

## **ABOUT US**



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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**EASY**MONTAGE

**REMOTE**CONTROL

20% SAVINGS VOICE

**ASSISTANT** 

TEMPERATURE CONTROL

HEATING MANAGEMENT SYSTEM





#### **APP FOR REMOTE OPERATION CONTROL**

















# 85

EU-WiFi 8S / EU-WiFi 8S p

Up to 8 zones

**Built in WiFi module** 

Voltage-free relay





WIELOO -	power / communications	230V 50Hz	wireless 868 MHz
WIFI 8S p	dimensions [mm] / colour	95 x 95 x 13	white
WIEL OF	power / communications	5V / 230V 50Hz	wireless 868 MHz
WIFI 8S	dimensions [mm] / colour	105 x 135 x 28	white

# 165

**EU-16S WiFi** 

Up to 16 zones

**Built in WiFi module** 

DEC.

MENU   ?	ने ।		20.01.2019 08:30
□ Kucheis	Salon		2 Garderoba
22.0	22.5	23.1	20.0
→ 22.0	→22.5	→ 23.0	→20.0
Pakáj dzieci	Sypialnia	P Przedpokój	⇔ Garat
21.5	19.4	20.3	16.0
→ 21.5	→ 19.5	→ 20.5	→ 16.0

**AVAILABLE COLOURS** 



power / communications	230V 50Hz	wireless 868 MHz
dimensions [mm] / colour	127 x 90 x 20	white / black



- controlling up to 8 (EU-WIFI 8S/8S p) or 16 (EU-WiFi 16S) different zones with the use of
- wired temperature sensor **EU-C-7** ρ (in set with **EU-WiFi 16S**)
- wireless temperature sensor **EU-C-mini (in set with EU-WiFi 8S mini)**
- possibility of connecting up to 8 (EU-WiFi 8S) or 16 (EU-WiFi 16S) wireless sensors EU-C-mini, EU-CL-mini, EU-C-8r or room regulators EU-R-8b, EU-R-8z, EU-R-8b PLUS,
- **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
   STT-868/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 by assigned an individual operation mode (costant temperature, time limit or 6 operation schedules)
- compatible with wireless external sensor EU-C-8 zr

#### **Equippment:**

- · power supply 5V
- additional wired temperature sensor EU-C-7 ρ (EU-WiFi 8S)
- additional wireless temperature sensor EU-C-mini (EU-WiFi 8S ρ)



Power adapter in set



Power adapter in set



Flush mountable

EU 16S WIFI

WIFI 8S p

EU-WIFI 8S



### 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** CONTROLLERS

**Fast transmission** 

Power supply 2x AA

M30 x 1,5 mm

#### WIRELES THERMOELECTRIC ACTUATOR

#### **Function:**

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

power / communications	bəttery 2xAA 1,5V	wireless 868 MHz
dimensions [mm] / fastening	82 x 83 x 49	M30 x 1,5 mm







RAN and RTDN adapters in set

#### **STT-869** - WIRELES THERMOELECTRIC ACTUATOR

**Silent transmission** 

Power supply 2x AA

M30 x 1,5 mm



#### WIRELES THERMOELECTRIC 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,

power / communications	battery 2xAA 1,5V	wireless 868 MHz
dimensions [mm] / fastening	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,



#### **EU-C-mini**

WIRELESS ROOM TEMPERATURE SENSOR

- air temperature measurement,
- compact in size,

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

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,



#### EU-R-8b

WIRELESS ROOM REGULATOR

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

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

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

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



#### **EU- R-8b PLUS**

## WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- measuring air humidity,
- temperature control on the basis of floor temperature,
- heating program with time limit,
- · LCD display without backlight,



#### **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 Φ60 mm.

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

power / communications	Zəsiləcz 5V / 230V 50Hz	wireless 868 MHz
dimensions [mm] / colour	80 x 80 x 16	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-MW-1 / EU-MW-1 - 230

