

EMODZB | Relay module / ZigBee Repeater



Quick Guide

Ver. 2
Release date: II 2023



Producer:
Engo Controls S.C.
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Technical Informations

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 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 a 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 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. Installation must be carried out by a qualified person in accordance with national and EU regulations.

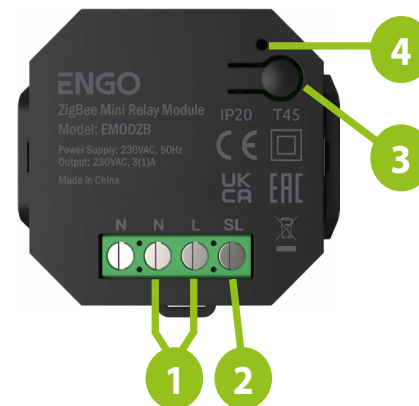
Installation:

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.

Input/Output EMODZB



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

LED diode indications

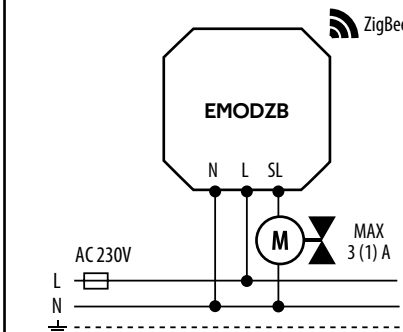
	EXPLANATION
LED diode flashes quickly on red ●●●●●●●●●●	The device is in pairing mode with the ZigBee network (when the device does not has been previously added to the ZigBee network , or after restoring factory settings)
LED diode flashes slowly on red ●●●●●	The device is in binding mode (when the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

Button functions

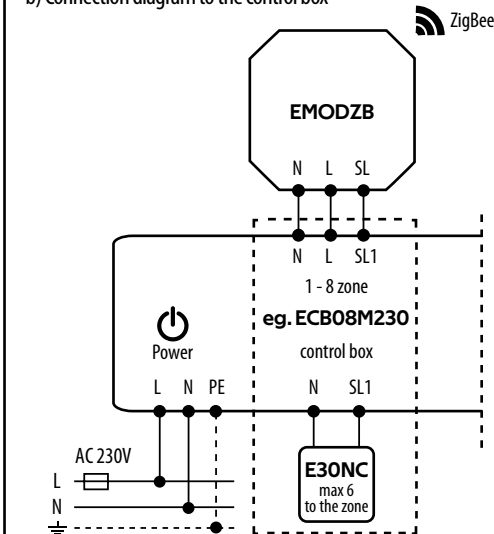
	EXPLANATION
Press 1 time	Control of the modules relay (ON/OFF)
Press quickly 5 times	Enables binding process (to link EMODZB with thermostat)
Press and hold approx. 8 seconds until the LED will start flashing red	Module reset (module will be removed from the ZigBee network and automatically will go into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

Connection description

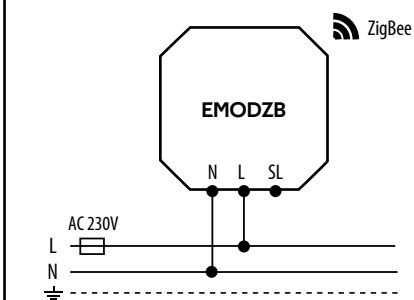
a) Connection diagram for pump / actuator



b) Connection diagram to the control box



c) Connection diagram as a ZigBee repeater



Legend:

- L, N Power supply 230V
- SL Output 230V AC
- SL1 230V input in control box
- ⊞ fuse
- ⊞ Valve

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.

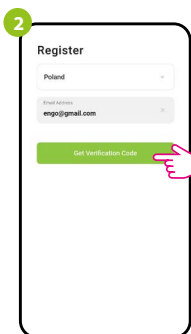


STEP 2 - REGISTER THE NEW ACCOUNT

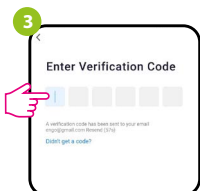
To register a new account, please follow the steps below:



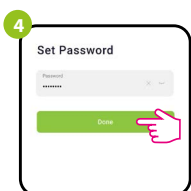
Click „Register” to create new account.



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 MODULE TO ZigBee network

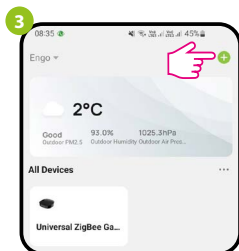
After installing the application and creating an account, follow these steps:



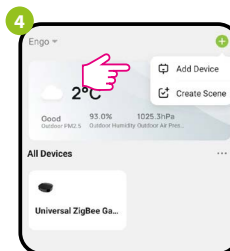
Make sure ZigBee gateway has been added to the Engo Smart app.



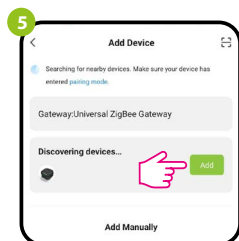
Make sure the module is connected to the power supply. The LED should flash quickly on red. If not, hold down the button for about 8 seconds. The module will enter pairing mode.



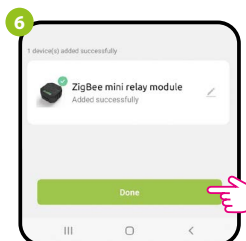
In the app, click on + upper right corner.



Select: „Add Device”.



When the ZigBee gateway finds EMODZB module correctly click the „Add” button.



Name the device and click „Done”.



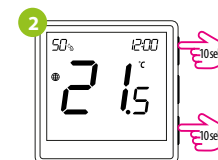
The module has been installed and displays the main interface.

BINDING thermostat with the module/relay

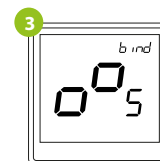
Make sure that the module and thermostat are in the same ZigBee network (they are added to the same gateway EGATEZB).



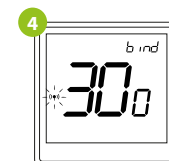
To properly bind thermostat with the module first click quickly the button on the device 5 times. The LED diode will start flashing slowly on red, which means the device will enable binding mode.



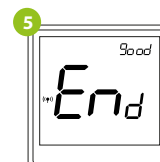
On the EONE controller, hold ▲ and ▼ buttons and for 10 at the same time seconds until the „bind” function appears.



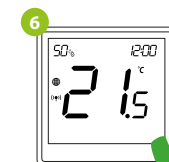
Release the keys, binding function (process of linking thermostat with control box) is active.



The „binding” process takes up to 300 seconds.



After successful binding operation „End” message will be displayed. The LED on the module will stop flashing.



Both devices have been successfully linked. Thermostat displays the main screen, icon “(●)” appeared 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, then goes into pairing mode. Now it's possible to add the module again (see STEP 3 - CONNECT THE MODULE TO ZigBee network).

