



Rev. 06/2026

TWE01

Zigbee Thermostatic Head

INSTALLATION MANUAL

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1. GENERAL INFORMATION

1.1 INTRODUCTION

TDZB is a device designed for automatic room temperature control through precise management of water flow in radiators. Thanks to Zigbee wireless connectivity and integration with the Smart Life app, it improves home comfort and reduces energy consumption.

The device constantly monitors the room temperature and automatically adjusts the valve opening to maintain the temperature set by the user. Through the dedicated app, you can manage the temperature remotely, create custom weekly schedules, monitor the device's status, and control multiple valves simultaneously.

Code	Description
TWE-01WLESSZBEE	ZIGBEE THERMOSTATIC HEAD

1.2 MAIN FUNCTIONS

- Daily and weekly temperature scheduling.
- Remote control via smartphone and tablet.
- Open-window detection feature for energy savings.
- Automatic freeze protection.
- Anti-scale function to maintain valve efficiency.
- Child lock.
- Device group management and centralized control.
- Compatibility with Amazon Alexa and Google Assistant for voice control.
- Low-battery notifications and automatic diagnostics.

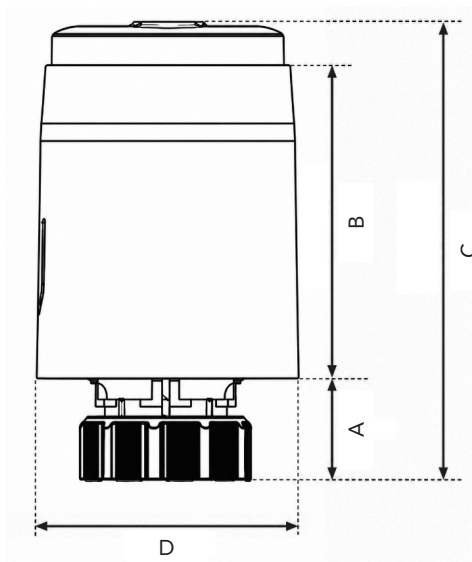
1.3 TECHNICAL SPECIFICATIONS

Product Code:	TWE-01WLESSZBEE
Power supply:	2 AA batteries (not included)
Communication protocol:	Zigbee
Radio frequency:	2.4 GHz
Signal range:	30m in open field
Accuracy:	0,5 °C
Operating temperature:	0 °C ~ 50 °C
Adjustable temperature:	5 °C ~ 30 °C
Curing temperature:	-10 °C ~ 60 °C
Valve connection:	M30 x 1.5 mm
Protection rating:	IP21
Dimensions:	95,2 mm x Ø 55 mm
Certifications:	CE, RoHS

1.4 PACKAGE CONTENTS

- TWE01 Digital Thermostatic Head
- Danfoss, Caleffi, and Giacomini adapters.
- 1 screw and 1 mounting nut.
- User manual.

1.5 DIMENSIONS



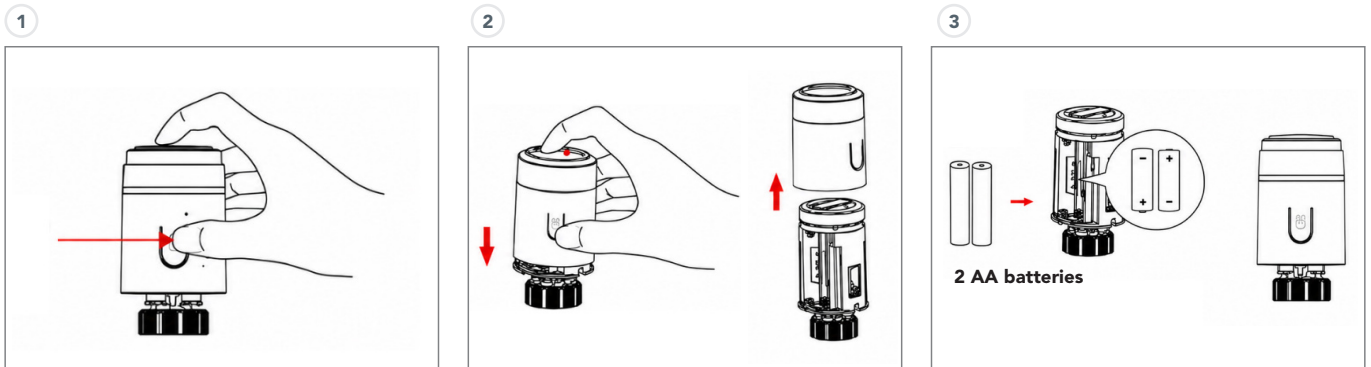
A [mm]	B [mm]	C [mm]	D [mm]
21	65,2	95,2	55

2. INSTALLATION

2.1 RADIATOR INSTALLATION



WARNING: Do not remove or disconnect the rotating ring nut while installing the batteries.



