



phone: +48 33 875 93 80  
e-mail: serwis@techsterowniki.pl

Service:  
ul. Skotnica 120, 32-652 Bulowice

Central headquarters:  
ul. Biała Droga 31, 34-122 Wieprz

EN

EU-T-2.1  
USER'S MANUAL

TECH  
CONTROLLERS

TECH  
CONTROLLERS

## WARRANTY CARD

TECH STEROWNIKI II Sp. z o.o. company ensures to the Buyer proper operation of the device for the period of 24 months from the date of sale. The Guarantor undertakes to repair the device free of charge if the defects occurred through the manufacturer's fault. The device should be delivered to its manufacturer. Principles of conduct in the case of a complaint are determined by the Act on specific terms and conditions of consumer sale and amendments of the Civil Code (Journal of Laws of 5 September 2002).

**CAUTION! THE TEMPERATURE SENSOR CANNOT BE IMMERSSED IN ANY LIQUID (OIL ETC). THIS MAY RESULT IN DAMAGING THE CONTROLLER AND LOSS OF WARRANTY! THE ACCEPTABLE RELATIVE HUMIDITY OF THE CONTROLLER'S ENVIRONMENT IS 5÷85% REL.H. WITHOUT THE STEAM CONDENSATION EFFECT.**

THE DEVICE IS NOT INTENDED TO BE OPERATED BY CHILDREN.

Activities related to setting and regulation of the controller parameters described in the Instruction Manual and parts wearing out during normal operation, such as fuses, are not covered by warranty repairs. The warranty does not cover damages arising as a result of improper operation or through the user's fault, mechanical damage or damage created as a result of fire, flood, atmospheric discharges, overvoltage or short-circuit. The interference of an unauthorized service, wilful repairs, modifications and construction changes cause the loss of Warranty. TECH controllers have protective seals. Removing a seal results in the loss of Warranty.

The costs of unjustifiable service call to a defect will be borne exclusively by the buyer. The unjustifiable service call is defined as a call to remove damages not resulting from the Guarantor's fault as well as a call considered unjustifiable by the service after diagnosing the device (e.g. damage of the equipment through the fault of the client or not subject to Warranty), or if the device defect occurred for reasons lying beyond the device.

In order to execute the rights arising from this Warranty, the user is obliged, at his own cost and risk, deliver the device to the Guarantor along with a correctly filled-in warranty card (containing in particular the sale date, the seller's signature and a description of the defect) and sales proof (receipt, VAT invoice, etc.). The Warranty Card is the only basis for repair free of charge. The complaint repair time is 14 days.

When the Warranty Card is lost or damaged, the manufacturer does not issue a duplicate.

.....  
seller's stamp

.....  
date of sale

## SAFETY

Before using the device for the first time the user should read the following regulations carefully. Not obeying the rules included in this manual may lead to personal injuries or controller damage. The user's manual should be stored in a safe place for further reference. In order to avoid accidents and errors it should be ensured that every person using the device has familiarized themselves with the principle of operation as well as security functions of the controller. If the device is to be sold or put in a different place, make sure that the user's manual is there with the device so that any potential user has access to essential information about the device.

The manufacturer does not accept responsibility for any injuries or damage resulting from negligence; therefore, users are obliged to take the necessary safety measures listed in this manual to protect their lives and property.

### ! WARNING

- The device should be installed by a qualified person.
- The regulator is not intended to be used by children.
- Any use other than specified by the manufacturer is forbidden.

### ! WARNING

- Risk of fatal electric shock from touching live connections. Before working on the controller switch off the power supply and prevent it from being accidentally switched on.
- Incorrect connection of cables may lead to controller damage.



We are committed to protecting the environment. Manufacturing electronic devices imposes an obligation of providing for environmentally safe disposal of used electronic components and devices. Hence, we have been entered into a register kept by the Inspection For Environmental Protection. The crossed-out bin symbol on a product means that the product may not be disposed of to household waste containers. Recycling of wastes helps to protect the environment. The user is obliged to transfer their used equipment to a collection point where all electric and electronic components.

