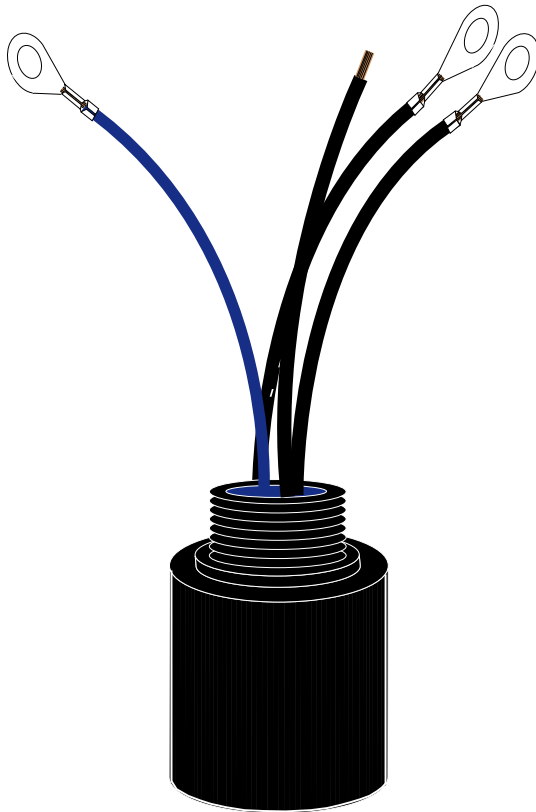


Type RC 3S



## Basic information

The interference suppression module is used for radio shielding of magnetic coils and AC motors.

## Application

The interference suppression module is applied where electromagnetic emission has to be suppressed during the switching of magnetic coils and motors, e.g.:

- especially for AC motors in star connection
- optional for AC motors in delta connection
- optional for single-phase motors
- relay coils

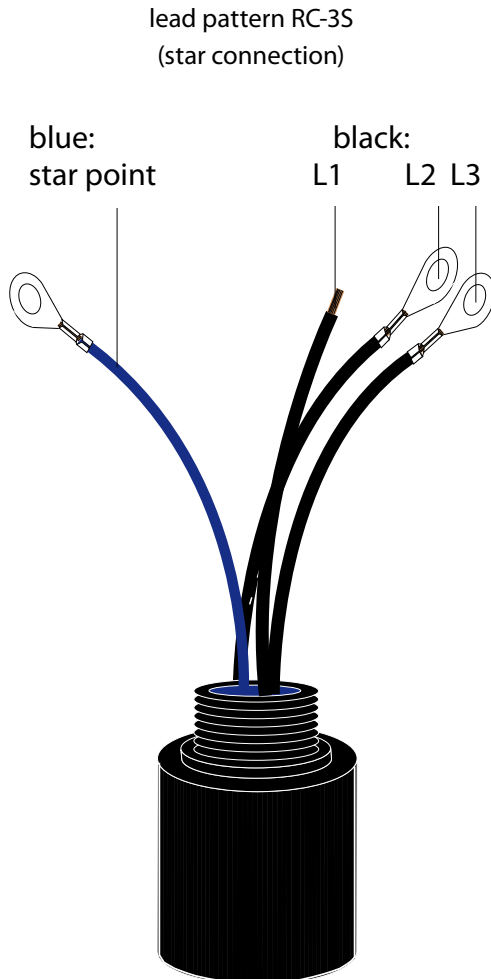
## General function

The interference suppression module reduces overvoltage peaks which result from the switching of magnetic coils and motors.

This self-induction voltage can be multiple kV and this can lead to electromagnetic disturbances in electric devices, to the destruction of insulators, or damageable electronic componentry.

## Advantages

- Universally applicable for magnetic coils and for AC motors up to 7.5 kVA.
- Compact housing for mounting in and at the motor terminal block.
- High energy consumption and at the same time a good damping of high- and low-frequency voltage peaks: RC/VDR-1.
- Very fast limitation and damping of high-frequency voltage peaks: RC-3, RC-3S.
- Optional polarity.



## Technical data

### Electrical data

Module-Type:	operating voltage:
RC-3S	maximum 250V AC between star point and phase, star connection, star point led through
RC-3, RC/VDR-1	maximum 500V AC, star connection

motor wattage:	maximum 7.5 KVA
ambient temperature:	maximum +85°C
storage temperature:	-40°C ... +90°C

