



# ENGEO EONEBATW Internet Controlled Thermostat ZigBee User Guide

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**ENGEO EONEBATW Internet Controlled Thermostat ZigBee**



## Product Compliance






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

**WARNING:** This product must be used with a ZigBee EGATEZB gateway (purchased separately). Thermostat programming is done by ENGO Smart app.

## Product advantages

-  • Built-in Li-Ion 3,7V Battery
-  • Communication in the ZigBee 3.0 standard
-  • A multitude of functions available from ENGO Smart / Tuya Smart application
-  • S1-S2 Input for additional sensor
-  • ENGO binding function (devices connection in Online and Offline mode)

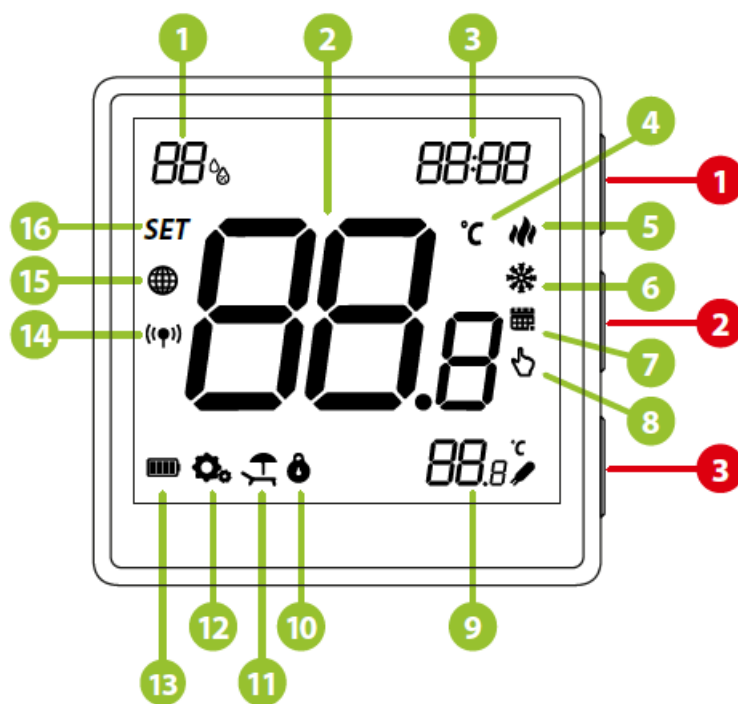
## INTRODUCTION

ONEBAT is a surface-mounted room thermostat which works over ZigBee technology. It has a built-in humidity sensor and a minimum/maximum setpoint temperature limiting function. The ONEBAT has the ability to work in heating or cooling modes. The unique feature of this thermostat is the possibility of wireless control over ENGO binding function. In order to have the ability to controll wirelessly, ONEBAT needs to be used with ENGO Smart / TUYA Smart mobile application and EGATEZB internet gateway (sold separately). „ENGO binding” function provides wireless and direct connection to the receivers (e.g. ECB62ZB control box, EMODZB module or EREL1ZB12A relay) over the EGATEZB gateway. After adding to the mobile app, thermostat offer more functions, e.g. push notifications or possibility of programming time schedules.

## Technical Informations

Power supply	Built-in Li-Ion 3,7V Battery
Charging connector	USB type C, 5V DC
Temperature range	5,0°C – 45,0°C
Display temperature accuracy	0,1°C
Control algorithm	TPI or Histeresis (from $\pm 0,1^{\circ}\text{C}$ to $\pm 2^{\circ}\text{C}$ )
Communication	ZigBee 3.0 2,4GHz
S1/S2 multifunctional input	Floor temp sensor, external air sensor, occupancy sensor
IP protection class	IP30
Dimension [mm]	90 x 90 x 14 mm

