INFRARED THERMOGRAPHY REPORT

Infrared Thermography Report

Contact:
Rick White
Facility Manager

Site:
General Products Co.
500 West Harris Blvd.
Charlotte, NC 28216

Start Date:
12/08/2025

Facility Results™
Electrical System Reliability & Safety Solutions

Info@FacilityResults.com 888-762-0090 Plymouth, Michigan 48170

Facility Results™
Electrical System Reliability & Safety Solutions

December 8, 2025

Rick White
General Products Co.
500 West Harris Blvd.
Charlotte, NC 28216

Facility Results has completed the scheduled infrared thermography survey as part of your ongoing preventative maintenance program. Weather and operating conditions during the inspection were typical for the season, supporting accurate thermal comparisons under normal electrical loading.

Scope of Work
Our IR technician conducted the inspection unaccompanied and was granted access to open electrical enclosures throughout the facility. All areas, equipment, panels, and components evaluated are documented within this proprietary detailed report, which includes observations, recommendations, and any identified code-related concerns.

This report serves as the master record for future infrared inspections and applies the NFPA 70B four-tier condition assessment system to every piece of equipment inspected, defined as:

Normal Condition **< 4.1°C** - Heat condition appeared normal during inspection of equipment.
Alert Condition **4.1°C to 8.0°C** - Monitor component and make repair during scheduled maintenance period.
Serious Condition **8.1°C to 15.0°C** - Schedule repair before next maintenance interval.
Critical Condition **>15.1°C** - Repair immediately; component nearing failure.

These NFPA 70B condition levels are represented with a standardized four-color classification system for clear, immediate prioritization.

Any components exhibiting abnormal temperatures, anomalies, elevated risk, or potential code issues are documented on dedicated pages. Each finding includes:

Equipment Location
Equipment Type
Reference Temperature
Target Temperature
Temperature Differential
Thermal Condition Level
Digital image
Thermographic Image (if elevated)
Electrical Anomalies & Recommendations
Code Violation

A follow-up infrared scan is recommended after corrective actions to verify the equipment has returned to a Normal Condition.

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Guarantees and Limitations
Facility Results performs inspection services only—we are not a repair contractor. All findings are unbiased and unaffected by any financial interest in corrective work.

All equipment inspected is assigned a condition level using the NFPA 70B four-tier classification system. This inspection meets or exceeds applicable IEEE, ASNT, and NETA infrared inspection standards. Only ISO-9001–rated imagers were used, and all thermal observations were reviewed using industry-standard infrared analysis practices to ensure accurate interpretation and realistic prioritization.

This report does not claim to identify every potential electrical defect or hazard. We assume no responsibility for the control, correction, or continuation of any condition or practice at your facility, whether identified or not. Repair decisions should be based on your maintenance history, operational knowledge, and risk tolerance. A return inspection is strongly recommended to confirm the effectiveness of repairs.

All company safety procedures and site-specific protocols were followed throughout the inspection.

Maintenance must be performed to ensure proper operation of the electrical system. An annual electrical safety audit should be performed to manage arc flash hazard labeling. This audit should be completed by a Qualified Person and shall include, but is not limited to, a full system walk-through with a review of each device. An accurate one-line drawing shall be created and kept up to date.

Regards,

Bryan Rupert

Bryan Rupert - SME
Electrical System Reliability & Safety
Consultant Facility Results

