

TECH
CONTROLLERS



ROOM REGULATORS



TECH CONTROLLERS

Our company manufactures microprocessor devices for consumer electronics. We are the largest Polish manufacturer of controllers for CH boilers fired with solid fuels. We have been trusted by the leading CH boiler companies in Poland and abroad. Our devices are characterized by the highest quality and reliability, confirmed by many years of experience.

We specialize in designing and production of controllers for CH boilers fired with coal, fine coal, pellet, wood and biomass (oats, corn, dried seeds). Apart from that, we also manufacture regulators for refrigeration industry, solar systems, sewage treatment plants, mushroom farms, three- and four-way valves as well as room regulators and scoreboards for sports playfields.

We have already sold hundreds of thousands of various controllers and we are successfully expanding our offer, with the customer satisfaction being our top priority. The quality management system ISO 9001 and a number of certificates confirm the highest quality of our products.

The history of our company are, first of all, the people who create it, their knowledge, experience, involvement and persistence. Our plans for the future include maintaining good relations with our customers, acquiring new customers and developing new, high-quality products.

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ROOM REGULATORS



ROOM REGULATORS

Thanks to room regulators, we can manage the heating device directly where they are installed. By adjusting the operation of the boiler to the conditions in the room, the controller allows you to maintain the optimal temperature and at the same time ensure considerable savings, minimizing energy losses.

Our offer includes both programmable controllers that work in two time periods: (day/night), and more advanced ones that allow you to program the temperature for every hour of the day and every day of the week.

ROOM REGULATORS FOR FRAME SYSTEMS



230V POWERED VERSIONS

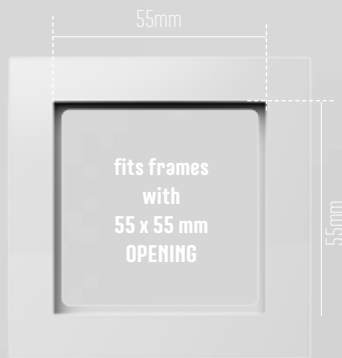
+ / - CONTROL in **EU-F-2z**

WEEKLY CONTROL in **EU-F-4z**

HEATING - COOLING MODE

OPTIONAL FLOOR SENSOR in **EU-F-4z**

WIRED or **WIRELESS**



CREATE THE PERFECT COMBINATION OF STYLE IN YOUR HOME

Examples of compatible frame systems:

- **Berker** - S.1, B.1, B.3, B.7
- **Jung** - AS, A500, A PLUS, A CREATION
- **Gira** - STANDART 55, E2, EVENT, ESPRINT, PROFIL55, E22
- **SIEMENS** - DELTA LINE, DELTA VITA, DELTA MIRO
- **SCHNEIDER** - SYSTEM M-PLAN, SYSTEM M-ELEGANCE, M-PURE, M-SMART



Click to check
the current list of
compatible systems

ROOM REGULATORS FOR FRAME SYSTEMS



2 colors available



2 colors available



EU-F-2z



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- hysteresis range 0.2- 4°C
- key lock
- heating / cooling mode

Controller equipment

- glass front
- built in air temperature sensor
- LCD display, no backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)
- built-in 230V power supply

List of compatible frame systems on page 5.

power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	55 x 55 x 11	white, black

EU-F-4z



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- **weekly** mode
- **day/night** mode
- **optimum-start** function
- possibility of connecting a **floor temperature sensor**
- hysteresis range 0.2- 4°C
- key lock
- heating / cooling mode

Controller equipment

- glass front
- built in air temperature sensor
- LCD display, **temporary backlight**
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)
- built-in 230V power supply

List of compatible frame systems on page 5.

power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	55 x 55 x 11	white, black

+/- ROOM REGULATORS



2 colors available



2 colors available



EU-294



Controller functions

- controlling room temperature +/- with 0,1°C accuracy,
- hysteresis range 0.2- 4°C,
- key lock,
- possibility to set limitation of the range of temperature changes
- sensor calibration
- heating / cooling mode

Controller equipment

- built in air temperature sensor
- 2 x AAA 1,5V batteries
- radio receiver with v2 version
- mounting plate
- LCD display, no backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

v1	power / communication	2 x AAA	wired 2 x 0,5mm ²
	dimensions [mm] / color	80 x 80 x 24	white, black
v2	power / communication	2 x AAA	wireless
	dimensions [mm] / color	80 x 80 x 24	white, black

EU-T-2



Controller functions

- controlling room temperature +/- with 0,1°C accuracy,
- hysteresis range 0.2- 4°C,
- key lock,
- possibility to set limitation of the range of temperature changes
- sensor calibration
- heating / cooling mode

