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EN

USER'S MANUAL
ST-868

TECH
CONTROLLERS

TECH
CONTROLLERS

WARRANTY CARD

TECH 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 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 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 electrician.

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.

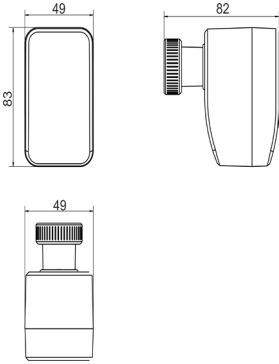


Description of the device

STT-868 wireless electric actuator allows the user to easily and efficiently manage the temperature in particular heating zones of a building. The system controlling the thermostat actuator ensures optimum heating comfort and contributes to significant energy saving. This type of actuator may be used both in the heating and cooling systems. It is compatible with ST-2807 regulator and external controllers for thermostatic valves (WIFI 8S, L-8, ST-8S etc.).

Technical data

Output – nut M30x1,5
Communication – wireless,
frequency: 868MHz
Power supply – 2x AA 1,5V
batteries – it is advisable to use
high volume batteries
(over 2500mAh).



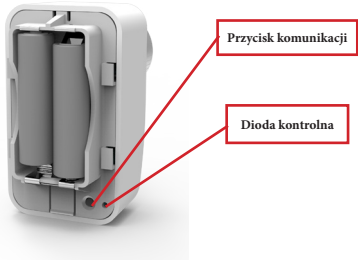
Replacing batteries

- 1. Remove batteries
- 2. Press the button
- 3. Insert batteries

How to install the actuator

Follow these steps while installing the device:

- 1. Remove the cover of STT-868 actuator.
- 2. Insert the batteries. The actuator remains in mounting position for 2 minutes making it easier for the user to screw it.
- 3. Screw the actuator to the radiator. Actuator calibration is initiated after pressing the button or automatically after 2 minutes.



How to register the actuator

In order to register the actuator in a given zone, select registration option in the main controller menu (see: user's manual for the controller) and press communication button (placed under the actuator cover). Release the button and observe the control light:

- if the light flashes twice, it indicates successful registration,
- if the light goes on for a while, an error occurred during the registration process and it must be conducted again.

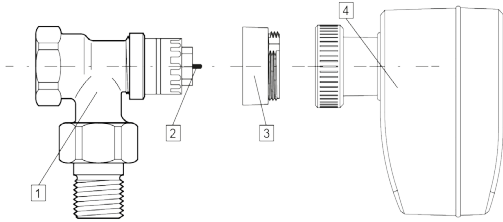
Connectivity test

In order to check the connection with the main controller, press the communication button and hold it until the control light flashes twice. Release the button and observe the control light:

- if the light flashes twice, it indicates successful communication,
- if the 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 to which the actuator is assigned.

Installation with Danfoss valve



- 1. Danfoss RAN (click) or RTD-N valve
- 2. Valve pressure pin
- 3. Danfoss RAN (click) or RTD-N adapter
- 4. STT-869 actuator

Main controller alarms connected with actuator operation

If the main controller supporting STT-868 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
Actuator alarm - ERROR #0 - low battery level	- Flat battery in the actuator	- Replace the batteries
Actuator alarm - ERROR #1 – possible damage of mechanical or electronic parts	- Some parts have been damaged	- Call the service staff
Actuator alarm - ERROR#2 – the maximum actuator stroke has been exceeded	- No piston controlling the valve - Too big stroke (movement) of the valve - The actuator has been incorrectly mounted on the radiator - Inappropriate valve on the radiator	- Install a piston controlling the actuator - Check the valve stroke - Install the actuator correctly - Replace the valve on the radiator
Actuator alarm - ERROR#3 – too little piston movement	- The valve got stuck - Inappropriate valve on the radiator - Too little stroke (movement) of the valve	- Inspect the valve operation - Replace the valve on the radiator - Check the valve stroke
Actuator alarm - ERROR #4 – no return communication (to the actuator)	- Out of range - No batteries	- The actuator is too far from the controller - Insert batteries into the actuator After the communication is re-established, the alarm is deactivated automatically.

EU DECLARATION OF CONFORMITY

Hereby, we declare under our sole responsibility that **STT-868** regulator manufactured by TECH, headquartered 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;
- the regulation by the Ministry of Economy of May 8, 2013 'concerning the essential requirements as regards the restriction of the use of certain hazardous substances in electrical and electronic equipment', implementing provisions of ROHS directive 2011/65/ EU.

For compliance assessment, harmonized standards were used:

PN-EN 60730-2-9 : 2011 par. 3.1a Safety of use
ETSI EN 301 489-1 V2.1.1 (2017-02) par.3.1b Electromagnetic compatibility
ETSI EN 301 489-3 V2.1.1 (2017-03) par.3.1 b Electromagnetic compatibility
ETSI EN 300 220-2 V3.1.1 (2017-02) par.3.2 Effective and coherent use of radio spectrum
ETSI EN 300 220-1 V3.1.1 (2017-02) par.3.2 Effective and coherent use of radio spectrum.