

# Infrared Thermography Report

# Gold Strike August 2021 Infrared Inspection



All electrical panels were scanned using a **CFLIR** P60 infrared camera. The following report only contains defects that were found during the survey. Below is our classification system for each defect included in this report. If there are any questions or comments, please feel free to contact us at any time.



employs a three-tier defect rating system:

**CLASS** I: A defect or defects are present that are likely to cause a problem in the long term (2-6 months). Should be addressed in the normal course of maintenance scheduling.

CLASS II: A defect or defects are present that are likely to cause a failure in the short term (less than 2 months). Should be addressed as soon as practical, on a high maintenance priority. Consideration should be given to increase monitoring frequency.

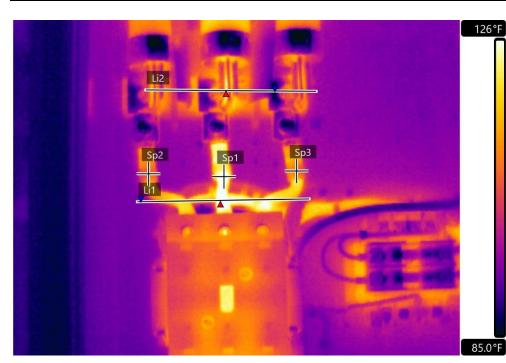
CLASS III: A defect or defects are present that make continued component reliability unpredictable and likelihood of secondary damage is high. Consideration should be given to an unscheduled shutdown to correct.



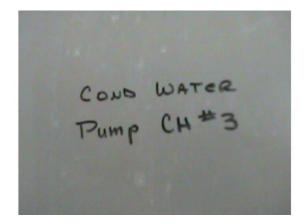
tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.



Component	B phase conductor below fuse
Equipment/Bucket ID	Chiller room motor control 13/ cond water pump ch 3



Sp1	131.8 °F
Sp2	108.3 °F
Sp3	109.2 °F
Li1 Minimum	93.9 °F
Li1 Maximum	129.3 °F
Li2 Minimum	86.5 °F
Li2 Maximum	123.9 °F
Areas	-



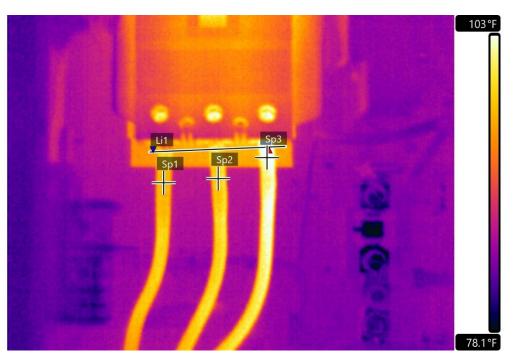
1.0	m	M	m	1
NY -	M		1 M	1 ~ 1 9
Label	Minimum	Maximum	Average	
📕 Li1	93.86	129.27	115.37	
Li2	86.54	123.95	103.63	

Fault	Temperature delta between phases
Defect Rating	II

The center phase conductor below the fuses appears to have a localized hot spot on the starter line side lug. There could be a loose connection or an unbalanced loading condition. Inspect all connections, clean and repair, or replace any defective components. Torque all lugs to specification.



Component	C phase conductor on load side of starter
Equipment/Bucket ID	



Sp1	95.2 °F
Sp2	98.2 °F
Sp3	103.4 °F
Li1 Minimum	94.3 °F
Li1 Maximum	106.9 °F
Areas	-



