



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 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:

- Ospel Sonata
- 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









ROOM REGULATORS FOR FRAME SYSTEMS





2 colors available



2 colors available







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 backlit
- radio receiver with v2 version
- 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.

| 1 | power / communication | 230V 50Hz | wired 2 x 0,5mm² |
|----|-------------------------|--------------|------------------|
| v1 | dimensions [mm] / color | 55 x 55 x 11 | white, black |
| 0 | power / communication | 230V 50Hz | wireless |
| v2 | dimensions [mm] / color | 55 x 55 x 11 | white, black |





Controller functions

- controlling room temperature +/with 0,1°C accuracy
- $\bullet \ \text{weekly} \ \text{mode}$
- · 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 backlit**
- radio receiver with v2 version
- 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.

| 1 | power / communication | 230V 50Hz | wired 2 x 0,5mm² |
|----|-------------------------|--------------|------------------|
| v1 | dimensions [mm] / color | 55 x 55 x 11 | white, black |
| 0 | power / communication | 230V 50Hz | wireless |
| v2 | 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 15V batteries
- radio receiver with v2 version
- mounting plate
- LCD display, no backlit
- NO-COM-NC non voltage relay

(max. load capacity 1A/230V/AC)

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 backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| 1 | power / communication | 2 x AAA | wired 2 x 0,5mm² |
|----|-------------------------|--------------|------------------|
| v1 | dimensions [mm] / color | 80 x 80 x 24 | white, black |
| 0 | power / communication | 2 x AAA | wireless |
| v2 | dimensions [mm] / color | 80 x 80 x 24 | white, black |

| 2.1 | power / communication | 2 x AAA | wired 2 x 0,5mm² |
|-----|-------------------------|--------------|------------------|
| 2.1 | dimensions [mm] / color | 84 x 84 x 26 | white, black |
| 0.0 | power / communication | 2 x AAA | wireless |
| 2.2 | dimensions [mm] / color | 84 x 84 x 15 | white, black |



DAY / NIGHT ROOM REGULATORS



HEATING - COOLING MODE

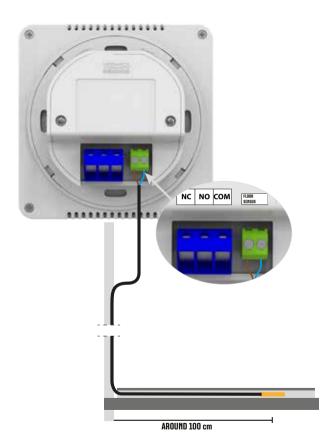
OPTIONAL **FLOOR TEMPERATURE** SENSOR

WALL or FLUSH MOUNTED VERSIONS

BATTERIES or **230V POWERED** VERSIONS

NEGATIVE DISPLAY*

FLOOR TEMPERATUR 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







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 backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

power / communication 2 x AAA wired 2 x N 5mm² ٧1 dimensions [mm] / color 95 x 95 x 24 white power / communication 2 x AAA wireless v2 dimensions [mm] / color 95 x 95 x 24 white



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

- · class front
- built in air temperature sensor
- 2 x AAA 1.5V batteries
- radio receiver with 3.2 version.
- touch buttons
- LCD display, temporary backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| 3.1 | power / communication 2 x AAA | wired 2 x 0,5mm² | |
|-----|-------------------------------|------------------|--------------|
| 3.1 | dimensions [mm] / color | 84 x 84 x 26 | white, black |
| 3.2 | power / communication | 2 x AAA | wireless |
| 3.2 | 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



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
- radio receiver with v2 version
- touch buttons
- LCD display, temporary backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| w | power / communication | 2 x AAA | wired 2 x 0,5mm2 |
|----|-------------------------|--------------|------------------|
| v3 | dimensions [mm] / color | 84 x 84 x 13 | white, black |
| 0 | power / communication | 2 x AAA | wireless |
| v2 | dimensions [mm] / color | 84 x 84 x 13 | white, black |