## EU DECLARATION OF CONFORMITY

Hereby, we declare under our sole responsibility that **EU-T-2.1** manufactured by TECH STEROWNIKI II Sp. z o.o., head-quartered in Wieprz Biała Droga 31, 34-122 Wieprz, is compliant with Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (EU OJ L 96, of 29.03.2014, p. 357), Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to electromagnetic compatibility (EU OJ L 96 of 29.03.2014, p.79), Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products as well as the regulation by the MINISTRY OF ENTREPRENEURSHIP AND TECHNOLOGY of 24 June 2019 amending the regulation concerning the essential requirements as regards the restriction of the use of certain hazardous substances in electrical and electronic equipment, implementing provisions of Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 305, 21.11.2017, p. 8).

For compliance assessment, harmonized standards were used:  
PN-EN IEC 60730-2-9:2019-06, PN-EN 60730-1:2016-10,  
EN IEC 63000:2018 RoHS.

*Paweł Jura* *Janusz Master*  
Paweł Jura Janusz Master

Prezesa firmy

Wieprz, 08.09.2022

## TECHNICAL DATA EU-T-2.1

Power supply	batteries 2xAAA 1,5V
Room temperature adjustment range	5°C ÷ 35°C
Humidity measurement range	10-95%RH
Potential-free cont. nom. out. load	230V AC / 0,5A (AC1) * 24V DC / 0,5A (DC1) **
Measurement error	± 0,5°C

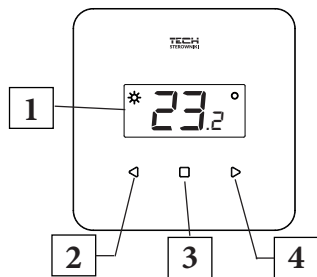
\* AC1 load category: single-phase, resistive or slightly inductive AC load.  
\*\* DC1 load category: direct current, resistive or slightly inductive load.

The pictures and diagrams are for illustration purposes only.  
The manufacturer reserves the right to introduce some changes.

## DESCRIPTION

The EU-T-2.1 room regulator is intended for controlling the heating device. Its main task is to maintain the pre-set room temperature by sending a signal to the heating device when the room temperature has been reached.

There are 2 color versions: white or black.



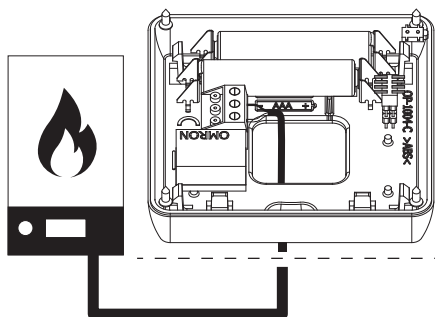
1. Display - current room temperature/humidity
2. <
3. Menu
4. >

## HOW TO INSTALL THE REGULATOR

The regulator should be installed by a qualified person.

- WARNING**
- Risk of fatal electric shock from touching live connections. Before working on the controller switch off the power supply and prevent it from being accidentally switched on.
  - Incorrect connection of wires may damage the regulator!

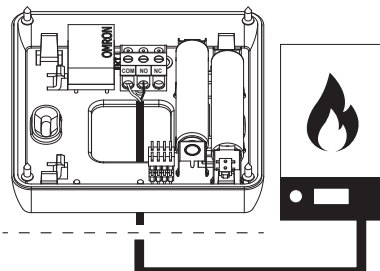
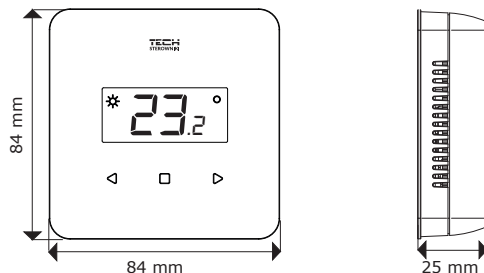
The diagrams below illustrate how the regulator should be mounted.



