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— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

Job Number 100359

Prepared for ARKANSAS INDUSTRIAL MACHINERY

3804 N. NONA ST
NORTH LITTLE ROCK AR 72118

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Hi-Speed Industrial Service
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AC Recondition As Found
ARKANSAS INDUSTRIAL MACHINERY
3804 N. NONA ST
NORTH LITTLE ROCK, AR 72118

FolderID: 100359
FormID: 14672395

AC Recondition - Rev. 2

Location: Shop
Serial Number: 3GE092313S2136002
Description: 7.5KW ABB 1800RPM 132M

Hi-Speed Job Number:	100359
Manufacturer:	ABB
Product Number:	3GAA132002-HDB
Serial Number:	3GE092313S2136002
HP/kW:	7.5 (kW)
RPM:	1750 (RPM)
Frame:	132M
Voltage:	460
Current:	15.3
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: ● 1 - High ● 8 - Good

Overall Condition

1. Report Date

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1.0

2. Nameplate Picture



3. Photos of all six sides of the machine.

4. Describe the Overall Condition of the Equipment as Received

Initial Mechanical/Electrical

5. Does Shaft Turn Freely?	(Yes) Yes
6. Does Shaft Have Visible Damage?	(No) No
7. Assembled Shaft Runout	0.0003 Inches
8. Assembled Shaft End Play	
9. Air Gap Variation <10%	

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10. Lead Condition	(P) Pass
11. Lead Length	10 Inches



12. Frame Condition	pass
13. Fan Condition	(P) Pass



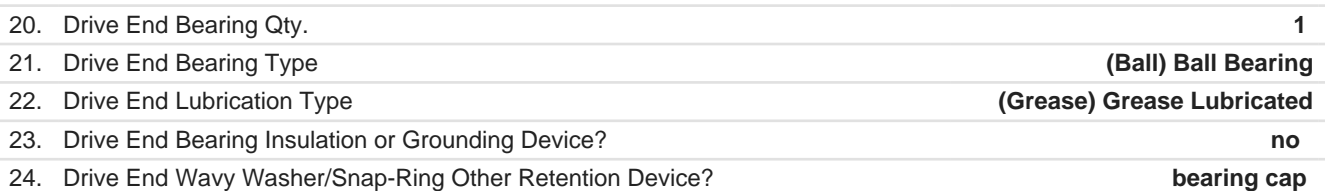
14. Broken or Missing Components	0	
Initial Electrical Inspection		
15. Insulation Resistance/Megger	210597 Megohms	
16. Winding Resistance		
1-2	1-3	2-3
1.296	1.293	1.296

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(P) Pass



6208ZZ



1.3

25. Drive End Bearing Condition

metal fatigue



26. Opposite Drive End Bearing Number-

6206ZZ



27. Opposite Drive End Bearing Qty.

1

28. Opposite Drive End Bearing Type

(Ball) Ball Bearing

29. Opposite Drive End Lubrication Type

(Grease) Grease Lubricated

30. Opposite Drive End Bearing Insulation or Grounding Device?

no

31. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?

Wavy washer

32. Opposite Drive End Bearing Condition

pass



33. Drive End Seal

34. Opposite Drive End Seal

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Rotor Inspection

35. Rotor Type/Material

(Squirrel Aluminum) Squirrel
Cage Aluminum Die Cast



36. Growler Test

(Pass) Pass

37. Number of Rotor Bars

28

38. Rotor Condition

pass



39. List the Parts needed for the Repair Below

40. Signature of Technician that Disassembled Motor

RW



Mechanical Fits- Rotor

41. Shaft Runout

0.0002 inches

42. Rotor Runout

Drive End Bearing Fit

Rotor Body

Opposite Drive End Bearing

43. Coupling Fit Closest to Bearing Housing

0 Degrees

90 Degrees

120 Degrees

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44. Coupling Fit Closest to the end of the Shaft			
0 Degrees	60 Degrees	120 Degrees	
45. Drive End Bearing Shaft Fit			
0 Degrees	60 Degrees	120 Degrees	
1.575	1.5749	1.5749	
46. Drive End Bearing Shaft Fit Condition			(P) Pass



47. Opposite Drive End Bearing Shaft Fit			
0 Degrees	60 Degrees	120 Degrees	
1.1812	1.1812	1.1812	
48. Opposite Drive End Bearing Shaft Fit Condition			(P) Pass
49. Shaft Air Seal Fits			
Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

50. Drive End - Endbell Bearing Fit			
0 Degrees	60 Degrees	120 Degrees	
3.15	3.15	3.15	
51. Drive End - Endbell Bearing Fit Condition			(P) Pass



52. Opposite Drive End - Endbell Bearing Fit			
0 Degrees	60 Degrees	120 Degrees	
2.4412	2.4412	2.4412	

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54. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

pass



55. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

56. List Machine Work Needed Below

Na

57. Technician

RW

Root Cause of Failure

58. Failure locations

59. Root cause of failure



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5. **DELIVERY OF GOODS AND/OR SERVICES.** 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.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
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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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15. **ASSIGNMENT.** The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
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