EU-297z





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
- radio receiver with v2 version
- touch buttons
- \cdot built-in 230V power supply
- LCD display, temporary backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| n | power / communication | 230V 50Hz | wired 2 x 0,5mm2 |
|----|-------------------------|--------------|------------------|
| v3 | dimensions [mm] / color | 84 x 84 x 13 | white, black |
| v2 | power / communication | 230V 50Hz | wireless |
| ٧Z | dimensions [mm] / color | 84 x 84 x 13 | white, black |



WEELKY ROOM REGULATORS



DAY / NIGHT AND WEEKLY MODE

HEATING - COOLING MODE

OPTIONAL FLOOR TEMPERATURE SENSOR*

WALL and FLUSH MOUNTED

BATTERY and 230V POWERED

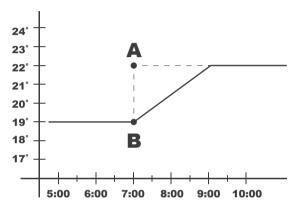
NEGATIVE DISPLAY**

* except for the EU-1-4 regulator

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

OPTIMUM START FUNCTION

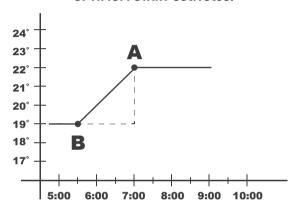
ROOM TEMPERATURE OPTIMUM START disabled:



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







- 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 backlit
- mechanical buttons
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| . 1 | power / communication | 2 x AA | wired 2 x 0,5mm2 |
|-----|-------------------------|---------------|------------------|
| 4.1 | dimensions [mm] / color | 134 x 95 x 24 | white |
| | power / communication | 2 x AA | wireless |
| 4.2 | dimensions [mm] / color | 134 x 95 x 24 | white |



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 backlit
- · glass front
- · touch buttons
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| 1 | power / communication | 2 x AA | wired 2 x 0,5mm2 |
|----|-------------------------|---------------|------------------|
| v3 | dimensions [mm] / color | 121 x 95 x 24 | white, black |
| 0 | power / communication | 2 x AA | wireless |
| v2 | dimensions [mm] / color | 121 x 95 x 24 | white, black |



WEEKLY FLUSH MOUNTED ROOM REGULATORS





2 colors available



Flush mounted in Ø60mm electrical box



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 AAA 1,5V batteries
- radio receiver with v2 version
- glass front
- touch buttons
- LCD display, temporary backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

v3 power / communication 2 x AAA wired 2 x 0,5mm2 dimensions [mm] / color 125 x 83 x 14 white, black v2 power / communication 2 x AA wireless dimensions [mm] / color 125 x 83 x 14 white, black



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
- radio receiver with v2 version
- glass front
- touch buttons
- built-in 230V power supply
- LCD display, temporary backlit
- NO-COM-NC non voltage relay (max. load capacity 1A/230V/AC)

| | power / communication | 230V 50Hz | wired 2 x 0,5mm2 |
|----|-------------------------|---------------|------------------|
| v3 | dimensions [mm] / color | 125 x 83 x 14 | white, black |
| 0 | power / communication | 230V 50Hz | wireless |
| v2 | dimensions [mm] / color | 125 x 83 x 14 | white, black |



INTERNET TWO-STATE ROOM REGULATOR



OPENTHERM INTERNET REGULATOR



INTERNET TWO-STATE ROOM REGULATOR









EU-T-5z WiFi

EU-T-5z WiFi



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 underheated, it sends a signal to start the heating device.

Controller equipment:

- 230V power supply
- wireless temperature sensor **EU-C-mini**
- · huilt in WiFi module

| EU- T-5z WiFi | power / communication | 230V power supply | wireless |
|------------------|-------------------------|-------------------|----------|
| | dimensions [mm] / color | 95 x 95 x 28 | white |

Expandability:

After expanding the controller with additional 8 temperature sensors, the user receives:

- 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 ROOM REGULATOR









EU-2801 WIFI







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

· WiFi 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

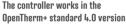
Controller equipment

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

The controller works in the

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.