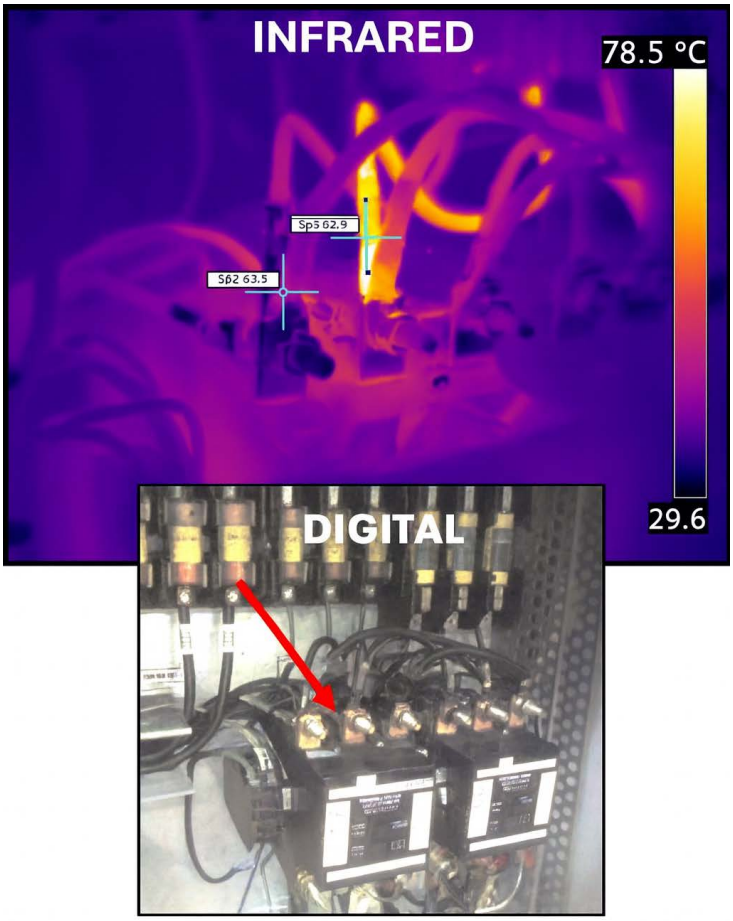
Facility Results™

Electrical System Reliability & Safety Solutions

How to Read an Infrared (IR) Image

Interpreting an infrared image starts with understanding what you're actually looking at: a temperature map, not a photograph. The bright or "hot" areas indicate elevated temperatures, while the darker or "cool" areas show lower temperatures relative to the surrounding components. The key is comparison — IR inspections are based on temperature differentials, not absolute temperatures. A component is evaluated against similar components under similar load conditions (phase-to-phase, breaker-to-breaker, connection-to-connection). Any abnormal pattern, such as one phase running hotter than the others or a single termination showing a concentrated hot spot, typically indicates resistance, imbalance, deterioration, or a developing failure.

Reading the image also requires recognizing thermal patterns and shapes. A wide, diffused warm area may suggest load-related heating, while a small, concentrated hot point often signals a loose or deteriorated connection. Symmetry matters: identical equipment should present similar temperature profiles. When one component breaks the pattern, that's the red flag. The visual palette (the "color scale") simply translates temperature into gradients — it doesn't define severity on its own. Severity is determined by context: temperature rise above baseline, equipment type, loading, ambient conditions, and most importantly, how it aligns with NFPA 70B condition levels.



FacilityResults.com
Plymouth, Michigan 48170

I-77 Partners 8015 West WT Harris Blvd. Charlotte, NC 28216

Address
500 West Harris Blvd. Charlotte, NC 28216

Facility Results Contact

Plymouth, Michigan / FacilityResults.com

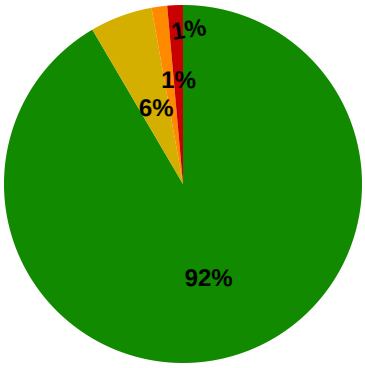
Technician
Bill Thomas, IR Level III

Technician Phone
(734) 555-1212

Project Start Date
December 8, 2025

Sum of Thermal Differentials

Normal <4.1 ºC — 65 (92%)
Alert 4.1-8 ºC — 4 (6%)
Severe 8-15 ºC — 1 (1%)
Critical >15.1 ºC — 1 (1%)



Thermal Anomalies - 5

Records: ***26, 44, 48, 56, 60, 69***

Note(s) - 2 Panels could not be opened while energized.

