ENGO CONTROLS / ≡RELAY

EREL1ZB12A | Smart Relay ZigBee, 12A
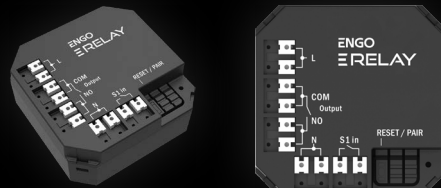
UK CA CE EAC

Technical specifications

Power supply	230V AC 50Hz
Max load	12A
Communication	ZigBee 3.0 2,4GHz
Output	COM / NO (Volt-free)
Input	S1 (Volt free)
Dimension [mm]	48 x 48 x 20

Introduction

The product is designed for intelligent control devices that need to be controlled over voltage-free signal. The voltage-free output makes also possible to control devices which require 230V voltage. The size of the module allows to place it in a flushmounted installation box. It can be used as a boiler control relay for heating system („normally open" output logic). It works according to programmed schedules or scenarios (e.g. work dependent on the actions of others system elements, such as a window/door opening sensor or temperature controller). EREL1ZB12A can be controlled remotely (via smartphone and Engo Smart/Tuya app) or locally using a bistable/monostable switch.

The relay is equipped with the ENGO binding function, to connect it wirelessly witch 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 EREL1ZB12A
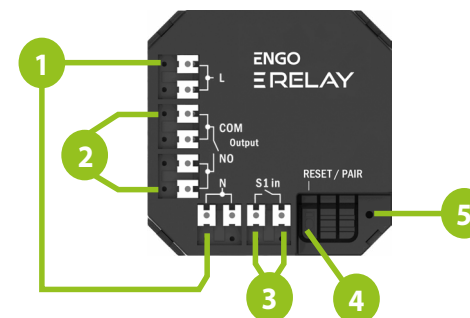
1. Power supply 230V AC
2. Volt free output
3. Volt free input
4. Function button
5. LED diode indicating the status of the module

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**	Relay reset (module will be removed from the ZigBee i network and automatically will go into pairing mode)

Connection description

a) Connection diagram for gas boiler
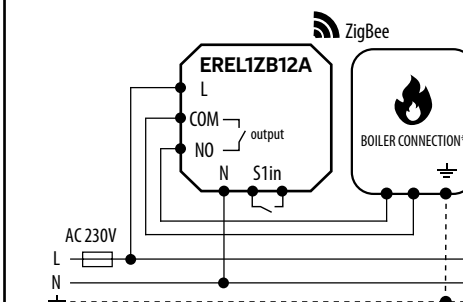
b) Connection diagram for lighting
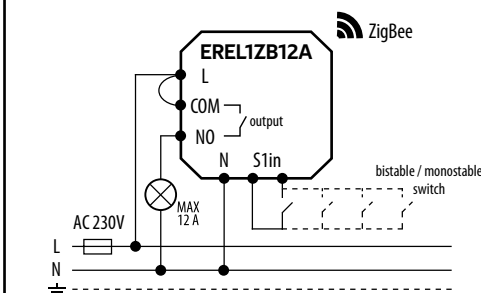
c) Connection diagram for pump / actuator
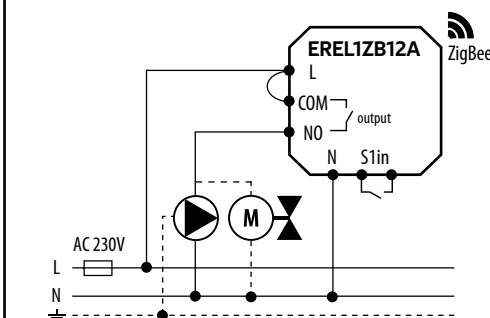
Legend:

🔥 **Boiler connection*** –Boiler's contacts for ON/OFF thermostat (according to the boiler's instructions)

L, N	230V AC power supply	▶	Pump
COM, NO	Voltage-free output	Ⓜ✕	Valve actuator
SL in	230V AC voltage output	⊡	Fuse

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.
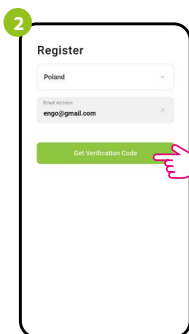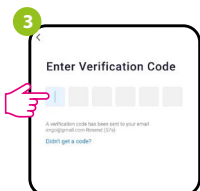

STEP 2 - REGISTER THE NEW ACCOUNT

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

1

Click „Register" to create new account.

