

**TECH**  
CONTROLLERS



**ZONE HEATING 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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# TECH CONTROLLERS

# Sinum



Your home in tune with you.



Heating



Lighting



Safety  
and quality



Control  
of roller shutters  
and awnings

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Garage

17.0°C



Living room

21.0°C



Kitchen

20.0°C



Bathroom

23.0°C



Bedroom

19.0°C



Outdoor temp.

14.0°C

APP FOR REMOTE OPERATION CONTROL

# eModul



VIEW AND EDITING PARAMETERS  
IN EACH ZONE

TEMPERATURE  
HISTORY

HEATING  
SCHEDULE

OPEN WINDOW  
INFORMATION

VIEW THE  
ALARM LOG

FREE TO  
USE

VOICE  
ASSISTANT



# 8S

## EU-WiFi 8S

Up to 8 zones

Built in WiFi module

Voltage-free relay



WiFi 8S

power / communications

5V / 230V 50Hz

wireless 868 MHz

dimensions [mm] / colour

105 x 135 x 28

white

## Functions:

- controlling up to **8 different zones** with the use of
  - wired temperature sensor **EU-C-7 p** or **FC-S1p**
  - possibility of connecting up to **8 wireless sensors EU-C-mini, EU-CL-mini, EU-C-8r** or room regulators **EU-R-8b, EU-R-8z, EU-R-8b PLUS, EU-R-8pz PLUS, EU-R-8z, EU-F-8z**
- **NO/NC relay output** (e.g. for controlling the heating device which is activated when the room temperature is too low)
- possibility of connecting up to **6 wireless electric actuators G-X/STT-869 in each zone**
- **possibility of connecting up to 6 modules EU-MW-1 / EU-MW-1 230**
- possibility of installing up to **6 wireless window opening sensors EU-C-2n**
- possibility of updating the software via USB port
- each zone may be assigned an individual operation mode (constant temperature, time limit or 6 operation schedules)
- compatible with wireless external sensor **EU-C-8 zr**

## Equipment:

- **power supply 5V**
- additional wired temperature sensor **EU-C-7p**



EU-WIFI 8S

Power adapter in set



## EU-C-2n

### WIRELESS WINDOW OPENING SENSOR

- window opening signal,
- heating control,
- compact dimensions,
- discreet design,
- long-life battery ER14250 S

### OPEN WINDOW HEATING OFF

### AVAILABLE COLOURS



antracite

brown

golden oak

white



Modern design

Fast transmission

Power supply 2x AA

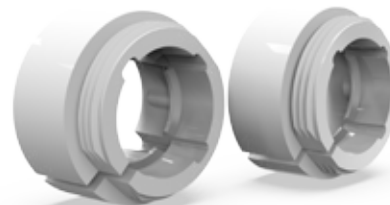


## WIRELES ELECTRIC ACTUATOR

### Function:

- open/close radiator valve
- minimum and maximum range settings
- proportional valve opening control
- hidden pairing button
- wireless communication.
- RAN and RTDN adapters in set

|                                    |                   |                  |
|------------------------------------|-------------------|------------------|
| <b>power / communications</b>      | battery 2xAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / fastening</b> | 82 x 83 x 49      | M30 x 1,5 mm     |



RAN and RTDN adapters in set

Silent transmission

Power supply 2x AA

M30 x 1,5 mm



## WIRELES ELECTRIC ACTUATOR

### Function:

- wireless communication,
- open/close radiator valve
- new, silent transmission,
- pairing button on the outside of the casing,
- possibility of using an adapters for other types of valves
- RAN and RTDN adapters in set

|                                    |                   |                  |
|------------------------------------|-------------------|------------------|
| <b>power / communications</b>      | battery 2xAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / fastening</b> | 80 x 70 x 46      | M30 x 1,5 mm     |



## WIRELESS SYSTEM EXTENSION EU-WiFi 8s/8s p, EU-16s WiFi

### EU-CL-mini

WIRELESS ROOM TEMPERATURE SENSOR  
IN HERMETIC CASING IP64

- air temperature measurement,
- meets the IP64 standard,
- compact in size



|                          |                 |                  |
|--------------------------|-----------------|------------------|
| power / communications   | battery CR 2032 | wireless 868 MHz |
| dimensions [mm] / colour | 37 x 37 x 16    | white            |

### EU-C-8r

WIRELESS ROOM TEMPERATURE SENSOR

- air temperature measurement



|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black     |

### EU-R-8b

WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- heating program with time limit,
- LCD display without backlight



|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black     |

### EU-R-8x

WIRELESS ROOM REGULATOR  
WITH HUMIDITY SENSOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- LCD display without backlight,
- **mechanical buttons**



|                          |                   |                  |
|--------------------------|-------------------|------------------|
| power / communications   | battery 2xAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 81 x 81 x 21      | white, black     |



### EU-R-8b PLUS

#### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display without backlight

|                                 |                    |                  |
|---------------------------------|--------------------|------------------|
| <b>power / communications</b>   | battery 2xAAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16       | white, black     |



### EU-R-8z

#### WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- heating program with time limit,
- LED display with backlight,
- 5V power supply included in the set mountable in an electrical box 960 mm

|                                 |                         |                  |
|---------------------------------|-------------------------|------------------|
| <b>power / communications</b>   | Zasilacz 5V / 230V 50Hz | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16            | white, black     |



### EU-R-8s PLUS

#### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display, temporary backlight

|                                 |                    |                  |
|---------------------------------|--------------------|------------------|
| <b>power / communications</b>   | battery 2xAAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 84 x 84 x 24       | white, black     |



### EU-R-8 LED

#### WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LED display

|                                 |              |                  |
|---------------------------------|--------------|------------------|
| <b>power / communications</b>   | 230V 50Hz    | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16 | white, black     |



### EU-R-8pz PLUS

WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display, temporary backlight
- power supply 230V / 50Hz
- mountable in an electrical box  $\varnothing$ 60 mm

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 84 x 84 x 16 | white, black     |



### EU-F-8z

WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR FOR FRAME SYSTEMS 55mm

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display without backlight,
- **flush mountable, for the 55mm frame, list of compatible frame systems on page 25 or on webpage**

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 55 x 55 x 11 | white, black     |



### EU-C-8zr

WIRELESS OUTSIDE TEMPERATURE SENSOR

- air temperature measurement

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 50 x 20       | white            |



### EU-RP-4

SIGNAL REPEATER FOR WIRELESS DEVICES

- signal transmission between devices and individual wireless controllers, increasing the range
- compact size,
- simplified operation

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 60 x 60 x 76 | white            |

## WIRELESS SYSTEM EXTENSION EU-WiFi 8s/8s p, EU-16s WiFi



### EU-MW-1 / EU-MW-1 - 230

#### WIRELESS EXECUTIVE MODULE

- voltage-free relay, **MW-1**  
output load contact 1A/230V/50Hz,
- voltage relay, **MW-1/230**  
output load contact 1A/230V/50Hz,
- automatic off in case of loss of communication

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 50 x 80 x 60 | white            |



### EU-MWN-1 / EU-MWN-1 - 230

#### WIRELESS WALL MOUNTED EXECUTIVE MODULE

- potential-free contact, **MWN-1**  
contact load 1A / 230V / 50Hz
- voltage contact, **MWN-1-230**  
contact load 1A / 230V / 50Hz
- automatic disconnection of the contact in case of  
lack of communication

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 95 x 98 x 31 | white            |

# FLOOR HEATING SYSTEM

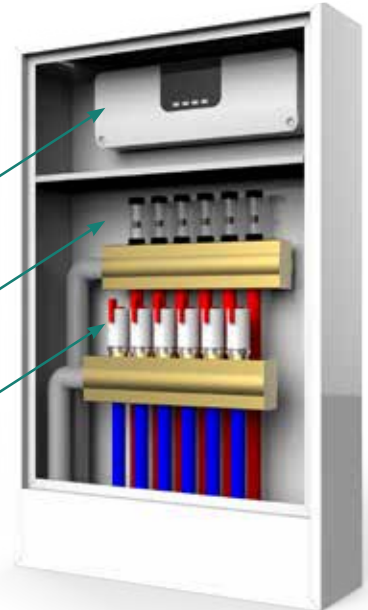
## Basic installation requirements



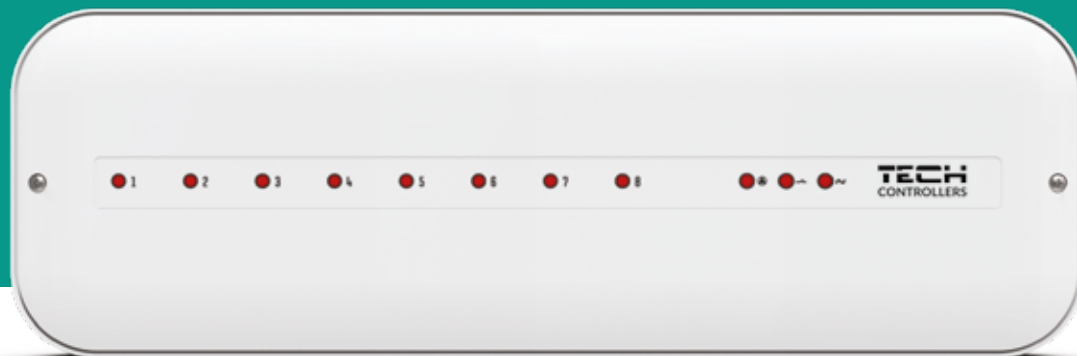
**Place** for  
main controller

**Power supply**  
230V 50Hz

**Thermoelectric**  
actuators



# EU-L-5S WIRED FLOOR HEATING SYSTEM

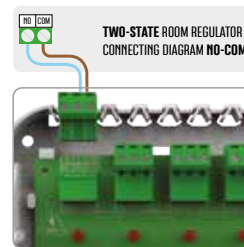
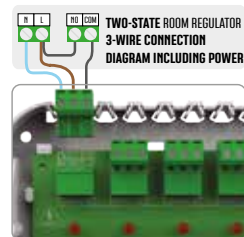


