

POPP Smart Thermostat user guide

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POPP Smart Thermostat is a connected radiator thermostat for residential use. It is battery powered, compact, easy to operate, and install with a manual hand wheel and single button.

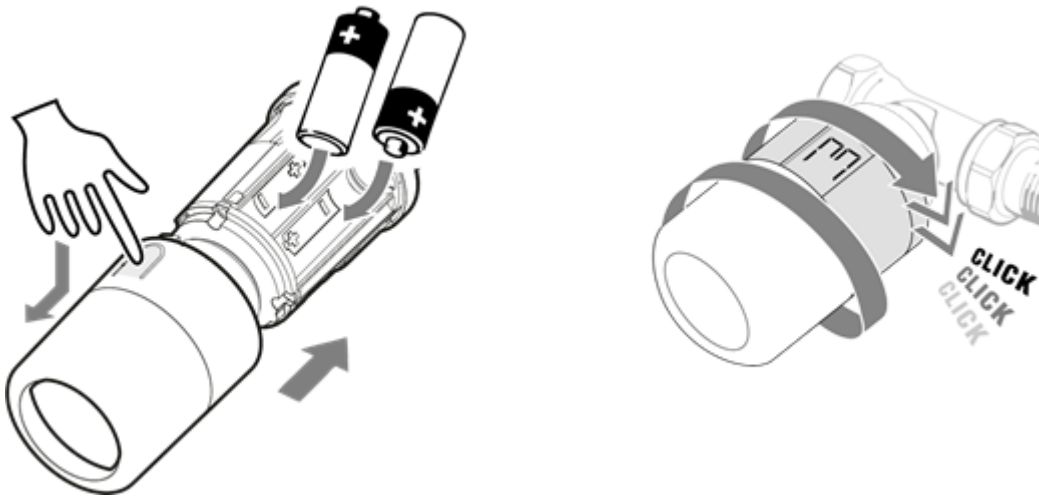
This product is Zigbee Certified using **Popp Zigbee technology** (<https://www.popp.eu/technologies/>), compatible with the POPP ZB-Stick, ZB-Shield and with third-party certified systems compatible to Zigbee 3.0.

Package contents

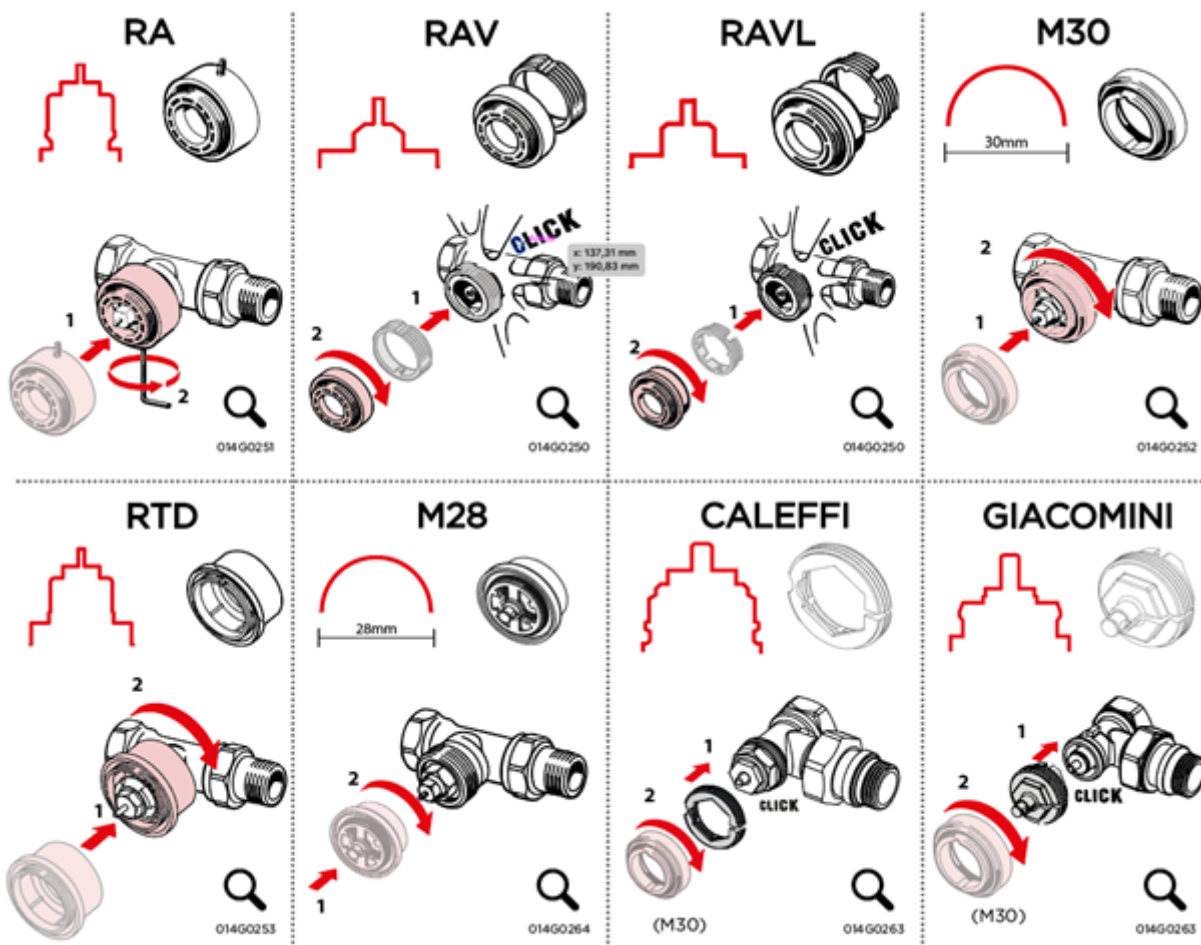
- 1x POPP Smart Thermostat
- 1x Adapter for Danfoss RA-Valve
- 1x Adapter for Danfoss M30-Valve
- 1x Adapter for Danfoss RAV
- 1x Adapter for Danfoss RAVL
- 1x User Guide
- 2x Battery 1,5V AA LR6