Controller equipment

- **glass front**
- built in air temperature sensor
- 2 x AAA 1,5V batteries
- radio receiver with 2.2 version
- mounting plate
- LCD display, no backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

2.1	power / communication	2 x AAA	wired 2 x 0,5mm ²
	dimensions [mm] / color	84 x 84 x 26	white, black
2.2	power / communication	2 x AAA	wireless
	dimensions [mm] / color	84 x 84 x 15	white, black

ROOM REGULATORS 230V



T-P1.1z



Controller functions

- room temperature control
- 0.5°C or 1°C hysteresis selectable
- heating/cooling function selectable
- dedicated for the EU-L-5s or EU-L-2 controller

Controller equipment

- built-in temperature sensor
- temperature adjustment knob range: 5–30°C
- power supply: 230V 50Hz
- voltage relay (1A/AC1)

power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	81 x 81 x 27,3	white

T-P2.1z



Controller functions

- room temperature control
- 0.5°C or 1°C hysteresis selectable
- heating/cooling function selectable
- dedicated for the EU-L-5s or EU-L-2 controller

Controller equipment

- built-in temperature sensor
- LCD display, no backlight
- temperature adjustment knob range: 5–30°C
- power supply: 230V 50Hz
- voltage relay (1A/AC1)

power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	81 x 81 x 27,3	white

DAY / NIGHT ROOM REGULATORS



HEATING - COOLING MODE

OPTIONAL **FLOOR TEMPERATURE** SENSOR

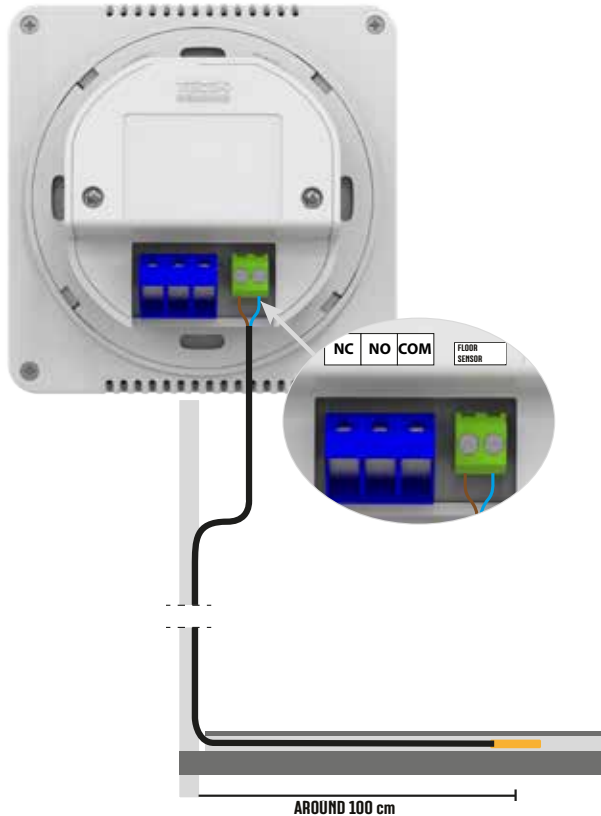
WALL or **FLUSH MOUNTED** VERSIONS

BATTERIES or **230V POWERED** VERSIONS

NEGATIVE DISPLAY*

* available only in black versions

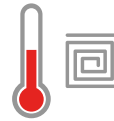
FLOOR TEMPERATURE SENSOR



When using an additional floor temperature sensor, the room regulator will control the room temperature taking into account the additional floor temperature (set the minimum and maximum floor temperature). Among other things, we can prevent the floor from cooling down in well-sunny rooms and maintain the floor temperature at a fixed level, for example in bathrooms.



MAXIMUM TEMPERATURE
in the range of 20°C - 45°C



HYSTERESIS
in the range of 0.2°C - 5°C



MINIMUM TEMPERATURE
in the range of 10°C - 30°C

* ranges may differ depending on the controller version

DAY / NIGHT WALL MOUNTED ROOM REGULATORS



2 colors available



EU-295



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- hysteresis range 0.2- 8°C
- day / night mode
- manual mode
- additional control based on floor temperature (in case of using NTC floor sensor - not included)

Controller equipment

- PVC front
- built in air temperature sensor
- 2 x AAA 1,5V batteries
- radio receiver with v2 version
- mechanical buttons
- LCD display, temporary backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

v1	power / communication	2 x AAA	wired 2 x 0,5mm ²
	dimensions [mm] / color	95 x 95 x 24	white
v2	power / communication	2 x AAA	wireless
	dimensions [mm] / color	95 x 95 x 24	white

EU-T-3.1



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- hysteresis range 0.2- 5°C
- day / night mode
- manual mode
- key lock**
- additional control based on floor temperature (in case of using NTC floor sensor - not included).
- heating / cooling mode**

