




2023 Annual Electrical Infrared Survey Report



All electrical panels were scanned using a  **FLIR** T865 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.



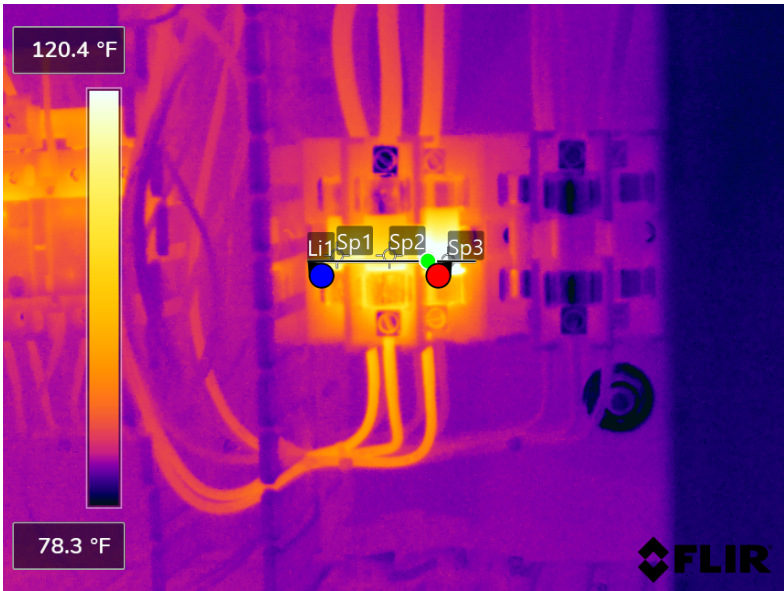
tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed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

Component

Fuse

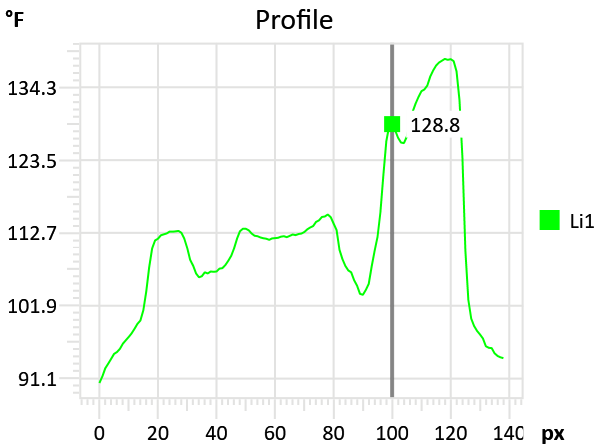
Equipment/Bucket ID

1225



Measurements

Sp2	109.3 °F
Sp3	136.5 °F
Li1	
Max	138.5 °F
Avg	112.0 °F
Min	90.5 °F
Sp1	110.6 °F



Fault

Weak fuse/Fuse connection

Defect Rating

CLASS I

Recommendations

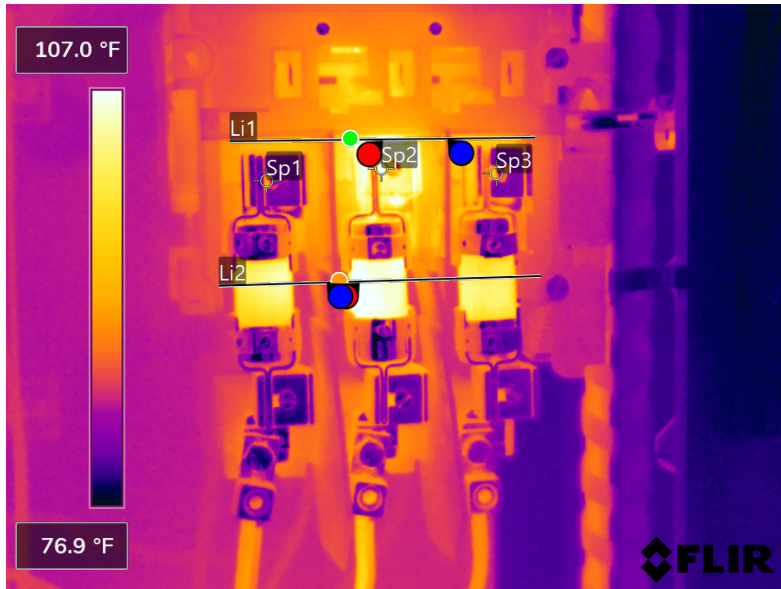
IR image shows left fuse section to have a delta T of around 26 degrees F at the right fuse. This may be the fuse itself, so we recommend replacing fuse ensuring fuse holder connections are clean and tight.