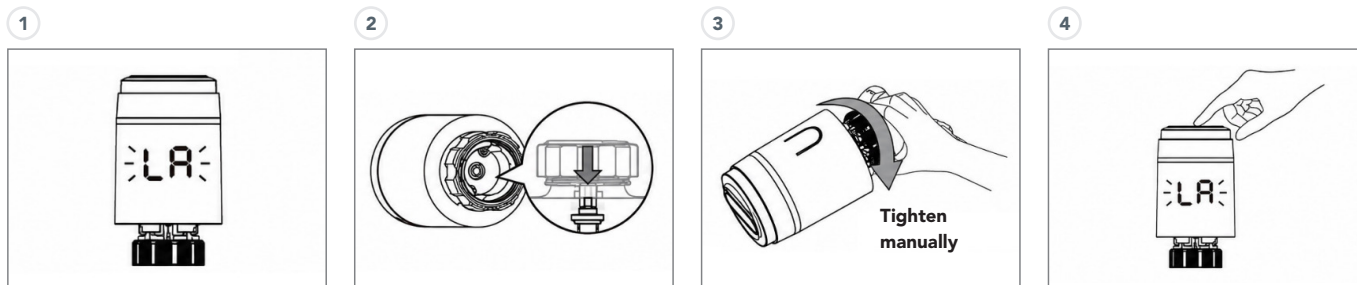
Press the release tab to remove the cover.

Gently press with your thumb at the point indicated by the arrow.

While holding the rotating ring down with your index finger, gently lift the battery compartment cover.

Insert the batteries, observing the indicated polarity (+/-).

2.2 INSTALLATION ON THE VALVE



The "LA" symbol flashes on the display.

Check that the valve pin is fully retracted and flush with the valve body.

Install the thermostatic head (TRV) on the valve using the M30 x 1.5 threaded connection.

Tighten the retaining ring.

Lightly press the button on the rotating ring. The "LA" symbol will flash on the display.

The thermostatic head will automatically adjust to the valve's stroke. Once the procedure is complete, the initial setup will begin.

NOTE: After tightening by hand, do not use wrenches or other tools to further tighten the ring nut. Overtightening may damage the retaining ring.

2.3 INSTALLING ADAPTERS

The **thermostatic head** is designed for direct connection to valves with an M30 x 1.5 mm thread. For valves with different connections, you must first install the specific adapter compatible with the valve model. Select the correct adapter and proceed with installation as described below.

Adapters for **Danfoss**, **Caleffi**, and **Giacomini** valves are

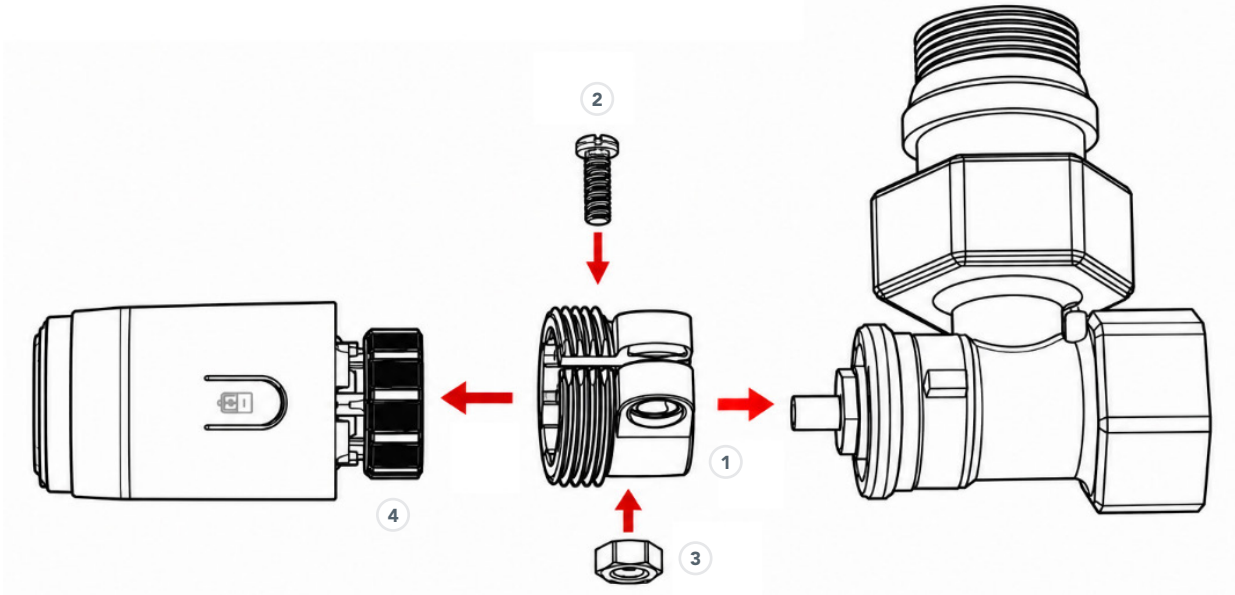
included in the package.