## LCD Icon Description + Button Description



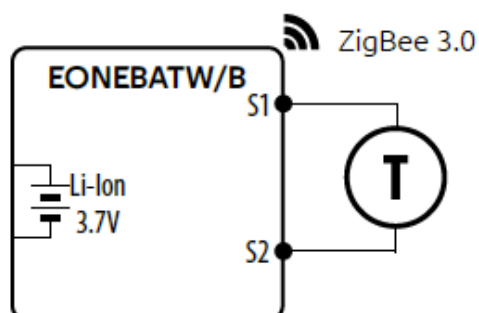
1. Current humidity reading
2. Current Temperature / Setpoint Temperature
3. Clock
4. Temperature unit
5. Heating indicator (icon is animating when there is heating demand)
6. Cooling indicator (icon is animating when there is cooling demand)
7. Schedule mode icon
8. Temporary override mode
9. External/Floor or Occupancy sensor
10. Button lock
11. Holiday mode

12. Settings icon
13. Battery indicator
14. Receiver pairing indicator
15. ZigBee network connection indicator
16. Settings icon / temperature settings

## Wireless communication diagram



## Connection description



- Products sold separately.

## Legend

- Temperature sensor
- S1, S2** • Thermostat input for ext. temperature sensor
- Connection with ZigBee 3.0 network
- Connection with WiFi 2.4GHz network

## 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.

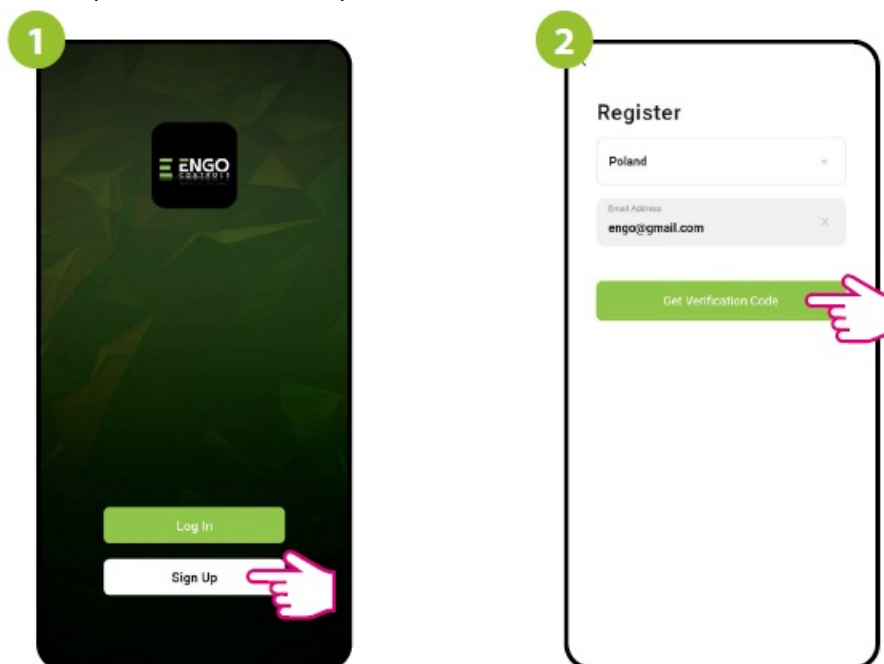
### STEP 1: DOWNLOAD ENGO SMART APP



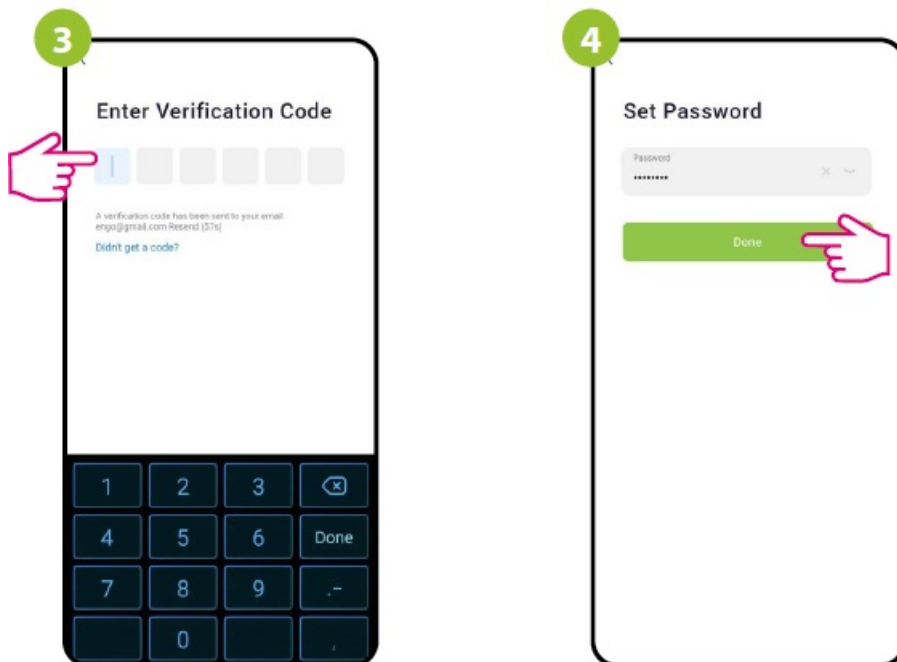
- Download the ENGO Smart app from Google Play or Apple App Store and install it on your smartphone.