## EU-L-5s

### Functions:

- capability to support up to 50 thermoelectric actuators using two-state (ON/OFF) room regulators.
- ability to power two-state regulators (compatible with: ST-297z v3, F-2z v1, F-4z v1, T-1.1z, T-P1.1z, and T-P2.1z) - 3-core cable required (N, L, L1).
- 4 x 230V voltage outputs; maximum load per zone up to 0.3A (~70W).
- voltage-free relay (e.g. to control an additional heating device)
- one 230V output for a pump

|                          |                |                         |
|--------------------------|----------------|-------------------------|
| power / communications   | 230V 50Hz      | wired 2 or 3 core cable |
| dimensions [mm] / relay  | 337 x 114 x 37 | • / 1 A                 |
| max load 1-8 / pump load | 0,3 A          | 0,5 A                   |



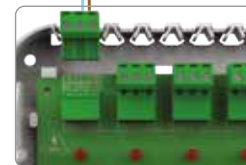
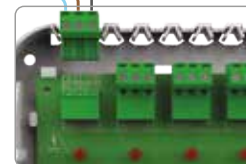
# EU-L-2 WIRED FLOOR HEATING SYSTEM



## EU-L-2

### Functions:

- capability to support up to 25 thermoelectric actuators using two-state (ON/OFF) room regulators.
- ability to power two-state regulators (compatible with: ST-297z v3, F-2z v1, F-4z v1, T-1.1z, T-P1.1z, and T-P2.1z) - 3-core cable required (N, L, L1).
- 4 x 230V voltage outputs; maximum load per zone up to 0.3A (~70W).
- voltage-free relay (e.g. to control an additional heating device)



|                          |            |                         |
|--------------------------|------------|-------------------------|
| power / communications   | 230V 50Hz  | wired 2 or 3 core cable |
| dimensions [mm] / relay  | 203x120x53 | - / 0,5 A               |
| max load 1-8 / pump load | 0,3 A      | 0,5 A                   |
| kod / EAN                | WG.20.0211 | 5902479668734           |

# EU-L-10 WIRED FLOOR HEATING SYSTEM



## EU- L-10

### Functions

Possibility of controlling up to **50 thermoelectric actuators** with the use of **10 room regulators**:

- standard two-state regulators (2-core cable)
- dedicated regulators powered from the main controller (3-core cable)
- voltage - free relay (e.g. to control an additional heating device)
- voltage relay for controlling the floor pump
- **2-minute delay of output activation : voltage-free output and pump output**

MAX. 10 ZONES

ROOM REGULATORS POWERED  
FROM MAIN CONTROLLER

|   |                |                   |
|---|----------------|-------------------|
| power / communications                  | 230V 50Hz      | wired 2 or 3 cord |
| dimensions [mm] / relay                 | 343 x 125 x 55 | • / 1 A           |
| outputs 1-10 load / pump<br>output load | 0,3 A          | 0,5 A             |

## DEDICATED WIRED EXTENSIONS EU-L-10 - ROOM REGULATORS POWERED FROM MAIN CONTROLLER



### EU-R-10b

DEDICATED WIRED ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- LCD display without backlight



### EU-R-10s PLUS

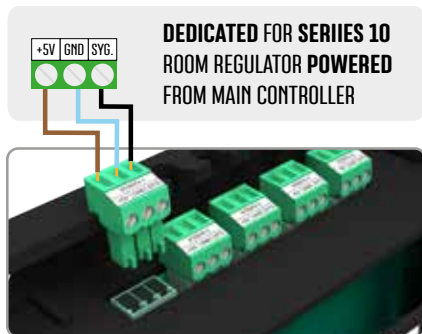
DEDICATED WIRED ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- day/night program,
- additional control based on floor temperature (if optional floor sensor is used),
- temporary display backlight,
- touch buttons

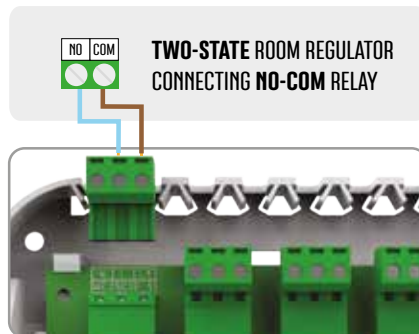
|                                 |                      |                              |
|---------------------------------|----------------------|------------------------------|
| <b>power / communications</b>   | powered from EU-L-10 | wired 3 x 0,5mm <sup>2</sup> |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16         | white, black                 |

|                                 |                      |                              |
|---------------------------------|----------------------|------------------------------|
| <b>power / communications</b>   | powered from EU-L-10 | wired 3 x 0,5mm <sup>2</sup> |
| <b>dimensions [mm] / colour</b> | 84 x 84 x 14         | white                        |

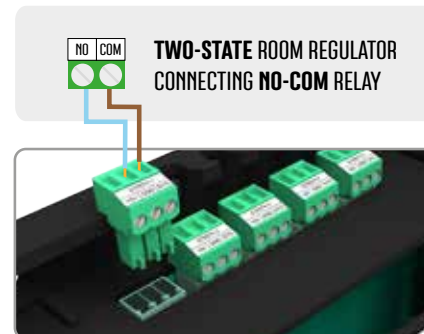
Connecting diagram of dedicated room regulator with **EU-L-10 controller**



Connecting diagram of two-state room regulator with **EU-L-5s controller**



Connecting diagram of two-state room regulator with **EU-L-10 controller**



## SYSTEM EXTENSIONS EU-L-5s,EU-L-10 - STANDARD TWO-STATE ROOM REGULATORS

### EU-294 v1

#### WIRED TWO-STATE ROOM REGULATOR



- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- LCD display without backlight,
- possibility to set a limit the range of temperature changes
- sensor calibration

|                          |                    |                            |
|--------------------------|--------------------|----------------------------|
| power / communications   | battery 2xAAA 1,5V | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black               |

### T-2.1

#### WIRED TWO-STATE ROOM REGULATOR



- air temperature measurement and control,
- measuring air humidity,
- hysteresis 0,2 - 4°C,
- LCD display without backlight,
- possibility to set a limit the range of temperature changes,
- sensor calibration

|                          |                    |                            |
|--------------------------|--------------------|----------------------------|
| power / communications   | battery 2xAAA 1,5V | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 84 x 84 x 25       | white                      |

### EU-292 v3

#### WIRED TWO-STATE ROOM REGULATOR



- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- weekly heating program,
- day/night program,
- Optimum Start function,
- additional control based on floor temperature (if optional floor sensor is used),
- temporary display backlight

|                          |                    |                             |
|--------------------------|--------------------|-----------------------------|
| power / communications   | battery 2xAAA 1,5V | wired 2x0,75mm <sup>2</sup> |
| dimensions [mm] / colour | 121 x 95 x 24      | white, black                |

### EU-297 v3

#### WIRED TWO-STATE ROOM REGULATOR



- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- day/night program,
- temporary display backlight,
- **flush mountable (electric box 60mm)**

|                          |                    |                            |
|--------------------------|--------------------|----------------------------|
| power / communications   | battery 2xAAA 1,5V | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 84 x 84 x 13       | white, black               |

## SYSTEM EXTENSIONS EU-L-5s, EU-L-10 - STANDARD TWO-STATE ROOM REGULATORS

### EU-T-3.1

#### WIRED TWO-STATE ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- day/night program,
- additional control based on floor temperature (if optional floor sensor is used),
- touch buttons,
- temporary display backlight



|                          |                    |                            |
|--------------------------|--------------------|----------------------------|
| power / communications   | battery 2xAAA 1,5V | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 95 x 95 x 25       | white, black               |

