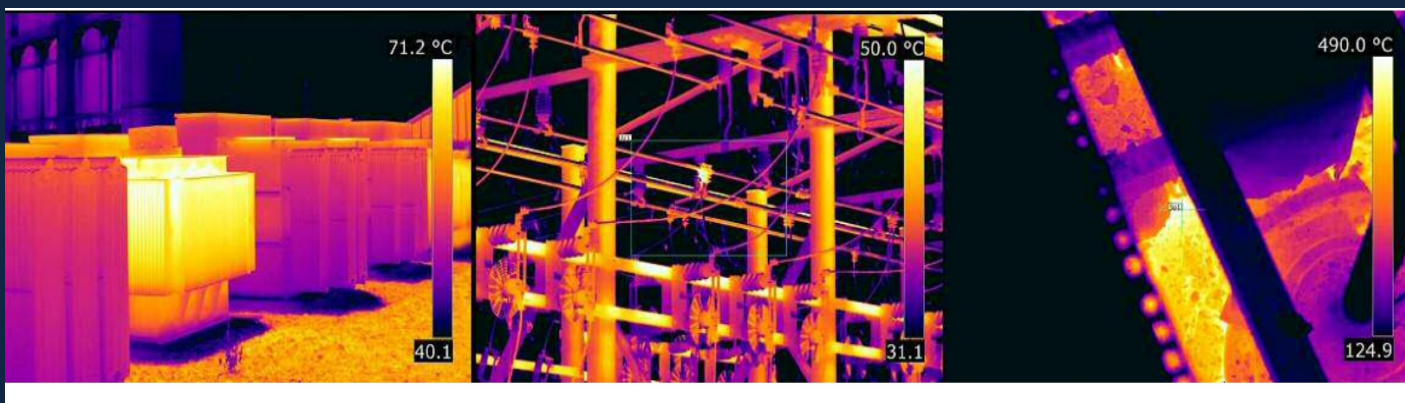




THERMAL INSPECTION REPORT

PROPERTY MANAGEMENT

Professional thermographic assessment - anonymised client example

INSPECTION DATE

21 January 2025

PREPARED BY

Rupert Adamstein

REVIEWED BY

Rupert Adamstein

REPORT TYPE

Anonymised Sample

SCOPE OF SAMPLE

Electrical thermography and condition assessment

Demonstrates finding documentation, Delta-T review, severity classification and recommendations.

THERMOGRAPHY

FLOW & PRESSURE

OIL / FLUID ANALYSIS

Client & Inspection Overview

Thermographer Details

Thermographer	Rupert Adamstein
E-Mail	info@infraredrisk.co.za
Camera / Scanner	Refer to source image metadata
Radiometric Sample	FLIR E8 identified from embedded FLIR metadata
Calibration	Refer to applicable camera calibration record

Client Details

CLIENT ANONYMISED	E-MAIL / TELEPHONE ANONYMISED
CLIENT SITE ANONYMISED	STREET ADDRESS ANONYMISED
INSPECTION DATE 21 January 2025	TOWN / PROVINCE ANONYMISED
RESPONSIBLE PERSON ANONYMISED	OBSERVER ANONYMISED
NATURE OF BUSINESS Retail	OBSERVER OCCUPATION Property Manager

Inspection Summary

Three distribution-board observations are documented in this sample report: one OK-NORMAL observation and two D-LOW / MONITOR findings. The low-level temperature differentials are intended for trending and do not indicate an immediate repair requirement under the severity criteria used in this report.

Severity summary:A 0 | B 0 | C 0 | D 2 | Investigate 0 | OK 1

Inspection Protocol

1. INSPECTION: Scope of Work

The scope of this inspection is limited to the Equipment Inspected Inventory shown in Table 2 of this report. The inventory is as agreed with the Client/Client Responsible Person prior to or during the course of the inspection and as confirmed by the thermographer immediately upon completion of the inspection. It is the responsibility of the Client/Client Responsible Person to ensure that the full inventory of equipment required to be scanned appears in the aforementioned Inventory List.

2. Inspection of open panels

An infrared scanner essentially detects infrared radiation levels reflected/radiated from the surface of an object. Infrared scanning cannot penetrate solid materials such as metal, glass or poly - carbonate. For safety purposes, and to prevent unwanted tripping of circuit breakers or failures, it is the client's responsibility to ensure that the panels are opened according to the relevant safety regulations/best practices.