Controller equipment

- glass front**
- built in air temperature sensor
- 2 x AAA 1,5V batteries
- touch buttons
- LCD display, temporary backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

power / communication	2 x AAA	wired 2 x 0,5mm ²
dimensions [mm] / color	84 x 84 x 26	white, black

DAY / NIGHT FLUSH MOUNTED ROOM REGULATORS



2 colors available



Flush mounted in Ø60mm electrical box

EU-297 V3



**BATTERY
POWERED**

Controller functions

- controlling room temperature +/- with 0.1°C accuracy
- hysteresis range 0.2- 5°C
- day / night mode
- manual mode
- key lock
- additional control based on floor temperature (in case of using NTC floor sensor - not included)
- heating / cooling mode

Controller equipment

- built in air temperature sensor
- **2 x AAA 1,5V batteries**
- touch buttons
- LCD display, temporary backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

power / communication	2 x AAA	wired 2 x 0,5mm ²
dimensions [mm] / color	84 x 84 x 13	white, black

EU-297z v3



**230V 50Hz
POWERED**

Controller functions

- controlling room temperature +/- with 0.1°C accuracy
- hysteresis range 0.2- 5°C
- day / night mode
- manual mode
- key lock
- additional control based on floor temperature (in case of using NTC floor sensor - not included)
- heating / cooling mode

Controller equipment

- built in air temperature sensor
- touch buttons
- **built-in 230V power supply**
- LCD display, temporary backlight
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	84 x 84 x 13	white, black

FLUSH MOUNTED ROOM REGULATORS



Two-state room regulators



Fan coil unit controller

Flush mounted in Ø60mm electrical box

EU-T-1.1z



230V 50Hz
POWERED

Controller functions

- room temperature control +/- with an accuracy of 0.1°C
- hysteresis adjustable from 0.2 to 4°C
- two-state controller
- dedicated for the EU-L-5s or EU-L-2 controller (can be powered from the controller)

Controller equipment

- plastic front panel
- built-in room temperature sensor
- mechanical buttons
- LCD display without backlight
- voltage relay (load capacity 0.5A / 230V / AC)

power / communication	230V 50Hz	wired
dimensions [mm] / color	80 x 80 x 40	white

R-KL2



230V 50Hz
POWERED

Controller functions

- fan coil controller
- room temperature control +/- with an accuracy of 0.1°C
- hysteresis adjustable from 0.2 to 4°C
- button lock
- operating mode – heating / cooling / off
- controller can operate independently
- wireless communication with the Sinum central unit
- min/max temperature limit (Sinum)
- separate hysteresis for each fan speed (Sinum)
- relay status monitoring (Sinum)
- time overlay on/off (Sinum)

Controller equipment

- plastic front panel
- built-in room temperature sensor
- mechanical buttons
- LCD display without backlight
- voltage relay (load capacity 0.5 A / 230 V AC)

power / communication	230V 50Hz	WTP Sinum
dimensions [mm] / color	80 x 80 x 72	white



WEEKLY ROOM REGULATORS



DAY / NIGHT AND WEEKLY MODE

HEATING - COOLING MODE

OPTIONAL FLOOR TEMPERATURE SENSOR*

WALL and FLUSH MOUNTED

BATTERY and 230V POWERED

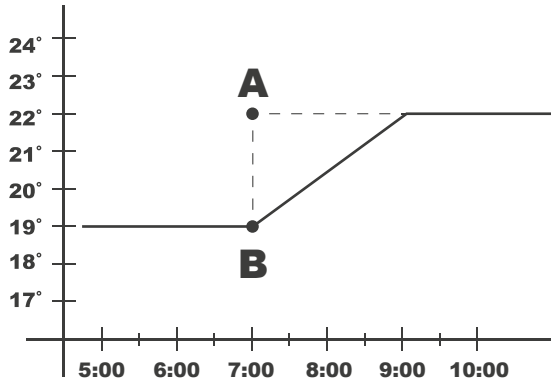
NEGATIVE DISPLAY**

* except for the EU-T-4 regulator,

**in black versions, except for EU-T-4 and EU-292 regulators

OPTIMUM START FUNCTION

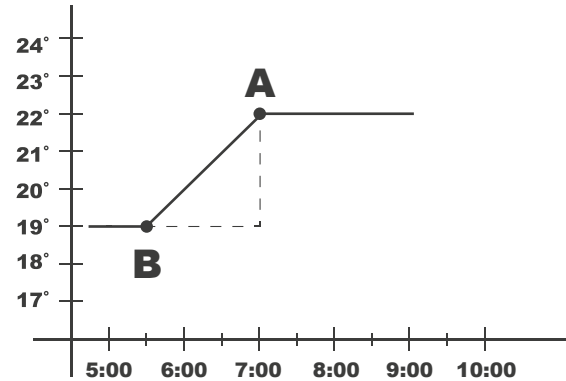
ROOM TEMPERATURE
OPTIMUM START disabled:



A - Set temperature

B - Turning on the heating

ROOM TEMPERATURE
OPTIMUM START activated:



A - Set temperature

B - Turning on the heating

This function enables intelligent control of the heating device, increases efficiency and provides better thermal comfort. The room regulator, learning by itself, will select the optimal boiler activation time in order to achieve thermal comfort, so that the room is heated to the set temperature for a pre-set time.