### EU-T-4.1

#### WIRED TWO-STATE ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- weekly heating program,
- day/night program,
- hysteresis 0,2 - 4°C,
- Optimum Start function,
- temporary display backlight

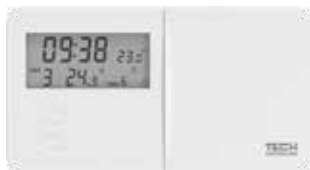


|                          |                   |                             |
|--------------------------|-------------------|-----------------------------|
| power / communications   | battery 2xAA 1,5V | wired 2x0,75mm <sup>2</sup> |
| dimensions [mm] / colour | 134 x 95 x 24     | white, black                |

### EU-T-9.1

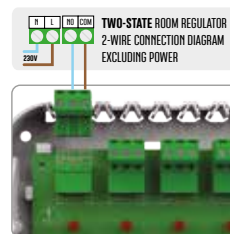
#### WIRED TWO-STATE ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- weekly heating program,
- day/night program,
- hysteresis 0,2 - 4°C,
- 9 heating program
- temporary display backlight

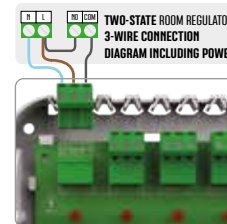


|                          |                |                            |
|--------------------------|----------------|----------------------------|
| power / communications   | 230V 50Hz      | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 81 x 81 x 27,3 | white                      |

Connecting diagram of room regulator powered 230V



Connecting diagram of room regulator powered 230V using power from EU-L-5s, EU-L-2 controller



### EU-297z v3

WIRED TWO-STATE ROOM REGULATOR - 230 V

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- day/night program,
- temporary display backlight,
- **flush mountable (electric box 60mm)**



|                          |              |                            |
|--------------------------|--------------|----------------------------|
| power / communications   | 230V 50Hz    | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 84 x 84 x 13 | white, black               |

### EU-F-2z v1

WIRED TWO-STATE ROOM REGULATOR FOR FRAME SYSTEMS 55mm - 230 V

- air temperature measurement and control,
- measuring air humidity,
- LCD display without backlight,
- sensor calibration,
- **flush mountable, for the 55mm frame, list of compatible frame systems on page 25 or on webpage**



|                          |              |                             |
|--------------------------|--------------|-----------------------------|
| power / communications   | 230V 50Hz    | wired 2x0,75mm <sup>2</sup> |
| dimensions [mm] / colour | 55 x 55 x 11 | white, black                |

### EU-F-4z v1

WIRED TWO-STATE ROOM REGULATOR FOR FRAME SYSTEMS 55mm - 230 V

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- weekly heating program,
- day/night program,
- Optimum Start function
- temporary display backlight,
- touch buttons,
- **flush mountable, for the 55mm frame**



|                          |              |                            |
|--------------------------|--------------|----------------------------|
| power / communications   | 230V 50Hz    | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 55 x 55 x 11 | white, black               |

### T-P1.1z

WIRED TWO-STATE ROOM REGULATOR - 230 V

- air temperature measurement and control,
- hysteresis 0,5 or 1°C,
- heating/cooling mode
- powered from EU-L-5s or EU-L-2 controller
- knob for changing the set temperature in the range of 5-30°C
- voltage contact (1A/AC1)



|                          |                |                            |
|--------------------------|----------------|----------------------------|
| power / communications   | 230V 50Hz      | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 81 x 81 x 27,3 | white                      |

## EXTENSION EU-L-5s, EU-L-10- ROOM REGULATORS POWERED 230V ⚡

### T-P2.1z

#### WIRED TWO-STATE ROOM REGULATOR - 230 V

- air temperature measurement and control,
- hysteresis 0,5 or 1°C,
- heating/cooling mode
- powered from EU-L-5s or EU-L-2 controller
- knob for changing the set temperature in the range of 5-30°C
- voltage contact (1A/AC1)
- LCD display with no backlight



|                          |                |                            |
|--------------------------|----------------|----------------------------|
| power / communications   | 230V 50Hz      | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 81 x 81 x 27,3 | white                      |

### EU-T-1.1z

#### WIRED TWO-STATE ROOM REGULATOR - 230 V

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- LCD display without backlight,
- mechanical buttons
- sensor calibration
- voltage contact (1A/AC1)
- **flush mountable (electric box 60mm)**



|                          |                |                            |
|--------------------------|----------------|----------------------------|
| power / communications   | 230V 50Hz      | wired 2x0,5mm <sup>2</sup> |
| dimensions [mm] / colour | 81 x 81 x 27,3 | white                      |

## EXTENSION EU-L-5s, EU-L-10- ROOM REGULATORS WITH WI-FI

### EU-T-2x Wi-Fi

#### WIRELESS TWO-STATE ROOM REGULATOR WITH WI-FI

- air temperature measurement and control,
- measuring air humidity,
- hysteresis 0,2 - 4°C,
- LCD display without backlight,
- sensor calibration
- **controllable via eModul**
- wireless communication module with 2-state output and built-in Wi-Fi



|                          |                             |                 |
|--------------------------|-----------------------------|-----------------|
| power / communications   | 2xAA 1,5V / module 230V AC  | TECH WTP/ wired |
| dimensions [mm] / colour | 81 x 81 x 21 / 95 x 98 x 31 | white           |

### EU-T-5z Wi-Fi

#### WIRELESS TWO-STATE ROOM REGULATOR WITH WI-FI

- air temperature measurement and control,
- wireless system sensor or controller (B series)
- up to 6 units of STT-868/STT-869/G-X and C-2n
- temporary backlight, touch buttons
- 2-state output
- **flush mountable (electric box 60mm)**
- **controllable via eModul**



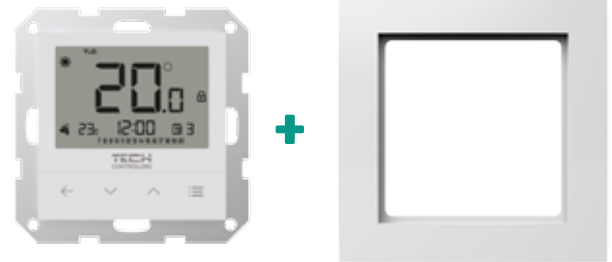
|                          |              |                 |
|--------------------------|--------------|-----------------|
| power / communications   | 230V 50Hz    | TECH WTP/ wired |
| dimensions [mm] / colour | 95 x 95 x 28 | white           |



## CREATE THE PERFECT COMBINATION OF STYLE IN YOUR HOME

### Examples of compatible frame systems:

- **Berker** - S.1, B.3, B.7
- **Jung** - A CREATION
- **Gira** - STANDART 55, E2, EVENT, ESPRINT
- **SCHNEIDER** - SYSTEM M-PLAN, SYSTEM M-ELEGANCE, M-PURE, M-SMART



# SYSTEM CONTROLLED VIA THE INTERNET



## eModul



It's cold

In which room should the temperature be raised?

## VOICE CONTROL



**TECH**  
CONTROLLERS

# EU-L-8e WIRELESS FLOOR HEATING SYSTEM



## Functions:

Controlling up to **50 thermoelectric actuators** with the use of **22 outputs**, via:

wireless room regulators and wireless room temperature sensors

– 3 zones supporting 4 outputs each (if there are more actuators, the maximum output load is 0,3A)

– 5 zones supporting 2 outputs each (if there are more actuators, the maximum output load is 0,3A)

- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- optional summer mode with external temperature sensor

### • heating/cooling function

- possibility of limiting the range of temperature change introduced from the zone level
- possibility of controlling wireless actuators **STT-868/STT-869** (the maximum of 6 per zone)
- possibility of installing up to **6 wireless window opening sensors EU-C-2n** in each zone
- possibility of connecting **6 executive modules EU-MW-1 or EU-MW-1/230**
- possibility of connecting **EU-M-8e wireless control panel**
- possibility of connecting **EU-505 Ethernet or WiFi RS for controlling the installation via the Internet**
- possibility of connecting **EU-i-1 or EU-i-1m valve module**
- software update via USB

|                                       |                |                  |
|---------------------------------------|----------------|------------------|
| power / communications                | 230V 50Hz      | wireless 868 MHz |
| dimensions [mm] /voltage-free relay   | 335 x 105 x 75 | • / 1 A          |
| outputs 1 - 8 load / pump output load | 0,3 A          | 0,5 A            |