### STEP 2: REGISTER THE NEW ACCOUNT

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

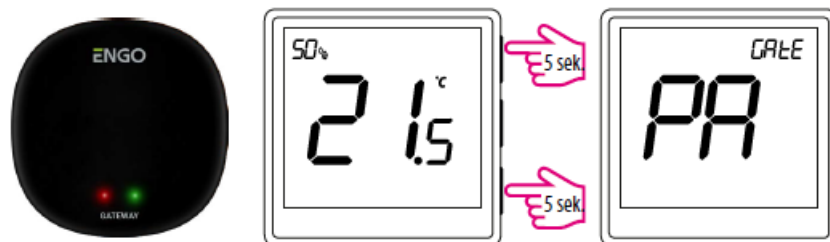


1. Click „Register” to create new account.
2. Enter your e-mail address to which the verification code will be sent.

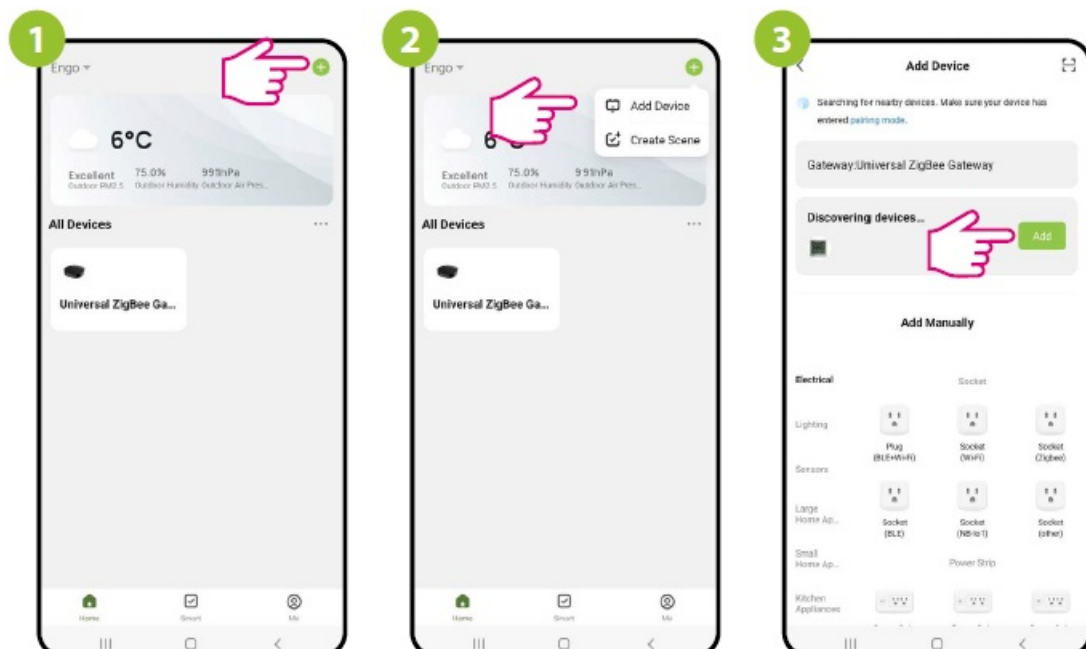


3. Enter the verification code received in the email. Remember that you only have 60 seconds to enter the code!!
4. Then set the login password.

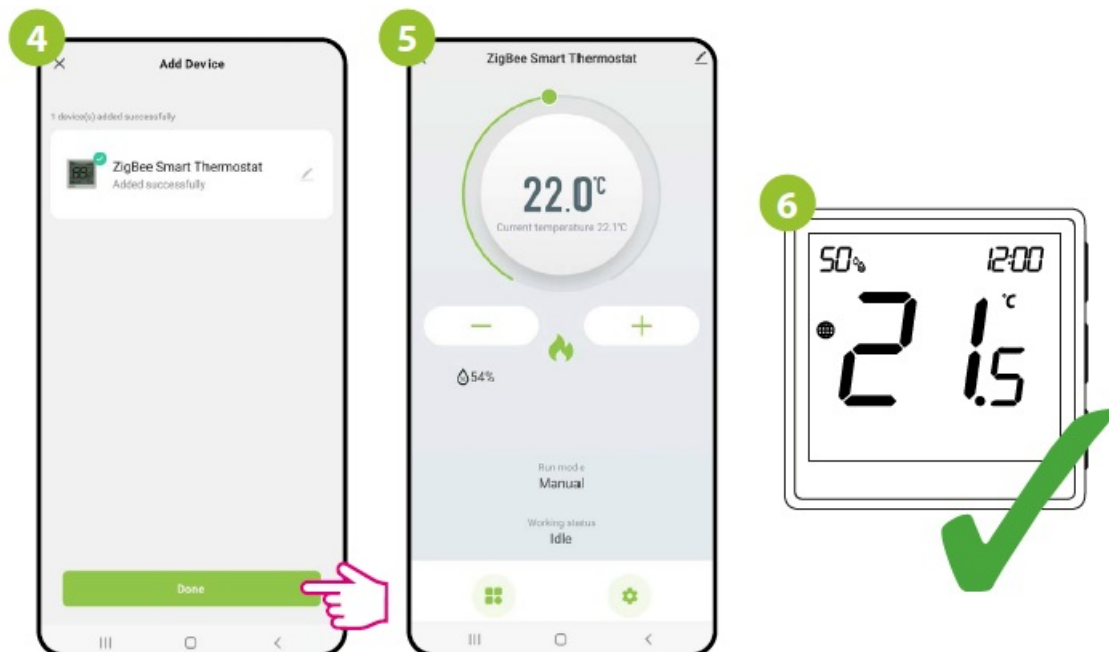
### STEP 3: CONNECT THE THERMOSTAT TO ZigBee



- Make sure ZigBee gateway has been added to the Enigo Smart app.
- Press and hold the ▲ and ▼ buttons on the thermostat for approx. 5 seconds until the display shows „PA”. Then release the keys. The pairing mode will be started up and counts the time back (180s).



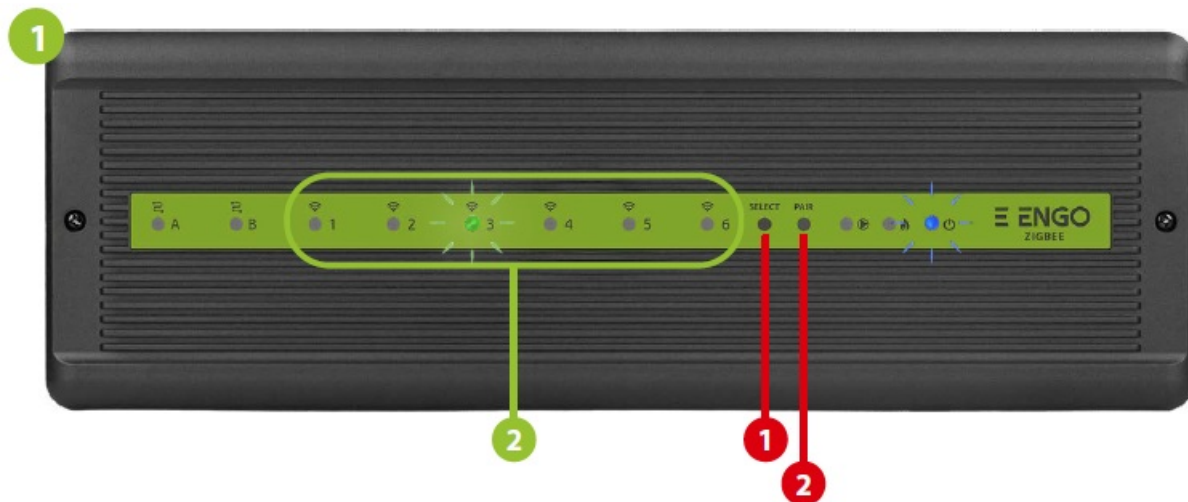
1. In the app, click on + upper right corner.
2. **Select:** „Add Device”.
3. When the ZigBee gateway finds thermostat click the „Add” button.



