

# LR Motor Shop Repairs

## **Job Number 104033**

Prepared for Kiswire (12060)

5100 industrial dr. S. white hall ar 71602

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AC Inspection as Found - LR MOTOR SHOP

AC Inspection - Rev. 2: Q2-K18T0332NPI26

1.0



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

> FolderID: 104033 FormID: 23095705

### **AC Inspection as Found**

**Kiswire (12060)** 

5100 industrial dr. S. white hall, ar 71602

#### AC Inspection - Rev. 2

Location: LR MOTOR SHOP Serial Number: Q2-K18T0332NPI26

Description: 18.65 KW SIEMANS FAN

**ASSEMBLY** 

Hi-Speed Job Number:	104033
Manufacturer:	Siemens
Serial Number:	Q2-K18T0332NPI26
HP/kW:	18.65 (HP)
Frame:	NA
Voltage:	460
Current:	30 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	3
J-box Included:	Complete
Coupling/Sheave:	Sheave
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element
12 - Good	

Priorities Found: 1 - High





📗 1 - Medium



12 - Good

#### **Overall Condition**

01/31/2025 1. Report Date

#### 2. Nameplate Picture



3. Photos of all six sides of the machine.













































- Describe the Overall Condition of the Equipment as Received Dirty
- 5. Distance from the end of the shaft to the Coupling/Sheave

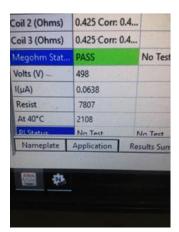
inches

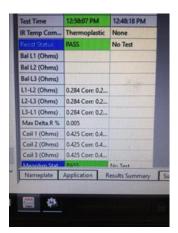




Motor sheave Fan sheave

Initia	Initial 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	Inches		
10.	Assembled Shaft End Play	inches		
11.	Air Gap Variation <10%			
12.	Lead Condition	(P) Pass		
13.	Lead Length	14 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	all baffle bolts for fan and a belt cover bolt		
19.	Does motor have internal fan?	(No) No		
Initia	I Electrical Inspection			
20.	Insulation Resistance/Megger	Megohms		





#### 22. Perform Surge Test

(P) Pass



23. Number of Stator Slots	48		
24. Stator Condition	pass		
25. Stator Thermistors/Ohms			
26. Stator Overloads/Ohms			
Mechanical Inspection			
27. Drive End Bearing Brand	ORS		



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28. Drive End Bearing Number-	6310
29. Drive End Bearing Qty.	1
30. Drive End Bearing Type	(Ball) Ball Bearing
31. Drive End Lubrication Type	(Grease) Grease Lubricated
32. Drive End Bearing Insulation or Grounding Device?	
33. Drive End Wavy Washer/Snap-Ring Other Retention Device?	
34. Drive End Bearing Condition	
Signs of frosting	



#### 35. Opposite Drive End Bearing Brand

ORS



36.	Opposite Drive End Bearing Number-	6310	
37. Opposite Drive End Bearing Qty.		1	
38. Opposite Drive End Bearing Type (Ball) Ball Bearing			
39. Opposite Drive End Lubrication Type (Grease) Grease Lubricated			
40.	40. Opposite Drive End Bearing Insulation or Grounding Device?		
<b>4</b> 1.	41. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?		
-	Wavy washer		
42.	Opposite Drive End Bearing Condition		
-	Signs of frosting		

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43.	Drive End Seal	
44.	Opposite Drive End Seal	
Rotor	Inspection	
45.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
46.	Growler Test	(Pass) Pass
47.	Number of Rotor Bars	40
48.	Rotor Condition	pass
49.	List the Parts needed for the Repair Below	
	6310x2 SKF- SE/512/610 X2 Pillar block bearings Aegis ring	
50.	Signature of Technician that Disassembled Motor	Cw

Quin

Mechanical Fits- Rotor				
51.	Shaft Runout		inches	
52.	Rotor Runout			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
53.	. Coupling Fit Closest to Bearing Housing			
	0 Degrees	90 Degrees	120 Degrees	
54.	Coupling Fit Closest to the end of the Shaft			
	0 Degrees	60 Degrees	120 Degrees	
55.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
-	1.9690-1.9690-1.9689			
<b>5</b> 6.	Drive End Bearing Shaft Fit Condition		(P) Pass	

57.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	•	J	•	
-	1.9688-1.9688-1.9688			
58.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
59.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
		· ·		
Mech	anical Fits- Bearing Housings			
60.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
-	4.3314-4.3315-4.3315			
<b>6</b> 1.				(P) Pass
62.	Opposite Drive End - Endbell Bearing	Fit		
	0 Degrees	60 Degrees	120 Degrees	
•	4.3317-4.3318-4.4418	Etc. O		(2) 2
<ul><li>63.</li></ul>	-11	Fit Condition		(P) Pass
64.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	Pass			
,	End Bell Air Seal Fits			
03.	Drive End Air Seal	Opposite Drive End Air Seal		
	Drive Erid Ali Seai	Opposite Drive End All Seal		
66.	List Machine Work Needed Below			
	Aegis ring installment			
67.	Technician			Crw
	/ frem			
	1 lun			
	Co cioni BDW			
,	Co sign: RRW			
	Cause of Failure			
ზგ.	Failure locations  Bearings, and fan shaft and shives			
60	Root cause of failure			
69.	Wear and electrical discharge			
Duna				
-	mic Balance Report			
70.	Rotor Weight and Balance Grade	Dalamas Crada		
	Rotor Weight	Balance Grade		
71.	Initial Balance Readings			
	Drive End	Opposite Drive End		
	20 20	CPPOSITO EIIG		

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72.	Final Balance Readings			
	Drive End	Opposite Drive End		
===				
	73. Technician			
Asser	•			
	QC Check All Parts for Cleanliness Pr	<u> </u>		
	Photograph All Major Components pri	or to assembly		
	Final Insulation Resistance Test			
	Assembled Shaft Endplay			
	Assembled Shaft Runout			
79.	Test Run Voltage			
	Volts	Volts	Volts	
80.	Test Run Amperage			
	Amps	Amps	Amps	
81	Drive End Vibration Readings - Inches	: Par Sacond		
01.	Horizontal	Vertical	Axial	
	Honzontal	vertical	Axiai	
82.	Opposite Drive End Vibration Reading	s - Inches Per Second		
	Horizontal	Vertical	Axial	
83.	Ambient Temperature - Fahrenheit			
84.	Drive End Bearing Temps - Fahrenhei	t		
	5 Minutes	10 Minutes	15 Minutes	
85.	Opposite Drive End Bearing Temps -			
	5 Minutes	10 Minutes	15 Minutes	
	Document Final Condition with Pictures after paint			
87.	Final Pics and QC Review			

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