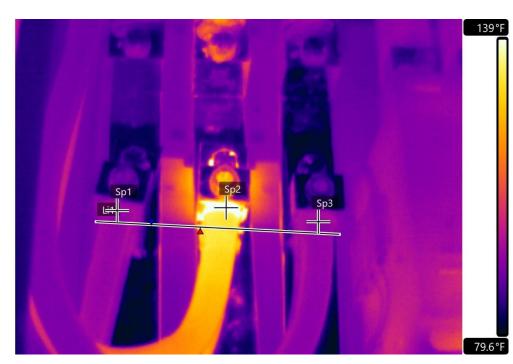


Fault	Temperature delta between phases
Defect Rating	I

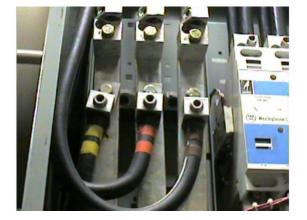
The C phase conductor below the starter appears to have a localized hot spot on the starter load side lug. There could be a loose connection or an unbalanced loading condition. Inspect all connections, clean and repair, or replace any defective components. Torque all lugs to specification.



Component	B phase conductor at component lug
Equipment/Bucket ID	Chiller Room/ Chiller #2



Sp1	97.2 °F
Sp2	145.0 °F
Sp3	96.7 °F
Li1 Minimum	81.8 °F
Li1 Maximum	138.5 °F
Areas	-



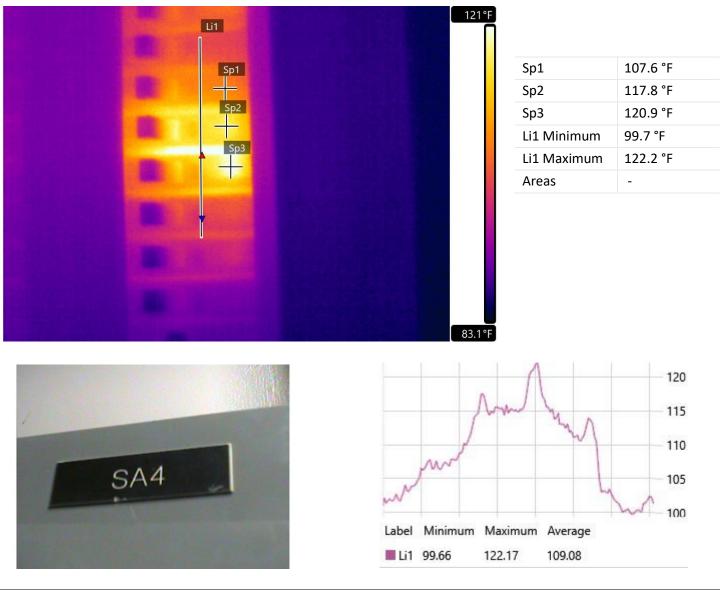


Fault	Large temperature delta between phases
Defect Rating	III

The center phase conductor appears to have a localized hot spot on the component load side lug. There could be a loose connection or an unbalanced loading condition. Inspect all connections, clean and repair, or replace any defective components. Torque all lugs to specification



Component	Circuit Breakers 26 and 28
Equipment/Bucket ID	Casino Panel SA4



Fault	Elevated temperature delta between breakers
Defect Rating	II

One or possibly both circuit breakers could be defective, have loose connections or have an over current condition. Inspect all connections, clean and repair, or replace any defective components. Torque all lugs to specification suffer from multiple issues. Ensure the current does not exceed NEMA guidelines.