### Mechanical data

housing:	plastic/black
material:	PA6, grout filled

module-type:	dimension:
RC-3S, RC-3	H x Ø: 40 x 36.5 mm

RC-3, RC/VDR-1	H x L x B: approx. 25 x 50 x 40 mm
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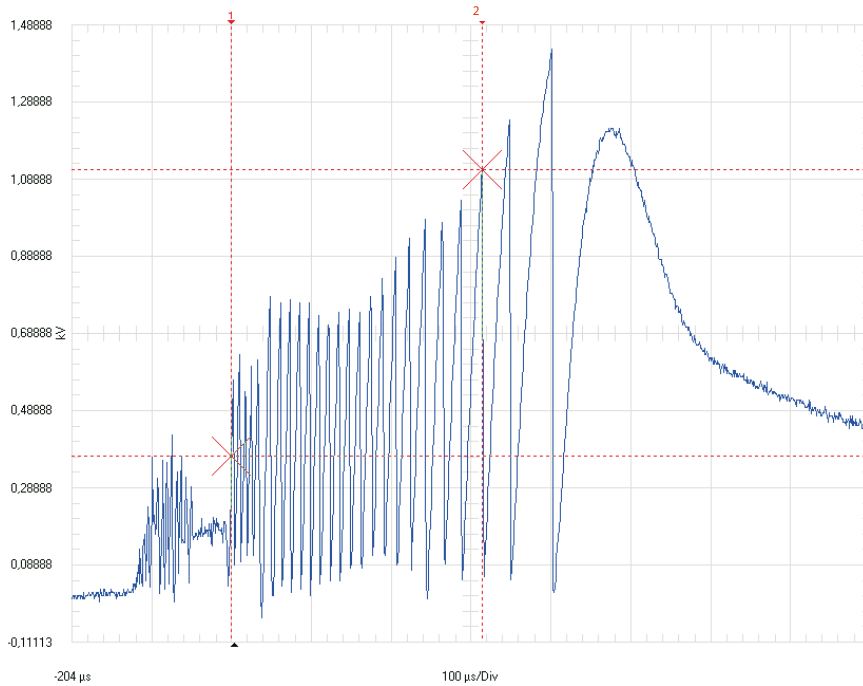
module-type:	mounting:
RC-3S, RC-3	thread M20x1.5 mm

RC-3, RC/VDR-1	terminal plug
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module-type:	terminal:
RC-3S	lead AWG20, L=100mm, with cable shoe M4; optional: length according to customer's requirements
RC-3, RC/VDR-1	lead AWG20, length according to customer's requirements

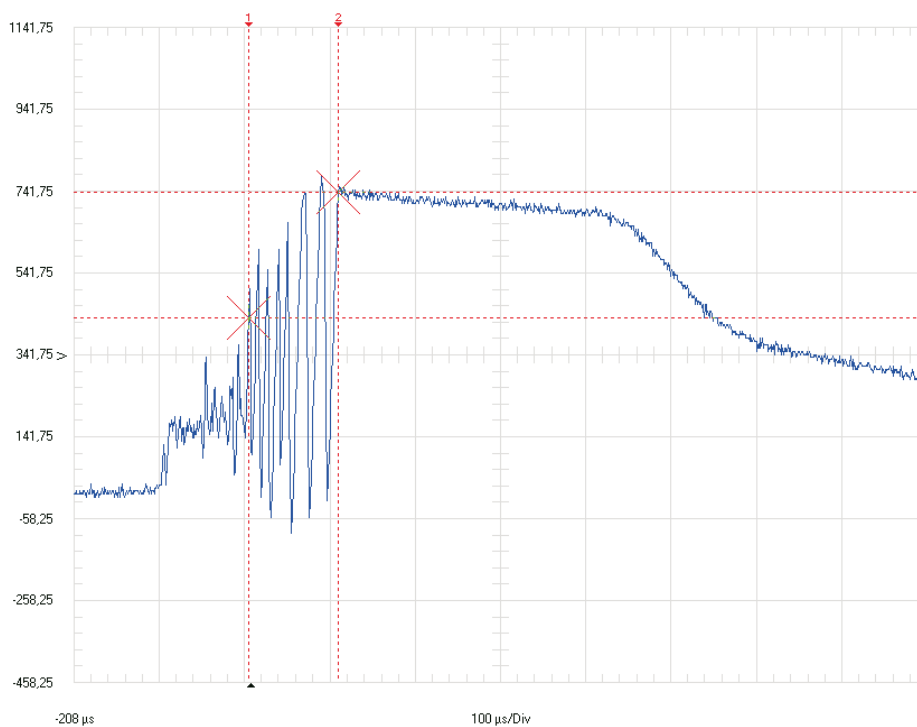
protection factor:	IP 65
weight:	approx. 70 g

Voltage curve, during switch-off, for motors without a suppressor:



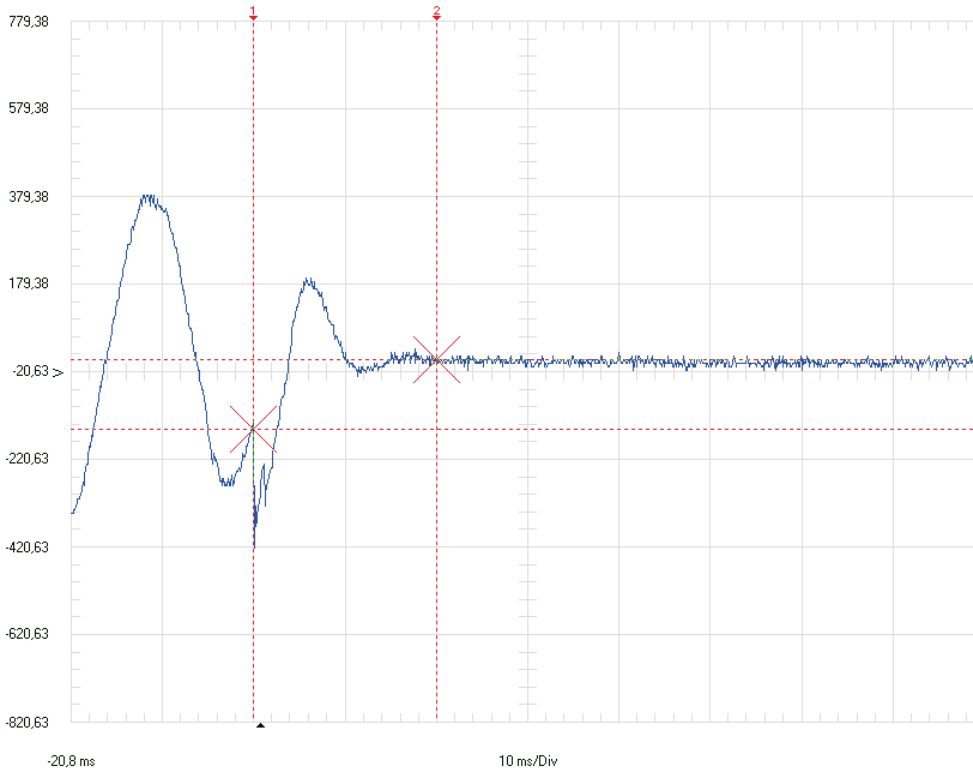
To switch off (Mark1) a high frequency voltage with a consequent oscillation (Mark 2) and with higher voltage amplitude less frequent.

Voltage curve, during switch-off for motors with varistor-suppressor:



The results of varistor-filters: The oscillation ringing (up to Mark 2) with higher voltage amplitude and low frequency is suppressed by means of varistor very effectively.

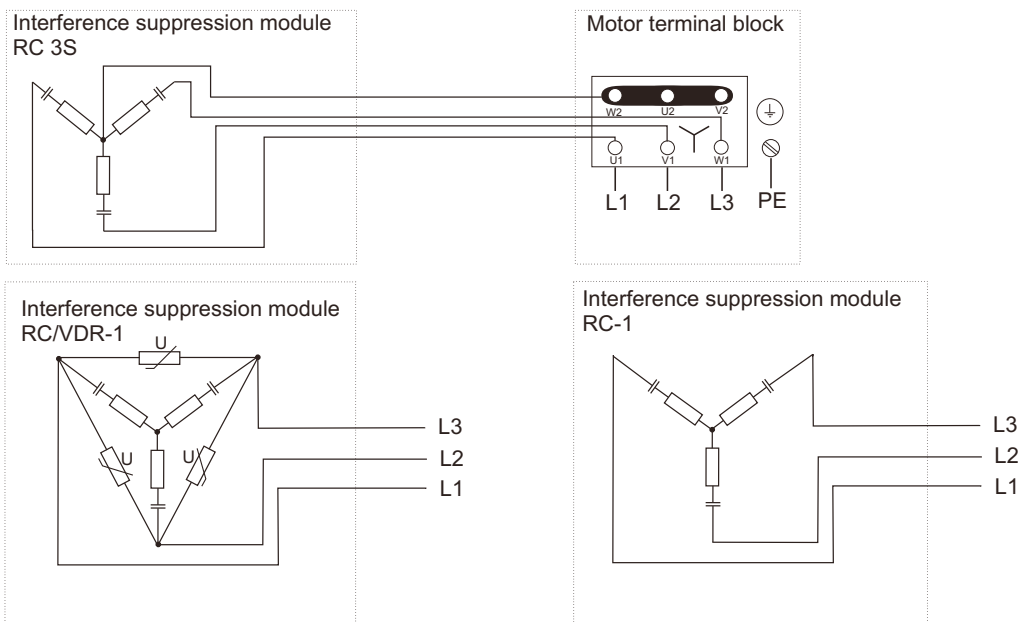
Voltage curve, during switch-off, for motors with varistor and RC interference suppressor, RC/VDR-1:



Effects of the varistor and RC-filter:

The high frequency voltage (up to Mark 1) is suppressed by the RC-suppressor. The consequent oscillation and vibration, with higher voltage amplitude and low frequency (up to Mark 2) is suppressed by the varistor.

Schematic circuit:



Further advice and information always available: