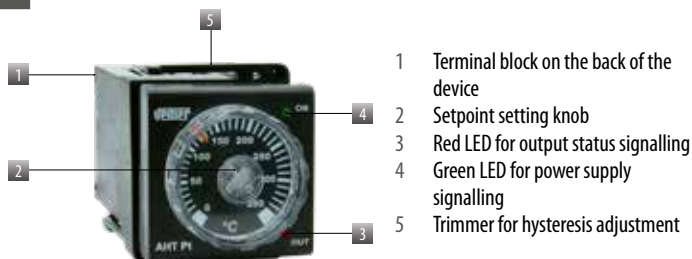
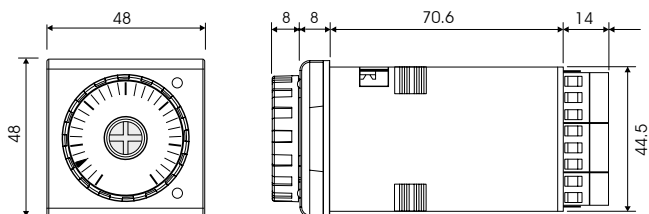




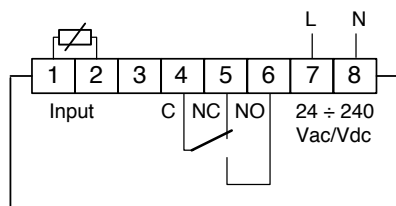
2 INSTRUMENT DESCRIPTION and DIMENSION



- 1 Terminal block on the back of the device
- 2 Setpoint setting knob
- 3 Red LED for output status signalling
- 4 Green LED for power supply signalling
- 5 Trimmer for hysteresis adjustment



3 CONNECTION DIAGRAM



4 INSTALLATION

- To install the heat regulator drill a 45.5x45.5 mm square hole.
- Fix the instrument to the panel using the appropriate bracket. To obtain the declared frontal protection degree, it is recommended the use of a gasket (not included in the package).
- Make sure that the instrument is suitably ventilated to avoid overheating.
- Avoid installing the instrument in places where high humidity can generate condensation or where dirt could lead to the introduction of conductive substances into the instrument.
- Install the heat regulator as far as possible from sources that can generate electromagnetic disturbances, such as motors, telebreakers, relays, solenoid valves, etc.
- Make sure that the cables of the probe are kept separate from the power supplying cables or the positive leads to avoid electromagnetic disturbances. The use of shielded probe cables is recommended; the shielding must be earthed only in one point, usually near the instrument.

5 OPERATION

- AHT-Pt100 heat regulators work in reverse-heating mode, which means that they activate the output if the temperature measured is lower than the set one (setpoint).
- To use the heat regulators simply set the setpoint by rotating the knob placed on the front and position the orange arrow on the desired temperature value. The triggering of the relay is signalled by the switching on of the red LED.
- The ON/OFF control operates in asymmetrical mode with hysteresis selectable from a minimum of 1°C to a maximum of 10°C using the trimmer located on the upper side of the device.

1 User Manual ANALOG HEAT REGULATORS

Read all the instructions carefully

The **AHT-Pt100** heat regulators are analogue temperature regulators with compact dimensions 48x48mm with Pt100 thermoresistor input signal, which perform type 1B actions (standard CEI EN 60730-1). They perfectly suit applications that require where ease of use and sturdiness, thanks to the central knob for temperature regulation and the signaling LEDs on the front to indicate the intervention of the output relay (red led) and the power supply of the instrument (green led).

Code	Model	Description
VE253100	AHT-Pt100 1P4U	48x48 Heat regulator for Pt100 probes

SAFETY WARNINGS

During the installation and operation of the instrument, proceed in accordance with the instructions below:

- 1) The instrument should be installed by a qualified operator following the installation diagrams carefully
- 2) The instrument should be installed in a panel from which no access can be gained to the terminals after installation
- 3) Do not power or connect the instrument if any part of it is damaged
- 4) In the power supply network a bipolar disconnection must be present
- 5) A protection device against over-currents should be installed in the electrical system, upstream of the device.
- 6) The instrument guarantees reinforced insulation between the low voltage parts (250 Vac) and the front and the very low voltage parts and between the power supply and the relay output.
- 7) The instrument is designed for installations with over-voltage category II and pollution level 2, in accordance with the EN 61010-1 standard
- 8) Any external switches connected to the heat regulator must guarantee, at the operating temperatures, a minimum insulation of 250 Vac or must be protected by an equivalent insulation

TECHNICAL CHARACTERISTICS

- Power supply: 24 ÷ 240 Vac/Vdc ($\pm 10\%$) 50/60 Hz
- Current input: ~3 VA
- Terminal block: 8 screw terminals for cables with a maximum section of 2.5 mm²
- Output: 1 relay with change-over contact 8 (3) A /250 Vac
- Regulation type: ON/OFF (only heating mode)
- Hysteresis: 1 ÷ 10 °C selectable by trimmer
- Precision: $\pm 2\%$ full-scale
- Measuring scale: 0 ÷ 350 °C
- Connectable probes: Pt100 thermoresistance
- Operating temperature: 0 ÷ 50 °C
- Operating humidity: 35 ÷ 95% not condensing U.R.
- Storage temperature: -25 °C ÷ 60 °C
- Protection degree: IP20 / IP65 (on the front with gasket)
- Container: in self-extinguishing plastic material V0 in accordance with UL94



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.

03-2023

REFERENCE STANDARDS

Compliance with Community Directives:
2014/35/UE (LVD) and 2014/30/UE (EMCD)
is declared with reference to the following standards:
• EN 61010-1 • EN 61326