# EU-L-4X WiFi UNIVERSAL FLOOR HEATING SYSTEM



## Function:

- management of 8 radiator zones or 4 radiator zones and 4 floor zones (with built-in 4 voltage relay outputs)
- management of 8 floor zones when connecting the **ML-4X WiFi** extension module (additional 4 voltage relay outputs)
- control of 8 zones using dedicated wired controllers or wireless system controllers or temperature sensors
- control of 4 zones using wired temperature sensors C-7p
- control of floor temperature sensor C-8f
- external temperature sensor C-8zr support and weather control
- communication with dedicated devices using the **TECH SBUS** protocol
- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- possibility of controlling wireless actuators **STT-868/STT-869** (the maximum of 6 per zone)
- in each zone, it is possible to install up to 6 wireless **EU-C-2n** window opening sensors
- possibility of connecting **6 executive modules EU-MW-1 or EU-MW-1/230**
- possibility of connecting **EU-i-1 or EU-i-1m valve module**
- **built-in WiFi module**
- the ability to control the installation via the Internet, **eModul** application
- **heating/cooling function**
- software update via USB

|                                       |               |                |
|---------------------------------------|---------------|----------------|
| power / communications                | 230V 50Hz     | wired/wireless |
| dimensions [mm] / voltage-free relay  | 182x 120 x 53 | • / 0,5 A      |
| outputs 1 - 8 load / pump output load | 0,3 A         | 0,5 A          |

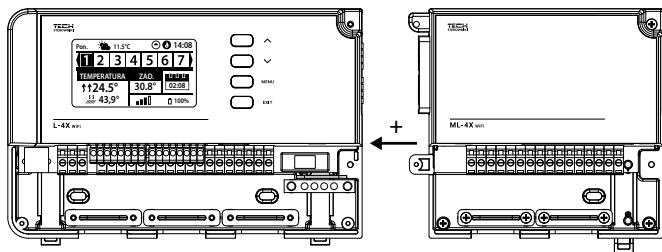
# ML-4X WiFi IS AN EXTENSION OF THE EU-L-4X WiFi SYSTEM

THE MODULE DOES NOT  
OPERATE INDEPENDENTLY



## Functions:

- module with 4 additional voltage relay outputs extending the capabilities of the EU-L-4X WiFi controller by adding 4 extra floor zones
- the module does not operate independently



|                   |                |
|-------------------|----------------|
| power             | 230V 50Hz      |
| dimensions [mm]   | 121 x 120 x 53 |
| outputs 4- 8 load | 0,3 A          |

# EU-L-X WiFi UNIVERSAL FLOOR HEATING SYSTEM



## Functions:

- the ability to handle max. 50 thermoelectric actuators, zones can be created using **8 dedicated wired regulators or wireless system regulators or temperature sensors, or wired temperature sensors C-7p**:
  - 3 zones with 3 outputs each (if there are more actuators, the maximum output load is 0,3A)
  - 5 zones with 2 outputs each (if there are more actuators, the maximum output load is 0,3A)
- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- possibility of controlling wireless actuators **STT-868/STT-869** (the maximum of 6 per zone)
- in each zone, it is possible to install up to 6 wireless **EU-C-2n** window opening sensors
- possibility of connecting **6 executive modules EU-MW-1 or EU-MW-1/230**
- possibility of connecting **EU-i-1 or EU-i-1m valve module**
- **built-in WiFi module**
- the ability to control the installation via the Internet, **eModul** application
- **heating/cooling function**
- software update via USB

| power / communications                | 230V 50Hz       | wired/wireless |
|---------------------------------------|-----------------|----------------|
| dimensions [mm] / voltage-free relay  | 34,3 x 120 x 55 | • / 0,5 A      |
| outputs 1 - 8 load / pump output load | 0,3 A           | 0,5 A          |

# EU-L-12 UNIVERSAL FLOOR HEATING SYSTEM



## MASTER

### Functions:

- the ability to handle max. 50 thermoelectric actuators, zones can be created using **8 dedicated wired regulators or wireless system regulators or temperature sensors, or wired temperature sensors C-7p:**
  - 3 zones with 3 outputs each (if there are more actuators, the maximum output load is 0,3A)
  - 5 zones with 2 outputs each (if there are more actuators, the maximum output load is 0,3A)
- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- possibility of controlling wireless actuators **STT-868/STT-869** (the maximum of 6 per zone)
- in each zone, it is possible to install up to 6 wireless **EU-C-2n** window opening sensors
- possibility of connecting **6 executive modules EU-MW-1 or EU-MW-1/230**
- possibility of connecting **EU-i-1 or EU-i-1m valve module**
- **up to 4 EU-ML-12 slaves can be connected**
- the EU-M-12 control panel can be connected
- possibility to control the installation via the Internet, **eModul** application - **EU-WiFi L** module included
- **heating/cooling function**
- software update via USB
- **OpenTherm** communication

|                                       |                |                |
|---------------------------------------|----------------|----------------|
| power / communications                | 230V 50Hz      | wired/wireless |
| dimensions [mm] / voltage-free relay  | 343 x 120 x 55 | • / 0,5 A      |
| outputs 1 - 8 load / pump output load | 0,3 A          | 0,5 A          |

# EU-M-12 UNIVERSAL CONTROL PANEL FOR EU-L-12

4,3" Touch screen

Adjusting each zone parameters in one place

Control up to 40 zones



## M-12 WIRED/WIRELESS CONTROL PANEL

Case: White or Black

**Main functions:** Zone registration, possibility of adjusting each zone parameters (Schedule settings, pre-set temperature), possibility of activating/deactivating a zone, setting time and date for the whole set, screensaver, alarm clock, screen lock.

**Communication with the EU-L-12 master controller can be wired (RS 485) or wireless.**

**Without built-in temperature sensor.**



WALL MOUNTED  
(M-12T)

FLUSH MOUNTED  
(M-12)



## 2 COLOURS



|                 |                       |
|-----------------|-----------------------|
| power           | 230V 50Hz (M-12)      |
| dimensions [mm] | 127 x 90 x 20         |
| communications  | wired 4-cord/wireless |

# EU-ML-12 IS AN EXTENSION OF THE EU-L-12 SYSTEM

## SLAVE

Additional module  
for EU-L-12 Master



### Functions:

- the device is not standalone controller, it has to be connected to the EU-L-12 - MASTER
- wired (RS 485) or wireless communication with the MASTER controller EU-L-12
- the ability to handle max. 50 thermoelectric actuators, zones can be created using **8 dedicated wired regulators or wireless system regulators or temperature sensors, or wired temperature sensors C-7p:**
  - 3 zones with 3 outputs each (if there are more actuators, the maximum output load is 0,3A)
  - 5 zones with 2 outputs each (if there are more actuators, the maximum output load is 0,3A)
- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- possibility of controlling wireless actuators **STT-868/STT-869** (the maximum of 6 per zone)
- in each zone, it is possible to install up to 6 wireless **EU-C-2n** window opening sensors
- possibility of connecting **6 executive modules EU-MW-1 or EU-MW-1/230**
- possibility of connecting **EU-i-1 or EU-i-1m valve module**
- includes **repeater function**
- **heating/cooling function**
- software update via USB

|                                       |                 |                |
|---------------------------------------|-----------------|----------------|
| power / communications                | 230V 50Hz       | wired/wireless |
| dimensions [mm] / voltage-free relay  | 34,3 x 120 x 55 | • / 0,5 A      |
| outputs 1 - 8 load / pump output load | 0,3 A           | 0,5 A          |

## DEDICATED SYSTEM EXTENSIONS EU-L-X, EU-L-12, EU-ML-12 - ROOM REGULATORS



### EU-R-X

DEDICATED WIRED ROOM REGULATOR  
FOR EU-L-X, EU-L-12, EU-ML-12 SERIES

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- LCD display without backlight,
- **mechanical buttons**

|                                 |                         |                 |
|---------------------------------|-------------------------|-----------------|
| <b>power / communications</b>   | powered from controller | wired TECH SBUS |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16            | biały, czarny   |



### EU-R-12b

DEDICATED WIRED ROOM REGULATOR  
WITH HUMIDITY SENSOR  
FOR EU-L-X, EU-L-12, EU-ML-12 SERIES

- air temperature measurement and control,
- measuring air humidity,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- LCD display without backlight,
- touch buttons

|                                 |                         |                 |
|---------------------------------|-------------------------|-----------------|
| <b>power / communications</b>   | powered from controller | wired TECH SBUS |
| <b>dimensions [mm] / colour</b> | 84 x 84 x 16            | white, black    |



### EU-R-12s

DEDICATED WIRED ROOM REGULATOR  
WITH HUMIDITY SENSOR  
FOR EU-L-X, EU-L-12, EU-ML-12 SERIES

- air temperature measurement and control,
- measuring air humidity,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- temporary display backlight,
- touch buttons

|                                 |                         |                 |
|---------------------------------|-------------------------|-----------------|
| <b>power / communications</b>   | powered from controller | wired TECH SBUS |
| <b>dimensions [mm] / colour</b> | 84 x 84 x 14            | white, black    |