Infrared Camera Specifications

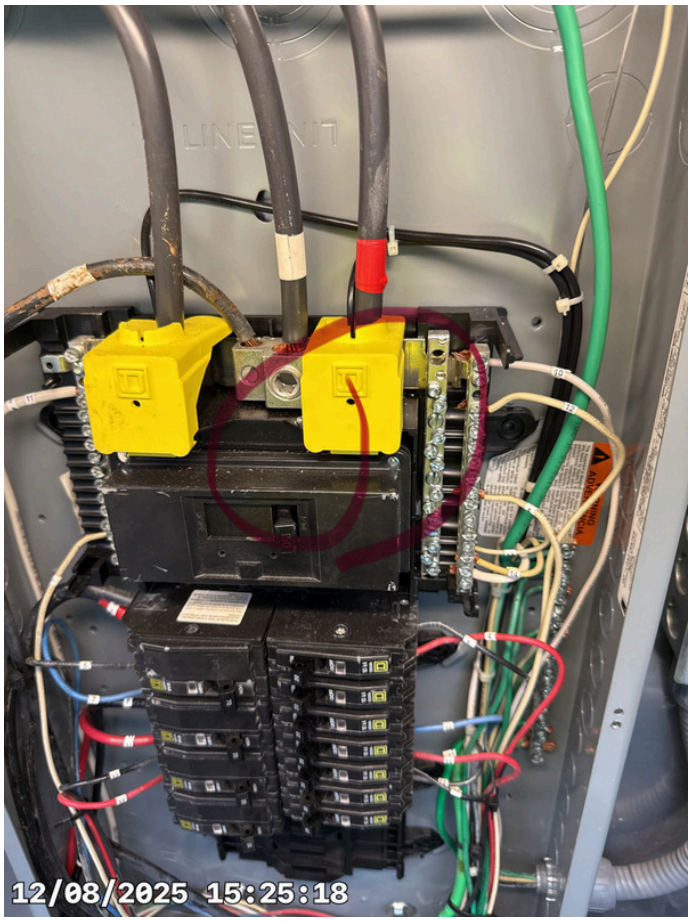
FLIR System, Inc. FLIR T420 Thermal Imaging Camera, MSX Enhancement, 320 x 240 Resolution, -20°C -650°C Range, 60 Hz

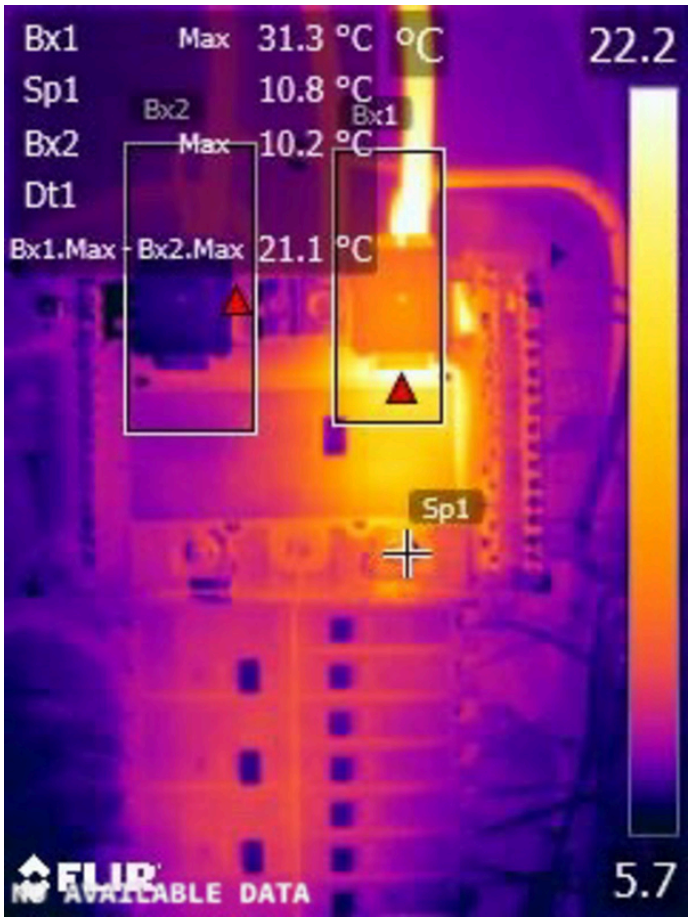
Thermographer Credentials
Certified Level III - The Snell Group, Montpelier, VT - June 2000

Infrared Inspection Records (71 items)

Infrared Inspection Records - 48. Main Power Distribution Room

Equipment Location	Main Power Distribution Room
Equipment Type	Distribution Panel
Primary Equipment Voltage	240 V
Reference Temperature (°C)	10.2 °C
Target Temperature (°C)	31.3 °C
Temperature Differential (°C)	**21.1 °C**
Thermal Condition Level	**Critical >15.1 ºC**
Electrical Anomalies & Recommendations	5. Wire Terminations and Crimps - Recommendation: Inspect and re-terminate as necessary, following NEC standards. Use dielectric grease to maintain secure connections.
Notes (as needed)	

