

Cressall Resistors

Industrial power resistors



Cressall built their first resistors in 1912 and have always been in the forefront of resistor design and development. From trams to high speed trains, stationary engines to nuclear power stations or warships to wind turbines, Cressall have provided the industry with the resistors they need for over a hundred years.

Cressall's long experience translates into a more comprehensive range of resistor types than any other manufacturer. This means that Cressall can not only meet current needs but also anticipate

future resistor requirements and provide the solutions necessary.

Continual investment in product development, manufacturing processes and testing ensure resistors of the highest quality and product reliability. Manufacturing takes place in England, at the main factory in Leicester and at the Transit and Special Projects division in Dereham.

All this makes Cressall the ideal partner for your next project – big or small.

Concentration, specialisation - focus on power resistors!

Earthing resistors, earthing systems

Earthing resistors are used in distribution networks to limit the fault current in case of an earth fault. Cressall manufactures earthing resistors for fault currents from a few amps up to thousands of amps. Enclosed, for indoor or outdoor installation, open frames to be installed in a switchgear or complete earthing systems, i.e. resistor and accessories as breakers and CT:s in a single enclosure.

We can also offer earthing systems where the resistor is combined with a single phase transformer or a Zn transformer.



Load banks

Power blackouts can strike everyone. More and more organizations invest in generating sets and UPS systems. But - do they work when required?

Battery discharge test as well as testing generator sets on a regular base is a necessity. Cressall offers a range of standard units for AC and DC load testing up to 100 kW.

Cressall also manufactures larger load banks suitable for both AC and DC testing. The load banks can be designed for almost any applications up to several megawatts.

Braking resistors

When large masses are to be stopped, these may generate energy which can be fed back into the motor or the drive system. The excess energy needs to be either re-generated or absorbed. An external braking resistor provides a compact, cost effective method of controlling braking and absorbing excess energy produced.

Cressall offers two product families of standard braking resistors, supplied with short delivery time for up to 25 kW continuous. For higher power applications Cressall offer customer's specified braking resistors for higher powers which but are based on standard formats, meaning that design, manufacture and despatch can be in just a few weeks. Fan cooled braking resistors are also available for higher power.

Cressall also offers braking resistors for marine applications, suitable for corrosive saline atmosphere, with higher ingress protection.



EVT and EV2 water cooled braking resistors

Compact, water cooled resistors for low and medium voltage applications like vehicles, traction systems and marine propulsion. EVT and EV2 use a patented design that encapsulates and totally separates the resistor elements from the coolant, fresh water with or without glycol. The design is modular, light weight and low volume, typically 10% of the volume and 15% of the weight of the equivalent air cooled resistor. The modules can be combined together to handle powers from 10 – 600 kW continuous.

Motor control

Resistors are also used for motor starting to limit the starting current. Electronic starters such as soft starters and AC variable speed drives have reduced need for starting resistors, however there are still applications a resistor is practical and cost-effective solution. Cressall can supply starting resistors for most starting methods including:

- Resistors for DC motors
- Resistors for wound rotor motors with slip rings
- Closed transition resistors for Star-Delta starter



Traction resistors

Cressall have long experience of resistors for traction applications, one of the harshest environments a resistor can be installed in. We work mainly with railway maintenance companies in the Nordic countries with upgrading and modernizing of existing resistors for the demands of the 21th century. Together with Swedish Transport Administration, a test resistor has been developed, a special load resistor used in railway supply stations.

Filter resistors

Increased use of power electronics increases the amount of disturbances and harmonics in the distri-

bution networks. High quality on the power supplies getting more and more important for both users and utilities. Harmonics and disturbances can be limited by different types of filters where the filter resistor is an important component.

One of the key factors for the filter resistor is low inductance. Resistor element type Expanded Mesh offers both low inductance as well as excellent heat dissipation. Cressall filter resistors are used in applications like

- SVC - Static Var Compensation
- MSCDN compensation
- HVDC transmissions
- Railway system supply stations

More than 30 years of experience of power resistors...

Projects in progress? Do you need help with selection and sizing? A first step to success may be to contact our sales team.



Jimmy

Micael

Björn

Börje

Jimmy Folkesson

+46 42 386104, mobile +46 726 006611
jimmy@chscontrols.se

Micael Hellström

+46 42 386102, mobile +46 705 151282
micael@chscontrols.se

Björn Robertsson

+46 42 386105, mobile +46 720 902650
bjorn@chscontrols.se

Börje Jansson

+46 42 386101, mobile +46 705 151281
borje@chscontrols.se

CHS Controls AB

Florettgatan 33, SE-254 67 Helsingborg, Sweden
Phone +46 42 386100
chs@chscontrols.se, www.chscontrols.se