2
Register
Poland
Email Address
engo@gmail.com
Get Verification Code

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

3
Enter Verification Code
A verification code has been sent to your email
engo@gmail.com Resend (57s)
Didn't get a code?

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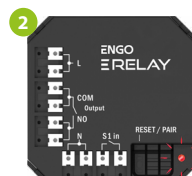
4
Set Password
Password
••••••••
Done
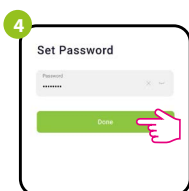
Then set the login password.
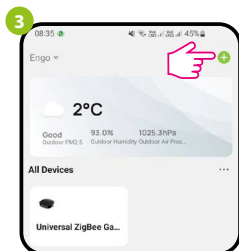

STEP 3 - CONNECT THE RELAY TO ZigBee network

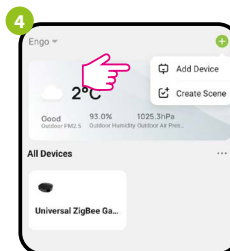After installing the application and creating an account, follow these steps:

1

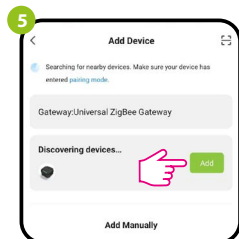Make sure ZigBee gateway has been added to the Engo Smart app.

2

Make sure the relay is connected to the power supply. The LED should flash quickly on red. If not, hold down the button for about 8 seconds. The relay will enter pairing mode.
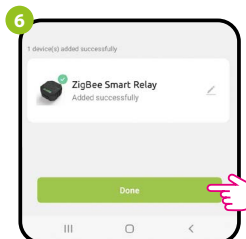
3
In the app, click on ➕ upper right corner.

4
Select: „Add Device".

5
Add Device
Searching for nearby devices. Make sure your device has entered pairing mode.
Gateway:Universal ZigBee Gateway
Discovering devices...
Add
Add Manually

When the ZigBee gateway finds the relay correctly click the „Add" button.

6
1 device(s) added successfully
ZigBee Smart Relay
Added successfully
Done

Name the device and click „Done".

7
EREL1ZB12A
ON
Power On

The relay has been installed and displays the main interface.

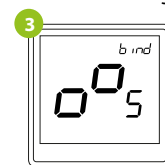### BINDING thermostat with the module/relay

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

1
5x clik
To properly bind thermostat with the relay 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.
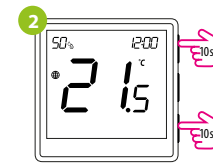
2
10sek.
10sek.
On the EONE controller, hold ▲ and ▼ buttons and for 10 at the same time seconds until the „bind" function appears.
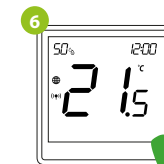
3
bind
Release the keys, binding function (process of linking thermostat with control box) is active.
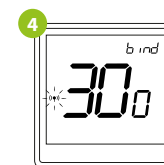
4
bind
30₀
The „binding" process takes up to 300 seconds.

5
good
End
After successfull binding operation „End" message will be displayed. LED on the module will stop flashing.

6
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 relay will be removed from the ZigBee network and gateway, then goes into pairing mode. Now it's possible to add the relay again (see STEP 3 - CONNECT THE RELAY TO ZigBee network).

8 sek.