Mechanical installation

1. Determine the correct adapter to use with your Popp Smart Thermostat
2. Insert the batteries, then mount the thermostat onto the adapter by turning it until you hear a click.
3. Leave the Smart Thermostat in mounting mode, which will be shown by the "M" on its display.



Adapter



The following adapters below are included in with Smart Thermostat. Adapter code number can be found below each adapter illustration.

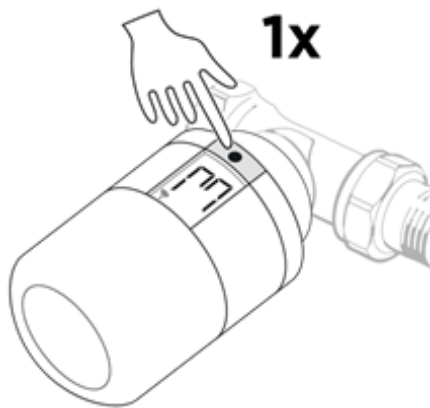


If a separate adapter is needed in the overview, it must be purchased separately. If your adapter is not listed, you can check which adapter you need in the following solution.

Thermostat Adapter (<https://aeotec.freshdesk.com/a/solutions/articles/6000226449>).

Add your POPP Smart Thermostat to Zigbee Network

1. Open your Zigbee enabled gateway App or user interface.
2. Start the Zigbee connection mode in your gateways App or User interface.
 - Look up the Gateways user manual to get the instructions on how you start the Zigbee pairing process in your App or user interface if you are not sure how.
3. Tap/Press the button on the POPP Smart Thermostat once. The connection symbol on the Screen will start to flash



4. The POPP Smart Thermostat should now appear in your gateways app or user interface.
5. Finish the installation by pressing and holding the button for 3 seconds on POPP Smart Thermostat. Popp Smart Thermostat will finish mounting mode and will display the temperature setting on the following screen.



Room temperature measurement

POPP Smart Thermostat measures the temperature using several built-in sensors to ensure accurate and precise control.

Room temperature in POPP Smart Thermostat is calculated and measured about 20 cm in front of this thermostat.

Please note that sources of cold or heat, such as open fires, direct sunlight or draughts, may affect the temperature measurements of POPP Smart Thermostat.

Device Reset

If you need to pair POPP Smart Thermostat to a new Zigbee hub/gateway, you must factory reset this device before it can be paired to a new hub.

To factory reset POPP Smart Thermostat:

1. Remove one battery.
2. Hold the button on the Smart Thermostat while inserting the battery.
 - The display will start flashing if performed correctly.
3. When the display stops flashing, release the button.
 - The POPP Smart Thermostat is now reset to factory default.
4. POPP Smart Thermostat will change into the mounting mode. You will see the "M" on the screen of the Smart Thermostat which indicates that you should now be able to pair your POPP Smart Thermostat to a new Zigbee hub/gateway.

Note: If the device is deleted from a hub/gateway, POPP Smart Thermostat should automatically reset. In the case that it does not, you can use these steps to manually reset POPP

Disassembly of the POPP Smart Thermostat

1. Press the button on the thermostat until it enters management mode.
2. Press and hold the button to open the housing and turn the thermostat counterclockwise from the valve.
3. Remove the adapter from the radiator valve.

Error States

E1 Top PCB sensor error - **Device faulty**

E2 Side PCB sensor error - **Device faulty**

E3 NVM error - **Device faulty**

E4 Unknown Hardware error - **Device faulty**

E6 Motor error - Motor jammed, **try re-start, try reboot, try re-mount**, if the error persists the device is faulty

E7 Communication module error - The last Joining attempt failed

E8 Invalid communication - Invalid internal communication, **try reboot (re insert batteries)**, if the error persists the device is faulty

E10 Invalid clock information (need resynchronization) - You have recently replaced battery and lost time synchronization.

E12 Radio communication error - **Communication with Gateway lost** (will be active for 2 minutes after re-connection for Collecting diagnostic if needed)

E13 Encoder Jammed

E14 Low Battery < 25%- Low Battery, the device will soon run out of batteries, **replace ASAP**

E15 Critical Low Battery < 12,5% - Batteries Empty, **Replace immediately**. The eTRV cannot control the valve longer and has opened to prevent potential frost damages to the system.