Component

Fuse holder connections

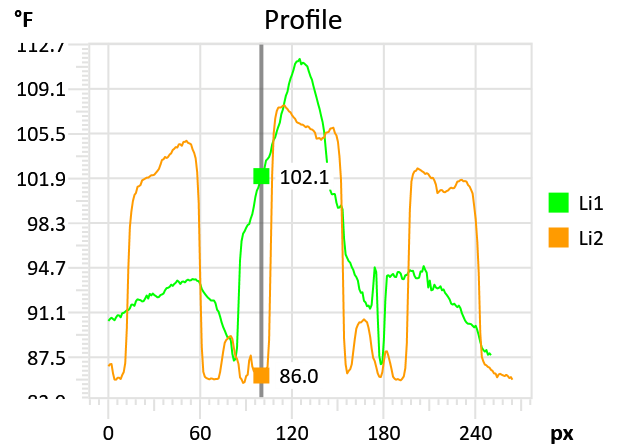
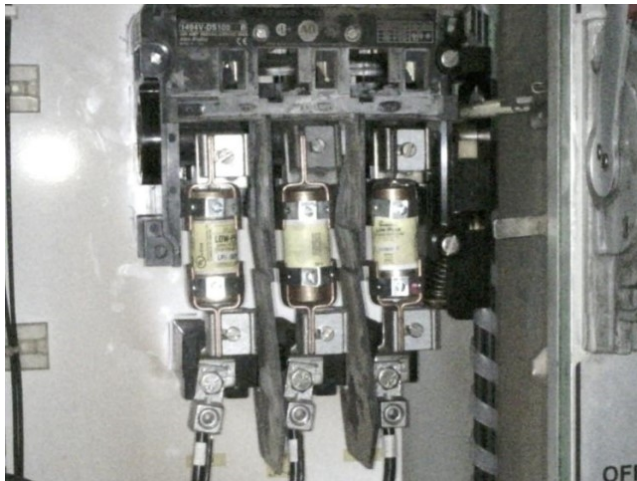
Equipment/Bucket ID

2232



Measurements

Sp2	109.3 °F
Sp3	91.3 °F
Li1	
Max	111.5 °F
Avg	95.6 °F
Min	87.0 °F
Li2	
Max	107.8 °F
Avg	95.7 °F
Min	85.5 °F
Sp1	91.9 °F



Fault

Faulty fuse holder connections

Defect Rating

CLASS I

Recommendations

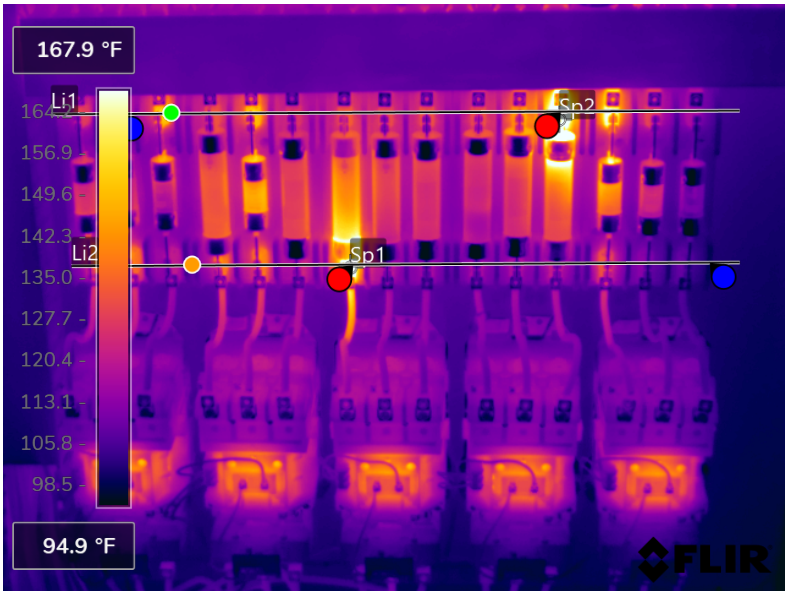
B phase fuse holder connections appear to have some slight issue. Check all fuse components for looseness and wear. Ensure all connections are clean and tight.