#### WIRELESS EXECUTIVE MODULE

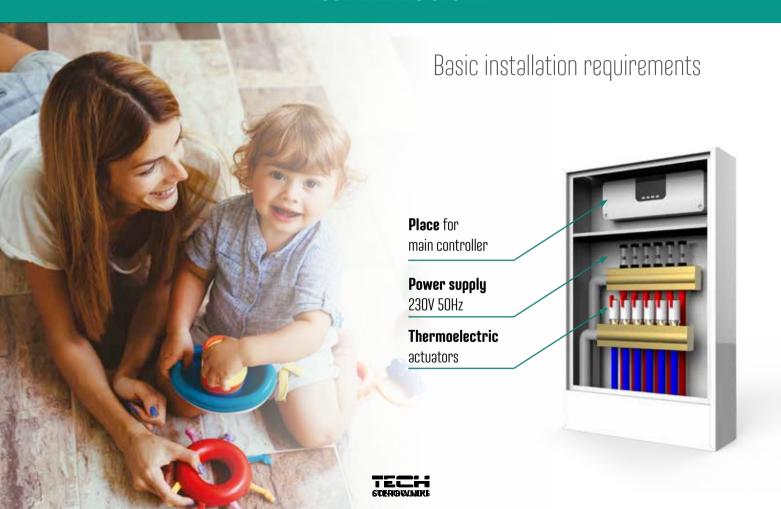
- voltage-free relay, MW-1: output load contact 1A/230V/50Hz,
- voltage relay, MW-1/230 output load contact 1A/230V/50Hz,
- automatic off in case of loss of communication,

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





# **FLOOR HEATING SYSTEM**



# **EU-L-5s WIRED** FLOOR HEATING SYSTEM



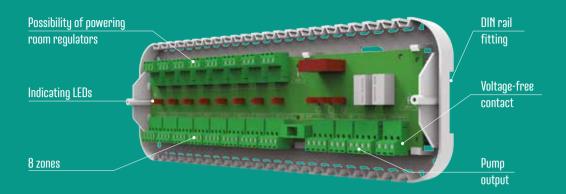
# EU-L-5s

#### **Functions:**

Controlling up to **50 thermoelectric actuators** with the use of **22 outputs**, via **two-state room regulators** 

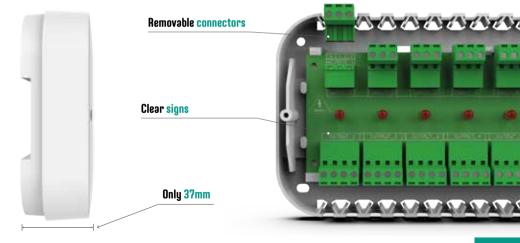
- -3 outputs may support **12 actuators** (the max. of 4 actuators per one output) or each output load of max. 0,3A (-70W)
- -5 outputs may support **10 actuators** (the max. of 2 actuators per one output) or each output load of max. 0,3A (-70W)
- one 230V output for a pump
- voltage-free relay (e.g. to control an additional heating device)

power / communications	230V 50Hz	wired 2 or 3 core cable
dimensions [mm] / relay	335 x 105 x 75	•/1A
max load 1-8 / pump load	0,3 A	0,5 A



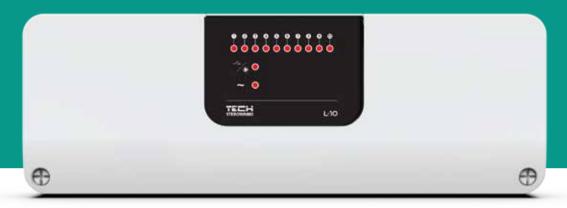








# **EU-L-10 WIRED** FLOOR HEATING SYSTEM



**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	•/1A
outputs 1-10 load / pump output load	0,3 A	0,5 A

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



#### FU-R-10h

#### DEDICATED WIRED ROOM REGULATOR

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



#### **EU-R-10z**

#### DEDICATED WIRED ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 4°C,
- LED display with backlight,

power / communications	power z listwy L-10	wired 3 x 0,5mm²
dimensions [mm] / colour	80 x 80 x 16	white, black

power / communications	power z listwy L-10	wired 3 x 0,5mm²
dimensions [mm] / colour	80 x 80 x 16	white, black



#### **EU-R-10s**

#### DEDICATED WIRED ROOM REGULATOR

- air temperature measurement and control,
- husteresis 0.2 4°C.
- · day/night program,
- additional control based on floor temperature (if floor sensor is used),
- · temporary display backlight,
- touch buttons



#### **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 floor sensor is used),
- temporary display backlight,
- · touch buttons,

power / communications	power z listwy L-10	wired 3 x 0,5mm²
dimensions [mm] / colour	95 x 95 x 25	white

power / communications	power z listwy L-10	wired 3 x 0,5mm²
dimensions [mm] / colour	84 x 84 x 14	white



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



Connecting diagram of two-state room regulator

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-293 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 floor sensor is used).
- temporary display backlight,

power / communications	battery 2xAAA 1,5V	wired 2x0,75mm²
dimensions [mm] / colour	125 x 83 x 14	white, black



#### 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 floor sensor is used),
- temporary display backlight,

power / communications	bəttery 2xAA 1,5V	wired 2x0,75mm²
dimensions [mm] / colour	121 x 95 x 24	white, black

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



#### FIJ-294 v1

#### WIRED TWO-STATE ROOM REGULATOR

- air temperature measurement and control,
- husteresis 0.2 4°C.
- LCD display without backlight,
- possibility to set a limit the range of temperature changes
- sensor calibration.



#### EU-297 v3

#### WIRED TWO-STATE ROOM REGULATOR

- air temperature measurement and control,
- husteresis 0.2 4°C.
- additional control based on floor temperature (if floor sensor is used).
- day/night program,
- · temporary display backlight,
- flush mountable (electric box 60mm)

power / communications	battery 2xAAA 1,5V	wired 2x0,5mm²
dimensions [mm] / colour	80 x 80 x 16	white, black





#### EU-295 v3

#### WIRED TWO-STATE ROOM REGULATOR

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



#### EU-290 v3

#### 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,

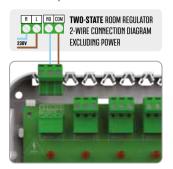
power / communications	battery 2xAAA 1,5V	wired 2x0,5mm²
dimensions [mm] / colour	95 x 95 x 25	white

power / communications	bəttery 2xAA 1,5V	wired 2x0,75mm²
dimensions [mm] / colour	134 x 95 x 24	white, black



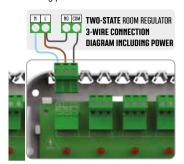


# Connecting diagram of room regulator oowered 230V



### Connecting diagram of room regulator powered 230V

#### using power from **L-5s controller**



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



#### EU-293z 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 floor sensor is used),
- weekly heating program,
- · day/night program,
- Optimum Start function
- · temporary display backlight,
- flush mountable (electric box 60mm)

power / communications	230V 50Hz	wired 2x0,75mm²
dimensions [mm] / colour	125 x 83 x 14	white, black



#### 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 floor sensor is used).
- day/night program,
- · temporary display backlight,
- · flush mountable (electric box 60mm)

power / communications	230V 50Hz	wired 2x0,5mm²
dimensions [mm] / colour	84 x 84 x 13	white, black



# **EU-L-7e WIRED** FLOOR HEATING SYSTEM



#### **Functions:**

Controlling up to 50 thermoelectric actuators with the use of 22 outputs, via EU-C-7p wired room temperature sensors

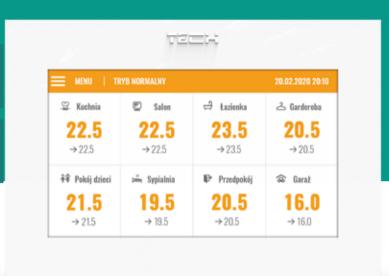
- -3 outputs may support 12 actuators (the max. of 4 actuators per one output) or each output load of max. 0,3A (-70W)
- -5 outputs may support 10 actuators (the max. of 2 actuators per one output) or each output load of max. 0.3A (~70W)
- one 230V output for a pump
- voltage-free relay (to control an additional heating device)
- possibility of connecting EU-M-7 control panel (wire connection)
- possibility of connecting EU-505 Ethernet or EU-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	wired - 2 wire
dimensions [mm] / voltage-free relay	335 x 105 x 75	•/1A
outputs 1 - 8 load / pump output load	0,3 A	0,5 A

# EU-M-7 WIRED CONTROL PANEL FOR EU-L-7e

4,3" Touch

Adjusting each zone parameters in one place



#### EU-M-7 WIREN CONTROLL PANEL

Casing: Black or white

**Principle of operation:** the controller allows the user to control and view the parameters of floor heating sustem.

Functions: Changing the parameters for each zone (schedule settings, set temperature), possibility of enabling/disabling particular zone, time/date settings, brightness settings, screensaver, alert clock, scrren lock, easy to mount in electrical box (ø60mm). No integrated temperature sensor.

**Power supply:** 230V 50Hz. **Dimensions:** 127 x 90 x 20 mm



**FLUSH MOUNTABLE** 

#### 2 COLOURS



power 230V 50Hz	
dimensions [mm]	127 x 90 x 20
communications	wired - 4 cord



#### SYSTEM EXTENSION EU-L-7e - TEMPERATURE SENSOR AND ADDITIONAL MODULES



#### EU-C-7p

#### WIRED ROOM TEMPERATURE SENSOR

• air temperature measurement,



#### EU-i-1m

#### MIXING VALVE CONTROLLER

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

power / communications	-	wired 2x0,5 mm²
dimensions [mm] / colour	80 x 80 x 16	white, black

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



#### INTERNET MODULE



- remote control of the floor heating system via eModul
- wired connection.
- power supply 5V



#### **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	120 x 80 x 31	black

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

# **Additional options:**

- Controll panel **EU-M-7**
- Internet module **EU-WiFi RS**

#### \*CONTROLL PANEL



EU-M-7

#### TEMPERATURE SENSOR



EU-L-7e \*INTERNET MODULE





# 4

# **EU-L-4 UNIVERSAL** FLOOR HEATING SYSTEM **WITH WIFI** MODULE



#### **Function:**

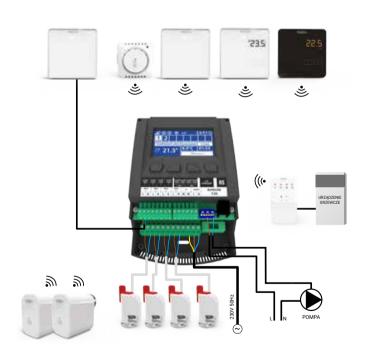
Controlling 4 voltage outputs by 4 wired temperature sensors EU-C-7p or wireless temperature sensors EU-C-mini, EU-CL-mini, EU-C-8r or wireless regulators EU-R-8b, EU-R-8z,

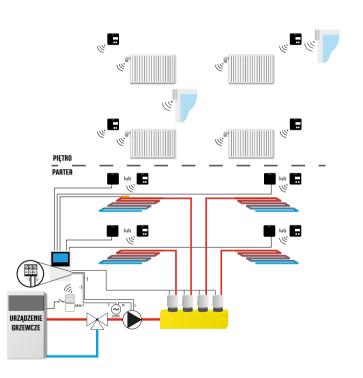
- voltage-free relay (to control an additional heating device or pump)
- possibility of controlling the installation via the Internet
- possibility of controlling 8 zones:
- 4 zones controlled by wireless temperature sensors EU-C-mini, EU-CL-mini, EU-C-8r or wireless regulators EU-R-8b, EU-R-8z,
- 4 zones with voltage outputs controlled by 4 wired temperature sensors EU-C-7p or wireless temperature sensors EU-C-mini, EU-CL-mini, EU-C-8r or wireless regulators EU-R-8b, EU-R-8z.
- possibility of controlling wireless actuators STT-868/STT-869 (the maximum of 6 per zone)
- possibility of connecting 4 wired or 8 wireless floor temperature sensors,
- possibility of connecting 8 executive modules EU-MW-1 or EU-MW-1/230,
- · software update via USB

power / communications	230V 50Hz	wired / wireless
 dimensions [mm] / voltage-free relay	110 x 163 x 57	•/1A
outputs 1 - 8 load / pump output load	0,3 A	0,5 A

#### **CONNECTION DIAGRAM**

#### **EXAMPLE INSTALATION DIAGRAM**







## **EU-L-8e WIRELESS** FLOOR HEATING SYSTEM



#### **Functions:**

Controlling up to  $\bf 50$  thermoelectric actuators with the use of  $\bf 22$  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 form 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	•/1A
outputs 1 - 8 load / pump output load	0,3 A	0,5 A

# EU-M-8e WIRELESS CONTROL PANEL FOR EU-L-8e

4,3" Touch screen

Adjusting each zone parameters in one place

Can measure air temperature in 1 zone

Wireless communication

d łazienka C Kuchnia Salan 2 Garderoha 22.5 20.5  $\rightarrow 225$  $\rightarrow 225$  $\rightarrow 23.5$  $\rightarrow 20.5$ ++ Pokój dzieci 🚊 Sypialnia Przedpokój Garat 16.0 19.5 20.5  $\rightarrow 21.5$ → 19.5 $\rightarrow 20.5$ → 16.0

#### EU-M-82 DEDICATED WIRELESS CONTROL PANEL (FLUSH-MOUNTED)

Casino: Black or white

**Principle of operation:** Controller is intended for control and preview the parameters of floor heating sustem.

**Functions:** Changing the parameters for each zone (schedule settings, set temperature), possibility of enabling/disabling particular zone, time/date settings, brightness settings, screensaver, alert clock, scrren lock, easy to mount in electrical box (φ60mm).

**Power supply**: 230V 50Hz. **Dimensions:** 127 x 90 x 20 mm



#### **FLUSH MOUNTABLE**

#### 2 COLOURS



power	power 230V 50Hz	
dimensions [mm]	127 x 90 x 20	
communications	wireless 868 MHz	



# **EU-L-9r UNIVERSAL** FLOOR HEATING SYSTEM



#### **Functions:**

Controlling up to **50 thermoelectric actuators** with the use of **19 outputs** 

- -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 connecting **EU-i-1 or EU-i-1m** valve module
- $\cdot$  possibility of connecting up to 4 main controllers controllers in series and controlling them via 1 control panel
- possibility of controlling the system online via eModul app (EU-M-9 panel is necessary)
- · heating/cooling function
- software update via USB

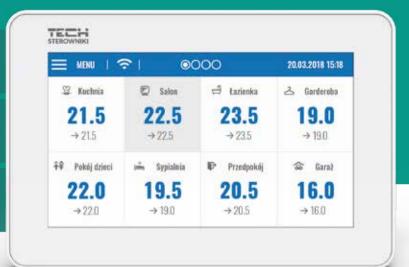
power / communications	230V 50Hz	wired/wireless
dimensions [mm] / voltage-free relay	340 x 118 x 52	•/1A
outputs 1 - 8 load / pump output load	0,3 A	0,5 A