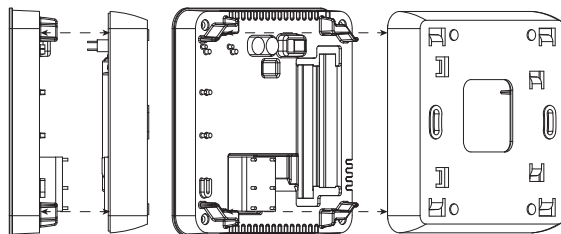
## Controller advantages

- built-in temperature and humidity sensor
- wall-mountable housing
- front panel made of glass

Current temperature is displayed on the screen. Use the Menu button (in the middle) to display current humidity. Press and hold the Menu button to enter the menu.



How to install particular elements:



### WARNING

If pump manufacturer requires an external main switch, power supply fuse or additional residual current device selective for distorted currents it is recommended not to connect pumps directly to pump control outputs. To avoid damaging to the device, an additional safety circuit must be used between the regulator and the pump. The manufacturer recommends the ZP-01 pump adapter, which must be purchased separately.

## HOW TO CHANGE THE PRE-SET TEMPERATURE

The pre-set temperature may be adjusted in the EU-T-2.1 room regulator by means of buttons < >.

During inactivity, the screen displays current room temperature. Press < or > to display the pre-set temperature value - the digits start flashing. Use the buttons < > to adjust the value.

### 4. Calibration

The Cal function enables the user to calibrate the sensor within the range of -10°C to +10°C. Select Cal and when the screen starts flashing, press the Menu button. The screen displays current calibration value. Use the buttons < > to adjust the value.

### 5. Auto-lock

The Loc function enables the user to activate the key lock. Select Loc and when the screen starts flashing, press the Menu button. Next, the regulator asks if you want to activate the key lock (yes/no). Select the answer using one of the buttons < >. Wait 5 seconds to confirm. When the lock is active, the keys are locked after a few seconds of inactivity. To unlock, press and hold both buttons < >. If the screen displays Uni, it means that the keys have been unlocked.

### 6. Min/Max pre-set temperature

The Def function enables the user to restore factory settings. Select this function and when the screen starts flashing, press the Menu button. Next, the regulator asks if you want to restore factory settings (yes/no). Select the answer using one of the buttons < >. In order to confirm, wait for about 5 seconds or press the Menu button.

## MENU FUNCTIONS

Press and **hold** the Menu button to enter the regulator menu. Use the buttons < > to navigate through menu functions.

### 1. Operation mode

The Out function enables the user to choose one of the regulator operation modes: heating (HEA) or cooling (Coo). Select Out and when the screen starts flashing, press the Menu button. The screen shows available operation modes (Coo, HEA). Use the buttons < > to select the mode. In order to confirm changes, wait for about 5 seconds or press the Menu button.

### 2. Battery

The Bat function enables the user to check the battery level (%). Select Bat and when the screen starts flashing, press the Menu button. The screen displays the battery level.

### 3. Hysteresis

The His function enables the user to set the room temperature hysteresis within the range of 0,2°C to 4°C. Room temperature hysteresis defines the pre-set temperature tolerance in order to prevent undesired oscillation in case of small temperature fluctuation.

Example:

Pre-set temperature : 23°C

Hysteresis: 1°C

The room regulator reports that the temperature is too low when the room temperature drops to 22 °C.

In order to define the pre-set temperature hysteresis, use the buttons < > and select a desired value. In order to confirm changes, wait for about 5 seconds or press the Menu button.

### 7. Factory settings

The Def function enables the user to restore factory settings. Select this function and when the screen starts flashing, press the Menu button. Next, the regulator asks if you want to restore factory settings (yes/no). Select the answer using one of the buttons < >. In order to confirm, wait for about 5 seconds or press the Menu button.

### 8. Exit the menu

To exit the menu, select the Ret option. The screen flashes for 3 seconds and exits the menu.

### NOTE

In order to display the software version number, press and hold the registration button on the back of the housing.