



Smart Information Delivery

RDZ103ZB Connected Home Thermostat OpenTherm® Operation Manual

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1 | Imprint

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2 | About this document

2.1 | Revision history

Edition	Date	Changes	Section
1	2024-09-29	First edition	All

2.2 | Reference documents

Ref.	Document title	Document number
[1]	RDZ103ZB mounting instructions	A6V15358322
[2]	RDZ103ZB datasheet	A6V15828114
[3]	Siemens Connected Home system description	A6V13661932

View and download the above documents from <http://siemens.com/bt/download> by searching the document numbers listed above.

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NOTICE



This symbol identifies an important notice that you should be aware of when you are using the product.



The 'i' symbol identifies supplementary information and tips for an easier way of working.

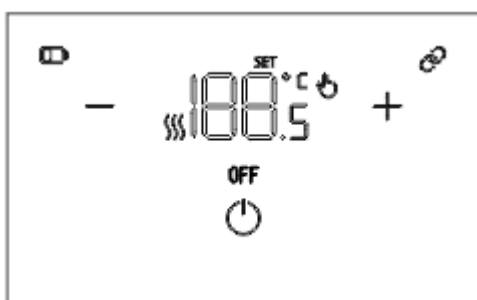
3 | Product overview

Connected Home Thermostat RDZ103ZB is designed to control heating in apartments, single family homes, dormitories and other types of residences. It controls heating and domestic hot water (DHW) using the OpenTherm[®] protocol. Note that the thermostat is compatible only with boilers supporting the Smart Power function (as of OpenTherm[®] protocol version V3.0).

Use the mobile application "Connected Home" (download from Google Play[™] or Apple App Store[®]) for advanced functionality such as scheduling and parameter adjustments.

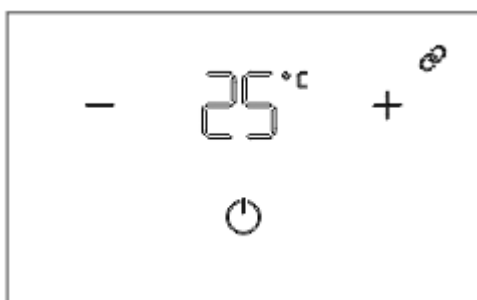
3.1 | Screen display mode overview

Initial power-up mode




When the thermostat starts up for the first time, all icons are lit for about three seconds before entering **ON** mode.

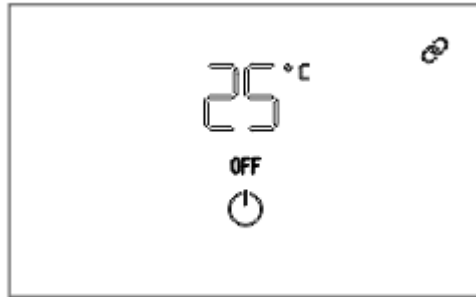
ON mode



In **ON** mode, the current room temperature, plus, minus and status icons (i.e., connection state) are displayed on screen. This mode allows you to adjust the temperature setpoint and switch between **OFF** and **ON**.

The  icon shows if the setpoint is adjusted manually via thermostat or mobile application, and indicates if the thermostat is in manual mode. It disappears after the thermostat receives the next setpoint via schedule, scene and automation from the mobile application.

Protection mode (OFF mode)



The thermostat activates protection mode (OFF) when you touch the Economy button in **ON** mode. OFF is displayed. If the temperature drops below 8 °C, the thermostat activates the heating output automatically until temperature reaches 8 °C.

In **OFF** mode, the present room temperature and state icons (i.e., connection state) are displayed. Switch to **ON** mode by pressing the Economy button again.

3.2 | Screen display icon overview

State	Description
	The setpoint is manually adjusted to a value different from the scheduled value. It disappears after the thermostat receives the next setpoint via schedule, scene, and automation from the mobile application. Note: If the thermostat does not receive the next scheduled setpoint due to network error, the icon continues to be displayed on screen. The thermostat remains on the temporary setpoint until it receives a new scheduled setpoint after network resumes working.
	Flame status in boiler
OFF	Thermostat in OFF mode
	Ready to join the Zigbee network (blinking), or Zigbee network joined (steady ON)
SET	Setpoint is being adjusted.
Operation	Description
 	<ul style="list-style-type: none">• Tap to decrease/increase temperature setpoint.• Tap and hold to decrease/increase temperature setpoint continuously until the setpoint limit is reached.• Tap and hold both icons at the same time for more than 10 seconds to reset the thermostat to factory settings.• After three seconds of inaction, the thermostat returns to the present room temperature. In the meantime, is displayed on screen, showing that the manually adjusted setpoint overrides the scheduled one.
	<ul style="list-style-type: none">• Tap to turn on display or turn on/off mode.• Tap and hold for more than five seconds to set the thermostat to joining/rejoining mode.

4 | Mounting and installation

NOTICE



We strongly recommend hiring licensed installers to mount and install the device.

See document [A6V15358322](#) for graphical instructions.

See document [A6V15828114](#) for more information on mounting and wiring.