WEEKLY WALL MOUNTED ROOM REGULATORS



2 colors available



EU-T-4



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- hysteresis range 0,2- 8°C
- weekly schedule
- day / night mode
- manual mode
- Optimum Start function
- heating / cooling mode

Controller equipment

- built in air temperature sensor
- 2 x AA 1,5V batteries
- radio receiver with 4.2 version
- stand included with 4.2 version
- LCD display, temporary backlight
- mechanical buttons**
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

4.1	power / communication	2 x AA	wired 2 x 0,5mm ²
	dimensions [mm] / color	134 x 95 x 24	white
4.2	power / communication	2 x AA	wireless
	dimensions [mm] / color	134 x 95 x 24	white

EU-292



Controller functions

- controlling room temperature +/- with 0,1°C accuracy
- hysteresis range 0,2- 8°C
- weekly schedule
- day / night mode
- manual mode
- Optimum Start function
- heating / cooling mode
- additional control based on floor** temperature (in case of using NTC floor sensor - not included)

Controller equipment

- built in air temperature sensor
- 2 x AA 1,5V batteries
- radio receiver with v2 version
- stand included with v2 version
- LCD display, temporary backlight
- glass front**
- touch buttons**
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

v3	power / communication	2 x AA	wired 2 x 0,5mm ²
	dimensions [mm] / color	121 x 95 x 24	white, black
v2	power / communication	2 x AA	wireless
	dimensions [mm] / color	121 x 95 x 24	white, black

WEEKLY WALL MOUNTED ROOM REGULATORS



EU-T-9



Controller functions

- room temperature control +/- with an accuracy of 0.1°C
- hysteresis selectable: 0.5 or 1°C
- weekly mode
- DAY/NIGHT mode
- manual mode
- 9 schedule programs
- heating/cooling function

Controller equipment

- built in air temperature sensor
- 2 x AA 1,5V batteries
- radio receiver with 9.2 version
- stand included
- LCD display, temporary backlit
- **mechanical buttons**
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

9.1	power / communication	2 x AA	wired 2 x 0,5mm ²
	dimensions [mm] / color	138 x 80 x 30	white
9.2	power / communication	2 x AA	wireless
	dimensions [mm] / color	138 x 80 x 30	white