If your valve is not one of these brands, please refer to the accessories available on the website www.ecodhome.com

2.3.1 DANFOSS ADAPTER INSTALLATION

1/2" Valve (RA)

Please tighten the screws after securing the valve connector.



1



Valve connector/adapter (included)

2



Mounting screw (included)

3



Lock nut (included)

4



Thermostatic head

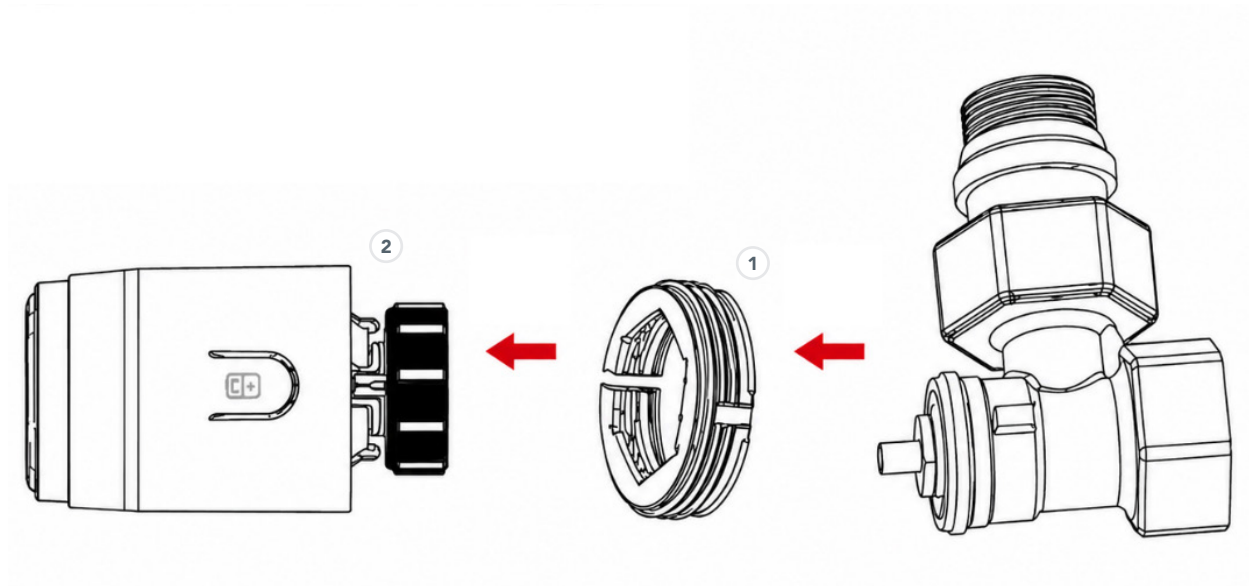


1/2" Valve (RA)

2.3.2 CALEFFI ADAPTER INSTALLATION

1/2" Valve (RA)

Adapter: Place directly on the valve.

