ENGO EMODZB Relay Module / ZigBee Repeater User Guide

Contents

ENGO EMODZB Relay Module / ZigBee Repeater

Specifications

- **Product:** EMODZB Relay module / ZigBee Repeater
- **Power Supply:** 230V AC 50Hz
- **Max Load Communication:** 3(1) A ZigBee 3.0 2.4GHz
- **Output Control Dimension:** 40 x 40 x 20 mm

FAQs

- **Q: Do I need to purchase a separate ZigBee gateway for this product?**
  - **A:** Yes, this product must be used together with an EGATEZB ZigBee gateway (purchased separately).
- **Q: What are the LED indications on the module?**
  - **A:** The LED flashing quickly on red indicates pairing mode, flashing slowly on red indicates binding mode and a green light indicates the relay of the module is turned ON.

Technical Information

Power supply	230V AC 50Hz
Max load	3(1) A
Communication	ZigBee 3.0 2,4GHz
Output control	230V AC
Dimension [mm]	40 x 40 x 20

Introduction

- The wireless module EMODZB is designed to connect with a wired control box for underfloor heating, e.g. ECB08M230, or for cooperation with wired zones of the ECB62ZB. You can pair this module with EONE series thermostats.

- After adding to the ENGO Smart/TUYA Smart device also works independently.
- The module also works as a repeater for ZigBee 3.0 networks. – extends their radio range. The operating state is signaled by using an LED.
- The product is mounted in the box or on a DIN rail (the holder for mounting the module on the DIN rail is supplied with the device).
- The module is equipped with the ENGO binding function, to connect it wirelessly with selected thermostats (e.g. EONE) in Online or Offline modes.

WARNING: This product must be used together with an EGATEZB ZigBee gateway (purchased separately).

Product Compliance

- **This product complies with the following EU Directives:** 2014/30/EU, 2014/35/EU, 2014/53/EU i 2011/65/EU.

Safety Information:

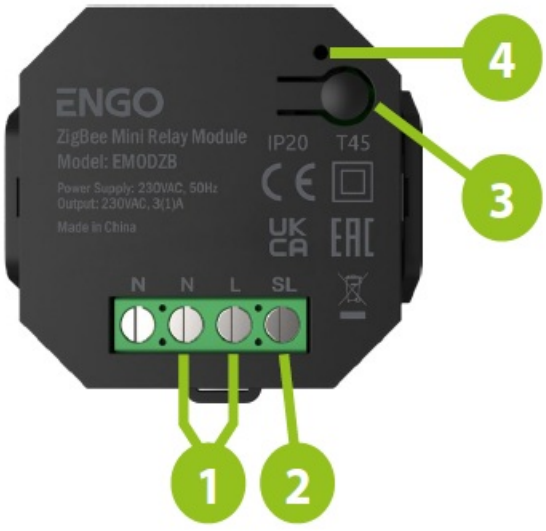
- Use per national and EU regulations.
- Use the device only as intended, keeping it in a dry condition.
- The product is for indoor use only. Installation must be carried out by a qualified person per national and EU regulations.

Installation

- Installation must be performed by a qualified person with appropriate electrical qualifications, per 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.

Input/Output EMODZB



1. Power supply EMODZB 230V AC
2. Output 230V AC
3. Function button
4. LED indicating the status of the module

LED indications

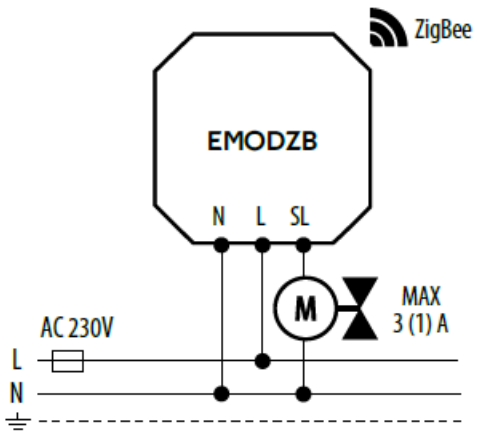
	EXPLANATION
LED diode flashes quickly on red ●●●●●●...	The device is in pairing mode with the ZigBee network (when the device does not has been previously added to the ZigBee network , or after restoring factory settings)
LED diode flashes slowly on red ● ● ●...	The device is in binding mode (when the device has been previously added to ZigBee network)
LED diode lights up green	Relay of the module has been turned ON