3. Equipment and Personnel

IRM will utilize a digital short wave (SW) or long wave (LW) scanner dependent upon the required application. The scanners operate across a wide temperature range between -50 Degrees Celsius and 1500 Degrees Celsius (depending on the scanner used) and with a thermal sensitivity (MRTD) of at least 2 percent of the temperature reading. The scanners are initially calibrated by the manufacturer and contain a continuous built-in calibration system. Thereafter each unit is calibrated annually in accordance with our Operating Standards. The specifications for the scanner used during this inspection appear below in this report. All IRM thermographers are qualified to at least International Certified Level 1 (ITC 1).

4. Standards and Procedures

Faults/Exceptions found are classified according to standards set out in Table 1 below. This standard of classification is recognized by all major global thermal inspection authorities. Different classification criteria do however exist and may be used upon request. However, final classification is determined at the discretion of the thermographer.

5. Recommendations

The recommendations/action for each exception found are noted in the detailed body of the report. The recommended actions for each indicated exception are noted in the body of the report. Whilst these actions are strongly recommended, factors such as the subjective interpretation of the relative importance of the particular equipment at issue, maintenance schedules and availability of spares and other operational considerations are left to the discretion of the Client/Client Responsible Person.

Severity Criteria by Temperature Difference

A - Critical	Repair Immediately	= or >40°C
B - Major	Repair as soon as possible	= 20°C < 40°C
C - Moderate	Repair on shutdown	= 10°C < 20°C
D - Low	Thermographer's Discretion	= <10°C
INV - Investigate	Visual fault found	
OK - Normal	No action required	

NUNL - Not under normal load

6. Equipment Inspected Inventory

The content of the Equipment Inspected Inventory [Table 2] on the following page shows all equipment inspected. It is the responsibility of the Client/Client Responsible Person to determine the initial inventory and to ensure that the inventory list remains comprehensive and accurate. It is also up to the Client/Client Responsible Person to ensure that the complete Equipment Inspected Inventory is in fact inspected and that any equipment not inspected for any reason whatsoever, be included for scanning during the next site visit. Note that all equipment scanned is deemed to be under normal load conditions, unless otherwise indicated.

Route List & Finding Summary

Summary aligned with the three detailed thermographic finding pages.

OK - NORMAL	Kitchen	DB	T1 right side of ELU	Circuit breaker	White phase outgoing - no significant thermal anomaly; ΔT 2.1 °C.
D - LOW	Kitchen	DB	N/A	T1 ELU	Blue & Neutral Phase incoming - minor temperature differential; ΔT 3.3 °C. Monitor trend.
D - LOW	Kitchen	DB	T3 Top third from left	MCB	Red phase - localized temperature rise; ΔT 6.6 °C. Monitor connection.

Summary

Finding 1 is classified OK - NORMAL. Finding 2 and Finding 3 are classified D - LOW / MONITOR. The two low-level findings are to be recorded and trended at the next thermographic assessment. No immediate repair requirement is indicated by the report's temperature-difference criteria; investigation should be escalated if the differential increases, loading changes materially, or visible signs of deterioration are identified.

Finding details

- 1 - OK / NORMAL

Circuit breaker, T1 right side of ELU, White phase outgoing. Tmax 36.3 °C; reference 34.2 °C; ΔT 2.1 °C. Retain as baseline.
- 2 - D / LOW

T1 ELU, Blue & Neutral Phase incoming. Tmax 43.2 °C; reference 39.9 °C; ΔT 3.3 °C. Record and monitor trend.
- 3 - D / LOW

MCB, T3 Top third from left, Red phase. Tmax 40.2 °C; reference 33.6 °C; ΔT 6.6 °C. Record and monitor connection.

Severity counts

A-Critical: 0 B-Major: 0 C-Moderate: 0 D-Low: 2 Investigate: 0 OK-Normal: 1

THERMOGRAPHIC FINDING

Finding 1 of 3 | Inspection 2025/01/21

SECTION	EQUIPMENT	COMPONENT	ASSET ID	LOCATION
Kitchen	DB	Circuit breaker	T1 right side of ELU	White phase outgoing

ASSESSMENT	OK - NORMAL	No actionable thermal anomaly
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VISIBLE IMAGE