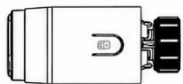


1

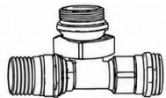


Adapter (included)

2



Thermostatic head (included)



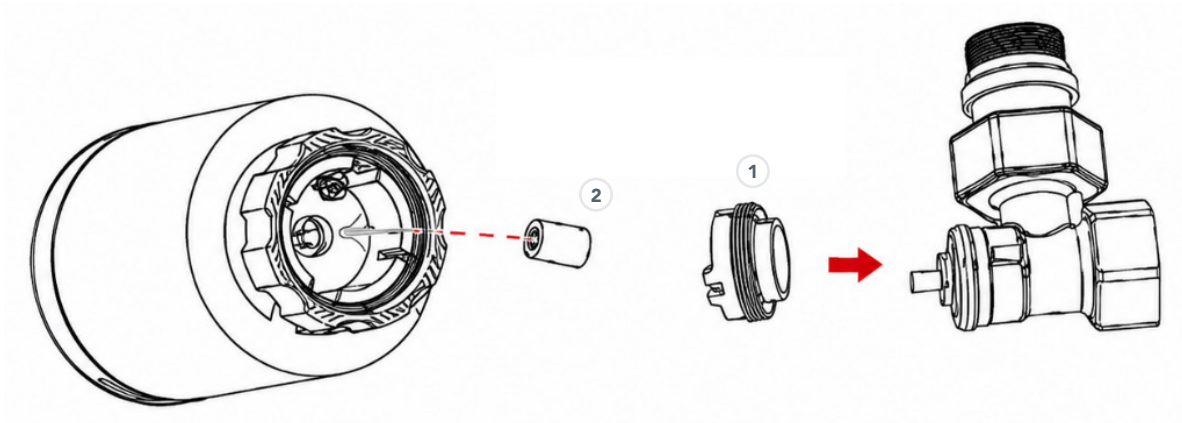
1/2" Valve (RA)

2.3.3 GIACOMINI ADAPTER INSTALLATION

1/2" Valve (RA)

Giacomini 1/2" valves require installation of the short pin in the lower seat of the thermostatic head (TRV).

Install the accessories directly onto the valve.

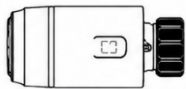


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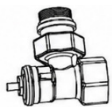


Short pin (included)

2



Thermostatic head (TRV)



1/2" Valve (RA)

3. CONNECTING TO THE WI-FI NETWORK

Download the **Smart Life** app from the Google Play Store or Apple App Store.

When you launch the app for the first time, you'll be **prompted to create an account**. Enter your email address, select your country of residence, and create a password for your Smart Life account.

Android



iOS



3.1 PAIRING PROCEDURE

1. Plug in the Zigbee gateway and make sure it's turned on.
2. Go to the app's Home screen and tap the "+" button in the upper-right corner.
3. Select Gateway (Zigbee) from the list of available devices.
4. Enter your Wi-Fi network credentials and tap **"Confirm."**
5. Verify that the gateway's red LED is flashing rapidly, then tap **"Next."**
6. Wait for the gateway discovery and configuration process to complete.
7. Tap **"Done"** to complete the pairing of the gateway with the app.



WARNING! MAKE SURE YOUR SMARTPHONE AND THE GATEWAY ARE CONNECTED TO THE SAME WI-FI NETWORK.

8. Set the thermostatic head to the **"OF"** state, then hold down the rotary knob until the pairing mode "--" appears on the display ..
9. In the Smart Life app, select **"Add Device"** to start searching for the thermostatic head.
10. Wait for the app to automatically detect the device.
11. When the thermostatic head is detected, press **"Next"** to proceed with pairing.
12. Wait for the device configuration and registration to complete.
13. Press **"Done"** to complete the pairing of the thermostatic head.

NOTE: The Zigbee gateway must be configured and paired with the app before adding the thermostatic head. Throughout the entire process, your smartphone and the gateway must remain connected to the same Wi-Fi network.



STORAGE WARNINGS

Store the product in its original packaging or a sealed container in a clean area protected from freezing, moisture, direct sunlight, heat sources, open flames, or ignition sources. Avoid sudden temperature fluctuations by maintaining optimal temperature and humidity conditions. Ensure there is no risk of damage due to the presence of other materials or possible tampering by unauthorized persons. For further details on proper storage, refer to the technical data sheet for the specific product.

DISPOSAL WARNINGS

At the end of its useful life, the product must be managed and disposed of in accordance with applicable environmental protection laws and regulations. The classification of the resulting waste is the responsibility of the user, who must assess the presence of any contaminants or changes to the product's original condition.

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