

## Solid-state relays

# COOLTECH



Optimised  
heat dissipation  
offers unparalleled  
capability in terms  
of reliability

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## Innovative technology !

Solid-state relays are called upon to switch considerable load-currents, thus their components are subject to significant temperature rises. This increased temperature can have a negative impact on the long-term reliability of the solid-state relay, possibly resulting in premature catastrophic failure.

The new generation of COOLTECH solid-state relays draws upon the latest technological advances made by Crouzet.

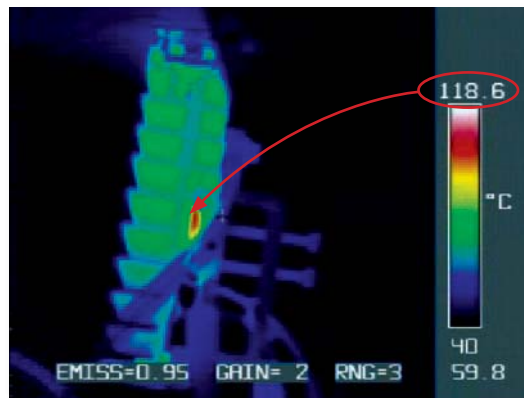
The design of the power assembly, based on **DBC (Direct Bond Copper)**, technology, allows for an efficient transfer of heat from the SCR die to the heat sink.

It is the key to reliability for your installations.

### Case in point :

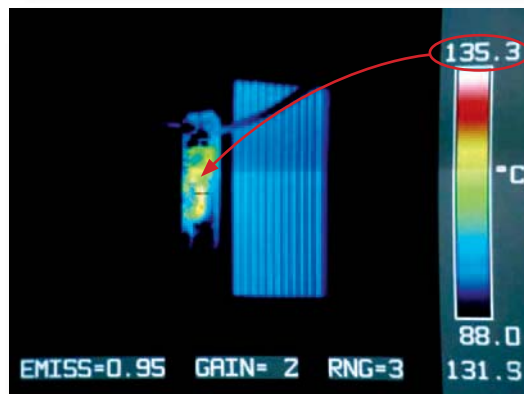
#### Comparison of 2 solid-state relays – 30 A (COOLTECH/Competitor product)

- Tests with resistive load



#### Crouzet's COOLTECH

The thermal images of COOLTECH solid-state relays indicate a maximum die temperature of **118°C** at 30 A (100% nominal current).



#### Competitor products

Under the same load conditions, some equivalent rated competitor's products could not be tested at 100% nominal current due to elevated die temperatures.

From 25 A upwards, the product's SCR die reached **135°C** : a full 10°C higher than the maximum permissible temperature of 125°C