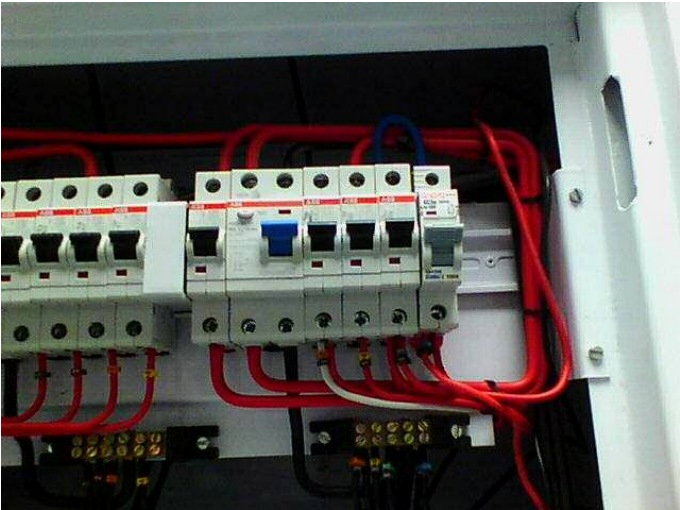


Image: 12319

THERMAL IMAGE



Image: 12318

MEASUREMENT & ASSESSMENT

TMAX	REFERENCE	ΔT	CLASSIFICATION
36.3 °C	34.2 °C	2.1 °C	OK - NORMAL

Thermographer's assessment

No significant thermal anomaly is indicated in this view. The measured temperature difference is small and is consistent with normal operating variation at the time of inspection.

Recommended action

No corrective action required from this thermal finding. Retain as a baseline image and compare during the next scheduled thermographic inspection.

Temperature assessment is based on the radiometric information visible in the supplied image. Load, emissivity, reflected temperature and environmental values are not stated here unless supplied/verified.

THERMOGRAPHIC FINDING

Finding 2 of 3 | Inspection 2025/01/21

SECTION	EQUIPMENT	COMPONENT	ASSET ID	LOCATION
Kitchen	DB	T1 ELU	N/A	Blue & Neutral Phase incoming

ASSESSMENT	D - LOW / MONITOR	Minor differential - monitor trend
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VISIBLE IMAGE

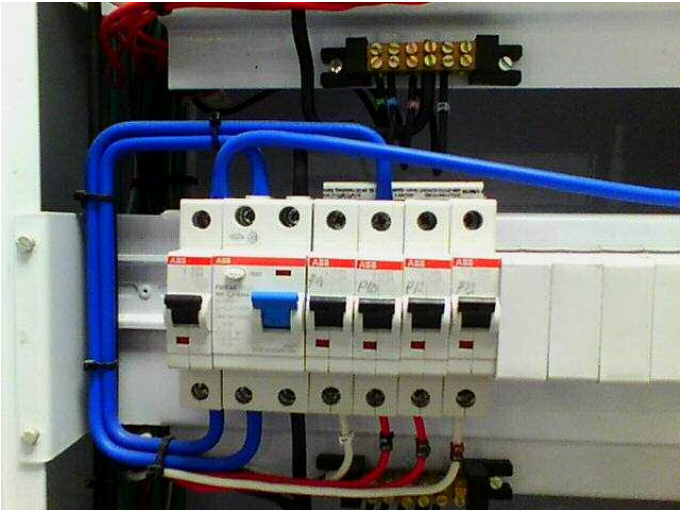


Image: 12321

THERMAL IMAGE

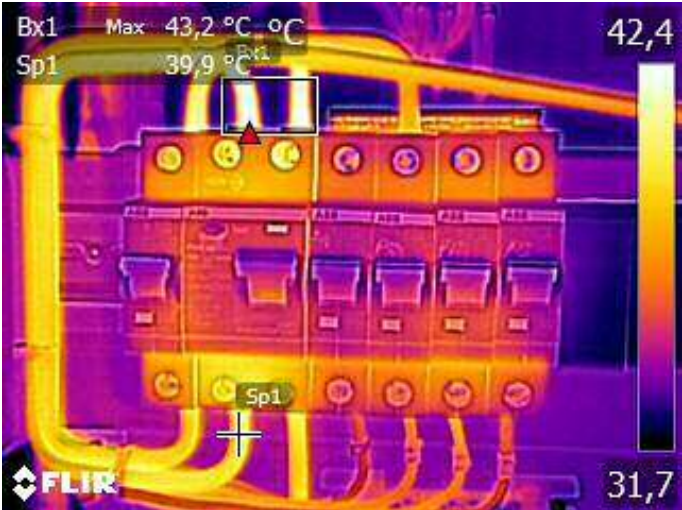


Image: 12320

MEASUREMENT & ASSESSMENT

TMAX 43.2 °C	REFERENCE 39.9 °C	ΔT 3.3 °C	CLASSIFICATION D - LOW / MONITOR
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Thermographer's assessment

A minor temperature differential is present at the upper connection area. The measured ΔT is below the report's Category D threshold and does not indicate an immediate repair requirement.