Component

Fuse connections

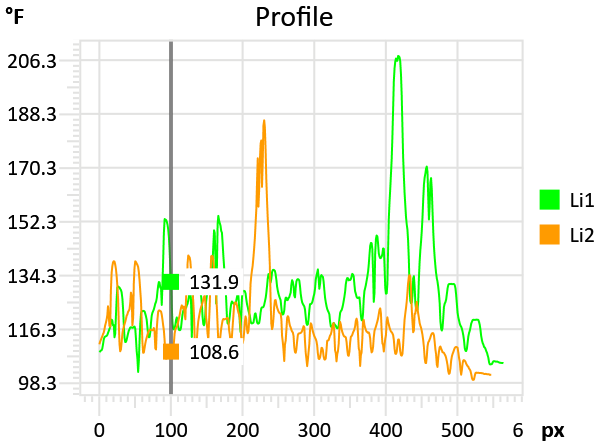
Equipment/Bucket ID

2200 Paint Oven (right side cabinet)



Measurements

Sp2	170.3 °F
Li1	
Max	207.8 °F
Avg	129.0 °F
Min	102.0 °F
Li2	
Max	186.2 °F
Avg	117.9 °F
Min	99.3 °F
Sp1	175.3 °F



Fault

Faulty fuse connections

Defect Rating

CLASS II

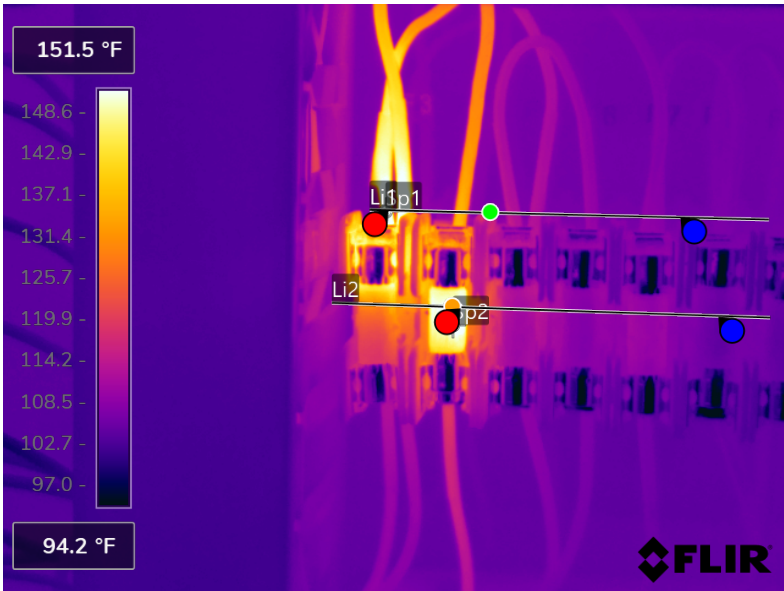
Recommendations

There appears to be two fuse connection issues here. Inpsct fuse clip/holders for wear and ensure connections are clean and tight.

Component

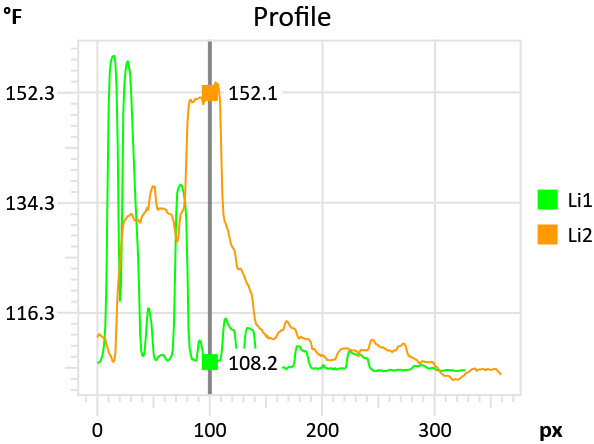
Equipment/Bucket ID

2200 Paint Oven (left Cabinet)



Measurements

Sp2	151.4 °F
Li1	
Max	158.3 °F
Avg	112.9 °F
Min	106.8 °F
Li2	
Max	154.0 °F
Avg	118.5 °F
Min	105.4 °F
Sp1	158.1 °F