128.1 °F

94.3 °F

122.3 °F

120

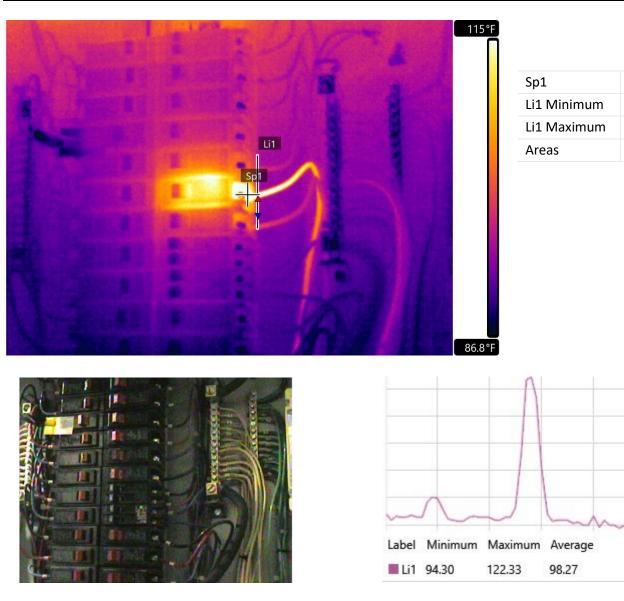
115 110

105

100 95

-

Component	Circuit Breaker 12
Equipment/Bucket ID	2nd Floor Electrical Room Panel UP2E



Fault	Temperature delta at breaker and conductor
Defect Rating	II

#### Recommendations

The #12 circuit breaker could be defective, have loose connections or have an over current condition. Inspect all connections, clean and repair, or replace any defective components. Torque all lugs to specification. Ensure the current does not exceed NEMA guidelines.



Component	Fusible Switch	
Equipment/Bucket ID	Hotel Main Electrical Room MCC3 Bucket T3C	
	52 Sp2 84.2 °F   Sp3 81.5 °F   Li1 Minimum 80.7 °F   Li1 Maximum 91.3 °F   Areas -	
	Port and a second and a second	
1	Li1 80.73 91.30 84.80	
Fault	Li1 80.73 91.30 84.80 Temperature delta at B phase fuse clip	

heating at the right side fuse clip of B phase or switch contact. Inspect all connections,
ny defective components. Torque all lugs to specification



Component Fusible Switch		
Equipment/Bucket ID	Hotel Main Electrical Room Gear LSB2 panel T3L	
Li1 Sp1 Sp2 Sp3	Sp1 121.6 °F   Sp2 86.8 °F   Sp3 83.7 °F   Li1 Minimum 82.5 °F   Li1 Maximum 122.2 °F   Areas -	
	80.2°F	
	80.2 °F	
	Label Minimum Maximum Average	

The A phase fuse clip on the left side appears to have a localized temperature delta. We suspect poor contact at the clip or switch. Inspect and clean the fuse clip contact, switch contacts; or replace the unit as needed. Torque all connectors.



Component	Fusible Switch
Equipment/Bucket ID	Hotel Main Electrical Room Gear HSB1 Bucket HB-1



Sp1	101.4 °F
Sp2	105.9 °F
Sp3	107.1 °F
Li1 Minimum	90.3 °F
Li1 Maximum	105.7 °F
Areas	-





Fault	Slight temperature delta at fuse clips
Defect Rating	

There is a slight temperature delta between phases at the right side fuse clips. Inspect and clean the fuse clips and switch contacts.



Component	Fuse clips	
Equipment/Bucket ID	Hotel Roof Distribution Board EHDBR Bucket AHU 1	
	147°F Sp1 148.1°F	
	<u>Sn2</u> 129 1 °E	
Sp1	Li1 Sp3 132.3 °F	
	Li1 Minimum 112.3 °F	
Sp2	Li1 Maximum 149.2 °F	
	Areas -	
	91.8°F	
	145 140 135 130 125 120 115	
	Label Minimum Maximum Average Li1 112.28 149.18 132.65	

**Defect Rating** 

Loaded circuit shows possible high resistive fuse connections for the A phase. Inspect and clean the fuse clips and fuses.

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### Summary

Image Date&Time	Page number
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8/4/2021 7:31:03 AM	6
8/4/2021 10:26:17 AM	7
8/5/2021 5:35:28 AM	8
8/5/2021 5:39:19 AM	9
8/5/2021 2:10:03 PM	10
8/5/2021 7:18:51 AM	11

This concludes our survey report. Please feel free to contact us at any time for question or comments.

Thank you for your business,

David W. Shook



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