

# LR Motor Shop Repairs

# **Job Number 101029**

Prepared for Custom Craft Poultry

3064 E Main St Batesville AR 72501

# **Table of Contents**

AC Recondition As Found - Shop

AC Recondition - Rev. 2: NO SN

1.0



FolderID: 101029

FormID: 16111737



# **AC Recondition As Found**

**Custom Craft Poultry** 

3064 E Main St Batesville, AR 72501

AC Recondition - Rev. 2

Location: Shop Serial Number: NO SN

Description: 25KW BALDOR 1200RPM D200L

Hi-Speed Job Number:	101029
Manufacturer:	Baldor
Product Number:	12N051W299G1
Spec/ID #:	12N051W299G1
HP/kW:	25 (kW)
RPM:	1150 (RPM)
Frame:	D200L
Voltage:	460
Current:	37
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	Propeller
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 1 - High

8 - Good

### **Overall Condition**

1. Report Date

2. Nameplate Picture





































	3.	Photos of all six sides of the machine.				
	4.	Describe the Overall Condition of the	Equipment as Received			
		Clean				
	5.	Distance from the end of the shaft to t	he Coupling/Sheave			
Ir	nitial	Mechanical/Electrical				
	6.	Does Shaft Turn Freely?		(Yes) Yes		
	7.	Does Shaft Have Visible Damage?		(No) No		
	8.	Assembled Shaft Runout		Inches		
	9.	Assembled Shaft End Play		0 inches		
	10.	Air Gap Variation <10%				
	11.	Lead Condition		(P) Pass		
	12.	Lead Length		12 Inches		
	13.	Frame Condition		good		
	14.	Fan Condition		(P) Pass		
	15.	Broken or Missing Components		2 front bearing cap bolts missing		
Ir	Initial Electrical Inspection					
	16.	Insulation Resistance/Megger		2000 Megohms		
	17.	Winding Resistance				
		1-2	1-3	2-3		
	18.	Perform Surge Test		(P) Pass		

19. Number of Stator Slots
20. Stator Condition good
Mechanical Inspection
21. Drive End Bearing Brand NTN



6312 2RS	. Drive End Bearing Number-
1	. Drive End Bearing Qty.
(Ball) Ball Bearing	. Drive End Bearing Type
(Grease) Grease Lubricated	. Drive End Lubrication Type
no	. Drive End Bearing Insulation or Grounding Device?
N12-W12 spanner	. Drive End Wavy Washer/Snap-Ring Other Retention Device?
	. Drive End Bearing Condition
	. Opposite Drive End Bearing Brand
6311 2RS	. Opposite Drive End Bearing Number-
1	. Opposite Drive End Bearing Qty.
(Ball) Ball Bearing	. Opposite Drive End Bearing Type
(Grease) Grease Lubricated	. Opposite Drive End Lubrication Type
none	. Opposite Drive End Bearing Insulation or Grounding Device?
none	. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?
	. Opposite Drive End Bearing Condition
labyrinth in good condition	. Drive End Seal
none	. Opposite Drive End Seal
	r Inspection
(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast	. Rotor Type/Material
(Pass) Pass	. Growler Test
50	. Number of Rotor Bars
good	. Rotor Condition
	. List the Parts needed for the Repair Below
	6311 2RS, 6312 2RS, 2- 8mm 1.25 x 25mm bolts.

