

Client:
The Rosebery Group

End-user:
A multinational blue-chip manufacturer

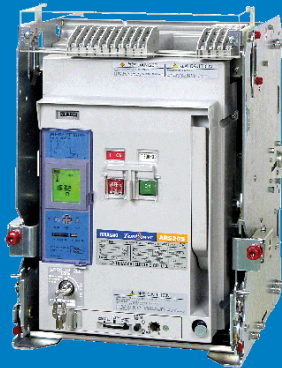
Site:
12 MW Datacentre

Location:
The Wirral, Merseyside, UK

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



TemPower 2 ACB,
TemBreak 2 MCCB and
TemTransfer 2
Automatic Changeover
Controller



3C Overheating Protection in a Datacentre

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 **C**ontacts, **C**onnections and **C**onductors. 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

Overheating Protection



ACBs: one integrated NTC thermistor per phase. "Overheat" alarm on integrated display of breaker + "overheat" alarm contact + "overheat" alarm delivered to Building Management System via Modbus

Outgoing circuits: temperature sensors integrated with line and load terminals of MCCBs. "Overheat" alarm contact + LED indication



The Rosebery Group Limited
ELECTRICAL – ENGINEERING – EXCELLENCE

