

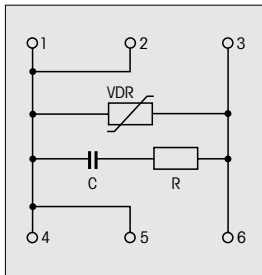
Protection elements / Suppressors

- Universal overvoltage dischargers and contact protection circuits (spark absorbers)
- Optimized noise suppression with RC-combination
- Voltage ranges up to 240V
- Compact DIN case

Spark absorbers

CRC02

Circuit



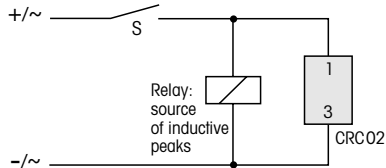
RC-element parallel to voltage absorber (Varistor)

Application

Contact protection

e.g. for inductive loads.
Voltage limitation by varistor, minimum noise radiation by RC-element.

Circuit example



Voltages

UC ≈ : 24V, 48V, 240V

Technical data

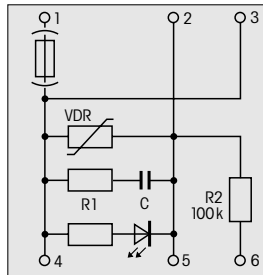
| | | | |
|-----------------------|---------------------------|--------|---------|
| Mechanical | | | |
| Type of protection | Case IP40, terminals IP20 | | |
| Operating temperature | -25...+60°C | | |
| Relative humidity | 10...95% non-condensing | | |
| Electrical | | | |
| Rated voltage | UC24V | UC48V | UC240V |
| DC operation | ...38V | ...85V | --- |
| AC operation | ...30V | ...60V | ...265V |
| Terminal current | max. 10A | | |
| Capacitor | 0,25µF/250V // X2 | | |
| Resistance (24V, 48V) | 47Ω/0,5W | | |
| (240V) | 470Ω/0,5W | | |

Example of order:
1 spark absorber CRC02/UC24V

Mains protection

CVG01

Circuit



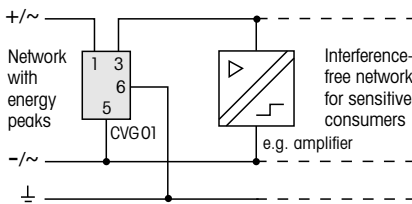
Combination with fuse, LED and shunt resistor

Application

Fine protection

e.g. on connection of sensitive consumers to a network with a high noise level.
Voltage limitation by varistor, minimum noise radiation by RC-element.
Dissipation of electrostatic charges.

Circuit example



Voltages

UC ≈ : 24V, 48V, 240V

Technical data

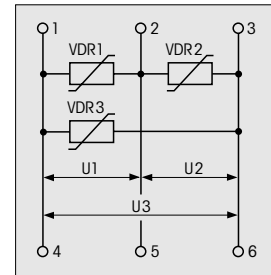
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| Operating temperature | -25...+60°C | | |
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| Electrical | | | |
| Rated voltage | UC24V | UC48V | UC240V |
| DC operation | ...38V | ...85V | --- |
| AC operation | ...30V | ...60V | ...265V |
| Terminal current | max. 10A | | |
| Capacitor | 0,25µF/250V // X2 | | |
| Resistance | 47Ω/0,5W | | |
| Fuse | 5x20mm (max. 6,3A) | | |
| Internal consumption | approx. 3mA | | |
| (LED not visible at approx. 40% of rated voltages) | | | |

Example of order:
1 mains protection CVG01/UC24V

Overvoltage dischargers

CUB03

Circuit



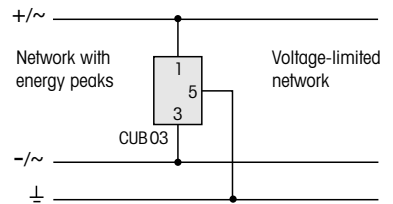
3 voltage dischargers (Varistors)

Application

General protection

e.g. for inductive energy peaks on the supply voltage.
Voltage limitation between two conductors and against a common conductor ($\frac{1}{2}$).

Circuit example



Voltages

UC ≈ : 24V, 48V, 240V

Technical data

| | | | |
|-----------------------|---------------------------|--------|---------|
| Mechanical | | | |
| Type of protection | Case IP40, terminals IP20 | | |
| Operating temperature | -25...+60°C | | |
| Relative humidity | 10...95% non-condensing | | |
| Electrical | | | |
| Rated voltage | UC24V | UC48V | UC240V |
| DC operation | ...38V | ...85V | --- |
| AC operation | ...30V | ...60V | ...265V |
| Terminal current | max. 10A | | |
| Limiting voltage | U1-2 = U2-3 = U1-3 | | |
| Type | UC24V | UC48V | UC240V |
| @ I = 1A | 75V | 130V | 550V |
| @ I = 100A | 130V | 165V | 680V |
| I max. (1ms) | 8A | 5A | 5A |

Example of order:
1 overvoltage discharger CUB03/UC24V