# M-9r WIRED CONTROL PANEL FOR EU-L-9r

4,3" Touch screen

Adjusting each zone parameters in one place

**Built in WiFi module** 



#### M-9r DEDICATED WIRED CONTROL PANEL (FLUSH-MOUNTED)

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, WiFi communication (possibility of control via eModul platform) Flush mountable in 60mm mounting box

Supply voltage 230V 50Hz Dimensions: 127 x 90 x 20 mm



#### 2 COLOURS



power	230V 50Hz
dimensions [mm]	127 x 90 x 20
communications	wired 4 x 0,5 / UTP

#### **FLUSH MOUNTABLE**



#### DEDICATED SYSTEM EXTENSIONS EU-L-9r - ROOM REGULATORS



#### FII-R-9h

#### DEDICATED WIRED ROOM REGULATOR

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



#### EU-R-9z

#### DEDICATED WIRED ROOM REGULATOR

- air temperature measurement and control,
- hysteresis 0,2 4°C,
- · LED display with backlight,
- additional control based on floor temperature (if floor sensor is used),

power / communications	powered from controller	wired 4 x 0,5 / UTP
dimensions [mm] / colour	80 x 80 x 16	white, black

power / communications	powered from controller	wired 4 x 0,5 / UTP
dimensions [mm] / colour	80 x 80 x 16	white, black



#### FII-R-9s

#### DEDICATED WIRED ROOM REGULATOR

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





#### **EU-R-9s 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 floor sensor is used),
- · temporary display backlight,
- touch buttons,

power / communications	powered from controller	wired 4 x 0,5 / UTP
dimensions [mm] / colour	84 x 84 x 14	white

Connecting of dedicated room regulator



Connecting of wired temperature sensor EU-C-7p

to main controller EU-L-9r

WIRED TEMPERATURE SENSOR

#### **SYSTEM EXTENSION EU-L-9r** - WIRED TEMPERATURE SENSORS



#### EU-C-7p

WIRED ROOM TEMPERATURE SENSOR

• air temperature measurement,



#### EU-291p NTC

WIRED OUTSIDE TEMPERATURE SENSOR

• air temperature measurement,

power / communications	-	wired 2 x 0,5 mm²
dimensions [mm] / colour	80 x 80 x 16	white, black

power / communications	-	wired 2 x 0,5 mm²
dimensions [mm] / colour	60 x 80 x20	white



#### WIRELESS EXTENSION EU-L-4 WiFi, EU-L-8e, EU-L-9r - MEASURING TEMPERATURE



#### **EU-CL-mini**

WIRELESS ROOM TEMPERATURE SENSOR IN HERMETIC CASING IP64

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



#### **EU-C-mini**

WIRELESS ROOM TEMPERATURE SENSOR

- air temperature measurement,
- compact in size,

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

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



#### EU-C-8f

WIRELESS FLOOR TEMPERATURE SENSOR IN HERMETIC CASING

• measuring floor temperature,



#### EU-C-8r

WIRELESS ROOM TEMPERATURE SENSOR

• air temperature measurement,

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

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

#### WIRELESS EXTENSION EU-L-4 WiFi, EU-L-8e, EU-L-9r - CONTROL TEMPERATURE



#### EU-R-8b

#### WIRELESS ROOM REGULATOR

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



#### **EU-R-8b PLUS**

#### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

- air temperature measurement and control,
- · measures air humidity,
- additional temperature control on the basis of floor temperatur,
- 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

power / communications	battery 2xAAA 1,5V	wireless 868 MHz
dimensions [mm] / colour	85 x 85 x 15	white, black



