

EN

TECH CONTROLLERS

USER MANUAL

EU-T-1.1z

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TECH CONTROLLERS

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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 IMMERSED 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.

The costs of unjustifi able service call to a defect will be borne exclusively by the buyer. The unjustifi able service call is defi ned as a call to remove damages not resulting from the Guarantor's fault as well as a call considered unjustifi able 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 fi lled-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

* The full content of the Warranty Card is available at www.tech-controllers.com.

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 diff erent 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
- High voltage! Make sure the controller is disconnected from the mains before performing any activities involving the power supply (plugging cables, installing the device etc.)
 - The device should be installed by a qualified electrician.
 - The controller should not be operated by children.
 - Any use other than specified by the manufacturer is forbidden.

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-1.1z** manufactured by TECH STEROWNIKI II Sp. z o.o., head-quartered in Wierpż Biała Droga 31, 34-122 Wierpż, 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
PN EN IEC 63000:2019-01 RoHS.

Wierpż, 27.09.2024

Here

Paweł Jura

Jarosław Mastan

Przemysław Borys

TECHNICAL DATA

Power supply	230V/+/-10%/50Hz
Maximum power consumption	0,5W
Potential-free cont. nom. out. load	230V AC / 0,5A (AC1) * 24V DC / 0,5A (DC1) **
Ambient temperature	5÷50°C
Temperature adjustment range	5÷35°C
Measurement error	±0,5°C

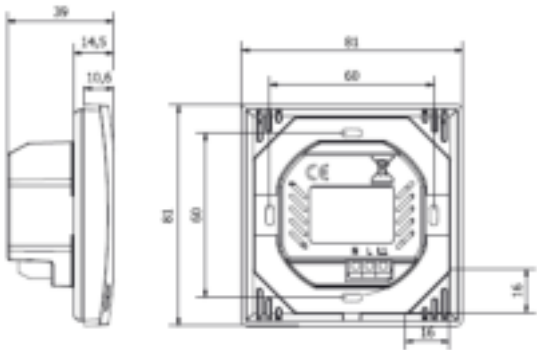
* AC1 load category: single-phase, resistive or slightly inductive AC load.
** DC1 load category: direct current, resistive or slightly inductive load.

If pump manufacturer requires an external main switch, power supply fuse or additional residual current device selective for distorted currents it is recomended 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.

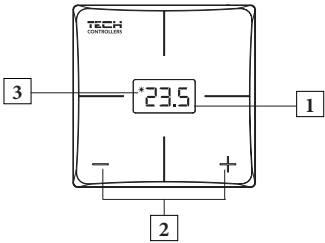
The pictures and diagrams are for illustration purposes only.
The manufacturer reserves the right to introduce some changes.

DESCRIPTION

The EU-T-1.1z dedicated room regulator is intended to be used for controlling a heating or cooling device. The regulator is designed to maintain the set temperature in the room by sending a signal to the heating/cooling device with information about reaching the set temperature values.
The regulator is installed in an electric box and powered by 230V AC from the EU-L-5s controller.



CONTROLLER OPERATION



1. Display - current temperature
2. +/- buttons
3. Sun icon
- lighted (heating mode) - the room needs to be heated
- flashes (cooling mode) - the room needs to be cooled

CHANGING THE PRE-SET TEMPERATURE

The screen displays the current room temperature.
Press the + or - button to change the pre-set temperature - the digits will start to flash. Using the +/- buttons, this value can then be changed.
After the change (after about 3 seconds), the current temperature is displayed again, and the change of the entered temperature is saved in the controller's memory.

MENU FUNCTIONS

To enter the controller menu, hold down the +/- buttons simultaneously. Use these buttons to navigate between individual menu items.

HIS 1. Hysteresis
This function allows setting the room temperature hysteresis in a range from 0.2°C to 8°C. The temperature hysteresis introduces a tolerance for the set temperature to prevent undesirable deviations.
Example: • Pre-set temperature: 23 °C • Hysteresis: 1 °C
The room regulator will start to indicate room underheating after the temperature drops to 22°C.
To set the hysteresis of the set temperature, select the desired value of hysteresis using the + and - buttons. When the set temperature stops flashing (after approx. 3 seconds), this value will be saved.

CAL 2. Calibration
The function allows setting the sensor calibration in a range from -10°C to +10°C. After switching to this function, the screen flashes for 3 seconds, and then the set calibration value is displayed. The setting can be changed by using the +/- buttons.

DEF 3. Operation mode selection
The function allows the switching of the operating mode of the controller between heating („HEA”) and cooling („Coo”). After switching to this function, the screen flashes for 3 seconds, and then the available modes (Coo, HEA) are displayed. Select the mode using the +/- buttons. Wait 3 seconds to confirm the selection.

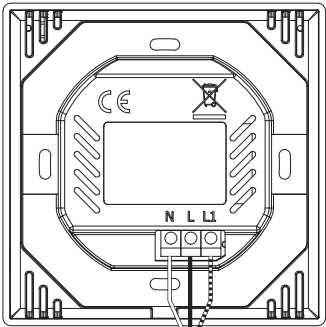
INSTALLATION

The device should be installed by a qualified electrician.

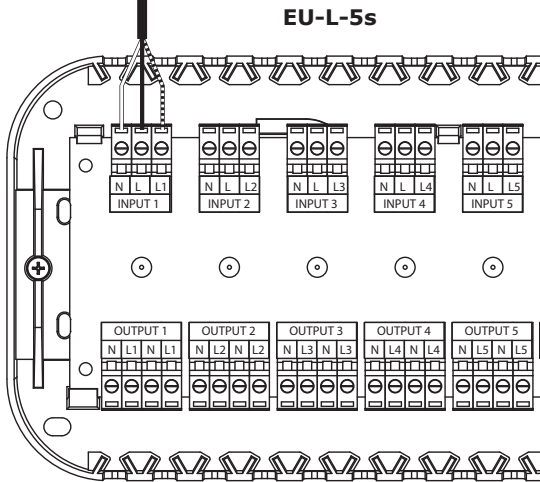


WARNING

- 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.



EU-T-1.1z



EU-L-5s

T1 T2 4. T1/T2 Min/max pre-set temperature
This function allows the setting of the minimum T1 and maximum T2 of the pre-set temperature. After entering this function, the screen flashes for 3 seconds. Use the +/- buttons to select the desired value, which will be confirmed automatically after 3 seconds from setting.

Loc 5. Button lock
This function allows button lock activation. After switching to this function, the screen flashes for 3 seconds, and then you are asked whether to activate the lock (yes/no). Select using the +/- buttons. Wait 3 seconds to confirm the selection. Once the lock is activated, the buttons will automatically lock after 10 seconds in idle mode. To unlock the buttons, simultaneously hold +/- . Once the „Ulc” prompt appears, the buttons are unlocked.
To cancel the button lock, enter this function again and select the „no” option.

VER 6. Software version
The function allows the viewing of the current software version.

DEF 7. Factory defaults
This function allows the restoration of the factory settings. After switching to this function, the screen flashes for 3 seconds, and then you are asked whether to reset to factory defaults (yes/no). Select with the +/- button. Wait 3 seconds to confirm the selection.

FE 8. Exit from menu
After switching to this function, the screen flashes for 3 seconds, then exits the menu.