/lecha	anical Fits- Rotor		
45.	Shaft Runout		inches
46.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
47.	Coupling Fit Closest to Bearing Housi	ng	
	0 Degrees	90 Degrees	120 Degrees
48.	Coupling Fit Closest to the end of the	Shaft	
	0 Degrees	60 Degrees	120 Degrees
49.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	2.3628	2.3628	2.3628
50.	Drive End Bearing Shaft Fit Condition		(P) Pass
51.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	2.1659	2.1659	2.1659
52.			(P) Pass
53.	Shaft Air Seal Fits		. ,
	Drive End Air Seal	Opposite Drive End Air Seal	
lecha	anical Fits- Bearing Housings		
54.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
	5.1185	5.1185	5.1185
55.	Drive End - Endbell Bearing Fit Condi	tion	(P) Pass
	Opposite Drive End - Endbell Bearing		( )
	0 Degrees	60 Degrees	120 Degrees
	4.7247	4.7247	4.7247
57.	Opposite Drive End - Endbell Bearing	=	(P) Pass
	Bearing Cap Condition		(- ) - 255
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
59.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
60.	List Machine Work Needed Below None		
61.	Technician		David Maclin
ynar	nic Balance Report		

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### 62. Rotor Weight and Balance Grade

Rotor Weight

**Balance Grade** 





63. Initial Balance Readings

Drive End Opposite Drive End

1.89

64. Final Balance Readings

Drive End Opposite Drive End

1.18

65. Technician David Maclin

## Rewind

66. Core Test Results - Watts loss per Pound

Pre-Burnout Post Burnout

67. Core Hot Spot Test

Pre-Burnout Post-Burnout

- 68. Post Rewind Electrical Test-Insulation Resistance
- 69. Post Rewind Polarization Index
- 70. Post Rewind Winding Resistance

1-2 1-3 2-3

- 71. Post Rewind Surge Test
- 72. Post Rewind Hi-Pot
- 73. Technician

#### **Root Cause of Failure**

- 74. Failure locations
- 75. Root cause of failure

## Mechanical Fits- Rotor - Post Repair

76. Shaft Runout Post Repair

77.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
78.	Coupling Fit Closest to Bearing Housi	ng Post Repair	
	0 Degrees	90 Degrees	120 Degrees
70	0 1: 5:01	OL ( D. ) D. ;	
79.	Coupling Fit Closest to the end of the	·	100 D
	0 Degrees	60 Degrees	120 Degrees
80.	Drive End Bearing Shaft Fit Post Repa	air	
	0 Degrees	60 Degrees	120 Degrees
	0 2 0g. 0 0 0	00 2 0g. 000	.20 20g.000
81. Opposite Drive End Bearing Shaft Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees
82.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
00	Chaft Danair Cian off		
	Shaft Repair Sign-off	ant Domeiu	
	anical Fits- Bearing Housings - P	•	
84.	Drive End - Endbell Bearing Fit Post F		400 D
	0 Degrees	60 Degrees	120 Degrees
85.	Opposite Drive End - Endbell Bearing	Fit Post Repair	
33.	0 Degrees	60 Degrees	120 Degrees
	0 20g.000	00 D0g.000	120 Dog:000
86.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
87.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
0.0	Ford Dall Dan eig Oine off		
	End Bell Repair Sign-off		
Asser	nniv		

## **Assembly**

89. Photograph All Major Components prior to assembly



















90. Final Insulation Resistance 1	Test		
91. Assembled Shaft Endplay			
92. Assembled Shaft Runout			
93. Test Run Voltage			
Volts	Volts	Volts	
461	462	461	



94.	Test Run Amperage			
	Amps	Amps	Amps	
	56	56.1	56	
95.	95. Drive End Vibration Readings - Inches Per Second			
	Horizontal	Vertical	Axial	
	0.0907	0.0078	0.03	
96. Opposite Drive End Vibration Readings - Inches Per Second				
	Horizontal	Vertical	Axial	
	0.0398	0.0131	0.0156	
97.	Ambient Temperature - Fahrenheit		70	
98.	98. Drive End Bearing Temps - Fahrenheit			
	5 Minutes	10 Minutes	15 Minutes	
99.	9. Opposite Drive End Bearing Temps - Fahrenheit			
	5 Minutes	10 Minutes	15 Minutes	

- 100. QC Check All Parts for Cleanliness Prior to Assembly
- 101. Document Final Condition with Pictures after paint
- 102. Final Pics and QC Review

**David Maclin** 









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