### EU-F-12b

DEDICATED WIRED ROOM REGULATOR  
WITH HUMIDITY SENSOR FOR FRAME SYSTEMS 55mm  
FOR EU-L-X, EU-L-12, EU-ML-12 SERIES

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- LCD display without backlight,
- **flush mountable, for the 55mm frame, list of compatible frame systems on page 25**

|                                 |                         |                 |
|---------------------------------|-------------------------|-----------------|
| <b>power / communications</b>   | powered from controller | wired TECH SBUS |
| <b>dimensions [mm] / colour</b> | 55 x 55 x 11            | white, black    |

## L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - WIRED TEMPERATURE SENSORS



### EU-C-7p

WIRED ROOM TEMPERATURE SENSOR

- air temperature measurement

|                          |              |                               |
|--------------------------|--------------|-------------------------------|
| power / communications   | -            | wired 2 x 0,5 mm <sup>2</sup> |
| dimensions [mm] / colour | 80 x 80 x 16 | white, black                  |



### EU-FC-S1p

WIRED ROOM TEMPERATURE SENSOR

- air temperature measurement
- **flush mountable, for the 55mm frame, list of compatible frame systems on page 25 or on webpage**

|                          |              |                               |
|--------------------------|--------------|-------------------------------|
| power / communications   | -            | wired 2 x 0,5 mm <sup>2</sup> |
| dimensions [mm] / colour | 55 x 55 x 11 | white, black                  |

## WIRELESS EXTENSION L-8e, L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - MEASURING TEMPERA-



### EU-CL-mini

WIRELESS ROOM TEMPERATURE SENSOR  
IN HERMETIC CASING IP64

- air temperature measurement,
- meets the IP64 standard,
- compact in size

|                          |                 |                  |
|--------------------------|-----------------|------------------|
| power / communications   | battery CR 2032 | wireless 868 MHz |
| dimensions [mm] / colour | 37 x 37 x 16    | white            |



### EU-C-8r

WIRELESS ROOM TEMPERATURE SENSOR

- air temperature measurement,

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black     |

## WIRELESS EXTENSION L-8e, L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - MEASURING TEMPERATURE



### EU-C-8f

WIRELESS FLOOR TEMPERATURE SENSOR

- measuring floor temperature,

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black     |

## WIRELESS EXTENSION L-8e, L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - TEMPERATURE CONTROL



### EU-R-8b

WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- heating program with time limit,
- LCD display without backlight,

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 80 x 80 x 16       | white, black     |



### EU-R-8x

WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- hysteresis 0,2 - 4°C,
- additional control based on floor temperature (if optional floor sensor is used),
- LCD display without backlight,
- **mechanical buttons**

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1,5V | wireless 868 MHz |
| dimensions [mm] / colour | 81 x 81 x 21       | white, black     |

### EU-R-8b PLUS

WIRELESS ROOM REGULATOR  
WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measures air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display without backlight



|                                 |                    |                  |
|---------------------------------|--------------------|------------------|
| <b>power / communications</b>   | battery 2xAAA 1.5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 85 x 85 x 15       | white, black     |

### EU-R-8z

WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- heating program with time limit,
- LED display with backlight,
- 5V power supply included in the set mountable in an electrical box 960 mm



|                                 |                |                  |
|---------------------------------|----------------|------------------|
| <b>power / communications</b>   | 5V / 230V 50Hz | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16   | white, black     |

### EU-R-8s PLUS

WIRELESS ROOM REGULATOR  
WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display, temporary backlight



|                                 |                    |                  |
|---------------------------------|--------------------|------------------|
| <b>power / communications</b>   | battery 2xAAA 1.5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 84 x 84 x 24       | white, black     |

### EU-R-8 LED

WIRELESS ROOM REGULATOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LED display



|                                 |              |                  |
|---------------------------------|--------------|------------------|
| <b>power / communications</b>   | 230V 50Hz    | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 80 x 80 x 16 | white, black     |

## WIRELESS EXTENSION L-8e, L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - TEMPERATURE CONTROL



### EU-R-8pz PLUS

#### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display, temporary backlight
- power supply 230V / 50Hz,
- mountable in an electrical box ø60 mm

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 84 x 84 x 16 | white, black     |



### EU-F-8z

#### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR FOR FRAME SYSTEMS 55mm

- air temperature measurement and control,
- measuring air humidity,
- additional control based on floor temperature (if optional floor sensor is used),
- heating program with time limit,
- LCD display without backlight,
- **flush mountable, for the 55mm frame, list of compatible frame systems on page 25 or on webpage**

|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 55 x 55 x 11 | white, black     |

## WIRELESS EXTENSION L-8e, L-4X Wi-Fi, L-X Wi-Fi, L-12, ML-12 - ADDITIONAL MODULES



### EU-C-8zr

#### WIRELESS OUTDOOR TEMPERATURE SENSOR

- air temperature measurement

|                          |                    |                  |
|--------------------------|--------------------|------------------|
| power / communications   | battery 2xAAA 1.5V | wireless 868 MHz |
| dimensions [mm] / colour | 63 x 77 x 20       | white            |



### EU-C-2n

#### WIRELESS WINDOW OPENING SENSOR

- window opening signal,
- heating control,
- compact dimensions,
- discreet design,
- long-life battery

|                          |                            |                                     |
|--------------------------|----------------------------|-------------------------------------|
| power / communications   | battery EVE ER14250 S      | wireless 868 MHz                    |
| dimensions [mm] / colour | 73 x 32 x 19, 37 x 10 x 10 | white, antracite, brown, golden oak |



### STT-869

#### WIRELESS THERMOELECTRIC ACTUATOR

- output - nut with M30x1,5 screw thread
- new transmission,
- pairing button on the outside of the casing,
- possibility of using adapters for other types of valves
- RAN and RTDN adapters in set

|                                 |                   |                  |
|---------------------------------|-------------------|------------------|
| <b>power / communications</b>   | battery 2xAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 82 x 70 x 46      | white            |



### G-X

#### WIRELESS THERMOELECTRIC ACTUATOR

- output - nut with M30x1,5 screw thread
- possibility of using adapters for other types of valves
- RAN and RTDN adapters in set,

|                                 |                   |                  |
|---------------------------------|-------------------|------------------|
| <b>power / communications</b>   | battery 2xAA 1,5V | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 82 x 47 x 47      | white            |



### EU-MW-1 / EU-MW-1 - 230

#### WIRELESS EXECUTIVE MODULE

- voltage-free relay, **MW-1:**  
output load contact 1A/230V/50Hz,
- voltage relay, **MW-1/230,**  
output load contact 10A/230V/50Hz,
- automatically turns off when communication is lost

|                                 |              |                  |
|---------------------------------|--------------|------------------|
| <b>power / communications</b>   | 230V 50Hz    | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 50 x 80 x 60 | white            |



### EU-RP-4

#### SIGNAL REPEATER

- It sends signal between wireless devices increasing the signal coverage/range,
- compact dimensions,
- simplified handling

|                                 |              |                  |
|---------------------------------|--------------|------------------|
| <b>power / communications</b>   | 230V 50Hz    | wireless 868 MHz |
| <b>dimensions [mm] / colour</b> | 60 x 60 x 76 | white            |

## EU-MWN-1 / EU-MWN-1 - 230

WIRELESS EXECUTIVE MODULE

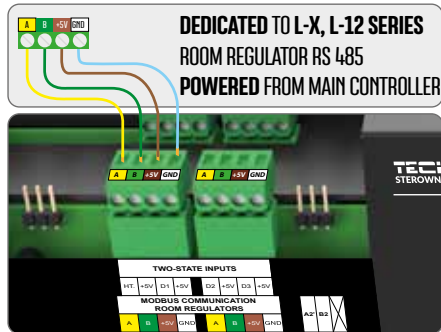


- voltage-free relay, **EU-MW-1**:  
output load contact 1A/230V/50Hz,
- voltage relay, **EI-MWN-1/230**,  
output load contact 10A/230V/50Hz,
- automatically turns off when communication is lost

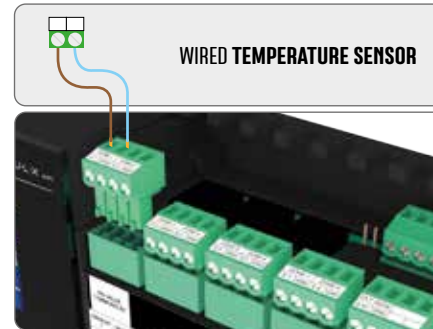
|                          |              |                  |
|--------------------------|--------------|------------------|
| power / communications   | 230V 50Hz    | wireless 868 MHz |
| dimensions [mm] / colour | 95 x 98 x 31 | white            |

