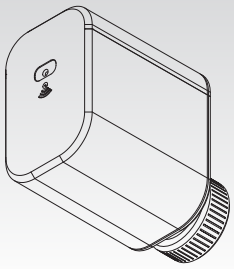


EN

USER'S MANUAL
STT-869

TECH CONTROLLERS

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

Service:
ul. Skotnica 120, 32-652 Bulowice
phone: **+48 33 875 93 80**
e-mail: **serwis@techsterowniki.pl**

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 specifi c terms and conditions of consumer sale and amendments of the Civil Code (Journal of Laws of 5 September 2002).

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 fi re, fl ood, atmospheric discharges, overvoltage or short-circuit. The interference of an unauthorized service, wilful repairs, modifi cations 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 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

EU DECLARATION OF CONFORMITY

Hereby, we declare under our sole responsibility that **STT-869** manufactured by TECH STEROWNIKI II Sp. z o.o., head-quartered in Wieprz Biała Droga 31, 34-122 Wieprz, is compliant with Directive 2014/53/EU of the European parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment, 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 art. 3.1a Safety of use
PN-EN 62479:2011 art. 3.1 a Safety of use
ETSI EN 301 489-1 V2.2.3 (2019-11) art.3.1b Electromagnetic compatibility
ETSI EN 301 489-3 V2.1.1:2019-03 art.3.1 b Electromagnetic compatibility
ETSI EN 300 220-2 V3.2.1 (2018-06) art.3.2 Effective and coherent use of radio spectrum
ETSI EN 300 220-1 V3.1.1 (2017-02) art.3.2 Effective and coherent use of radio spectrum
PN EN IEC 63000:2019-01 RoHS.

Paweł Jura Janusz Master
Prezesi firmy

Wieprz, 26.01.2024

Safety

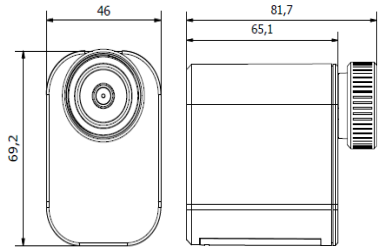
Before using the device for the fi rst time the user should read the following regulations carefully. Not obeying the instructions included in this manual may lead to personal injuries or controller damage.
The user's manual should be stored in a safe place for further reference.
In order to avoid accidents 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
- The device should be installed by a qualifi ed electrician.
- The actuator may not be used contrary to its intended purpose.

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.

Description

STT-869 wireless electric actuator allows the user to easily and effi ciently manage the temperature in particular heating zones of a building. The system controlling the actuator ensures optimum heating comfort and contributes to signifi cant energy saving. This type of actuator may be used in heating systems. It is compatible with such controllers as EU-L-4 WiFi, EU-L-8e, EU-L-9r, EU-WIFI 8S, etc.

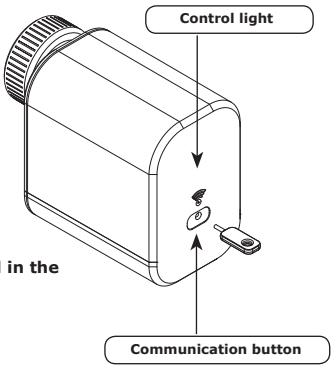


Technical data

Power supply	2xAA 1,5V batteries - Alkaline
Communication	wireless
Frequency	868MHz
Output	M30x1,5 nut

How to register the actuator

In order to register the actuator in a given zone, select <Registration> in the main controller (see: instruction manual of the device) and press the communication button.
Release it and observe the control light:
- if the green light flashes twice, it indicates successful registration
- if the red light goes on for a while, it indicates registration failure - it is necessary to conduct registration again.



Use the tool included in the kit to register.

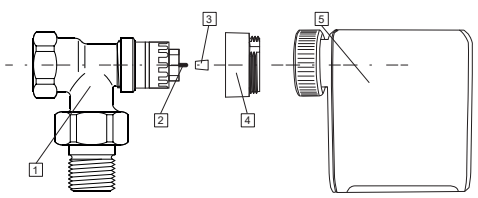
Installing the Controller and First Calibration

Follow these steps while installing the device:
1. Before starting the device - check that the radiator valve is not damaged (stuck, etc.). Use a hard tool to push the valve plunger at the radiator several times. If it does not move - replace the valve. If it works - the device can be installed. If the valve is not checked before hand and it has failed to properly operate, the Tech Sterowniki company will not guarantee the correct operation of the device.
2. Installing the battery and preparing for calibration - after inserting the battery, the actuator will start adopting the assembly position, which will facilitate screwing the device on the valve. Once the actuator is in the assembly position, it will keep this for 2 minutes. After this time, the calibration will start automatically.