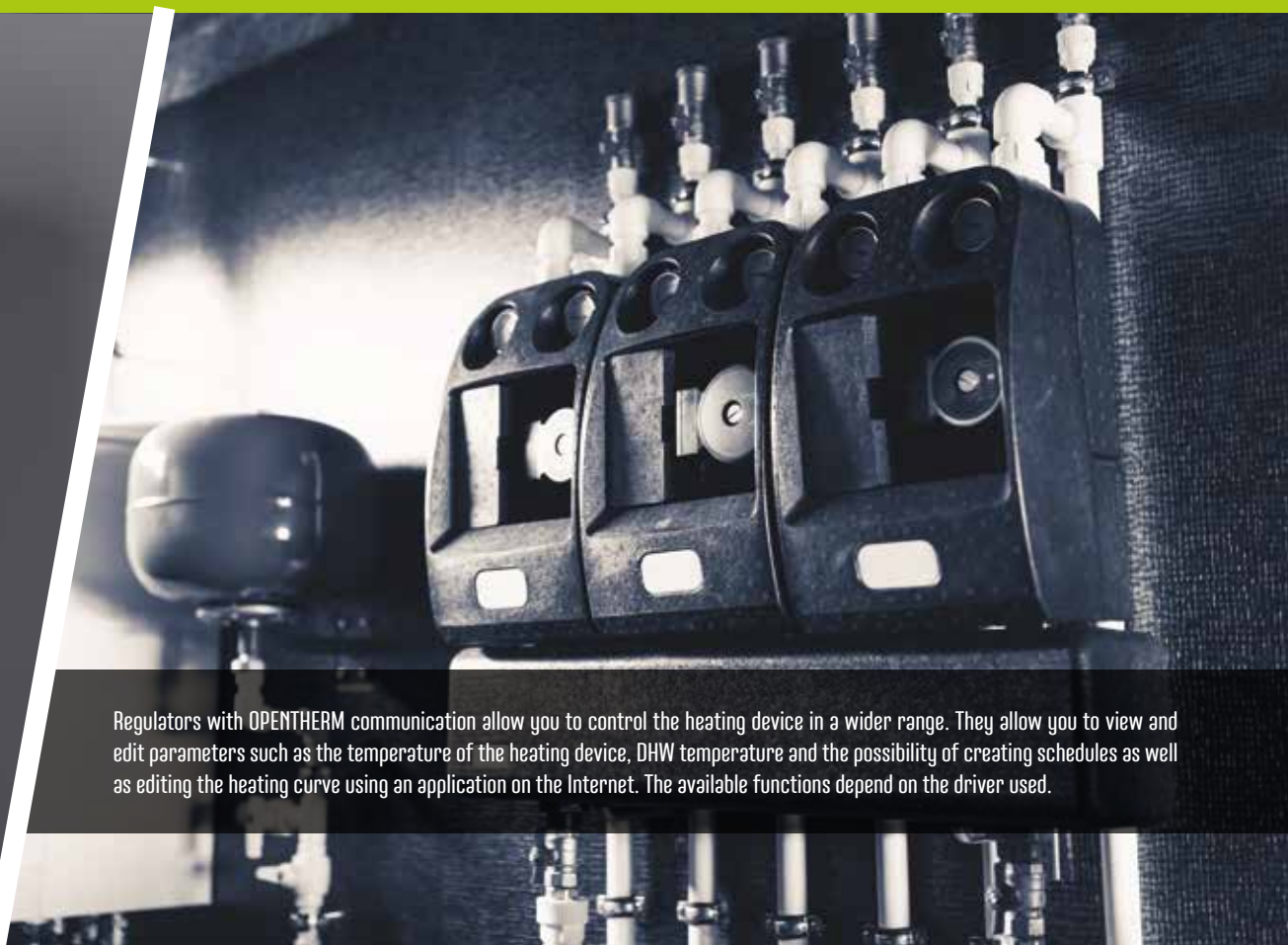
INTERNET TWO-STATE ROOM REGULATOR



The use of regulators with a built-in Wi-Fi module enables remote control of the temperature in a room with such a regulator. Thanks to the application available on the phone, you can control the heating from anywhere and at any time in my house. Two -state (ON/ OFF) regulators can work with many heating devices..



OPENTHERM INTERNET REGULATOR



Regulators with OPENTHERM communication allow you to control the heating device in a wider range. They allow you to view and edit parameters such as the temperature of the heating device, DHW temperature and the possibility of creating schedules as well as editing the heating curve using an application on the Internet. The available functions depend on the driver used.

INTERNET TWO-STATE ROOM REGULATOR



eModul

SUPERVISION VIA A MOBILE APP



EU-T-5z Wi-Fi

EU-T-5z Wi-Fi



Functions performed by the controller:

The standard controller (main controller + 1 temperature sensor) performs the functions of a two-state room regulator. After receiving a signal that the room is overheated, it sends a signal to start the heating device.

Controller equipment:

- 230V power supply
- wireless temperature sensor **EU-C-mini**
- **built in Wi-Fi module**

power / communication	230V power supply	wireless
dimensions [mm] / color	95 x 95 x 28	white

Expandability:

- possibility of connecting wireless **EU-C-mini**, **EU-CL-mini**, **EU-C-8r** sensors or **EU-R-8b**, **EU-R-8x**, **EU-R-8z**, **EU-R-8b PLUS**, **EU-R-8s PLUS**, **EU-R-8pb PLUS**, **EU-R-8pz PLUS** room regulators.
- **NO / NC** relay output, possibility of pairing the **EU-MW-1** wireless executive module
- possibility of connecting up to 6 wireless electric actuators **STT-868 / STT-869**
- possibility of connecting up to 6 wireless **EU-C-2n** window opening sensors
- the ability to update the software via the USB port
- support for the **EU-C-8 ZR** wireless outdoor sensor



INTERNET TWO-STATE ROOM REGULATOR



eModul

SUPERVISION VIA A MOBILE APP



EU-T-2x Wi-Fi

EU-T-2x Wi-Fi



Functions performed by the controller:

The controller (temperature regulator + wireless actuator module with built-in Wi-Fi) functions as a two-state room thermostat. Upon receiving a signal indicating insufficient room heating, it sends a signal to the module to activate the heating device.

