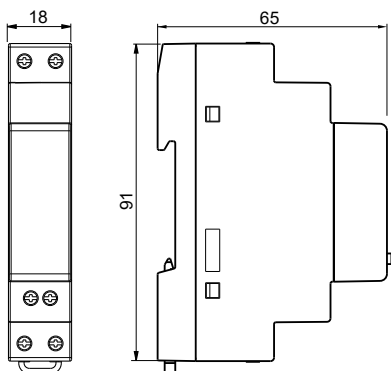
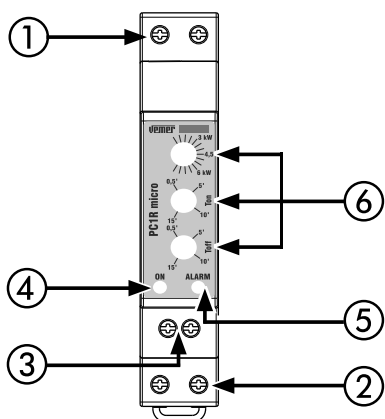




2 DIMENSIONS

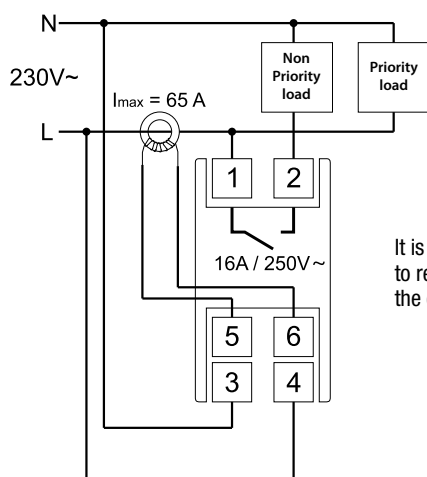


3 INSTRUMENT DESCRIPTION



- ① Relay terminals
- ② Terminals for power supply
- ③ Power input terminals
- ④ Green led: power supply presence
- ⑤ Red led: on indicates disconnected load
- ⑥ Adjustment trimmer

4 INSTALLATION



It is not necessary to respect a particular verse of the current through the CT.

1 User Manual LOADS CONTROL 1 RELAY

⚠ Read all the instructions carefully

Electronic instrument to measure the consumption of active power in single-phase systems to prevent the activation of the limiter switch of general current for overload.

PC1R Micro provides for the disconnection of a not priority load if the consumption of measured power is higher than the prefixed threshold (setpoint) continuously for a time of settable pre-alarm (Ton). The connection of the load occurs after a disconnection time (Toff).

Code	Model	Description
VE788800	PC1R Micro	Single-phase load control relay 1 relay

SAFETY WARNINGS

During the installation and the operation of the instrument it's necessary to observe the following instructions:

- 1) The instrument must be installed by a qualified person by observing scrupulously the connection diagrams.
- 2) The instrument must be installed and activated in compliance with current electric systems standards.
- 3) After installation, inaccessibility to the connection terminals without appropriate tools must be granted.
- 4) Do not use the instrument for other purposes different from the one specified.
- 5) The instrument must be installed in a closed electrical panel adequately protected.
- 6) In the power supply network a bipolar disconnection must be present.
- 7) A protection device against over-currents should be installed in the electrical system, upstream of the device.
- 8) Before accessing the connection terminals, verify that the leads are not live.
- 9) Do not power on or connect the instrument if any part of it is damaged.
- 10) The instrument can be used in environments with overvoltage category III and pollution degree 2, according to the CEI EN 61010-1 standard.

TECHNICAL CHARACTERISTICS

- Power supply: 230Vac (-15% ÷ +10%) 50/60 Hz
- Consumption: 1 W (12 VA) at 230 Vac
- Current insertion up to 65 A via current transformer (CT)
- Maximum diameter of the conductor through the TA: 10 mm
- Settable setpoint range: 1 ÷ 8 kW
- Pre-alarm time range Ton: 30 s ÷ 15 min
- Disconnection time range Toff: 30 s ÷ 15 min
- Output: 1 relay NO 16A / 250Vac
- Blocks for cables with maximum section of 4 mm²
- Operating temperature: -10°C ÷ +45°C
- Operating humidity: 10% ÷ 90% non condensing
- Storage temperature: -10°C ÷ +65°C
- Container: 1 module DIN
- Protection degree: IP20 / IP40 (on the front panel)
- Insulation: reinforced between accessible parts (front panel) and all other terminals
- Type of actions: 1B

To prevent the disconnection of all loads downstream of the general counter, the loads control PC1R Micro must measure the same current of the energy meter. For this reason the ideal position for the connection of the instrument is immediately downstream of the general switch.

Two loads or groups of loads must be located and so divided:

- **not disconnectable loads**, that is to say loads which can't be disconnected and that can't be controlled by PC1R Micro (even if their consumption must be measured by PC1R Micro to determine the total consumption)
- **disconnectable loads**, which can be disconnected if the absorbed power is higher than the prefixed threshold.

Note: PC1R Micro can be used also as a generic controller of absorbed power by loads under control by placing it upstream of the cable for power supply of loads themselves.

Clearly with this second application it's not possible to prevent the disconnection of the general energy meter, because the absorptions of the loads not controlled by PC1R Micro are not counted.

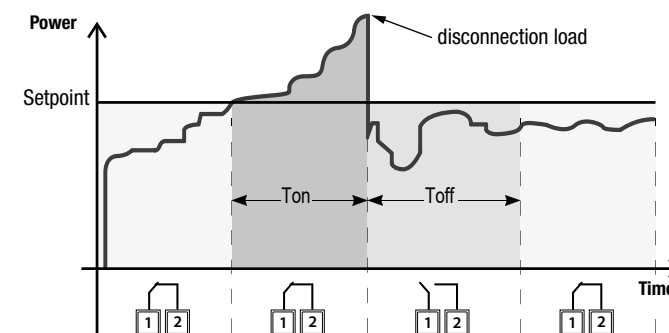
5 OPERATION

DEFINITION AND MODIFICATION OF OPERATION PARAMETERS

- **Setpoint** [kW] represents the activation threshold that is to say the maximum value of accepted consumption. Over this value the instrument provides for the disconnection of the load.
- **Ton** [seconds] represents the pre-alarm time, that is to say how long the power must be higher than the setpoint before the load is actually disconnected. During the pre-alarm time the red LED flashes.
- **Toff** [seconds] represents the disconnection time, that is to say after how long the load is reconnected. During the disconnection time the red LED is on.

Note: the load is connected only if the absorbed power is lower than the Setpoint.

OPERATION LOGIC



DEACTIVATION OF THE CONTROL

It is possible to disable relay switching which normally occurs when the intervention threshold is exceeded.

- To enable this function, regulate the **Ton** pre-alarm trimmer to the maximum value and verify that the green LED flashes.
- To restore normal operation, reset the **Ton** trimmer to the desired value (and in any case lower than the maximum value) and checking that the green LED is steady on.

information to users pursuant to art. 14 of the directive 2012/19 / EU of the european parliament and of the council of 4 july 2012 on waste electrical and electronic equipment (WEEE)



If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life.

The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one.

Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400 m², if they measure less than 25 cm.

An efficient sorted waste collection for the environmentally friendly disposal of the used device or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

REFERENCE STANDARDS

Compliance with Community Directives: 2014/35/EU (LVD) and 2014/30/EU (EMCD) is declared with reference to the following Standards:

- EN 61010-1 • EN 61000-6-2 and 61000-6-3