

Thermal Imaging Services

Production Loss = Money Loss

- catch potential problems before
-they shut down production.*



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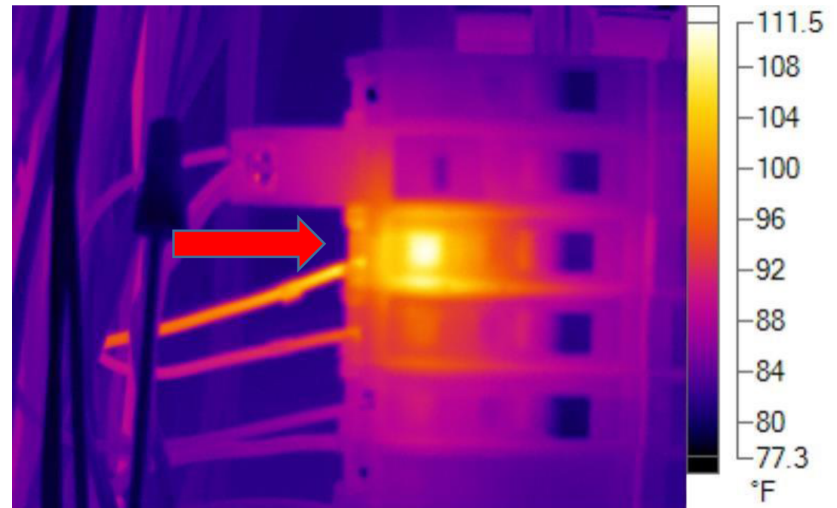


How Thermography Works

By using a thermal imaging device, we take apparent temperature readings of the electrical components to determine areas in your facility that have potential problems.

Potential problems that can stop your production

- Potential problems with relays, contacts, fuse blocks
- Overloads and overheating
- Loose/deteriorated connections
- Open circuits
- Unbalanced loads
- Inductive heating
- Defective equipment



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Thermography Report

Lines in red indicate problem

The list on the right is part of the report that shows ALL tested areas. The line items NOT showing red are normal with no problems found.

NEXT SLIDES will show the severity of problem uncovered.



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INSPECTION EQUIPMENT LIST

LOCATION	EQUIPMENT	DETAILS
	552 Distribution panel	
	552 Control panel	Siemens manual motor starter Q21-B is hot. (pg.2)
	551 Distribution panel, main	
	551 secondary	
	Breaker panel PP4A	
	Breaker panel PP4	Circuit 13, 15, 17, terminal screw is hot. (pg. 3)
	Breaker panel PP3	
	Breaker panel PP6	
	Breaker panel PP5	
	Main Distribution Gear	
	Breaker panel PP1	
	Fused disconnect press 121 blower	
	Fused disconnect press 120 blower	
	Fused disconnect CPS blower	
	Fused disconnect Rotary airlock motor	
	Breaker panel LP1	
	Breaker panel XFRM	
	Distribution panel DP6	
	Breaker panel PP400A	
	120 Kempsmith Distribution panel	Fuse block #14 is hot. (pg.4)
	120 Mark Andy control panel	
	120 Xeric dryer cabinet	
	119 IR dryer cabinet	
	119 Main drive cabinet	
	PP400A fused disconnect	
	PP400A disconnect motor starter	
	120 UVT1	
	120 UVT2	
	120 UVT3	
	120 UVT4	
	119 Die cutter	
	Baler control panel	

Thermography Report

Box in red indicates problem >

This report page shows a circuit that has a temperature rise of 65.9 degrees and that circuit is indicated with the thermal scan image at the bottom of the page.

CRITICAL = Repair IMMEDIATELY.



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Job Data

Equipment Data

Location: Breaker Panel PP4

Description: Breaker panel PP4, Circuit 13, 15, 17 terminal screw

THERMAL DATA ANALYSIS

Apparent Temperature Rise:

36.6° C / 65.9° F

Severity Rating

CRITICAL

Timeframe to be Corrected:

Repair as soon as possible

REVIEW AND RECOMMENDATIONS

Probable Cause:

The molecular structure tends to expand and contract through different load variations, this terminal screw likely became loose over time due to load variations.

Recommended Action:

The internal thermal and magnetic overload protection may have been affected by this hotspot. We recommend installation of a new breaker.