4. Name the device and click „Done”.
5. The thermostat has been installed and displays the main interface.
6. On the controller screen globe icon appeared stating that he has been he added to the ZigBee network.

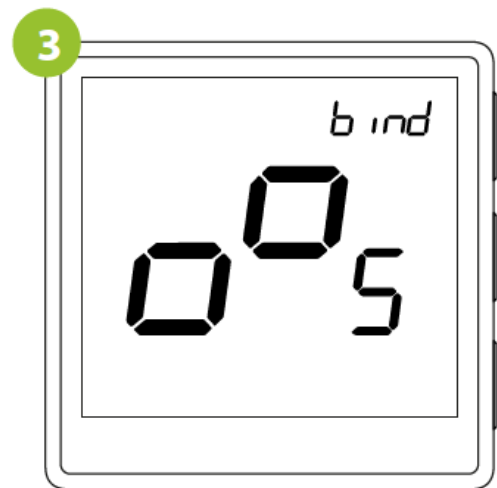
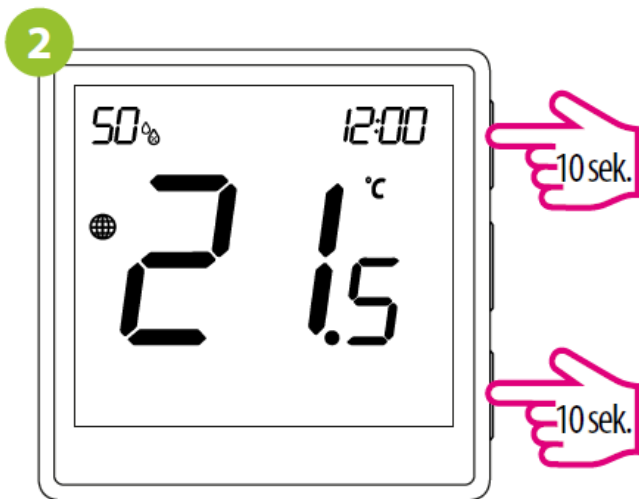
## Binding

### Binding thermostat with the ECB62ZB wireless control box

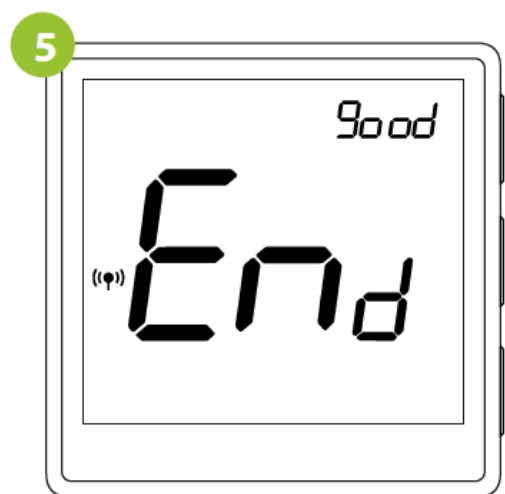
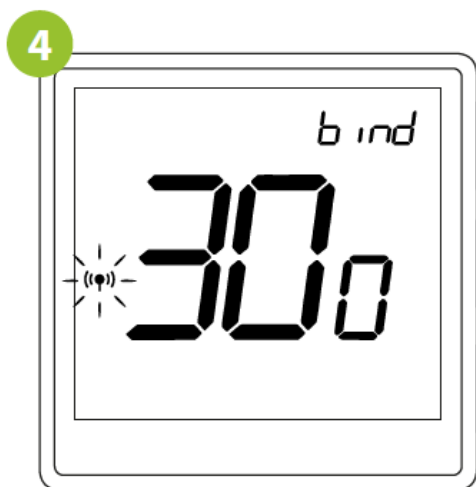



