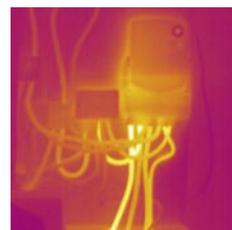
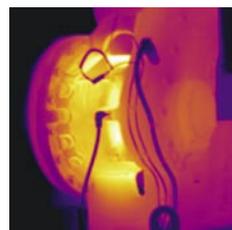
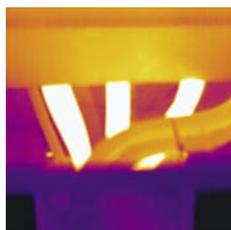
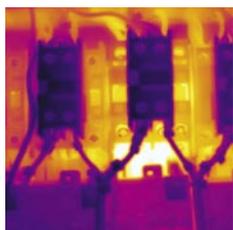


## Electrical systems

**Thermaltec** is an independent company supplying thermal imaging surveys and inspections to domestic, commercial and industrial organisations in the UK and abroad.



**All electrical systems, equipment and components are subject to deterioration once commissioned. This deterioration may be in many forms, for example, loose or corroded connections and joints, insulation resistance breakdown or worn and pitted parts.**

These poor electrical connections result in a high resistance across the connection with a subsequent rise in temperature. If uncorrected this rise in temperature will continue to increase, overheating will occur, leading to system, equipment and component failure.

In the most extreme circumstances system or equipment failure can result in fire and possible explosion.

Additionally, excessive loading of electrical systems and equipment or phase imbalance of electrical systems may also lead to failure.

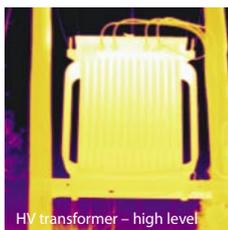
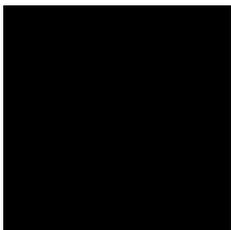
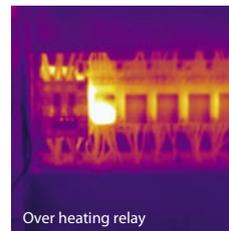
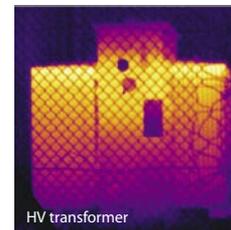
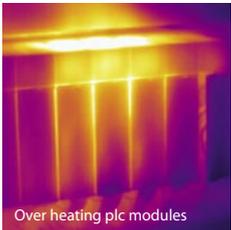
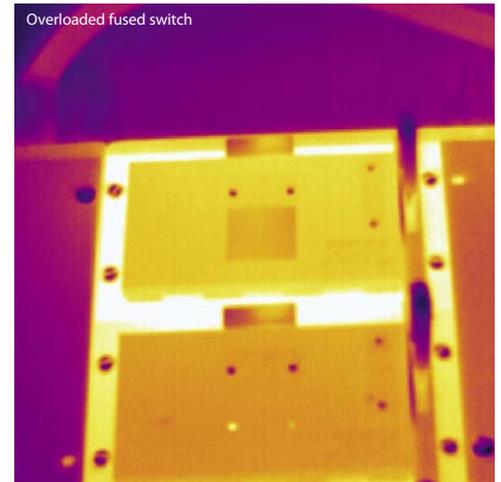
The deterioration and loading of electrical systems and equipment is not always apparent or detected by conventional checks such as routine monitoring and maintenance or periodic test and inspection.

However, when energized and under load, these faults can become clearly visible with the aid of thermal imaging techniques.

In many cases this allows for instant fault diagnosis which in serious cases can be brought to the client's attention immediately, allowing the necessary remedial action to take place at an early stage.

# Key points

- ▶ Systems and equipment deteriorate once commissioned.
- ▶ Excessive loading and phase imbalance.
- ▶ If uncorrected failure will occur.
- ▶ Possible fire and explosion.
- ▶ Faults are not always apparent with conventional testing.
- ▶ Faults can become visible with thermal imaging when energized.
- ▶ Instant fault diagnosis.
- ▶ Early stage remedial action.



## Electrical applications include:

- ▶ HV & LV distribution systems
- ▶ Transformers
- ▶ Switchgear
- ▶ Distribution boards
- ▶ Control panels
- ▶ Motors
- ▶ Inverters
- ▶ UPS systems
- ▶ Phase imbalance
- ▶ Batteries and charging systems

**Contact us** for further information on how thermal imaging can enhance your company's performance and help detect problems before they happen – saving you lost production time and money.