

1333 highway 270

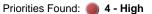
AC Inspection - Rev. 2		
Location:	Shop	
Serial Number:		

Description:Reliance

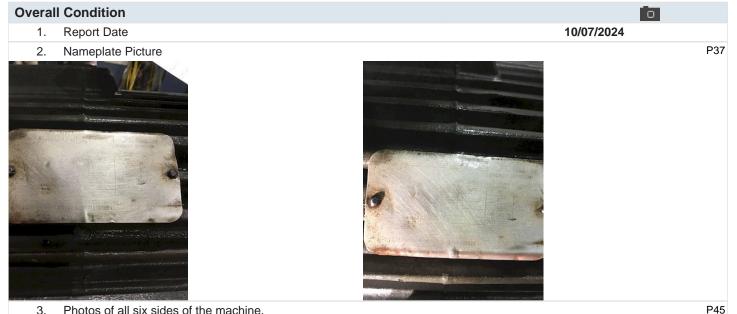
FolderID: 103592 FormID: 21823772

Hi-Speed Industrial Service

Hi-Speed Job Number:	103592
Manufacturer:	Reliance
Product Number:	M: 6300538
Voltage:	460
Current:	11 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1
Enclosure:	TENV
# of Leads:	3
J-box Included:	Half
Coupling/Sheave:	None
Date Received:	10/01/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element



6 - Good



3. Photos of all six sides of the machine.













4	ŀ.	Describe the Overall Condition of the Equipment as Received			
		Serviceable			
Initia	Initial Mechanical/Electrical				
• 5	5.	Does Shaft Turn Freely?	(N) No		
6	ò.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No		
7	.	Does Shaft Have Visible Damage?	(Yes) Yes		
		Minor dings and scratches.			
8	3.	Assembled Shaft Runout	Inches		
9).	Assembled Shaft End Play	inches		
10	0.	Air Gap Variation <10%			
• 11	1.	Lead Condition	(P) Pass	P69	



12.	Lead Length		8.5 Inches	
1 3.	Does it have Lugs?, If so v	what is the Stud Size?	(No) No	
14.	Lead Numbers		1-3	
15.	Frame Condition		pass	
16.	Fan Condition		(N) NA	
17.	Broken or Missing Compo	nents	connection box top cover missing	
Initial	Electrical Inspection			0
18.	Insulation Resistance/Meg	gger	Megohms	Ρ
19.	Winding Resistance	1-3	2-3	P2
20.	Perform Surge Test		(P) Pass	P5
20.	T enonin Surge Test		(r) Pass	F3

21.	Number of Stator Slots	48		
22.	Stator Condition	pass		
23.	Stator Thermistors/Ohms			
24.	Stator Overloads/Ohms			
	inical Inspection		O	
25.	Drive End Bearing Brand	FAG		P12





	and the second		
32.	Drive End Bearing Condition	replace	
33.	Opposite Drive End Bearing Brand	FAG	
34.	Opposite Drive End Bearing Number-	6316	P100
35.	Opposite Drive End Bearing Qty.	1	
36.	Opposite Drive End Bearing Type	(Ball) Ball Bearing	
37.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated	
38.	Opposite Drive End Bearing Insulation or Grounding Device?	none	
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	none	
40.	Opposite Drive End Bearing Condition	replace	
41.	Drive End Seal		
42.	Opposite Drive End Seal		
Rotor I	Inspection		
43.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast	
44.	Growler Test	(Pass) Pass	
45.	Number of Rotor Bars	64	
46.	Rotor Condition	pass	
47.	List the Parts needed for the Repair Below		
	(2) 6216 27 / C2 Boarings		

(2) 6316 2Z / C3 Bearings

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Mechanical Fits- Rotor 49. Shaft Runout 50. Rotor Runout Dive End Bearing Fit Rotor Body Opposite Drive End Bearing 51. Coupling Fit Closest to Bearing Housing 0 0 Degrees 90 Degrees 120 Degrees 52. Coupling Fit Closest to the end of the Shaft 0 0 Degrees 60 Degrees 53. Drive End Bearing Shaft Fit 0 0 Degrees 60 Degrees 120 Degrees 54. Drose End Bearing Shaft Fit 0 0 Degrees 60 Degrees 120 Degrees 55. Opposite Drive End Bearing Shaft Fit 0 Degrees 60 Degrees 120 Degrees 54. Drive End Bearing Shaft Fit 0 Degrees 60 Degrees 120 Degrees 55. Opposite Drive End Bearing Shaft Fit (F) Fail (P) Pass 57. Shaft Air Seal Opposite Drive End Air Seal Opposite Drive End Air Seal (P) Pass 58. Drive End Air Seal Opposite Drive End Air Seal P P 60 Degrees 60 Degrees 120 Degrees 120 Degrees P 68. Drive End			/	/		
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Mechanical Fits- Bearing Housings Image: Comparison of the series of	5	57.	Shaft Air Seal Fits			
58. Drive End - Endbell Bearing Fit 0 Degrees 60 Degrees 120 Degrees Excessive pitting			Drive End Air Seal	Opposite Drive End Air Seal		
0 Degrees60 Degrees120 Degrees• Excessive pitting	Мес	har	nical Fits- Bearing Housings			0
Excessive pitting	5	58.	Drive End - Endbell Bearing Fit			 P2
			0 Degrees	60 Degrees	120 Degrees	
				ondition	(F) Fail	
	5	59.	Drive End - Endbell Bearing Fit C	ondition	(F) Fail	

