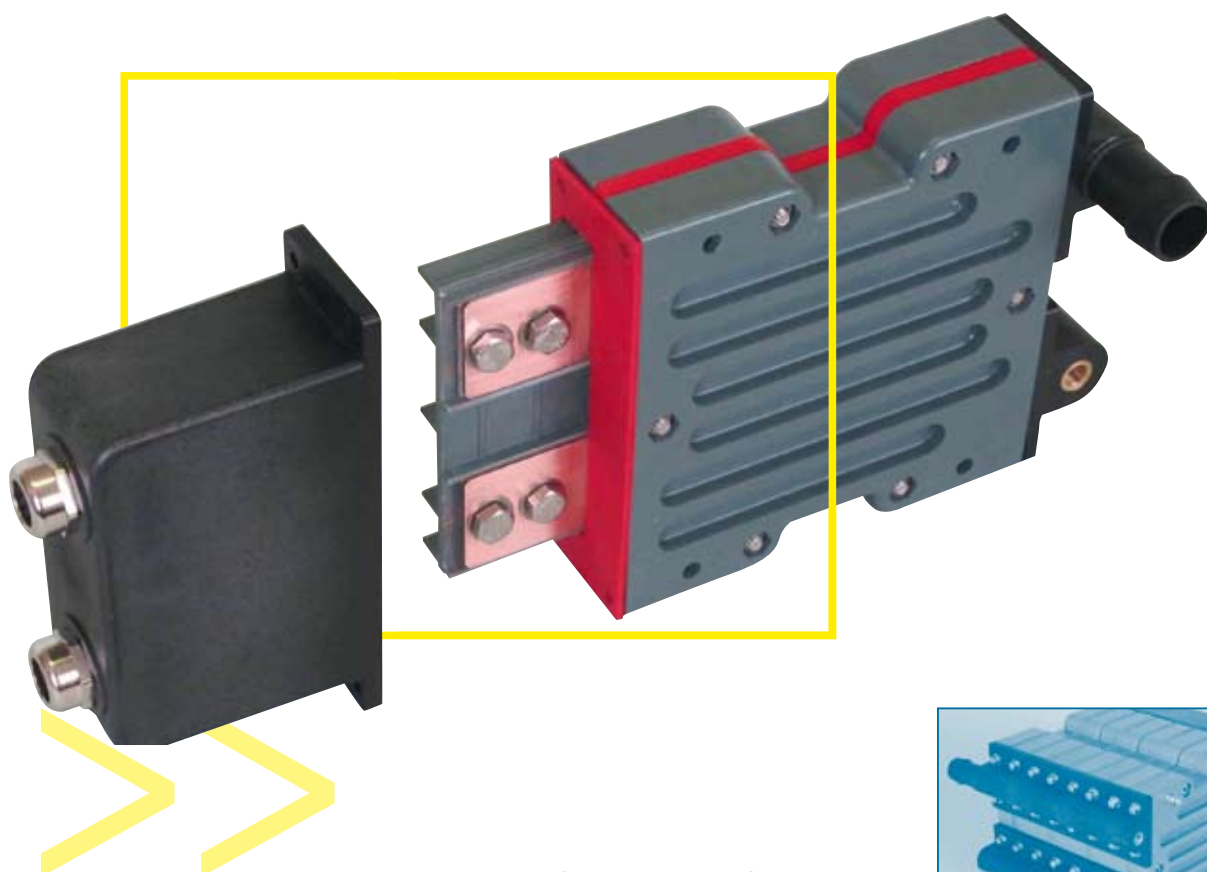
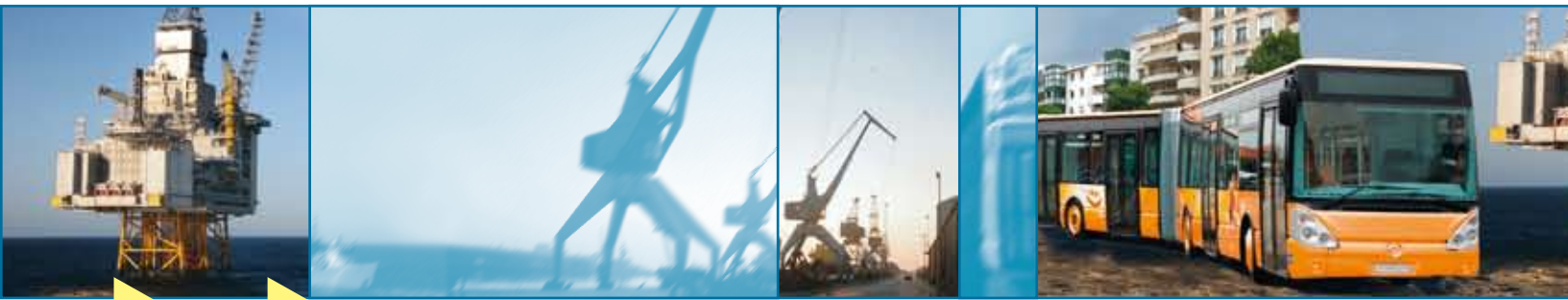