## CONNECTION DIAGRAM

Connection of the dedicated room regulator to EU-L-X, EU-L-12, EU-ML-12

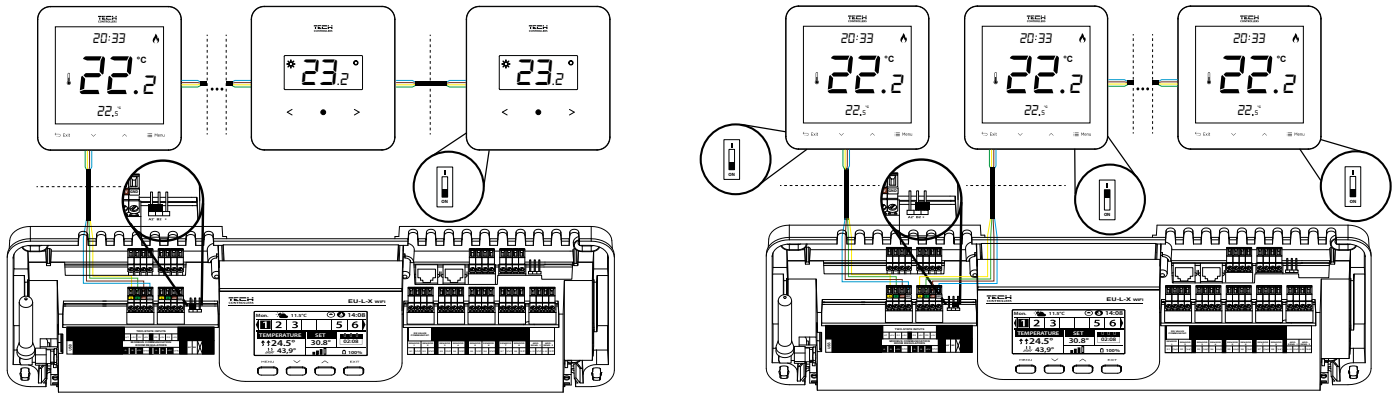


Connection of the wired temperature sensor EU-C-7p to EU-L-X, EU-L-12, EU-ML-12

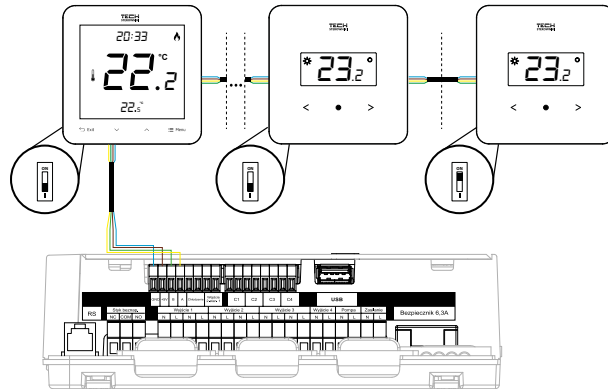


## CONNECTION DIAGRAM

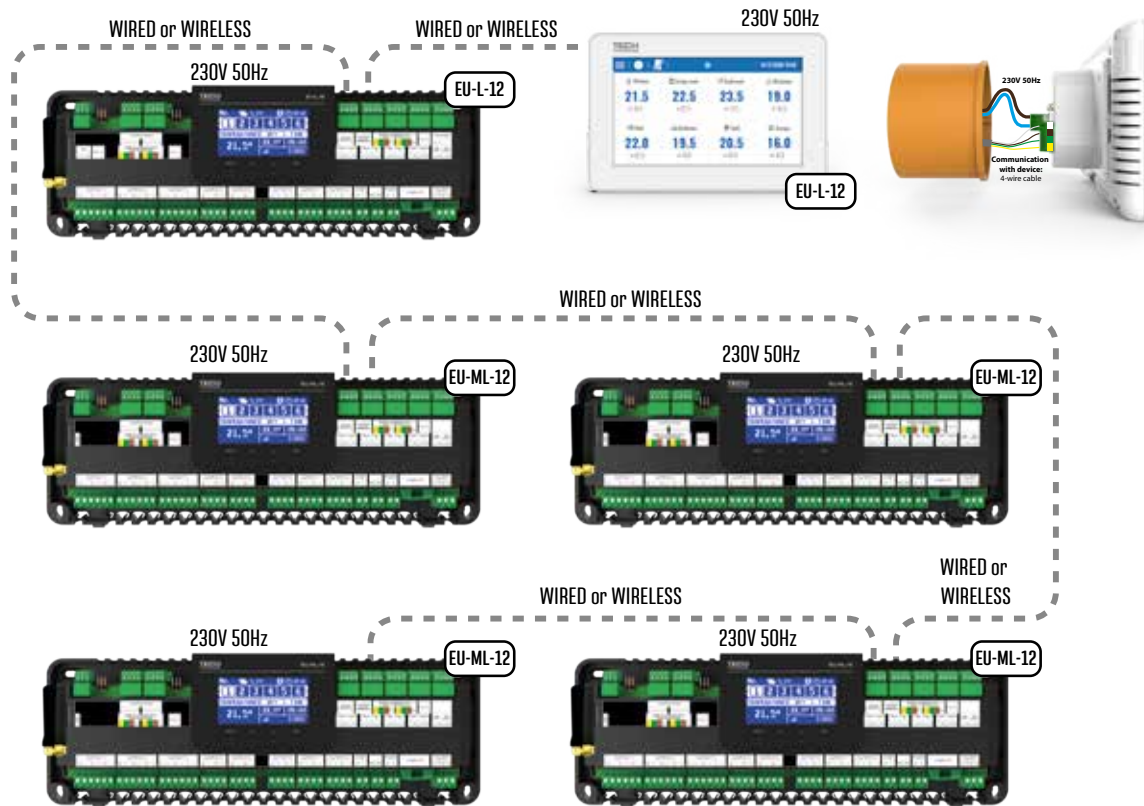
Termination method for RS 485 devices connected in series in EU-L-X, EU-L-12, EU-ML-12



Termination method for RS 485 devices connected in series in EU-L-4X WiFi



## CONNECTION DIAGRAM - COMMUNICATION BETWEEN MASTER EU-L-12 AND EU-ML-12 SLAVE DEVICES AND EU-M-12 PANEL





### STT-230/2

THERMOELECTRIC ACTUATOR

- fittings - nut with M30 x 1,5 screw thread or M28x1,5
- class - IP54,
- max. operation temperature 60 °C

|                       |           |       |
|-----------------------|-----------|-------|
| power / work power    | 230V 50Hz | 2W    |
| opening time / stroke | <5 min.   | 3,5mm |



### STT-230/2 M

THERMOELECTRIC ACTUATOR

- fittings - nut with M30 x 1,5 screw thread
- class - IP42
- max. operation temperature 60°C

|                       |           |     |
|-----------------------|-----------|-----|
| power / work power    | 230V 50Hz | 1W  |
| opening time / stroke | ~ 4 min.  | 5mm |



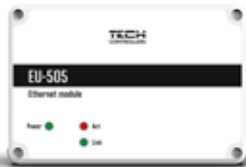
### STT-230/2 T

THERMOELECTRIC ACTUATOR

- fittings - nut with M30 x 1,5 screw thread
- class - IP54,
- max. operation temperature 60 °C

|                       |            |       |
|-----------------------|------------|-------|
| power / work power    | 230V 50Hz  | 3W    |
| opening time / stroke | ~ 3,5 min. | 3,7mm |

## WIRED EXTENSION EU-L-8e - ADDITIONAL MODULES



### EU-505

#### INTERNET MODULE

- remote control of the floor heating system via eModul
- LAN connection,
- power supply 5V

|                          |                |          |
|--------------------------|----------------|----------|
| power / communications   | 5V / 230V 50Hz | wired RS |
| dimensions [mm] / colour | 120 x 80 x 31  | black    |



### EU-WiFi RS

#### INTERNET MODULE

- remote control of the floor heating system via eModul
- WiFi connection
- web standard 2,4 MHz b/g/n
- power supply 5V

|                          |                |          |
|--------------------------|----------------|----------|
| power / communications   | 5V / 230V 50Hz | wired RS |
| dimensions [mm] / colour | 105 x 135 x 28 | white    |