Button functions

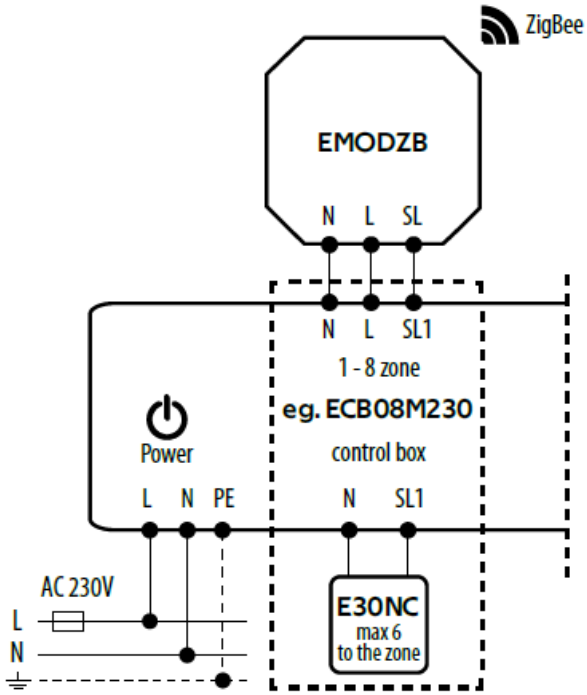
	EXPLANATION
Press 1 time	Control of the modules relay (ON/OFF)
Press quickly 5 times	Enables binding process (to link EMODZB with thermostat)
Press and hold approx. 8 seconds until t he LED will start flashing red	Module reset (module will be removed from the ZigBee network and automatically will go into pairing mode)

Connection description

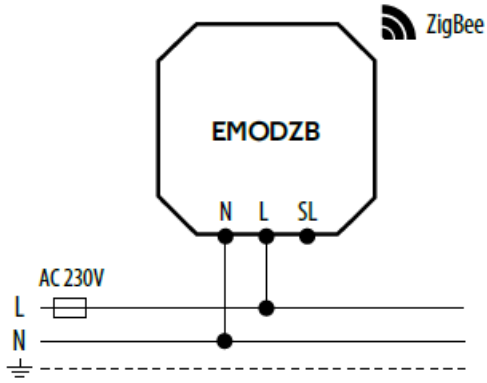
- **a)** Connection diagram for pump/actuator



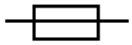
- **b)** Connection diagram to the control box



- **c)** Connection diagram as a ZigBee repeater



Legend:

- **L, N** Power supply 230V
- **SL** Output 230V AC
-  Valve
- **SL1** 230V input in the control box
-  Fuse

Installation of thermostat in the app

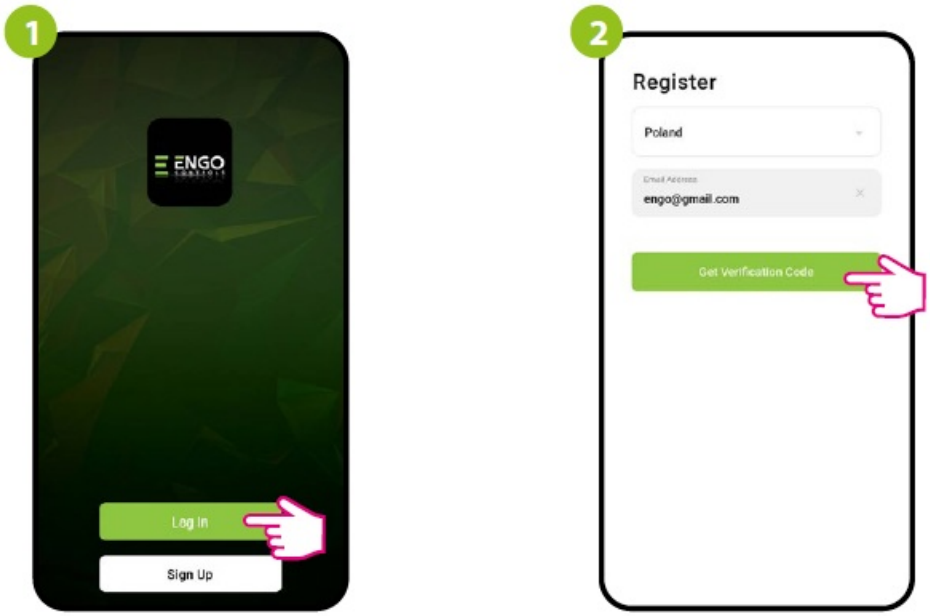
Make sure your router is within range of your smartphone. Make sure you are connected to the Internet. This will reduce the pairing time of the device.