#### EU-R-8bw

### WIRELESS ROOM REGULATOR WITH HUMIDITY SENSOR

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



#### 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 Φ60 mm,

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

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



#### WIRELESS EXTENSION EU-L-4 WiFi, EU-L-8e, EU-L-9r - ADDITIONAL MODULES



#### EU-C-8zr

#### WIRELESS OUTSIDE TEMPERATURE SENSOR

• air temperature measurement,



#### EU-C-2n

#### WIRELESS WINDOW OPENING SENSOR

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

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



#### 



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

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

#### EU-RP-3

#### SIGNAL REPEATER

 It sends signal between wireless devices increasing the signal coverage/range

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

#### WIRELESS EXTENSION EU-L-4 WiFi, EU-L-8e, EU-L-9r - ADDITIONAL MODULES



#### EU-RP-4

#### SIGNAL REPEATER

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



#### **EU-STT-868**

#### 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,

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

power / communications	battery 2xAA 1,5V	wireless 868 MHz
dimensions [mm] / colour	82 x 83 x 49	white



#### 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,

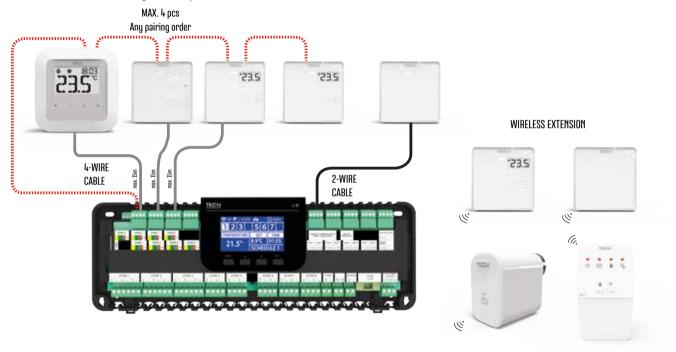
power / communications	battery 2xAA 1,5V	wireless 868 MHz
dimensions [mm] / colour	82 x 70 x 46	white





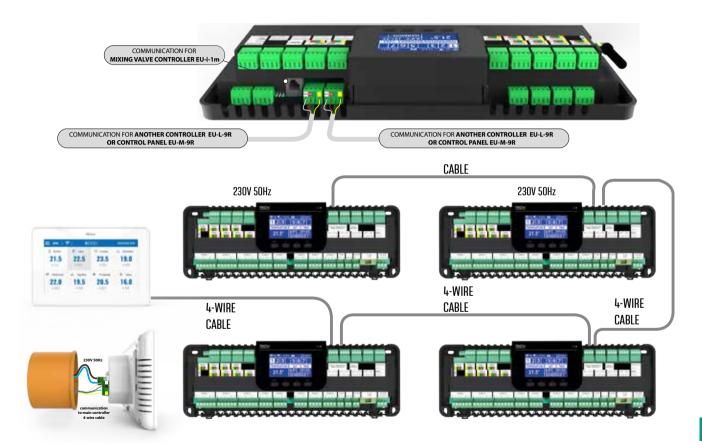
#### **CONNECTION DIAGRAM** - ADDITIONAL EXTENSION

Optional series connection of controllers - device registration required!



All elements from page 36-39

#### **CONNECTION DIAGRAM** - COMMUNICATIONS BETWEEN CONTROLLERS



#### WIRED EXTENSION EU-L-4 Wifi, EU-L-5s, EU-L-7e, EU-L-8e, EU-L-9r - THERMOELECTRIC ACTUATORS



#### STT-230/2

#### THERMOELECTRIC ACTUATOR

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



#### STT-230/2 S

#### THERMOELECTRIC ACTUATOR

- fittings nut with M30 x 1,5 screw thread
- class IP50.
- max. operation temperature 60 °C

power / work power	230V 50Hz	2W
opening time / stroke	<5 min.	4,5mm

power / work power	230V 50Hz	3,5W
opening time / stroke	~ 3 min.	3,6mm



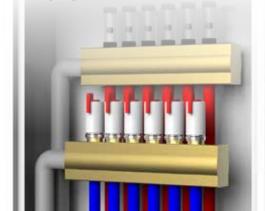
#### STT-230/2 T

#### THERMOELECTRIC ACTUATOR

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

## THERMOELECTRIC ACTUATORS 230V NORMALLY CLOSED (NC)





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



EU-505

FINERNET MODULE

#### INTERNET MODULE

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



#### **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	120 x 80 x 31	black

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



#### MIXING VALVE CONTROLLER



- control of the valve pump,
- return temperature protection,
- · weather-based control,
- · weekly work schedule,