Recommended action

Record this condition as a baseline and compare it at the next assessment. Escalate for investigation if the temperature differential increases, loading changes materially, or visible signs of deterioration are found.

Temperature assessment is based on the radiometric information visible in the supplied image. Load, emissivity, reflected temperature and environmental values are not stated here unless supplied/verified.

THERMOGRAPHIC FINDING

Finding 3 of 3 | Inspection 2025/01/21

SECTION	EQUIPMENT	COMPONENT	ASSET ID	LOCATION
Kitchen	DB	MCB	T3 Top third from left	Red phase

ASSESSMENT	D - LOW / MONITOR	Localized rise - monitor connection
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VISIBLE IMAGE

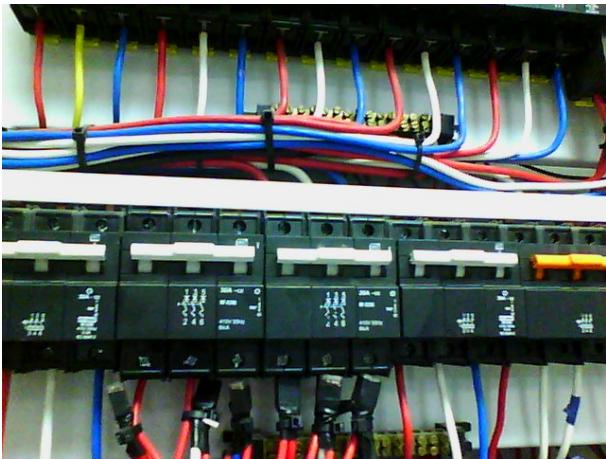


Image: FLIR12323

THERMAL IMAGE

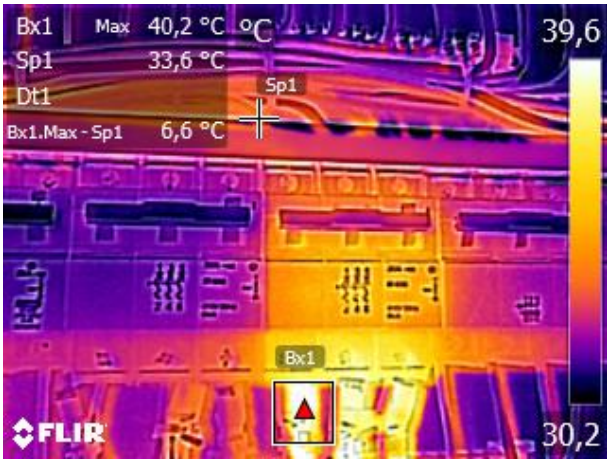


Image: FLIR12322

MEASUREMENT & ASSESSMENT

TMAX	REFERENCE	DELTA T	CLASSIFICATION
40.2 °C	33.6 °C	6.6 °C	D - LOW / MONITOR

Thermographer's assessment

A localized temperature rise is visible at the lower connection area of the distribution board. The thermal image displays a maximum of 40.2 °C and a reference spot of 33.6 °C, giving a Delta T of 6.6 °C. Under the report's severity criteria this remains a low-level condition.

Recommended action

Record and trend this connection at the next thermographic assessment. If the differential increases, or if loading or visual inspection indicates deterioration, arrange an electrical inspection of the affected termination and associated connection integrity.

RADIOMETRIC IMAGE DATA - EMBEDDED SOURCE-IMAGE PARAMETERS

Camera:	FLIR E8	Reflected apparent temp.:	23.0 °C
Detector:	320 x 240	Atmospheric temp.:	20.0 °C
Emissivity:	0.95	Relative humidity:	50%
Object distance:	1.0 m	IR window transmission:	1.00

Radiometric data verification: the original FLIR radiometric JPEG contains embedded camera parameters and a 320 x 240 16-bit thermal data matrix. These embedded settings support post-inspection review and re-analysis. Values above are source-image metadata and should not be interpreted as independently measured site conditions.

Temperature assessment is based on the original radiometric image and embedded source parameters. Load/current is not stated unless supplied or verified.