- **STEP 1 –** DOWNLOAD ENGO SMART APP
  - Download the ENGO Smart app from Google Play or Apple App Store and install it on your smartphone.

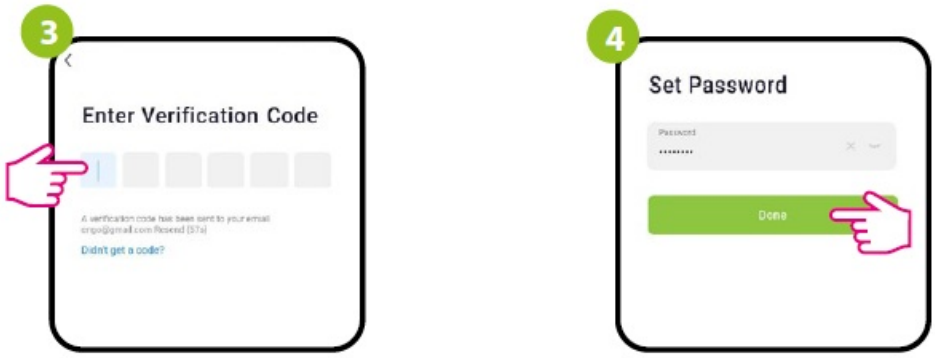
Google Play App Store

ENGO SMART

- **STEP 2 –** REGISTER THE NEW ACCOUNT
  - **To register a new account, please follow the steps below:**



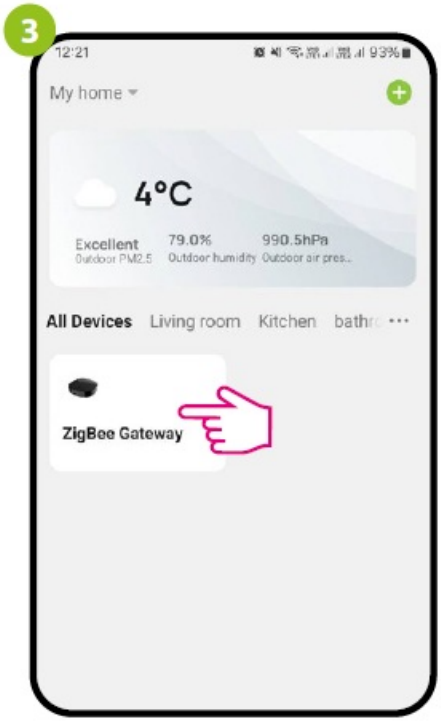
1. Click „Register” to create a new account.
2. Enter your e-mail address to which the verification code will be sent.

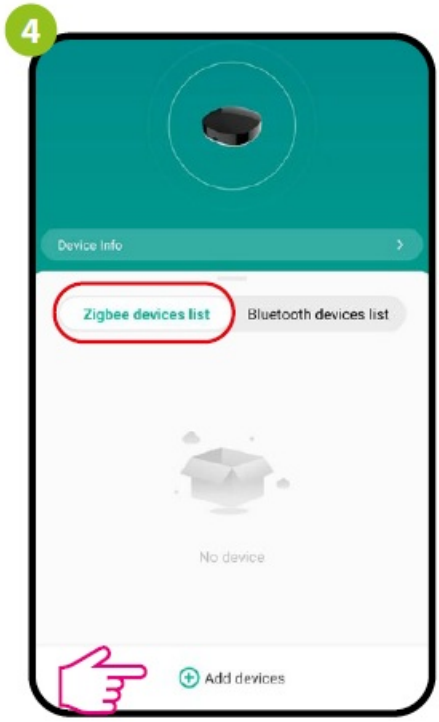


3. Enter the verification code received in the email. Remember that you only have 60 seconds to enter the code!!
4. Then set the login password.