EV2 - Advanced water cooled modular resistor

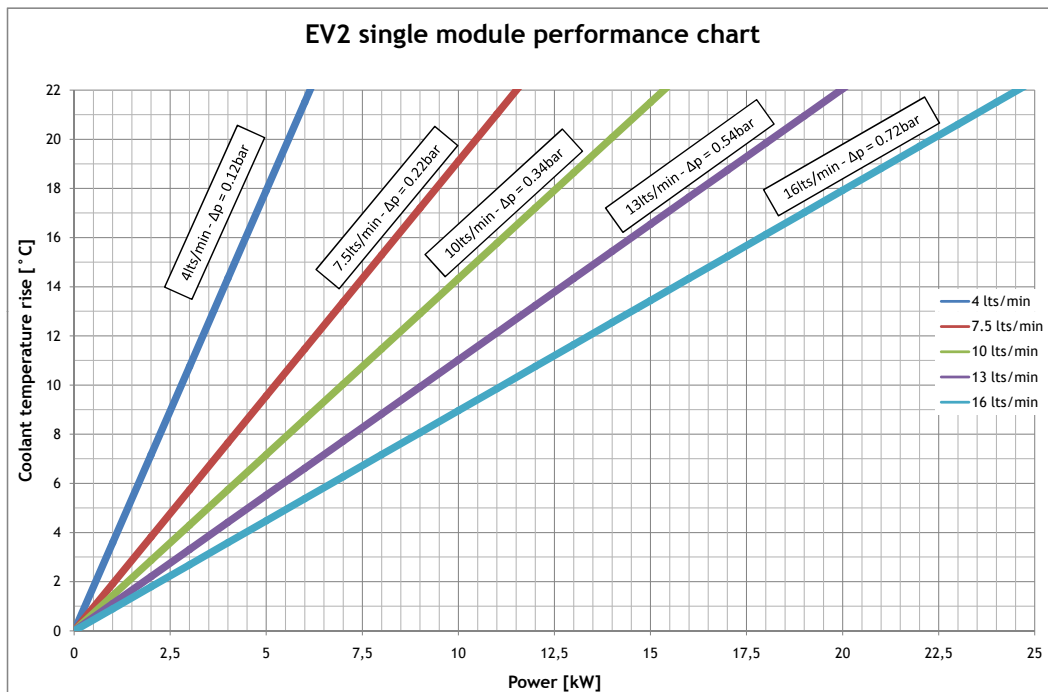
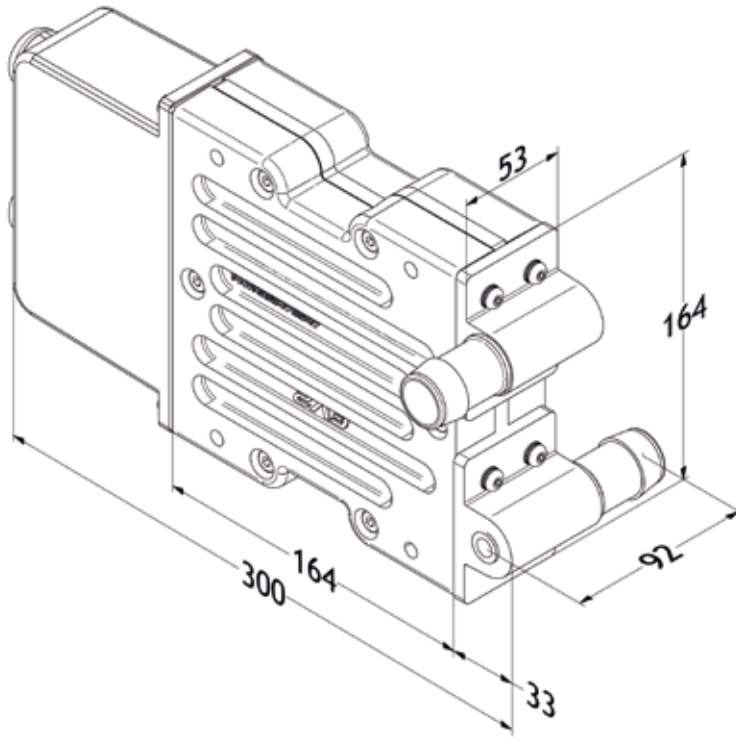


A new range of water cooled resistors for low and medium voltage applications, especially severe conditions in automotive, traction or marine systems.