Make sure that the ECB62ZB control box and thermostat are in the same ZigBee network (they are added to the same gateway EGATEZB) and the POWER LED lights up blue.

In order to correctly link thermostat with the control box, first select the zone in the control box with the SELECT button (1) (zone which you want to link with thermostat). The LED (2) will flash 3 times for the selected zone. Confirm your selection by clicking PAIR button (2). The LED (2) will flash green with the previously selected zone – binding process has started, it is active for 10 minutes and during this time you can link thermostat with the selected zone.



1. On the EONE thermostat, hold ▲ and ▼ buttons until the “bind” message appears.
2. Release the keys, binding function process of linking thermostat with control box is active.



3. The “binding” process takes up to 300 seconds.
4. After successful binding operation „End” message will be displayed.
5. Both devices have been successfully linked. Thermostat displays the main screen, icon “” appeared on the screen indicating connection with the receiver (ECB62ZB in this case).

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

#### Remember

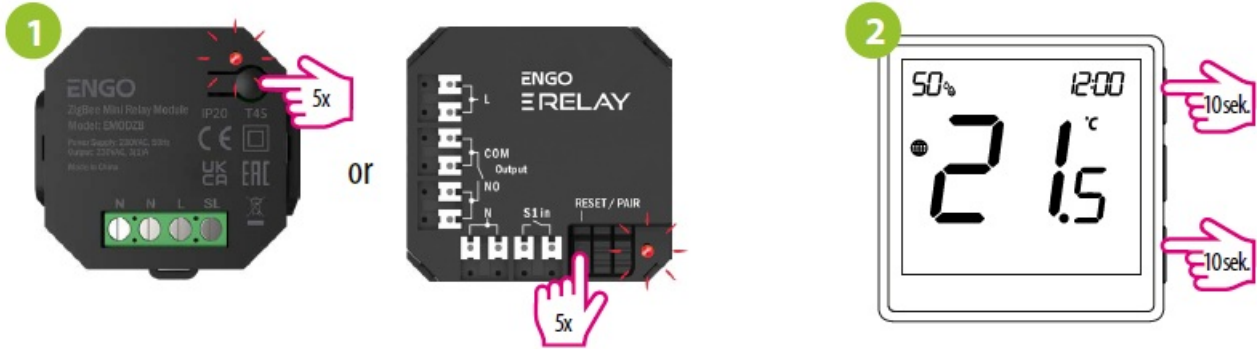


- Radio range can be increased by Engo ZigBee repeaters.

#### Binding thermostat with the module/relay



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



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



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



5. After successful 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 (module/relay in this case).

**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 thermostat to factory settings, hold the ▲ and ▼ buttons for approx. 15 seconds. FA will be displayed. Then release the keys. Thermostat will restart, restore default (factory) settings and displays the home screen. The device will be removed from the ZigBee network you will need to add/pair it again.

## ADDRESS

### Producer

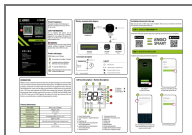
- Engo Controls S.C. 43-200 Pszczyna
- 3E Górnośląska St. Poland

### Distributor

- QL CONTROLS Sp z o.o. Sp. k.
- 43-262 Kobielice 4 Rolna St. Poland

[www.engocontrols.com](http://www.engocontrols.com)

## Documents / Resources



[ENG0 EONEBATW Internet Controlled Thermostat ZigBee](#) [pdf] User Guide  
EONEBATW Internet Controlled Thermostat ZigBee, EONEBATW, Internet Controlled  
Thermostat ZigBee, Thermostat ZigBee

## References

- [ENG0 Controls - Sterowanie ogrzewaniem](#)