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Microprocessor-based three-way valve controller

MTS for a valve

Installation and Operation Manual

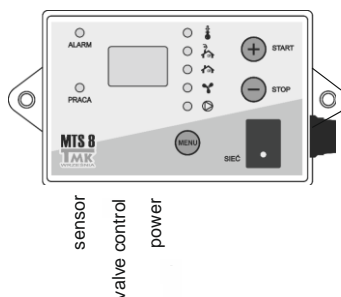
Applications

MTS8 is a microprocessor-based controller designed for maintaining preset temperatures (minimum and maximum) of the central heating (CH) system depending on the temperature of the room in which a room thermostat is installed.

Technical specifications

- Supply voltage	230V / 50Hz
- Temperature measurement range	0 ÷ 99°C
- Temperature of alarm activation	above 92°C and below 9°C

INSTALLATION

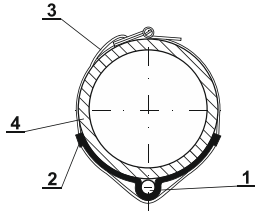


1. Controller mounting

Mount the controller on a suitable wall using 6 mm wall plugs (the plugs complete with screws are a part of the delivery set).

2. Sensor mounting (see the figure below)

- Mount the sensor (1) on a non-insulated pipe downstream the three-way valve.
- Adjust the sensor shield to the pipe.
- Thread the fastener (3) through the openings in the sensor shield (2) and slightly tighten the fastener on the pipe, as shown in the figure.
- Slide the sensor (1) between the pipe (4) and the sensor shield (2), and tighten the fastener (3).
- It is advisable to wrap the pipe with the sensor with a thermal insulation material.



Mounting of the sensor on the pipe downstream the valve

Note: The sensor is not suited for being used directly in the liquid!

3. Installation of room thermostat

Install the room thermostat according to the operation manual.

Connect the MTS8 controller to the room thermostat using a jack plug (included in the delivery set) and a two-wire cable.

The jack socket is placed on the left-side panel of the controller.

In the room thermostat, connect the cable to the COM and NC terminals which are closed when the heating indicator on the thermostat is inactive.

The status is indicated by the MTS8 controller by the lit lamp on the right of the digital display.

4. Connection of power supply cable to the valve

- Connect the grey wire of the controller cable to the blue wire of the valve cable.
- Connect the brown and black wires depending on valve configuration.

Note: Always ensure that regulator installation is performed by a properly qualified electrician.

5. Connection of the controller

Connect the supply cable to a **230 V, 50 Hz power outlet with an earth contact.**

The ambient temperature in the controller mounting location may not exceed 40°C.

CONTROLLER OPERATION

The controller operates by stabilizing temperature of the water in the CH system by means of opening or closing the three-way valve.

The controller makes it possible to select two different temperature settings:

- high temperature (when it is cold in the residential area);
- low temperature (when it is warm – provided that the room thermostat is connected).

The room temperature is set on the room thermostat.

SETTINGS MENU

To change settings, press the **MENU** button.

To go to the next parameter, press the button again.

The display shows currently set parameter values.



The HIGH TEMPERATURE indicator is blinking;
setting of the desired temperature of the radiators when it is cold using the (+) or (-) buttons.



The minimum setting is always 5°C higher than LOW TEMPERATURE.

The LOW TEMPERATURE indicator is blinking;
setting of the desired temperature of the radiators when it is warm using the (+) or (-) buttons.







The maximum setting is always 5°C lower than HIGH TEMPERATURE.

The BREAK TIME indicator is blinking;
setting of a break in valve operation using the (+) or (-) buttons.

The operation time is fixed and amounts to 1 s.

Pressing the **MENU** button again (or not pressing any buttons for longer than 10 seconds) saves the settings in the memory of the device and returns to temperature display.

DESCRIPTION OF INDICATORS (during controller operation)

	stable HIGH temperature
	stable LOW temperature
	valve opening
	valve closing
ALARM	CH temperature below 9°C or above 92°C
PRACA (WORK)	valve operation

SAFETY DEVICES

The valve and the controller are protected by means of a 500 mA fuse which blows up in emergency situations (e.g. short-circuit in the valve or in the controller).

DELIVERY SET

- controller
- controller shield
- fastener with a flexible pawl
- 6 mm wall plugs (2 pcs.)

WARRANTY

TMK sp.j. grants the user a warranty for the MTS controller. The warranty period is 3 years from the date of purchase of the device, however not longer than 4 years from the date of manufacture.

WARRANTY TERMS AND CONDITIONS

Warranty claims shall be accepted provided that the terms and conditions of warranty, and general rules of operation of electronic devices, are complied with as required. TMK sp.j. guarantees appropriate workmanship, high quality and reliable operation of the controller. In the event of any faults in the controller's operation, or defects which can be attributed to the manufacturer, TMK sp.j. shall repair or replace the faulty controller with a defect-free device within 14 working days from the date of returning the controller (in person or through post). The warranty scheme explicitly excludes all defects arising due to the user's fault and, particularly, defects caused by mechanical damage, faulty mounting, water ingress or operation of the device contrary to the general rules of operation of electronic devices.

The warranty is only valid with a proof of purchase.

DATE OF SALE:

.....
day, month, year

.....
Seller's stamp and signature

MANUFACTURER:

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DATE OF MANUFACTURE