60.				
	Opposite Drive End - Endbell			
	0 Degrees	60 Degrees	120 Degrees	
	Lip worn in.			
61.	Opposite Drive End - Endbell	Bearing Fit Condition	(F) Fail	
62.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Ca	ар	
	pass	pass		
63.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
64.	List Machine Work Needed Be	low		
	DE shaft fit measures too small	. Both end bell housing fits worn.		
65.			Terrence Holland	
001	-	1 10		
	-			
/		Ma		
/-	/			
Root C	ause of Failure		0	
66.	Failure locations			
	DE shaft fit, and both end bell h	ousing fits.		
67.	Root cause of failure			P18
	ODE bearing suffered cage failu	re due to lack of lubrication.		
	his Balance Paner			
-	The second se	nda		
рупат 68.	Rotor Weight and Balance Gra			
-	-	ade Balance Grade		
68.	Rotor Weight and Balance Gra Rotor Weight			
-	Rotor Weight and Balance Gra Rotor Weight Initial Balance Readings	Balance Grade		
68.	Rotor Weight and Balance Gra Rotor Weight			
68.	Rotor Weight and Balance Gra Rotor Weight Initial Balance Readings	Balance Grade		
68.	Rotor Weight and Balance Gra Rotor Weight Initial Balance Readings	Balance Grade		
68. 69.	Rotor Weight and Balance Gra Rotor Weight Initial Balance Readings Drive End	Balance Grade		
68. 69.	Rotor Weight and Balance Gra Rotor Weight Initial Balance Readings Drive End Final Balance Readings	Balance Grade Opposite Drive End		

Mecha	nical Fits- Rotor - Post Repai	ir		O
72.	Shaft Runout Post Repair		0.001 inches	
73.	Rotor Runout Post Repair			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
	0.002	0.002	0.003	
74.	Coupling Fit Closest to Bearing H	lousing Post Repair		
	0 Degrees	90 Degrees	120 Degrees	
75.	Coupling Fit Closest to the end o	f the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
76.	Drive End Bearing Shaft Fit Post	Repair		P49
	0 Degrees	60 Degrees	120 Degrees	
	3.1502	3.1502	3.1503	
77.	Opposite Drive End Bearing Shar	ft Fit Post Repair		
11.				
	0 Degrees	60 Degrees	120 Degrees	
70	Shaft Air Seal Fits Post Repair			
70.	Drive End Air Seal	Opposite Drive Fred Air Cool		
	Drive End Air Seal	Opposite Drive End Air Seal		
70	Chaft Danair Sign off		Conv	
79.	Shaft Repair Sign-off		Gary	
Mecha	nical Fits- Bearing Housings	- Post Repair		O

80.	Drive End - Endbell Bearing Fit Po	ost Repair		P5
	0 Degrees	60 Degrees	120 Degrees	
	6.6935	6.6935	6.6934	
				540
81.	Opposite Drive End - Endbell Bea 0 Degrees	ring Fit Post Repair 60 Degrees	120 Degrees	P19
	6.693	6.6931	6.6931	
82.	Bearing Cap Condition Post Repared	ir		
02.	Drive End Bearing Cap	" Opposite Drive End Bearing Cap		
83.	End Bell Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
84.	End Bell Repair Sign-off		G	bary
/	\sim			
Assem	bly			o

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86. Photograph All Major Components prior to assembly

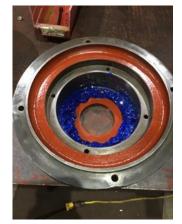












12.42 Gigohms

P31

P17

87. Final Insulation Resistance Test

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.

Printed on 11/11/2024

Y				
 88.	Assembled Shaft Endplay			nches
89.	Assembled Shaft Runout		0.002 ir	
90.	Test Run Voltage Volts	Volts	Volts	P56
91.	Test Run Amperage	4 m n n	4.777	P65
	Amps 7.3	Amps 7.2	Amps 7.6	
A UN				
92.	Drive End Vibration Readings		A	
	Horizontal	Vertical	Axial	

93.	Opposite Drive End Vibration Rea	adings - Inches Per Second		
	Horizontal	Vertical	Axial	
94.	Ambient Temperature - Fahrenhe	it		
95.	Drive End Bearing Temps - Fahre	enheit		
	5 Minutes	10 Minutes	15 Minutes	
96.	Opposite Drive End Bearing Tem	ps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes	
97.	Document Final Condition with Pi	ctures after paint		
	See below			
98.	Final Pics and QC Review		Terrence Holland	P132
/	L4	U P		
-	Co witness: RW			