EV2 25kW module





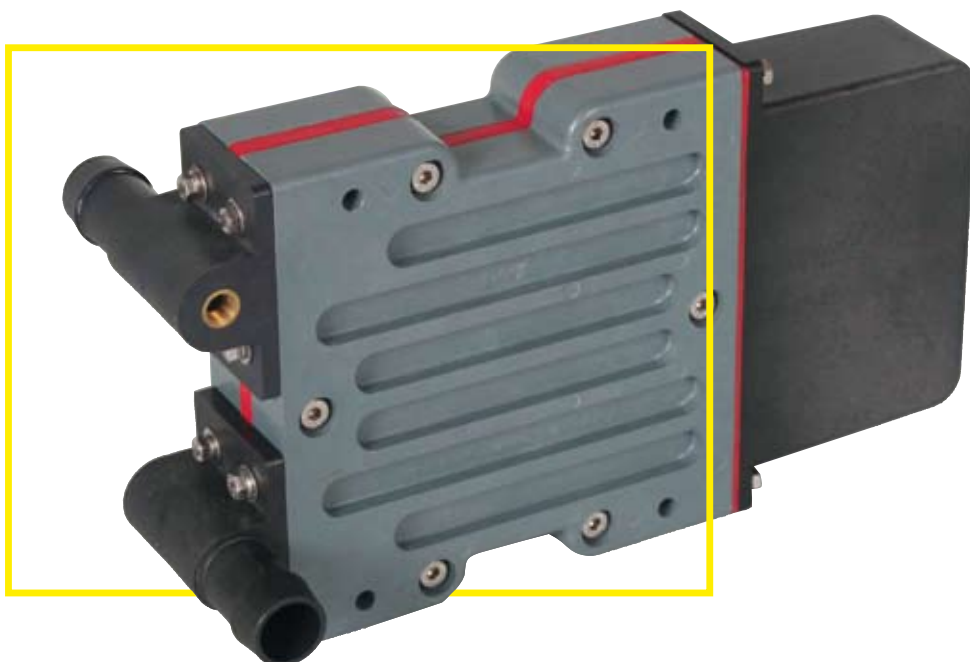
Applications

Rheostatic braking of all types of low and medium voltage AC drives in:

- > Hybrid and all-electric vehicles
- > Winches and cranes
- > Cable laying vessels
- > Propulsion drives on ships or oil rigs
- > Dummy loads and discharge resistors for MV electrical systems
- > Liquid heating

Patented design that encapsulates and totally separates the resistor elements from the coolant.

- > System voltage up to 12 kV - Continuous operating voltage: EV2: 1.5 kV, 4EV2: 6 kV
- > Advanced materials: Light weight, low volume, high (10 kW/kg) power density
- > Modular construction: EV resistors can be combined to handle any power inputs from 10 KW to 1 MW or more.
- > Extensively tested: Proven to meet all major shock and vibration standards for automotive/traction use.
- > IP56 ingress protection: Suitable for automotive/traction/marine use.
- > Low time constant: Full output temperature within 2 sec for heating applications.



Ratings

Continuous power: 25 KW
Overloads: 10 % for 60 s,
 20 % for 15 s, 30 % for 5 s
Ohmic value:
 min: 0,1 Ω; max: 40 Ω

Operating conditions

Ambient temperature:
 -30° bis +50 °C (operation),
 -40° bis +80 °C (storage)

Dimensions

(excluding pipe connections)

EV2: 300 x 164 x 53 mm
4EV2: 300 x 164 x 208 mm

Dimensions

(including pipe connections))

EV2: 300 x 164 x 90 mm
4EV2: 300 x 164 x 284 mm

Weight (empty)

EV2: 2,6 kg
4EV2: 10,2 kg

Cooling

Medium: Fresh water or water-glycol
Operating pressure: 3 bar max.
Test pressure: 6 bar
Burst pressure: 10 bar

Flow rates temperature rises

Minimum flow (for 20 °C
 temperature rise): 0.3 liter/sec
Pressure drop at 0.3 litres/sec: 0.8 bar
 (See charts for other flow rates)

Electrical

Working voltage (to earth): up to 12 KV
Working voltage (terminal - terminal): up to 1500 V
Test voltage: 7,2 KV, 1 min to earth
Megger: > 100 MOhm
Air clearance, terminal - terminal: 35 mm
Surface creepage, terminal - terminal: 35 mm
Protection degree to EN60529: Body IP 65
Ingress protection to BS-EN 60529: IP 56

Thermal Protection

Flow rate monitored required

Shock and vibration

To JLR spec TPJLR.00.047:
 50 hours random vibration 3-axis shock,
 4000 x 300 m/s²

Interfaces

Water: 2 x pipe stubs for 25 mm ID hose
Electrical: 38 x 1.5 mm copper
Temperature/pressure: 2 x 1/8. BSP

Materials

Body: Glass-filled plastic, colour RAL7031
Cable box: Glass-filled plastic, colour RAL7021
Terminals: copper
Seals: silicone rubber

Patents

GB2478547

For more information about this exciting breakthrough in regenerative braking contact our sales engineers at the address below.

Certified acc. to the actual
 Quality standards, such as:

- ISO 9001:2015
- EN 15085-2
- IRIS



IRIS
 Certification

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