Regulator function:

- controlling room temperature +/- with 0.1°C accuracy,
- hysteresis range 0.2- 4°C,
- key lock,
- sensor calibration
- heating / cooling mode

Module function:

- built-in Wi-Fi module
- voltage-free NO-COM-NC contact
- possibility of control via eModul



power / communication	2x AA 1,5V DC	wireless
dimensions [mm] / color	81 x 81 x 21	white

power / communication	230V power supply	wireless
dimensions [mm] / color	95 x 95 x 31	white

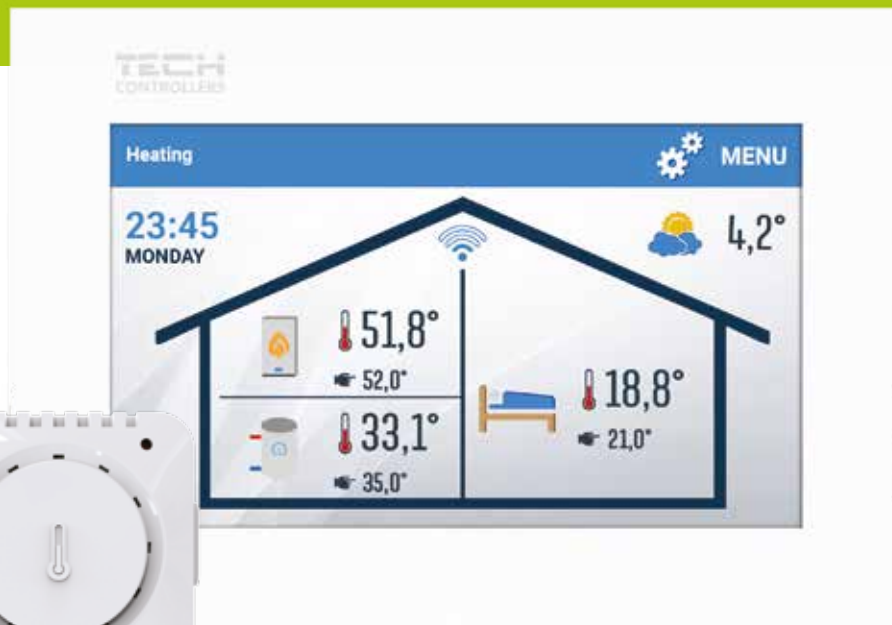
INTERNET ROOM REGULATOR

2 colors available



eModul

SUPERVISION VIA A MOBILE APP





Controller functions

- intelligently maintaining the set room temperature
- intelligent control of the set temperature of the central heating boiler
- change of the preset boiler temperature based on the outside temperature (weather control)
- viewing the outside temperature
- **Wi-Fi communication**
- weekly schedule of room heating and boiler
- displaying information about heating device alarms
- access to the temperature charts of the heating device
- alarm clock
- parental lock

Controller equipment

- large, easy to read, color, touchscreen display
- built in air temperature sensor
- flush mounted in Ø60mm electrical box
- **EU-C-mini** wireless temperature sensor

Principle of operation

The use of a room regulator ensures intelligent maintenance of the set room temperature through automatic proportional regulation of the set temperature of the boiler. The controller can adjust the parameters of the control algorithm by the user. The device is compatible with the OpenTherm / plus (OT+) and OpenTherm / lite (OT-) protocols.

The controller works in the OpenTherm+ standard 4.0 version



power / communication	230V 50Hz	wired 2 x 0,5mm2
dimensions [mm] / color	127 x 90 x 20	white, black

INTERNET ROOM REGULATOR



**ROOM
CONTROL**

**WEATHER
CONTROL**

**INTERNET
CONTROL**

eModul

SUPERVISION VIA A MOBILE APP





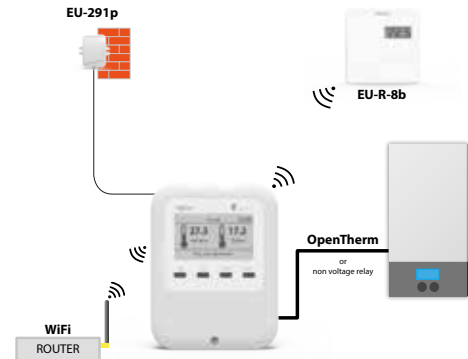
Controller functions

- intelligently maintaining the set room temperature
- intelligent control of the set temperature of the central heating boiler
- change of the preset boiler temperature based on the outside temperature (weather control)
- viewing the outside temperature
- weekly schedule of room heating and boiler
- displaying information about heating device alarms
- access to the temperature charts of the heating device
- **Wi-Fi communication**

Controller equipment

- large, easy to read display
- EU-R-8b wireless room regulator
- EU-291p NTC wired outdoor temperature sensor

The controller works in the **OpenTherm+ standard 4.0 version**



power / communication	230V 50Hz	wired 2 x 0,5mm ²
dimensions [mm] / color	105 x 135 x 28	white

