









FLIR T865 infrared camera. The following report only All electrical panels contained in provided spread sheet were scanned using a 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 unpredicable and likelihood of secondary damage is high. Consideration should be given to an unscheduled shutdown to correct.

HI-SPEED

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.



Knife switch

Equipment/Bucket ID

QSI-200 Disconnect



Measurements		
Li1		
Max	182.0 °F	
Avg	116.8 °F	
Min	84.8 °F	
Sp1	175.8 °F	



Fault Worn/faulty knife components

> Defect Rating CLASS II

Profile °F ___. 170.3 152.3 134.3 Li1 116.3 103.8 98.3 ou o 100 200 300 0 4 **рх**

Recommendations

IR image shows heat on B phase. This is likely due to worn knife components. Inspect, repair, and replace components as needed.



20 amp breaker/lead connection

Equipment/Bucket ID

Electric Room near control room Panel 10 Breaker #9 20 amp



Measurements		
Li1		
Max	88.8 °F	
Avg	82.3 °F	
Min	79.9 °F	
Sp1	88.2 °F	



 Fault

 Possible heavy load
 Image: CLASS Ima

°F Profile 87.5 85.7 83.9 82.1 0 100 200 300 px

Recommendations

Breaker may be near rated load. It is recommended to measure current on circuit. It is also recommended to disconnect, clean, and reconnect lead wire.



Thermal Overloads

Equipment/Bucket ID

#6 New Furnace Fan



Measurements		
Sp2	306.0 °F	
Sp3	267.5 °F	
Li1		
Max	365.1 °F	
Avg	207.5 °F	
Min	117.3 °F	
Sp1	353.6 °F	



Fault
Weak/Faulty Thermal Overloads
Defect Rating

CLASS III



Recommendations

Thermal overloads have excessive heat. Max temp. is near 380 F. This is indication of weak/defectivecomponents. It is highly recommended to replace the thermal overloads asap.



Lead wire

Equipment/Bucket ID

Combustion Air Control Panel 1L2 lead wire



Measurements		
Sp2	160.4 °F	
Sp3	131.5 °F	
Li1		
Max	155.1 °F	
Avg	103.8 °F	
Min	94.3 °F	
Sp1	148.7 °F	



Fault Weak/overloaded circuit Defect Rating

CLASS II



Recommendations

Visual image shows discoloration of the lead wire. This is indication of high heat on circuit. IR image shows highest temp. to be at connection. This may be a connection issue, but could also be heavy load. We recommend replacing wire due to signs of discoloration and likely insulation breakdown. Measure load on circuit and ensure a clean, tight connection.



Lead wire

Equipment/Bucket ID

Electrical room in control room Roof exhaust fan panel



Measurements		
Li1		
Max	242.0 °F	
Avg	121.0 °F	
Min	89.1 °F	
Sp1	245.7 °F	



Fault
Damaged/faulty wire
Defect Rating
CLASS III



Recommendations

The wire going to the indicator light has a bare spot and is showing over 250 degrees F. It is highly recommended to replace wire asap. Ensure a clean, tight connection.



Summary

File name	Created	Maximum temp.	Page number
FLIR0485.jpg	5/22/2023 2:11:28 AM	183.1 °F	3
FLIR0487.jpg	5/22/2023 2:30:00 AM	89.0 °F	4
FLIR0489.jpg	5/22/2023 2:35:15 AM	379.5 °F	5
FLIR0491.jpg	5/22/2023 2:39:36 AM	165.2 °F	6
FLIR0493.jpg	5/22/2023 2:49:42 AM	252.5 °F	7



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

Thank you for your business,

Keren W. Marcuell



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