Pike Little Rock AR 72206

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AC Inspection as Found - LR MOTOR SHOP

AC Inspection - Rev. 2: 1LG6259-2ZZ96-Z

1.0



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

> FolderID: 103255 FormID: 21058473

AC Inspection as Found

Ring Container Technologies (11634) 9000 Frazier Pike

Little Rock, AR 72206

AC Inspec	tion -	Rev.	2
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Location: LR MOTOR SHOP Serial Number: 1LG6259-2ZZ96-Z Description: 100HP 75KW SIEMENS EVAL

Hi-Speed Job Number:	103255
Manufacturer:	Siemens
Product Number:	776600100
Serial Number:	1LG6259-2ZZ96-Z
HP/kW:	100 (HP)
RPM:	3580 (RPM)
Voltage:	460
Current:	117 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.3
Enclosure:	TEFC
# of Leads:	3
J-box Included:	Half
Coupling/Sheave:	Coupling
Date Received:	07/19/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
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: 3 - High

10 - Good

Overall Condition

1. Report Date 07/22/2024

2. Nameplate Picture



3. Photos of all six sides of the machine.





























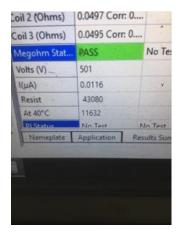


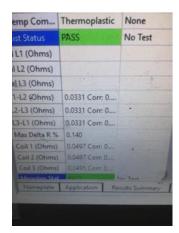






	4.	Describe the Overall Condition of the Equipment as Received	
		Dirty	
	5.	Distance from the end of the shaft to the Coupling/Sheave	inches
-		Flush	
Init	tial	Mechanical/Electrical	
	6.	Does Shaft Turn Freely?	(Y) Yes
	7.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
	8.	Does Shaft Have Visible Damage?	(No) No
	9.	Assembled Shaft Runout	0 Inches
	10.	Assembled Shaft End Play	0 inches
	11.	Air Gap Variation <10%	0
•	12.	Lead Condition	(P) Pass
	13.	Lead Length	58 Inches
•	14.	Does it have Lugs?, If so what is the Stud Size?	
-		Yes	
	15.	Lead Numbers	1-3
	16.	Frame Condition	pass
•	17.	Fan Condition	(P) Pass
	18.	Broken or Missing Components	na
Init	tial	Electrical Inspection	
	19.	Insulation Resistance/Megger	2000 Megohms





21. Perform Surge Test

(P) Pass



22. Number of Stator Slots	36
23. Stator Condition	pass
24. Stator Thermistors/Ohms	108.4
25. Stator Overloads/Ohms	0
Mechanical Inspection	
26. Drive End Bearing Brand	FAG



28.	Drive End Bearing Qty.	1
29.	Drive End Bearing Type	(Ball) Ball Bearing
30.	Drive End Lubrication Type	(Grease) Grease Lubricated
31.	Drive End Bearing Insulation or Grounding Device?	none
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
33.	Drive End Bearing Condition	
-	Signs of axial load and frosting	



34. Opposite Drive End Bearing Brand	FAG
35. Opposite Drive End Bearing Number-	6215-C4



36.	Opposite Drive End Bearing Qty.	1
37.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
38.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
39.	Opposite Drive End Bearing Insulation or Grounding Device?	none
40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	snap ring
41.	Opposite Drive End Bearing Condition	
-	Signs of frosting	



42.	Drive End Seal	slinger
43.	Opposite Drive End Seal	slinger
Rotor	Inspection	
44.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
45.	Growler Test	(Pass) Pass
46.	Number of Rotor Bars	28
47.	Rotor Condition	pass
48.	List the Parts needed for the Repair Below	
	6215-C4 x2 New aegis ring	
49.	Signature of Technician that Disassembled Motor	Cw