ACCESSORIES



Executive module

- Switching the device on and off
- 868MHz wireless communication
- NO - COM - NC potential free contact
- the ability to change the channel

Used with regulators:

- EU-294 v2
- EU-292 v2



Executive module

- Switching the device on and off
- 868MHz wireless communication
- NO - COM - NC potential free contact
- direct pairing

Used with regulators:

- EU-295 v2
- EU-283C Wi-Fi



Executive module

- Switching the device on and off
- 868MHz wireless communication
- NO - COM - NC potential free contact
- direct pairing

Used with regulators:

- EU-293 v2
- EU-293z v2
- EU-297 v2
- EU-297z v2
- EU-F-2z v2
- EU-F-4z v2
- EU-T-2.2
- EU-T-3.2
- EU-T-4.2



NTC floor sensor

- floor temperature measurement +/- with an accuracy of 0.1 ° C
- two-core cable
- available in lengths of 150 cm and 250 cm

Cooperates with:

- EU-F-4z
- EU-T-3
- EU-295
- EU-292
- EU-293
- EU-297



EU-C-8zr Outdoor sensor

- external temperature measurement
- 868MHz wireless communication
- direct pairing

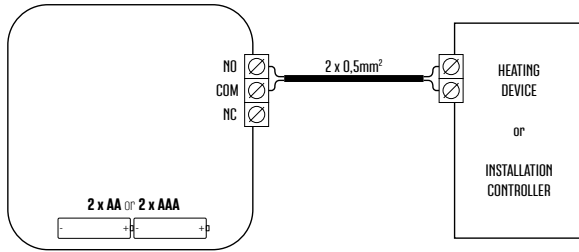
Cooperates with:

- EU-293z v2

Power supply: 2xAAA (included)

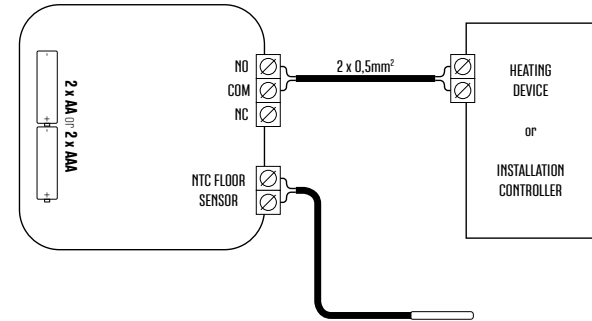
CONNECTION SCHEMES

Connecting a wired two-state controller to a heating device:



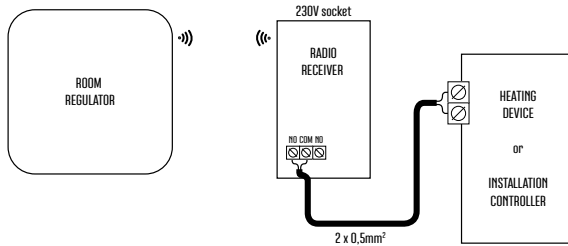
Applies to: EU-294 v3, EU-T-2.1

Connecting a wired two-state controller to a heating device:



Applies to: EU-292 v3, EU-295 v3, EU-297 v3, EU-293 v3, EU-T-3.2, T-4.2,

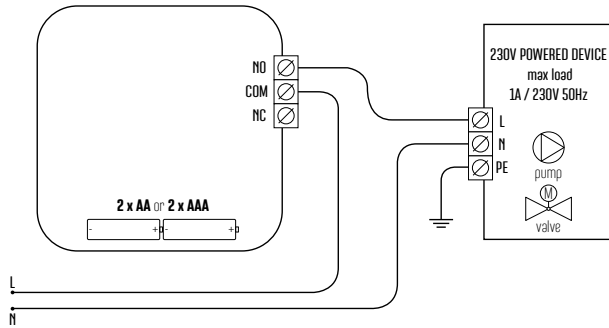
Connecting a wireless two-state controller to a heating device:



Applies to: EU-294 v2, EU-292 v2, EU-295 v2, EU-297 v2, EU-297z v2, EU-293 v2, EU-293z v2, EU-T-2.2, EU-T-3.2, EU-T-4.2, EU-F-2z v2, EU-F-4z v2, EU-283C Wi-Fi

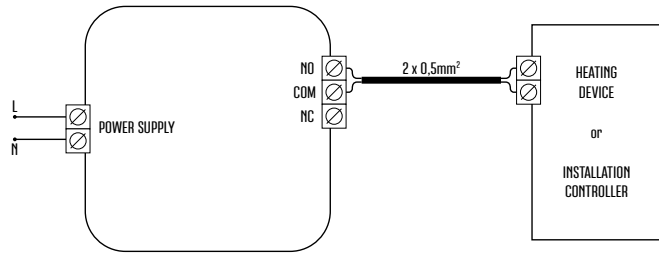
CONNECTION SCHEMES

Connecting a wired two-state controller to a voltage device:

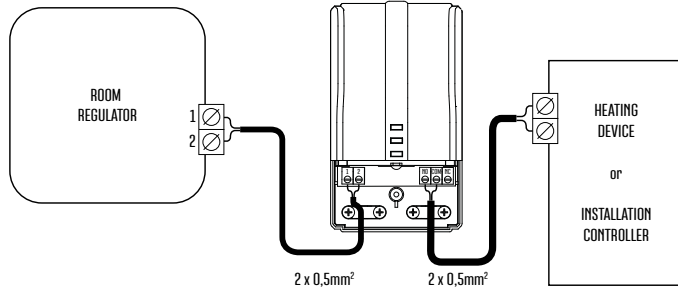


Applies to all regulators with a voltage free contact in wired and wireless versions.

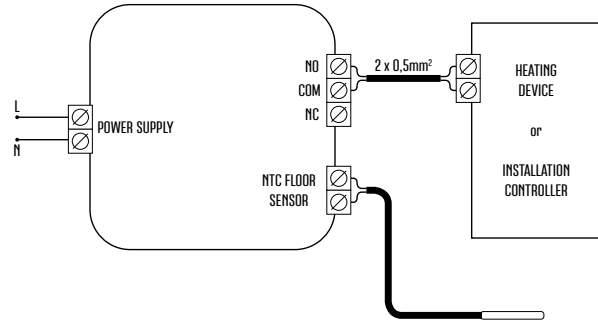
Connecting a wired two-state regulator power supplied with 230V to a heating device:



Applies to: EU-F-2z



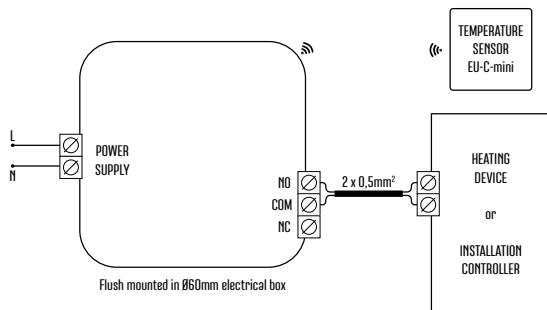
Applies to: EU-283



Applies to: EU-297z v3, EU-293z v3, EU-F-4z

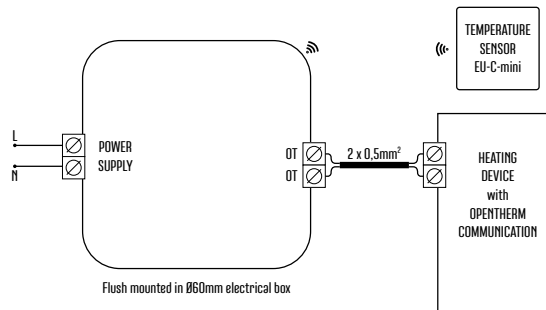
CONNECTION SCHEMES

Connecting a wired internet controller to the heating device:

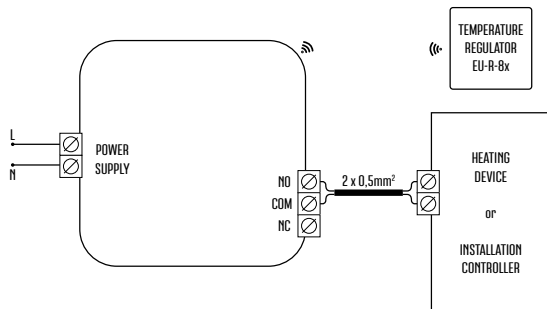


Applies: EU-T-5z Wi-Fi

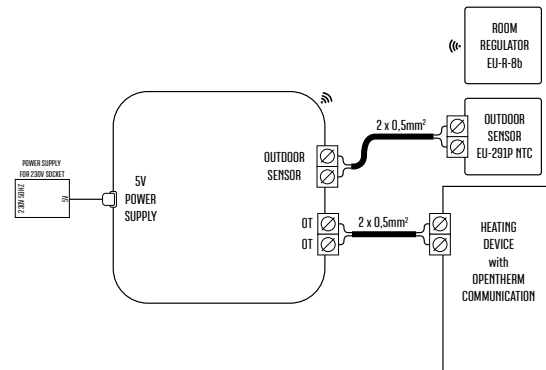
Connecting a wired regulator with OPENTHERM communication to a heating device:



Applies to: EU-2801 Wi-Fi



Applies: EU-T-2x Wi-Fi



Applies to: EU-Wi-Fi OT

TECH CONTROLLERS

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