NOTE
Depending on settings, it may take the actuator even 1,5 minutes to get into the mounting position.

3. Screwing the actuator onto the radiator valve and calibration - po przykręceniu siłownika do zaworu, aby rozpocząć ręcznie kalibrację, naafter screwing the actuator onto the valve, to start manual calibration, press the communication button with the included instrument.
The LED flashes 2 times - the calibration process was carried out correctly.

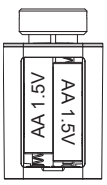
The actuator can be mounted with any valve. If installed with a Danfoss valve, use the appropriate adapter according to the diagram below.



1. Danfoss RAN (click) or RTD-N valve or Oventrop
2. Valve pressure pin
3. Pressure pin cap Danfoss or Oventrop
4. Danfoss RAN (click) or RTD-N adapter (only for the valve Danfoss)
5. STT-869 actuator

It is necessary to put the cap on the valve pressure pin if we want STT-869 and Danfoss or Oventrop valve to work properly.

Replacing the battery



1. Remove the cover
2. Remove the batteries
3. Press the communication button in order to release the residual electricity
4. Insert new batteries
5.The actuator will return to the assembly position. Subsequently, calibrate or wait 2 minutes (See: Installing the Controller and Calibrating items 2 and 3)

CAUTION
If the actuator indicates a battery level of 0 or 1% in the master controller (depending on the type of master controller), be prepared to replace the battery.

Always use two new batteries of the same brand. If two different batteries are installed or ones with different charge levels, the Tech Sterowniki company does not guarantee the correct operation of the actuator.

Additional functions

Connectivity test

In order to check the connection with the main controller, press the communication button and hold it until the control light fl ashes twice. Release the button and observe the control light:
- if the green light flashes twice, it indicates successful communication
- if the red light goes on for a while, there is no connection with the main controller.

Connectivity test enables the user to identify the controller and the zone in which a given actuator is registered. The main controller displays appropriate message.

Actuator recalibration

To reset the actuator, press the communication button and hold it until the control diode blinks three times. After releasing the button, the actuator will assume the mounting position and immediately start calibrating. This action will not cause the actuator to be unregistered from the master controller.

The actuator also has an automatic recalibration function every 500 movements in order to correct its closing.

Main controller alarms connected with actuator operation

If the main controller supporting STT-869 actuator informs about one of the following alarms, follow the steps described in the table below:

Type of alarm	Possible cause	How to fix it
Error #1 - Calibration error 1 – Moving the screw to the mounting position took too much time	- The limit switch sensor is damaged	- Calibrate actuator again by holding the communication button until the third flash of green light - Call the service staff
Error #2 - Calibration error 2 – The screw is maximally pulled out. No resistance while pulling out	- The actuator has not been screwed to the valve or has not been screwed completely - The valve stroke is too big or the valve dimensions are not typical - Actuator current sensor is damaged	- Check if the controller has been installed properly - Replace the batteries - Calibrate actuator again by holding the communication button until the third flash of green light - Call the service staff
Error #3 - Calibration error 3 - The screw has not been pulled out enough - the screw meets resistance too early	- The valve stroke is too small or the valve dimensions are not typical - Actuator current sensor is damaged - Low battery level	- Replace the batteries - Call the service staff
Error #4 - No feedback	- The master controller is switched off - Poor range or no range in the master controller - Radio module in the actuator is damaged	- Check if the master controller is on - Reduce the distance from the master controller - Call the service staff
Error #5 - Low battery level	- The battery is flat	- Replace the batteries
Error #6 - Encoder is locked	- The encoder is damaged	- Calibrate actuator again by holding the communication button until the third flash of green light - Call the service staff
Error #7 - To high voltage	- Unevenness of the screw, the thread etc. may cause excessive resistance - Too high resistance of gear or motor - Current sensor is damaged	
Error #8 - Limit switch sensor error	- Limit switch sensor damaged	