Fault

Weak Fuse/faulty fuse connections

Defect Rating

CLASS II

Recommendations

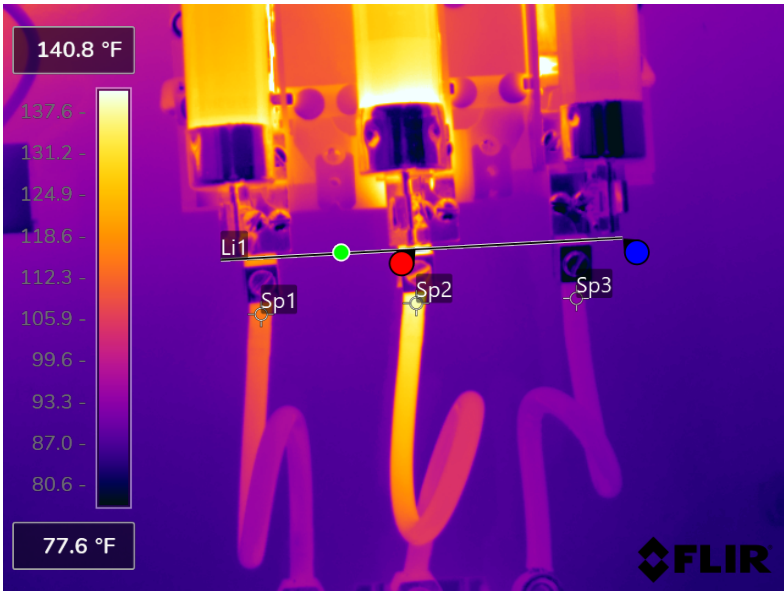
IR image shows some issue with the line side connections on the far left side fuse. There also appears to be an issue with the second fuse from the left. Replace this fuse and inspect the line side connections on the far left fuse , ensuring connections are clean and tight.

Component

Fuse connections

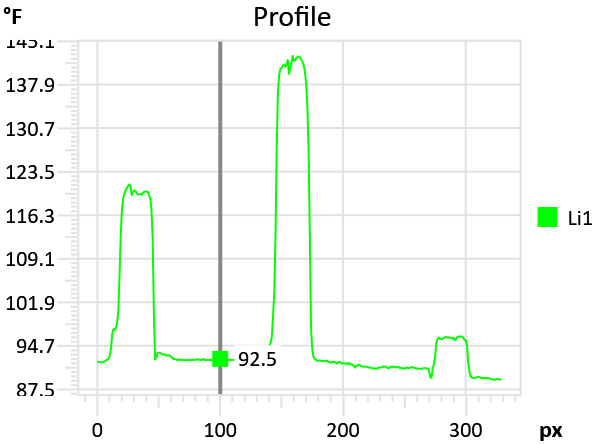
Equipment/Bucket ID

2611



Measurements

Sp2	138.2 °F
Sp3	94.6 °F
Li1	
Max	142.7 °F
Avg	98.7 °F
Min	89.1 °F
Sp1	116.6 °F



Fault

Fuse lead connection issue

Defect Rating

CLASS I

Recommendations

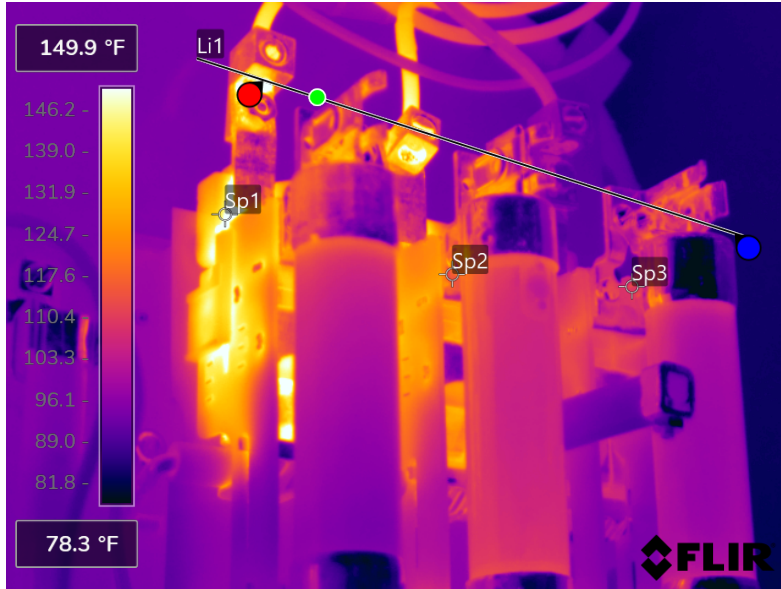
IR image shows some issue with the load side connections on the middle fuse. Inspect the load side connections , ensuring connections are clean and tight.