INTERNET ROOM REGULATOR



EU-WIFI OT



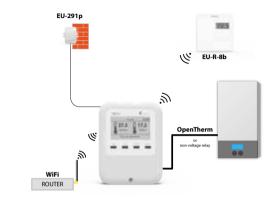
Controller functions

- 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
- WiFi communication

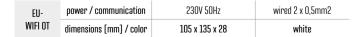
Controller equipment

- 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









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 WIFI



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

ACCESSORIES



NTC floor sensor

- \bullet floor temperature measurement +/- with an accuracy of 0.1 $^{\circ}$ 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

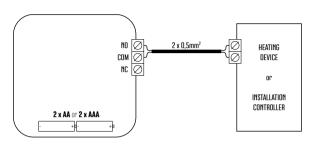
Cooperates with:

• EU-293z v2

Power supply: 2xAAA (included)

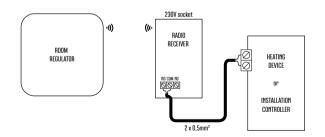
CONNECTION SCHEMES

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



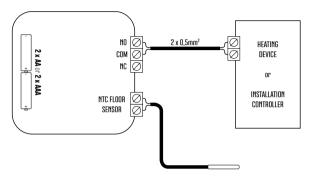
Applies to: EU-294 v3, EU-T-2.1

Connecting a 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 WIFI

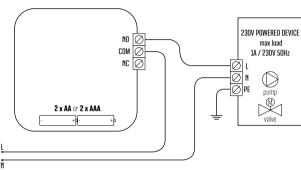
Connecting a wired two-state controller to a heating device:



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

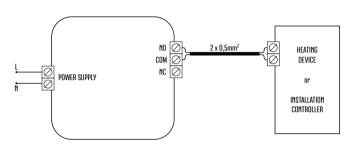
CONNECTION SCHEMES

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

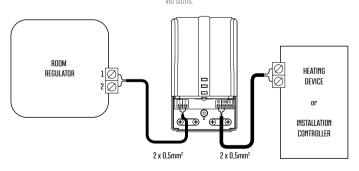


Applies to all regulators with a voltage free contact in wired and wireless versions.

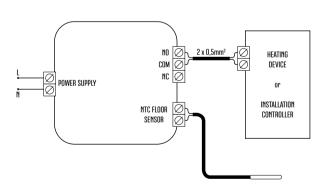
Connecting a wired two-state regulator power supplied with 230V to a heating device:



Applies to: EU-F-2z



Applies to: EU-283

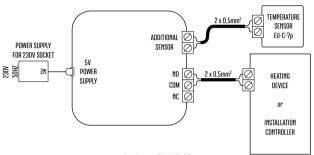


Applies to: EU-297z v3, EU-293z v3, EU-F-4z

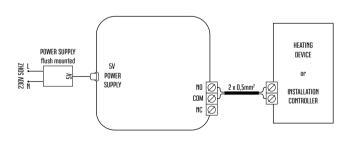


CONNECTION SCHEMES

Connecting a wired internet controller to the heating device:

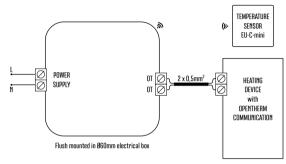


Applies to: EU-WIFI 8S

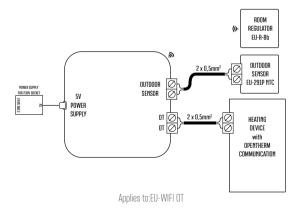


Applies to: EU-WIFI 8S MINI

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



Applies to: EU-2801 WIFI



| Notes | | |
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