## WIRED EXTENSION EU-L-8e, EU-L-9r - ADDITIONAL MODULES



### EU-i-1m

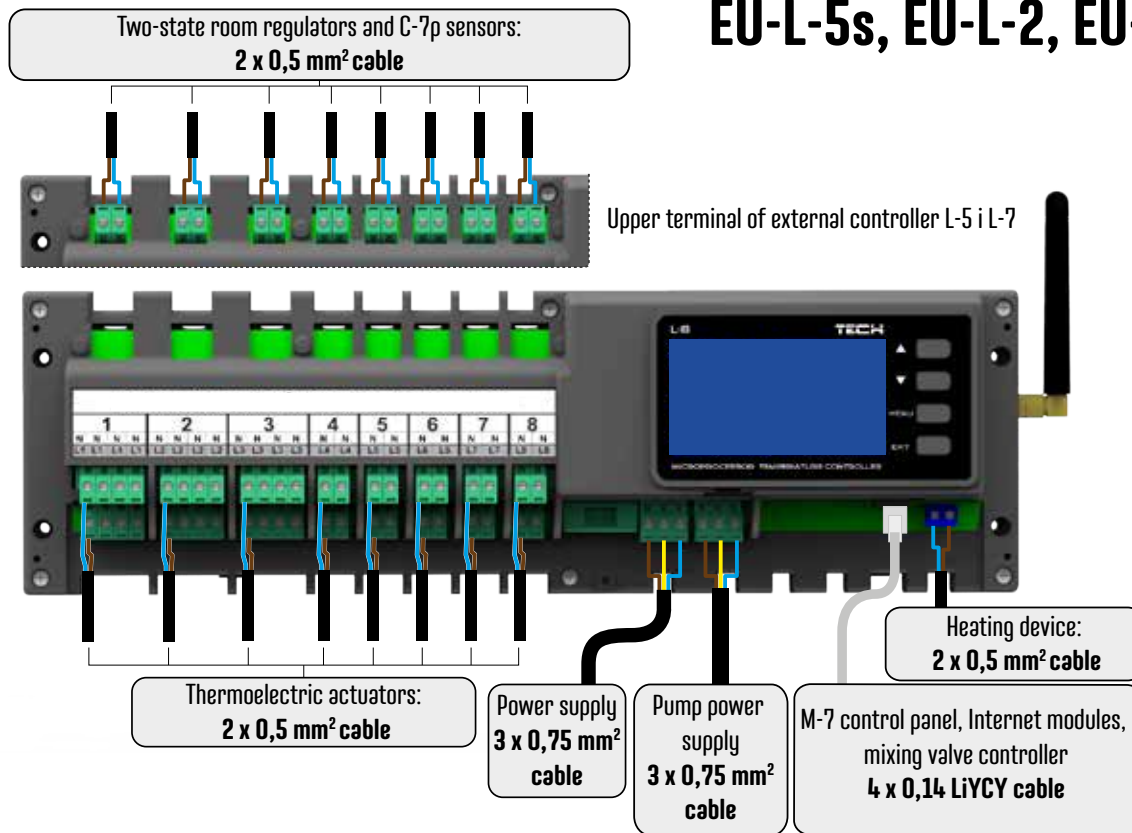
#### MIXING VALVE CONTROLLER

- smooth control of a three or four-way valve,
- control of the valve pump,
- return temperature protection,
- weather-based control,
- weekly work schedule

|                          |                |          |
|--------------------------|----------------|----------|
| power / communications   | 230V 50Hz      | wired RS |
| dimensions [mm] / colour | 110 x 163 x 57 | white    |

