



RAILTECH-KLK

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KLK
electromateriales

STARTING AND BRAKING RESISTORS



RAILTECH
WELDING & EQUIPMENT
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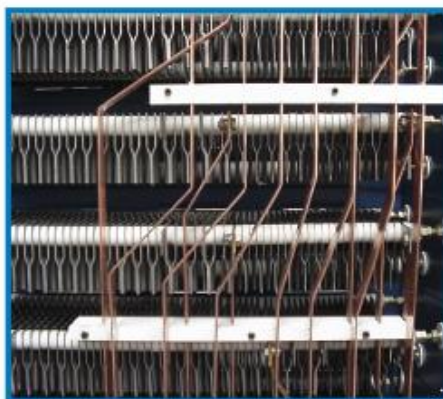
Starting and Braking Resistors are widely employed for controlling motors during start and/or stop.

Starting Resistors may be used for wound rotor induction motor and DC wound motor (this last type of motor is less and less common): adding a series resistor to each rotoric phase reduces the current and improves the starting torque. Starting Resistors may also be employed for squirrel cage induction motors, where series resistors added to the stator, limit initial current to three times its nominal value.

The essential parameters needed to design a Starting Resistor are:

- Horsepower
- Rotor/Stator Voltage
- Rotor/Stator Current
- RPM

Application; different applications require different solutions Crane control is a quite common application for Braking Resistors: during descent the load, especially if heavy, may cause the motor to generate power. Resistors are thus used to avoid unwanted and uncontrolled acceleration.



Braking Resistors for large motors are customised to best comply with any requirement:

We have developed special Braking Resistors for different applications:

- Any type of Crane: Tower Crane, Overhead Crane, Granty Crane, etc...
- Centrifugal pumps and fans.
- Conveyor belts.
- Positive Displacement Pumps.
- Lifts and Elevators.

Disexcitation of large capacitors and inductors must be carried out with care to avoid impulsive currents that could damage them permanently. Discharge Resistors limit the peak current and protect the capacitive/inductive device.

The essential parameters needed to design a Discharge Resistor are:

- Nominal Voltage
- Discharge Current
- Discharge Duration