#### **STZ-180 T**

#### MIXING VALVE ACTUATOR

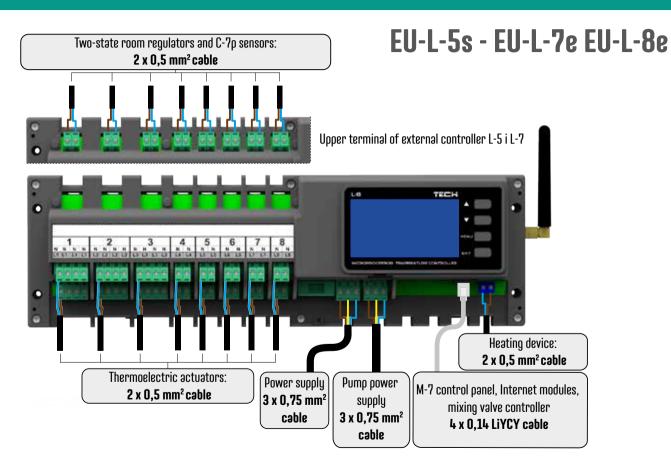
- smooth control of a three or four-way valve,
- 3-point signal control,
- manual control.
- · cooperation with valves: ESBE, Afriso, Herz, Womix, Honeywell, Wita

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

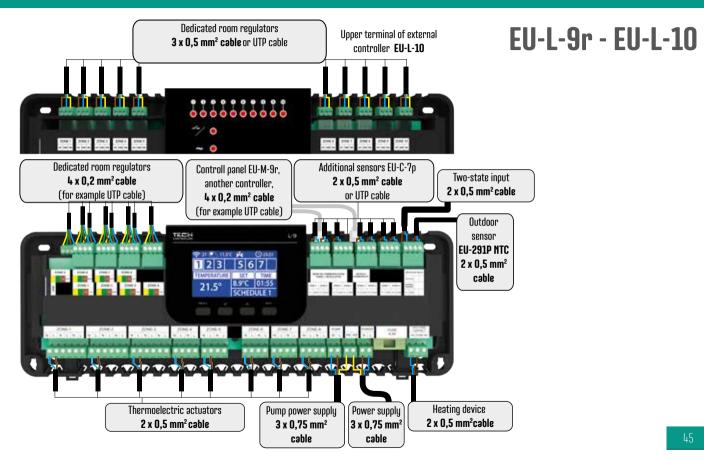
power / 90° turning time	230V 50Hz	180s
dimensions [mm] / colour	75 x 80 x 105	black



#### **RECOMMENDED CABLE DIAMETERS** FOR CONNECTING PARTICULAR SYSTEM MODULES



#### **RECOMMENDED CABLE DIAMETERS** FOR CONNECTING PARTICULAR SYSTEM MODULES



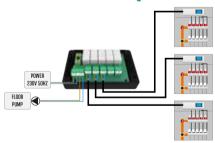
# **EU-513** Inputs integrator 230V

#### **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 from floor heating controllers





### Integration of actuator outputs for starting an additional pump

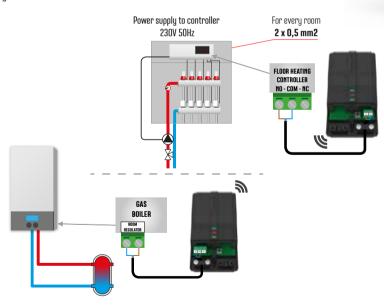


### **EU-262**

### Set for wireless rs communication

#### **Functions:**

• Universal communication set for all models of two-state room regulators



CONTROLLERS



### Notes