- **STEP 3 –** CONNECT THE MODULE TO ZigBee network
  - **After installing the application and creating an account, follow these steps:**

1. Make sure the ZigBee gateway has been added to the Engo Smart app.
2. Make sure the module is connected to the power supply. The LED should flashquickly on red. If not, hold down the button for about 8 seconds. The module will enter pairing mode.





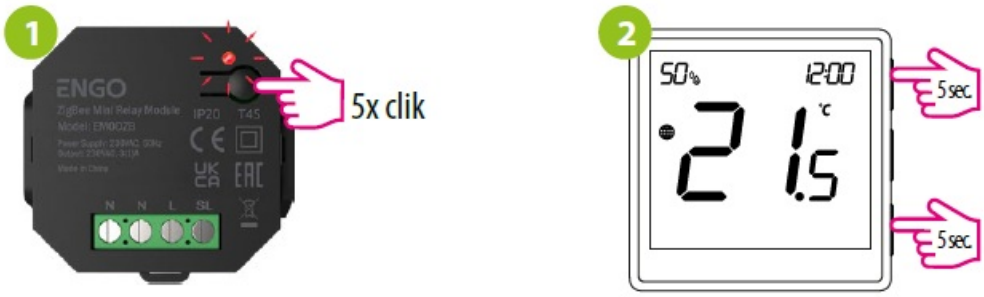
3. Enter the gateway interface.
4. In the „Zigbee devices list” go to „Add devices”.

5. Wait until the application finds the device and click ”Done”.
6. The module has been installed and displays the main interface.

BINDING thermostat with the module/relay

Make sure that the module and thermostat are in the same ZigBee network (they are added to the same gateway EGATEZB).

1. To properly bind the thermostat with the module first click quickly the button on the device 5 times. The LED will start flashing slowly on red, which means the device will enable binding mode.
2. On the EONE thermostat, hold ▲ and ▼ buttons until the „bind” message appears.



3. Release the keys, binding function (the process of linking the thermostat with the control box) is active.
4. The „binding” process takes up to 300 seconds.

5. After a successful binding operation „End” message will be displayed. The LED on the module will stop flashing.
6. Both devices have been successfully linked. The thermostat displays the main screen, icon ” ” appears on the screen indicating connection with the receiver.

ATTENTION: If the binding process fails, it must be repeated taking into account the distances between devices, obstacles, and local radio signal interferences.

- **Remember:** Radio range can be increased by Engo ZigBee repeaters.

Factory reset

- To reset the device, press and hold the function button for approx.

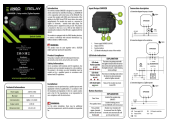
- 8 seconds until the LED flashes red. The module will be removed from the ZigBee network and gateway and then go into pairing mode.
- Now it’s possible to add the module again (see STEP 3 – CONNECT THE MODULE TO ZigBee network).

MORE INFO

- **Ver.** 7.1
- **Release date:** II 2024
- **Soft:** v1.0.12

- **Producer:** Engo Controls S.C. 43-262 Kobielice Rolna 4 St. Poland
- **Distributor:** QL CONTROLS Sp z o. o. Sp. k. 43-262 Kobielice Rolna 4 St. Poland
- www.engocontrols.com.

Documents / Resources

	ENGO EMODZB Relay Module / ZigBee Repeater [pdf] User Guide EMODZB Relay Module ZigBee Repeater, EMODZB, Relay Module ZigBee Repeater, Module ZigBee Repeater, ZigBee Repeater, Repeater

References

- User Manual