Mounting and installing RDZ103ZB

1. Switch off power using your home's breaker box.
2. Screw the mounting plate onto a conduit box.
3. Insert wires to the terminals on the mounting plate and tighten all inserted wires by screwing down the screws.
4. Push the small rectangle on the upper right corner of the back of the front panel to open and remove the cover at the front.
5. Attach the front panel by aligning the inner side of the back of the front panel with the mounting plate from bottom to top.
6. Press the left and right sides of the front panel to secure physical connection to the terminals.
7. Tighten the screw on the top.
8. Put back the removed cover.
9. Switch on power.



If the adapter plate ARG101 is used, assemble its mounting frame and mounting plate so that the bigger round spot embossed on the mounting frame is on top. Cover the RDZ103ZB mounting plate on the assembled adapter plate, then follow the above steps to mount and install the thermostat.

5 | Adding the thermostat to the hub (GTW100ZB)

Add the thermostat to the hub from the mobile application following on-screen instructions.



Re-add the thermostat to the hub, if the latter is reset to factory settings.

6 | Operation on the device

You can carry out the following operations on the device:

- Add the thermostat to the hub after the mobile application initiates the joining process.
- Adjust temperature setpoints.
- Turn on/off mode operation.
- Reset the thermostat to factory settings.

See [Screen display icon overview](#) for information on basic operation via icons on the thermostat. Other advanced operations such as setting schedules and adjusting parameters are only available in the mobile application.

7 | Parameter settings

Parameters are set to default values after the thermostat is powered up. Adjust the parameter settings later in the mobile application.

NOTICE



Advanced parameters must be set by a professional, otherwise it may affect the temperature control effect.

Parameter	Description	Default value
Measured temperature value correction	Temperature offset value for the built-in room temperature sensor. If the temperature on the display does not match the measured room temperature, calibrate the temperature sensor using this parameter. The sensor can be offset by ± 2.5 K.	0 K
Min. temperature setpoint for heating	Minimum temperature setpoint for heating.	5 °C
Max. temperature setpoint for heating	Maximum temperature setpoint for heating.	30 °C
Open Window detection	<p>If set to ON, this function detects if a window is opened and the room temperature drops rapidly. If yes, heating is switched to OFF mode.</p> <p>The thermostat resumes automatic operation when:</p> <ul style="list-style-type: none">• The room temperature rises faster than 1 °C/h.• The automatic schedule changes via the mobile application.• The setpoint is adjusted either locally or via the mobile application.• 20 minutes have passed even if the window is still open.	OFF
Max. flow temperature setpoint	<ul style="list-style-type: none">• Maximum water flow temperature setpoint of the boiler.• Visible only if the boiler supports this parameter.• Adjustable if the boiler allows for remote settings. Otherwise, it is a read-only value.	100 °C
Manual flow temperature setpoint	<ul style="list-style-type: none">• Water flow temperature setpoint of the boiler.• Visible only if boiler control is On or Off.• If the boiler is of the "modulation" or "Weather compensation" type, the flow temperature setpoint is calculated automatically.• The setpoint ranges from 0 to "Max. flow temperature setpoint".	40 °C
Weather compensation	<ul style="list-style-type: none">• The water flow temperature setpoint is calculated automatically based on outdoor temperature, room temperature and room temperature setpoint.• Visible only if the thermostat (when On) detects that the outdoor temperature sensor* is connected to the boiler.• The thermostat restarts when the parameter value changes.	OFF

Parameter	Description	Default value
Advanced parameters	<ul style="list-style-type: none"> • Opens more "Weather compensation" settings. • Sub-parameters: • <ul style="list-style-type: none"> ◦ Heat curve slope ◦ 24-hour heating limit ◦ Quick setback ◦ Summer/Winter changeover ◦ Summer/Winter heating limit • See the table below for detailed information on the sub-parameters. 	-
Low limit for hot water setpoint	<ul style="list-style-type: none"> • Temperature range of domestic hot water setpoint. • Read from the boiler. • Cannot be changed in the mobile application. 	-
High limit for hot water setpoint		

*) The outdoor temperature sensor may need to be purchased separately.

Sub-parameter	Description	Default value
Heat curve slope	<ul style="list-style-type: none"> • Represents the characteristics of temperature attenuation between outdoor and room temperatures. • Serves as a factor to calculate the water flow temperature setpoint. 	1.5
24-hour heating limit	<ul style="list-style-type: none"> • Works only when the thermostat is in Protection mode (set to 8 °C). • Switches on heating when the outdoor temperature is below the Protection setpoint (8 °C). • Switches off heating when the outdoor temperature is above the Protection setpoint (8 °C). 	ON
Quick setback	<ul style="list-style-type: none"> • Switches off heating when the thermostat changes over from ON to Protection. • Heating is switched on when: • <ul style="list-style-type: none"> ◦ The room temperature is below the Protection setpoint. ◦ The thermostat returns to ON mode. 	ON
Summer/Winter changeover	<ul style="list-style-type: none"> • Works only when the thermostat is in Protection (set to 8 °C). • Enables or disables the summer/winter changeover function. • Switches off heating when the attenuated outdoor temperature* exceeds the summer/winter heating limit. 	ON
Summer/Winter heating limit	Setpoint of the attenuated outdoor temperature.	18 °C

*) Calculated automatically based on the outdoor temperature value.

8 | Upgrading firmware

Firmware version of the device is displayed in the mobile application. Once a new firmware version is available, you can upgrade the firmware via the mobile application.

9 | Cyber security disclaimer

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