Overheating is the commonest cause of failure in switchgear. Electronic protection relays in circuit breakers are operated by overcurrent. They do not react to heating in the conductive path caused by loose connection bolts, ventilation failure or worn contacts.

The Rosebery Group used Terasaki’s 3C Overheating Protection in the switchboards for a 12 megawatt datacentre (pictured below). 3C is overheating protection for Contacts, Connections and Conductors. The following Terasaki products were used:

- 16 x Air Circuit Breakers (ACBs) with overheating protection, integrated display and data communication
- 16 x plug-in Moulded Case Circuit Breakers (MCCBs) with overheating protection, integrated display and data communication
- 2 x TemTransfer 2 changeover controllers

**Testimonial**

“This datacentre will have a constant, non-cyclic, high load which will certainly increase over time. Many overheating problems in electrical panels are caused by this type of load profile combined with a faulty connection. Terasaki’s contact monitoring system is a good solution because it is based on actual temperature measurement, so it protects the connections as well as the circuit breakers.”

-Gary Burgon, Technical Director, The Rosebery Group