APPARENT TEMPERATURE MEASUREMENTS

Ambient:

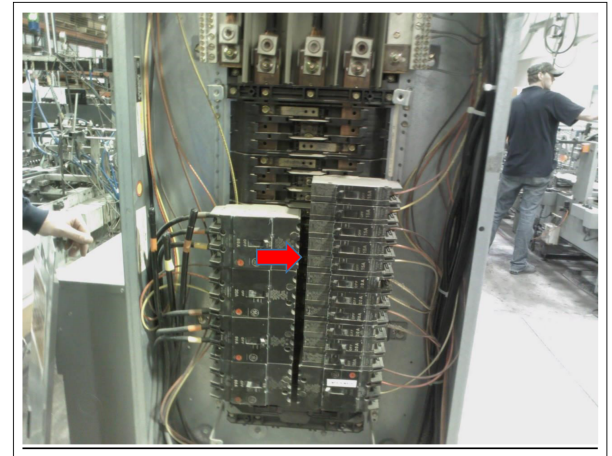
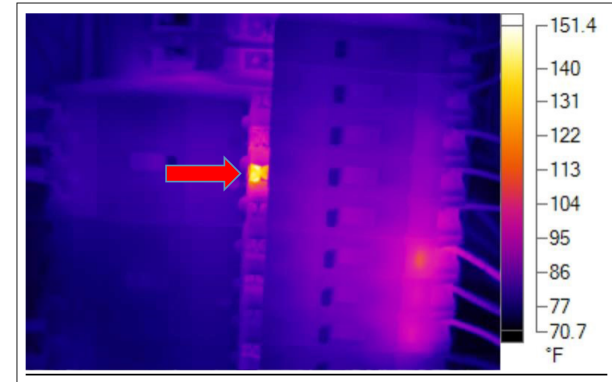
22.2° C / 72° F

Reference:

29.2° C / 84.7° F

Object:

65.8° C / 150.6° F



Thermography Report

Box in red indicates problem >

This report page shows a circuit that has a temperature rise of 26.2 degrees and that circuit is indicated with the thermal scan image at the bottom of the page.

Serious = Repair ASAP.



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Job Data
Equipment Data
Location: 120 Kempsmith Distribution Panel
Description: Fuse block #14

THERMAL DATA ANALYSIS

Apparent Temperature Rise:

14.5° C / 26.2° F

Severity Rating

SERIOUS

Timeframe to be Corrected:

Repair as soon as schedule allows

REVIEW AND RECOMMENDATIONS

Probable Cause:

The fuse block over time has become loose. The terminal screw for the wire is also loose and as a result the wire is beginning to deteriorate.

Recommended Action:

Replace fuse block and fuse. Cut back on wire and re-terminate.

APPARENT TEMPERATURE MEASUREMENTS

Ambient:

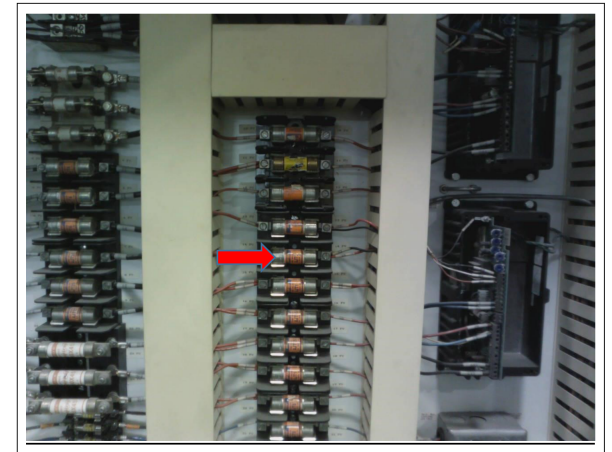
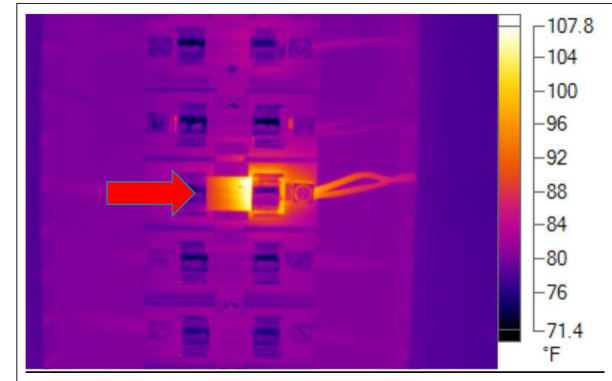
22.2° C / 72° F

Reference:

27.3° C / 81.2° F

Object:

41.8° C / 107.4° F



Sprint Thermography Process

INCLUDES: Thermographer and Electrician



1) Certified Thermographer: has extensive experience in detecting accurate hot-spots at all wiring termination points, as well as control components, etc.



2) Sprint Electrician: will accompany the Thermographer in visual inspections of cabinets, and/or switch gear, in your facility. Using tools, such as amp probes, to check all loads required for proper wire sizes.



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