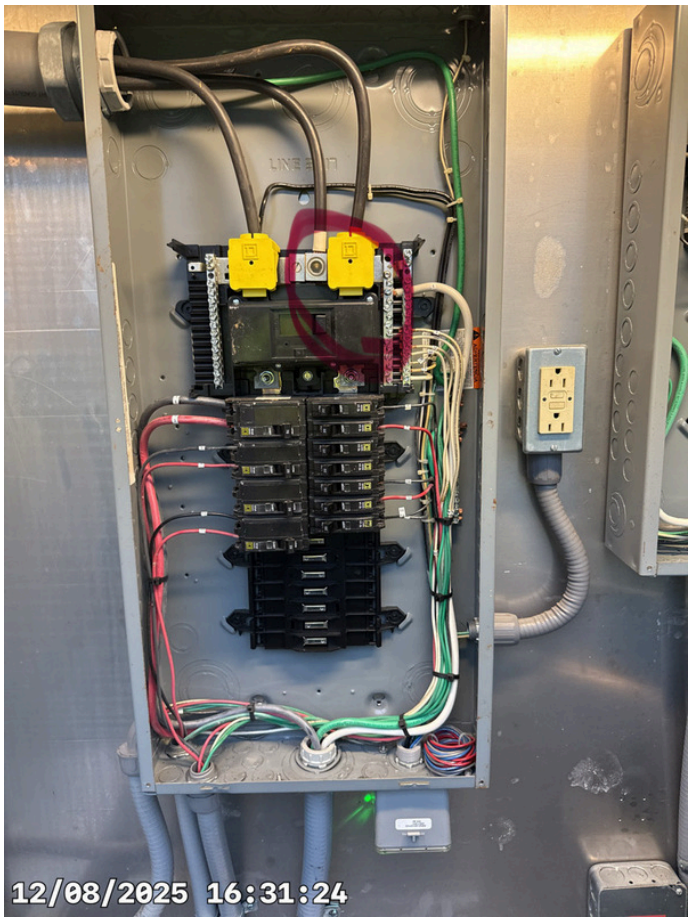


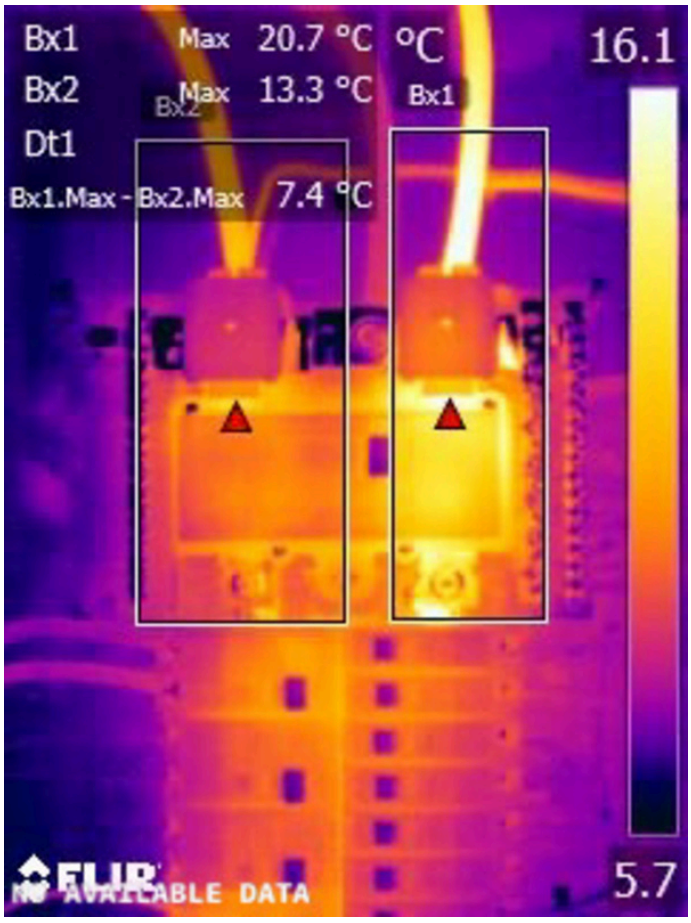


Primary Contact & Phone Number	Rick White (734) 555- 1213
Secondary Contact & Phone Number	Bill Hammer (734) 555-1214

Infrared Inspection Records - 69. Main Power Distribution Room

Equipment Location	Main Power Distribution Room
Equipment Type	Distribution Panel
Primary Equipment Voltage	240 V
Reference Temperature (°C)	13.3 °C
Target Temperature (°C)	20.7 °C
Temperature Differential (°C)	**7.4 °C**
Thermal Condition Level	**Alert 4.1-8 ºC**
Electrical Anomalies & Recommendations	5. Wire Terminations and Crimps - Recommendation: Inspect and re-terminate as necessary, following NEC standards. Use dielectric grease to maintain secure connections.
Notes (as needed)	





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