Men

Mech	Mechanical Fits- Rotor				
50.	Shaft Runout		0 inches		
51.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
	0	0	0		
52.	. Coupling Fit Closest to Bearing Housing				
	0 Degrees	90 Degrees	120 Degrees		
	0	0	0		
53.	Coupling Fit Closest to the end of the	Shaft			
	0 Degrees	60 Degrees	120 Degrees		
	0	0	0		

	ΕΛ	Drive End Bearing Chaft Fit			
	54.	Drive End Bearing Shaft Fit	00 B	100 D	
		0 Degrees	60 Degrees	120 Degrees	
		2.9535	2.9534	2.9534	(D) D
		Drive End Bearing Shaft Fit Condition			(P) Pass
	56.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.9534	2.9534	2.9535	
		Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	58.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		
M	echa	nical Fits- Bearing Housings			
	59.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		5.1195	5.1199	5.1195	
	60.	Drive End - Endbell Bearing Fit Condi	ion		(F) Fail
	61.	Opposite Drive End - Endbell Bearing	Fit		
		0 Degrees	60 Degrees	120 Degrees	
		5.1196	5.1194	5.1195	
	62.	Opposite Drive End - Endbell Bearing	Fit Condition		(F) Fail
	63.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	64.	End Bell Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
	65.	List Machine Work Needed Below			
		Both end bell bearing fits			
	66.	Technician			Cw
	00.				0
	/				
	/	11/11/			
		1000			
	_	Co sign:RRW			
R/	oot (Cause of Failure			
177		Failure locations			
	07.	Bearings, aegis ring, both end bell bear	ina fits		
	68	Root cause of failure			
	00.	Miss alignment, contamination, frosting	and wear		
D.					
ט י	Dynamic Balance Report				

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69. Rotor Weight and Balance Grade

Rotor Weight Balance Grade



70	Tablestates	Devid 8	A = = I!
	.12	.23	
	Drive End	Opposite Drive End	
71.	Final Balance Readings		
	.55	.83	
	Drive End	Opposite Drive End	
70.	Initial Balance Readings		

72. Technician David Maclin



Mechanical Fits- Bearing Housings - Post Repair

73. Drive End - Endbell Bearing Fit Post Repair
0 Degrees
60 Degrees
120 Degrees





74. Opposite Drive End - Endbell Bearing Fit Post Repair		
0 Degrees	60 Degrees	120 Degrees
5.1188	5.1188	5.1189



75.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	ok	ok	
76.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
	ok	ok	
77.	End Bell Repair Sign-off		Gary

1

Assembly

78. QC Check All Parts for Cleanliness Prior to Assembly

David Maclin

79. Photograph All Major Components prior to assembly























80.	Final Insulation Resistance Test		2000 Megohms
81.	Assembled Shaft Endplay		0 inches
82.	Assembled Shaft Runout		0 inches
83.	Test Run Voltage		
	Volts	Volts	Volts
	459	460	461



84. Test Run Amperage	. Test Run Amperage				
Amps	Amps	Amps			
36.8	36.8	37.1			

85.	Drive End Vibration Readings - Inches	s Per Second			
	Horizontal	Vertical	Axial		
	0.0245	0.0268	0.0126		
86.	6. Opposite Drive End Vibration Readings - Inches Per Second				
	Horizontal	Vertical	Axial		
	0.0204	0.0297	0.0169		
87.	Ambient Temperature - Fahrenheit			74	
88. Drive End Bearing Temps - Fahrenheit					
	5 Minutes	10 Minutes	15 Minutes		
	0	0	0		
89. Opposite Drive End Bearing Temps - Fahrenheit					
	5 Minutes	10 Minutes	15 Minutes		
	0	0	0		
90.	Document Final Condition with Pictures after paint			looks new	
91.	Final Pics and QC Review		C	David Maclin	











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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
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- 8. WARRANTIES. Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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- 11. **GOVERNING LAW AND JURISDICTION.** Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
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- 16. NO INDIVIDUAL LIABILITY. Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.