

# OVERVOLTAGE RELAY

- Monitoring of .....: Alternating voltage (residual voltage)
- Message from .....: Overvoltage
- with auxiliary voltage
- one delayed, one not delayed message contact



## Function description

The RUW 100 relay monitors the alternating voltages for exceeding an adjustable limit value in a range of 20 to 50 V (standard range). The electrical strength at the measuring input is 230 V. Therefore, the relay is especially qualified to monitor the residual voltage in an open converter delta connection, which is normally used for the earth contact acquisition in 3-wire grids.

When exceeding the limit value, the display changes from the green to the red LED and the contact K1 switches immediately (output contact 4, 6 closed). The contact K2 switches after the set delay time is expired. The reverse switch takes place immediately once the limit value (minus hysteresis) has been undershot.

The contact position in the wiring diagram is valid if the set voltage value is undershot, for a condition without voltage and if the auxiliary voltage fails.

Housing: Plastic housing type KS 1-01 (S&S) with locking bracket, matching the plug base "U" for fastening on a mounting plate or plug base "K" with adapter for rail installation, screw connections max 2x4 mm<sup>2</sup>.

## Technical data

- Measured voltage.....: max. 230 V AC (100% ED)
- Adjustment range.....: 20 to 50 V AC (other values on request)
- Hysteresis .....: app. 10% of the set value
- Auxiliary voltages .....: 220 V DC, 110 V DC, 24 V DC (-20%/+15%)

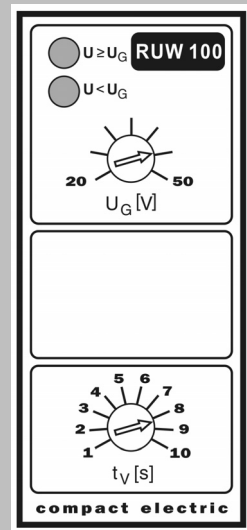
When ordering, please specify the required **auxiliary voltage**

- Triggering delay K1.....: ≤ 50 ms (inherent time)
- Triggering delay K2.....: 1 to 10 s

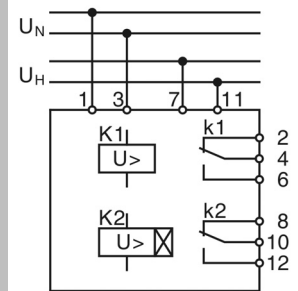
## Power consumption

- Measuring input .....: 0.5 VA
- Auxiliary voltage .....: 3 W max.
- Operating ambient temperature : 0 to 50 °C

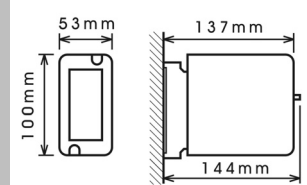
# RUW 100



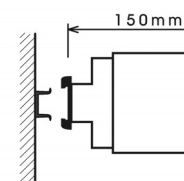
front view



wiring diagram



Socket Type U



Socket Type K

dimensions

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## Output contacts (2 changeover contacts)

Nominal/max. switching voltage .....	250 V / 440 V AC
Nominal/starting current .....	8 A (UL: 10 A) / 14 A AC
Nominal switching capacity .....	2000 VA (cos $\varphi$ = 1)
Switching capacity .....	250 V / 8 A AC (cos $\varphi$ = 1) 220 V / 0.6 A AC (cos $\varphi$ = 0.8) (1.3 * 10 <sup>6</sup> switching cycles) 300 V / 0.2 A DC 40 V / 8 A DC
Mechanical service life .....	20 * 10 <sup>6</sup> Switching cycles
Contact material .....	Ag Cd O

## Interference resistance

EN50082-2 (Industry)  
IEC 255-22-1 1MHz Interference test class III (2.5 kV)

## Maximum EMC influence at nominal operating conditions

Switching point displacement .....	< 3%
Trigger time displacement .....	< 3%

## Interference emission

EN50082-1 (small industry)

Protection class .....	IP40
Housing material .....	Polycarbonate
Burning behavior .....	UL 94 V-0, self extinguishing
Weight .....	0.3 kg

## Installation information

- 1) A distance of at least 1.5 cm to other devices and metallic surfaces must be adhered to at the side to guarantee the listed EMC interference resistance.
- 2) The relay can be secured against pulling off the pedestal using the two locking brackets of the housing. For locking, the brackets must be pressed at the outside notch (with a screwdriver) until they latch into the pedestal. The brackets will be unlocked by pressing the inner notch.

Subject to technical changes

