



### Quick Guide

Ver. 1.0

Release date: II 2024

Soft:

Main module v2.0.2

MCU v1.3.9



**Producer:**

Engo Controls S.C.  
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**Distributor:**

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### Technical specifications

Power supply	230V AC 50 Hz
Max current	3 (1) A
Temp. setpoint range	5,0°C - 45,0°C
Display temp. accuracy	0,1°C
Control algorithm	TPI or Hysteresis (±0,1°C - 2,0°C)
Communication	Wi-Fi 2,4 GHz
Control output	COM / NO (voltage-free relay)
Dimensions [mm]	55 x 55 x 39 (17 after mounting in a box with a diameter of 60)

### INTRODUCTION

Flush mounted temperature controller for mounting in 55x55 mm frame. Designed to control surface heating characterized by high thermal inertia. It can also control any other type of heating, as well as cooling systems - according to the user's needs and settings. The built-in Wi-Fi module allows easy installation and operation of the heating system using the ENGO Smart mobile app.

This product connects directly to the Internet via a 2.4GHz Wi-Fi network.

### Products features

- Wi-Fi 2.4 GHz communication standard
- compatibility with the ENGO Smart application (in Tuya Cloud technology)
- TPI algorithm ideal for underfloor heating
- HEATING/COOLING function

### Product Compliance

This product complies with the following EU Directives: 2014/53/EU i 2011/65/EU.

### SAFETY INFORMATION

Use in accordance with national and EU regulations. Use the device only as intended, keeping it in a dry condition. The product is for indoor use only. Please read the entire manual, before installation or use.

### Installation:

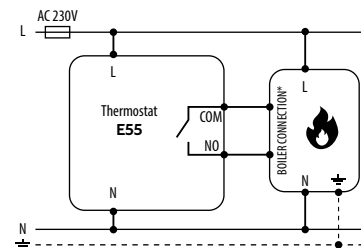
Installation must be performed by a qualified person with appropriate electrical qualifications, in accordance with the standards and regulations in force in a given country and in the EU. The manufacturer is not responsible for non-compliance with the instructions.

### WARNING:

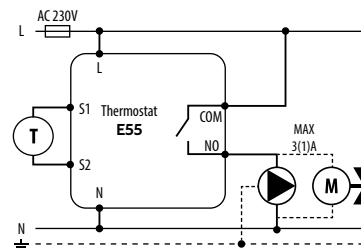
For the entire installation, there may be additional protection requirements, which the installer is responsible for.

### Connection description

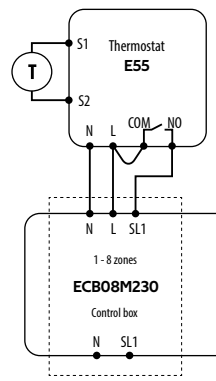
a) Connection diagram for boiler:



b) Connection diagram to pump / actuator:



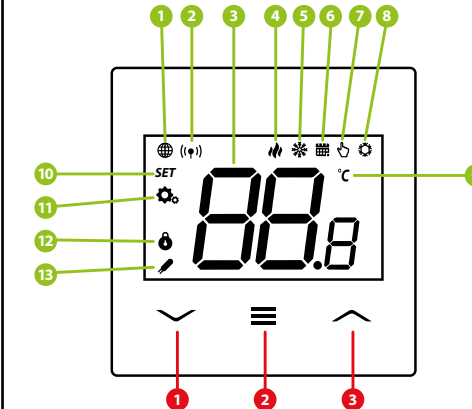
c) Connection diagram to the control box:



### Legend:

- Boiler connection\*** - Boiler's contacts for ON/OFF thermostat (according to the boiler's instructions)
- L, N 230V AC power supply
- COM, NO Voltage-free output
- S1, S2 Input terminals
- Pump
- Valve actuator
- Fuse
- Temperature sensor

### LCD Icon Description + Button Description



1. "Down" Button
2. "MENU" Button
3. "Up" Button
1. Cloud connection
2. Wi-Fi connection
3. Current/Setpoint temperature
4. Heating indicator
5. Cooling indicator
6. Schedule mode icon
7. Temporary override mode
8. FROST (anti-freeze mode)
9. Temperature unit
10. Settings icon / temperature settings
11. Settings icon
12. Button lock
13. External/Floor or Occupancy sensor

	Change the parameter value up
	Change the parameter value down
	Manual/Schedule mode - short button press (Online mode)
	Enter the installer parameters - hold 3 seconds
	Turn OFF/ON thermostat - hold 5 seconds
	Enter the pairing mode - hold until the PA message appears
	Factory reset - hold until the FA message appears
	Lock/Unlock thermostat keys - hold 3 seconds
	Heating/Cooling mode change - hold 3seconds

## Installation thermostat in the app

Make sure your router is within range of your smartphone. Make sure you are connected to the Internet. This will reduce the pairing time of the device.

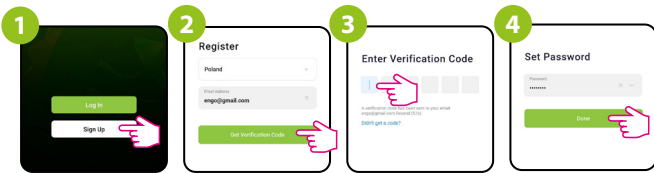
### STEP 1 - DOWNLOAD ENGO SMART APP

Download the ENGO Smart app from Google Play or Apple App Store and install it on your smartphone.



### STEP 2 - REGISTER THE NEW ACCOUNT

To register a new account, please follow the steps below:



Click „Register“ to create new account.

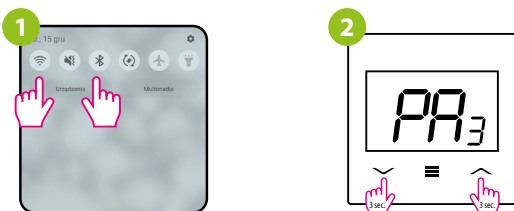
Enter your e-mail address to which the verification code will be sent.

Enter the verification code received in the email. Remember that you only have 60 seconds to enter the code!!

Then set the login password.

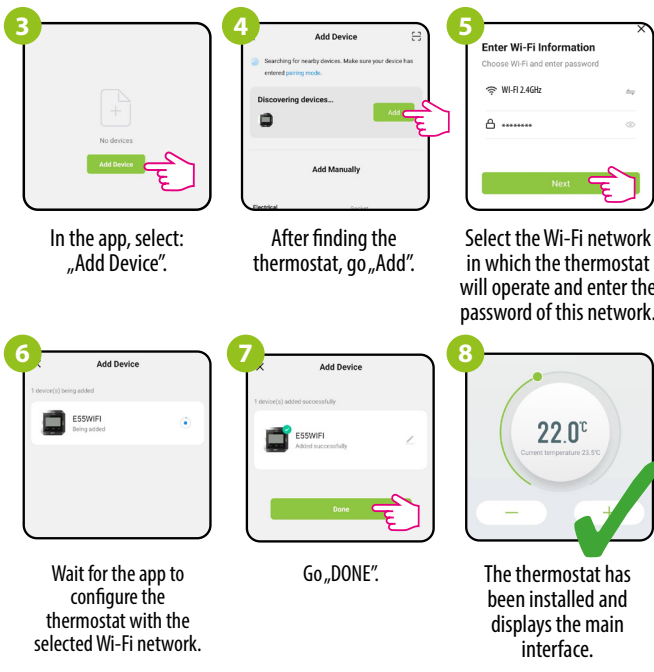
### STEP 3 - CONNECT THE THERMOSTAT TO WI-FI

After installing the app and creating an account:



On your mobile device, make sure the ENGO Smart has access to permissions (Location, Bluetooth, Nearby devices). Then turn on Bluetooth and Location. Connect to 2.4GHz Wi-Fi network to which you want to assign the device.