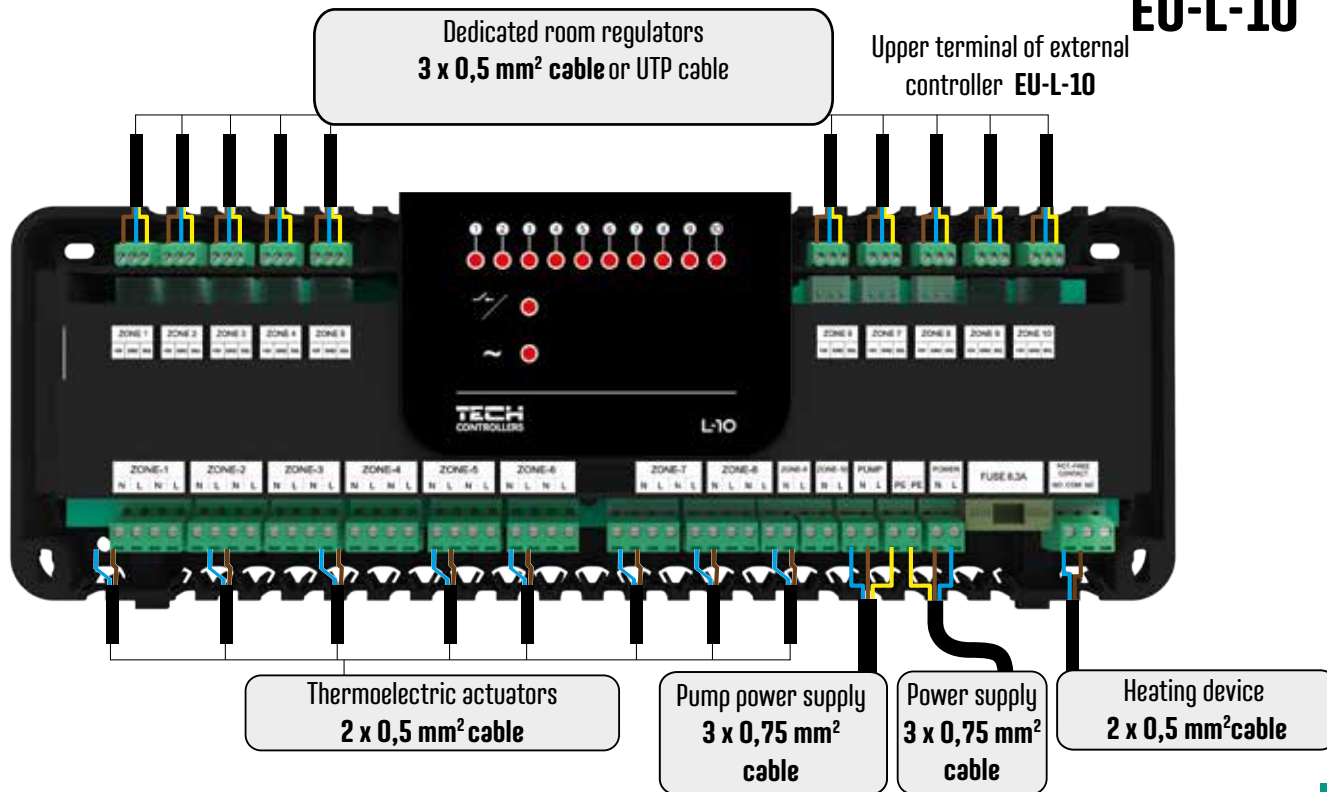
# RECOMMENDED CABLE DIAMETERS FOR CONNECTING PARTICULAR SYSTEM MODULES

## EU-L-5s, EU-L-2, EU-L-8e



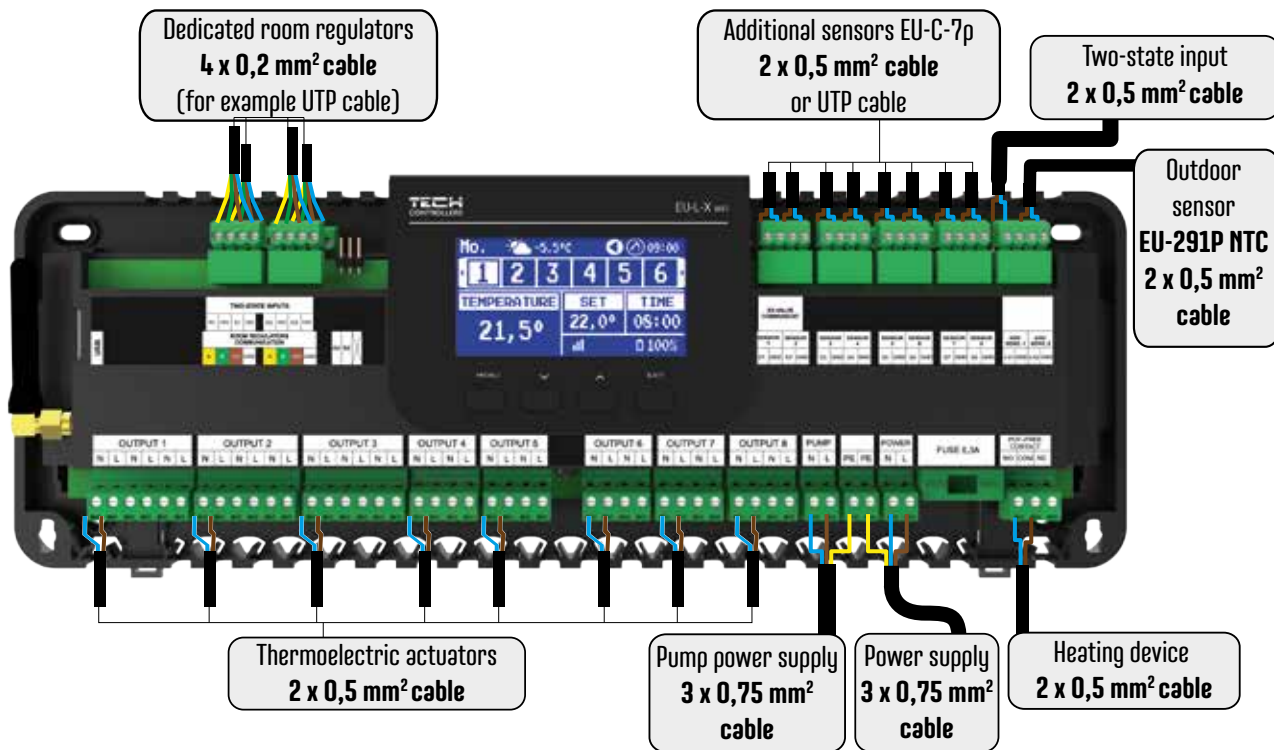
# RECOMMENDED CABLE DIAMETERS FOR CONNECTING PARTICULAR SYSTEM MODULES

## EU-L-10

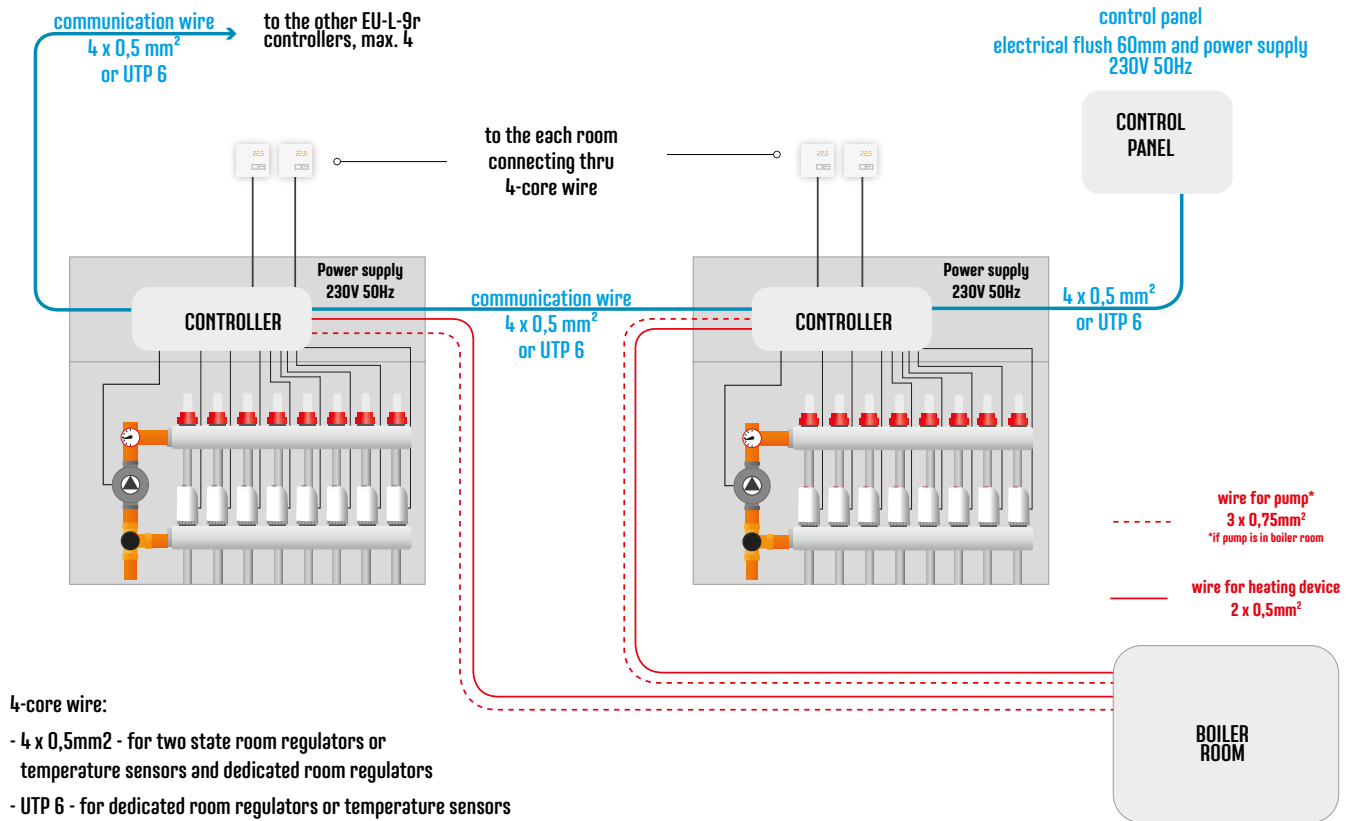


# RECOMMENDED CABLE DIAMETERS FOR CONNECTING PARTICULAR SYSTEM MODULES

## EU-L-4 X Wi-Fi, EU-L-X Wi-Fi, EU-L-12, EU-ML-12



## UNIVERSAL CONNECTING DIAGRAM



### 4-core wire:

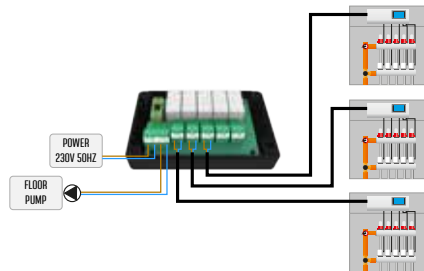
- 4 x 0,5mm<sup>2</sup> - for two state room regulators or temperature sensors and dedicated room regulators
- UTP 6 - for dedicated room regulators or temperature sensors

### Functions:

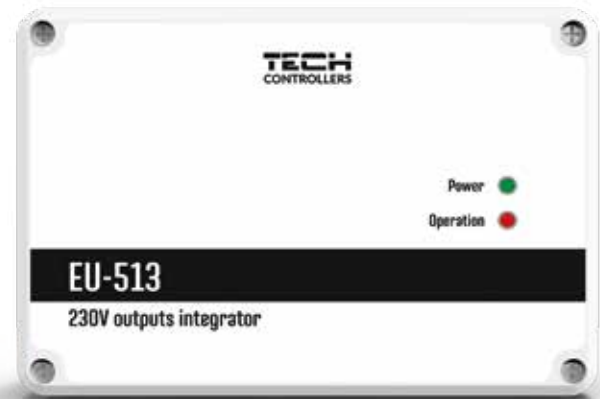
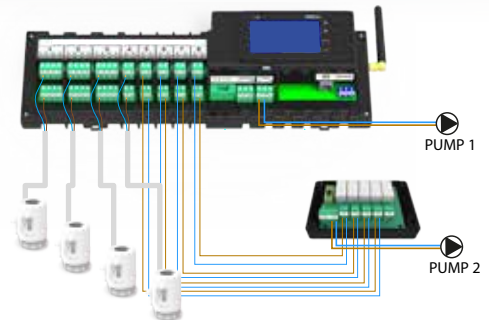
- Integration of 5 voltage inputs, control of one 230V output
- output 230 V
- inputs from 1-5 230V

|                    |               |           |
|--------------------|---------------|-----------|
| power / output     | 230V 50Hz     | 230V 50Hz |
| dimensions [mm]    | 120 x 80 x 40 |           |
| output load / fuse | 1 A           | 3,15 A    |

### Integration of pump outputs to start one pump



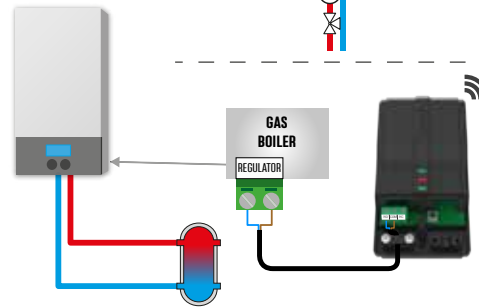
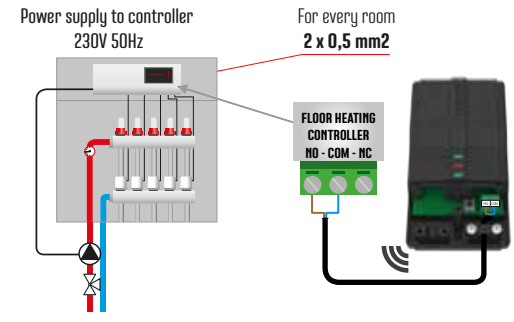
### Integration of actuator outputs to start the additional pump



## EU-262 - SET FOR WIRELESS RS COMMUNICATION



|                |           |           |
|----------------|-----------|-----------|
| power / output | 230V 50Hz | NO-COM-NC |
| load output    |           | 1 A       |



### Functions:

- EU-262 universal communication set for all models of two-state room regulators
- EU-MW-3 communication set for models of two-state room regulators with new communication (EU-T-2.2, EU-T-3.2, EU-T-4.2)

# **TECH CONTROLLERS**

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