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Mod. VCR

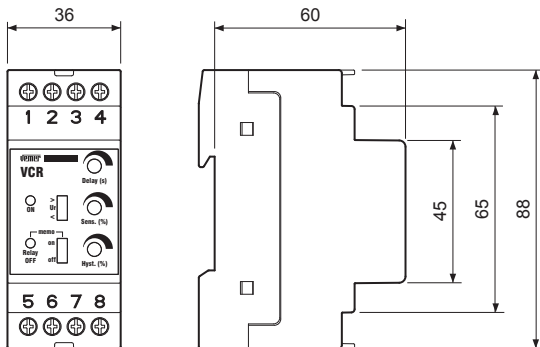


## User Manual

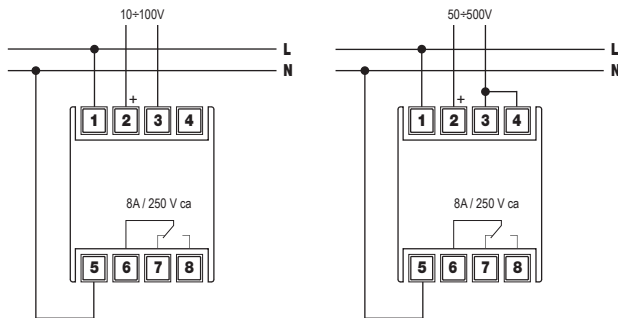
### VOLTAGE CONTROL RELAY

Read all the instructions carefully

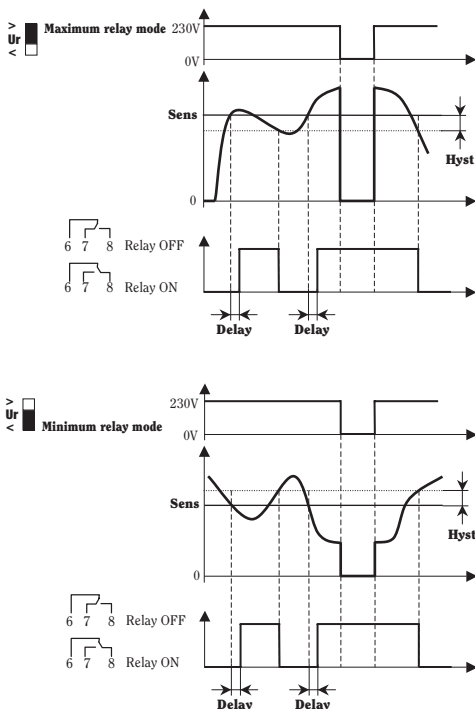
#### Dimension



#### Connection diagram



#### Operating diagram



- Voltage control relay **VCR** is an electronic control device to be mounted on a panel in a standard **2-DIN size** enclosure. It operates an external circuit following the tripping setting (direct or alternate voltage): threshold values, hysteresis and change-over delay can be adjusted.

#### SAFETY INSTRUCTIONS

*During the installation and operation of the device observe the following instructions:*

- 1) *The device must be installed by a qualified person, strictly following the wiring diagrams.*
- 2) *The device must be installed in an electrical panel which, after installation, leaves terminals inaccessible.*
- 3) *Do not power or connect the device if any part of it is damaged.*
- 4) *The electrical system in the building where the device is installed must feature a circuit breaker and an overcurrent protection device.*
- 5) *The device is aimed for use in places with over-voltage category III and pollution degree, 2 as per standards EN 61010-1.*

Code	Model	Description
VE144200	VCR	Voltage-control relay

#### TECHNICAL SPECIFICATIONS

- Power supply: 230 V CA (-15% ÷ +10%), 50/60 Hz
- Consumption: ≤ 4VA
- Termination: 6 mm<sup>2</sup> metal blocks
- Output: changeover contact relay 8 A / 250 V AC (resistive load)
- Input signal
  - 10 V ÷ 100 V
  - 50 V ÷ 500 V
- Full scale selection by wiring (cfr. **Connection diagram**)
- Threshold: to be trimmer-adjusted between 10% and 100% of the full scale value
- Hysteresis: to be trimmer-adjusted between 5% and 50% of the threshold value
- Relay switching delay: to be trimmer-adjusted from 0,1 to 10 seconds
- Signalling by 2 LEDs
  - green = power on
  - red = relay off (alarm)
- Operating temperature: -5°C ÷ +50°C
- Storage temperature: -10°C ÷ +70°C
- Input impedance: 2 MΩ
- Enclosure: 2 DIN size
- Setting of maximum or minimum relay by selector
- Setting of alarm status memory by way of selector
- Degree of protection: IP20/IP40 when correctly installed in an electrical panel

#### WIRING

- Power the device up by connecting terminal 1 to line and terminal 5 to neutral.
- Connect the signal to the measuring terminals according to range (for use with DC also observe polarity):
  - 10 V ÷ 100 V between terminals 2 and 3
  - 50 V ÷ 500 V between terminals 2 and 3, after terminals 3 and 4 have been short-circuited

#### OPERATION

- Select maximum or minimum relay mode using the selector on the front of the device (>Ur → maximum relay, <Ur → minimum relay)
- Select threshold voltage using trimmer **Sens**
- Select hysteresis value using trimmer **Hyst**
- Select the delay value using the **Delay** trimmer. This is the time intervening between the moment Ur is exceeded and the moment the relay switches over
- Selector **memo** enables the memory storing function. After alarm and the consequent relay switch over, the memory function keeps the acquired output status even when the measured value is back in the useful range; memory is zeroed using the selector, so that the device does not need to be switched off

#### RIFERENCE STANDARDS

Conformity to the EU directives:

2006/95/EC (Low Voltage)

89/336/EEC modified by 92/31/EEC and 93/68/EEC (EMC)

is declared with reference to the following harmonised standards:

**Safety:** EN 61010-1

**Electromagnetic compatibility:** EN 61000-6-2, EN 61000-6-4