Make sure the thermostat is powered on. Then press and hold the buttons on the thermostat for approx. 3 seconds until the display shows „PA“. Then release the keys. The pairing mode will be started up.



In the app, select: „Add Device“.

After finding the thermostat, go „Add“.

Select the Wi-Fi network in which the thermostat will operate and enter the password of this network.

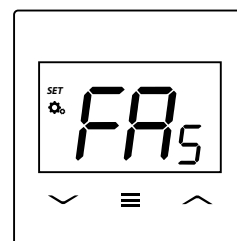
Wait for the app to configure the thermostat with the selected Wi-Fi network.

Go „DONE“.

The thermostat has been installed and displays the main interface.

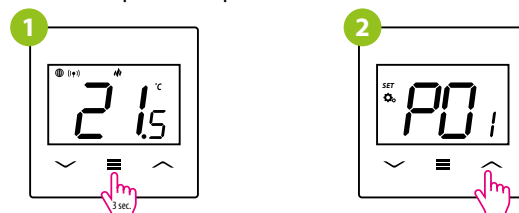
## Factory reset

To RESET Thermostat to factory settings, hold down the  $\vee$  &  $\wedge$  buttons until the FA message appears. Then release the keys. Thermostat will restart, restore default factory settings and displays the home screen. The device will be removed from the app you will need to add it again.



## Installer settings

To enter installer parameters press and hold  $\equiv$  button for 3 seconds.



Use  $\wedge$  or  $\vee$  . button to move between parameters. Enter the parameter by  $\equiv$  Edit the parameter using  $\wedge$  or  $\vee$  . Confirm the new parameter value with the  $\equiv$  button.

## Installer parameters

Pxx	Function	Value	Description	Default value
P01	Heating/Cooling Selection		Heating	
			Cooling	
P02	Control algorithm	TPI UFH	TPI for Underfloor Heating	HIS 0.2
		TPI RAD	TPI for Radiators	
		TPI ELE	TPI for Electrical Heating	
		HIS 0.4	SPAN +/-0.2°C	
		HIS 0.8	SPAN +/-0.4°C	
		HIS 1.2	SPAN +/-0.6°C	
		HIS 1.6	SPAN +/-0.8°C	
		HIS 2.0	SPAN +/-1.0°C	
P03	Offset temperature	-3.5°C do +3.5°C	If the thermostat indicates wrong temperature, you can correct it by max $\pm 3.5^\circ\text{C}$	0°C
P04	Relay type	NO	Normally Open type of relay	NO
		NC	Normally Closed type of relay	
P05	Minimum setpoint	5°C - 20°C	Minimum heating / cooling temperature that can be set	5°C
P06	Maximum setpoint	20°C - 45°C	Maximum heating / cooling temperature that can be set	35°C
P07	S1/S2 Input	1	Disable	1
		2	External sensor as a floor sensor	
		3	External sensor as an air sensor	
P08	Maximum floor temperature for heating	5°C - 45°C	In order to protect the floor, the heating will be turned off, when the temperature of the floor sensor rises above the maximum value.	35°C
P09	Minimum floor temperature for heating	5°C - 45°C	In order to protect the floor, the heating will be switched on, when the temperature of the floor sensor drops below the minimum value.	10°C
P10	Maximum floor temperature for cooling	5°C - 45°C	In order to protect the floor, cooling will be switched on, when the temperature of the floor sensor exceeds the maximum value.	15°C
P11	Minimum floor temperature for cooling	5°C - 45°C	In order to protect the floor, cooling will be turned off, when the temperature of the floor sensor drops below the minimum value	7°C
P12	Valve protection	ON	Function enabled	OFF
		OFF	Function disabled	
P13	PIN Code for settings access	NO	Function disabled	NO
		PIN	Function enabled	
P14	PIN code	000-xxx	User PIN	000
P15	Require a PIN to unlock the keys every time (function active when P13=PIN)	NO	Function disabled	NO
		YES	Function enabled	
CLR	Restoration default value	NO	No	NO
		YES	Yes	