Component

Fuse Holder

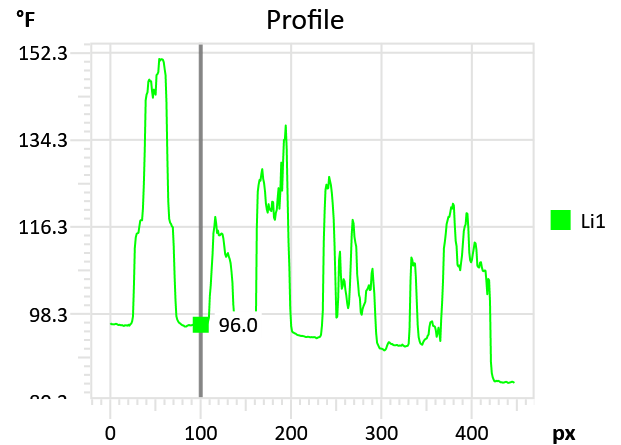
Equipment/Bucket ID

2612



Measurements

Sp2	119.0 °F
Sp3	114.4 °F
Li1	
Max	151.1 °F
Avg	105.4 °F
Min	84.1 °F
Sp1	151.2 °F



Fault

Faulty Fuse Holder/Switch

Defect Rating

CLASS II

Recommendations

Image shows some Delta-T behind A phase fuse. This may be due to loose or worn fuse switch components. It is recommended to perform a thorough inspection of the fuse switch/holder mechanism.

Component

Leads/lead connections

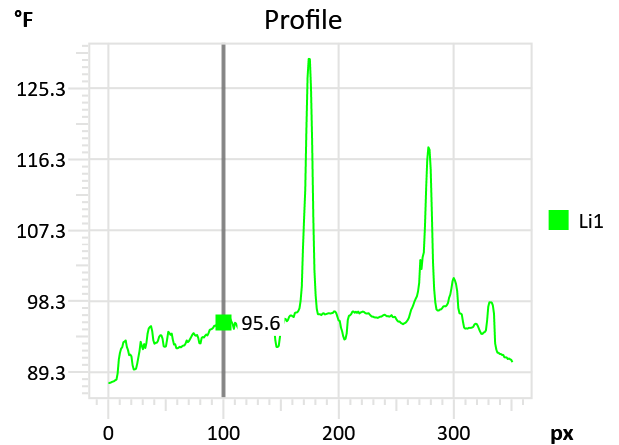
Equipment/Bucket ID

4810 Cure Oven Panel



Measurements

Li1	
Max	129.0 °F
Avg	96.2 °F
Min	88.0 °F
Sp2	134.6 °F
Sp3	123.6 °F
Sp4	147.7 °F
Sp5	137.0 °F
Sp6	104.7 °F
Sp1	141.1 °F



Fault

Load issue and or connection issue

Defect Rating

CLASS I

Recommendations

Check lead connections on the leads with the Delta-T as seen in the IR image above. Also check current on each phase ensuring load is balanced.



Summary

File name	Created	Maximum temp.	Page number
FLIR0441.jpg	3/15/2023 2:02:33 AM	140.8 °F	3
FLIR0443.jpg	3/15/2023 2:17:22 AM	111.6 °F	4
FLIR0445.jpg	3/15/2023 2:34:01 AM	209.1 °F	5
FLIR0447.jpg	3/15/2023 2:35:04 AM	160.1 °F	6
FLIR0449.jpg	3/15/2023 2:50:16 AM	158.4 °F	7
FLIR0451.jpg	3/15/2023 2:52:24 AM	159.8 °F	8
FLIR0455.jpg	3/15/2023 3:51:16 AM	152.2 °F	9



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

Thank you for your business,

Kerion W. Maxwell



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Thermographer

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