











ZigBee Smart Thermostatic Radiator Valve

Supporting remote control by smart life app,
voice control by Amazon Alexa and Google Assistant



Product Introduction

Standard accessories

					
TRV			User Manual		
					
For Danfoss RA valves	For Danfoss RAV valves	For Danfoss RAVL valves	For Caleffi valves	For Giacomini valves	For M28 valves
Adapters					

01

Product Introduction

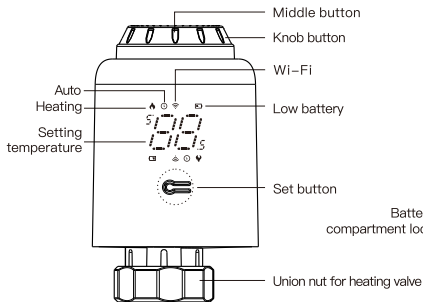
Technical specifications

Power Supply:	3 x 1.5 V alkaline AA batteries (not included)
Current Consumption:	100mA Max
Protection Degree:	IP20
Ambient Temperature:	0~50°C
Surface Temperature:	90°C Max (at the radiator)
Connection:	M30 x 1.5mm
Linear Travel:	4.3mm
Dimensions(W x H x D):	58.4mm x 97mm x 58.4mm
Weight:	117.7 g

02

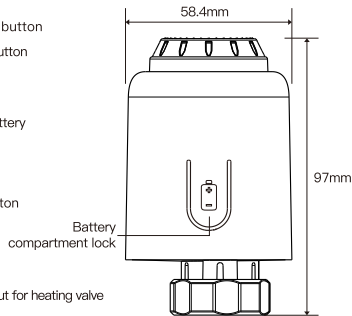
Product Introduction

① Interface and buttons



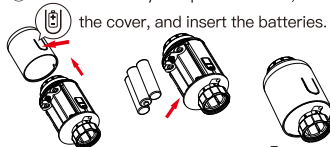
03

② Dimensions



Installation

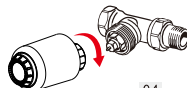
- ① Press the battery compartment lock, remove the cover, and insert the batteries.



- ② Initialize, the mandrel pull back, then "i n" is displayed and blinking on the screen.



- ③ When "i n" stop blinking, install the TRV union nut with M30*1.5 thread for heating valve, and then tighten the nut.



*Attention:

While inserting the batteries, please make sure the polarity of battery (+/-) is aligned.



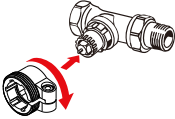
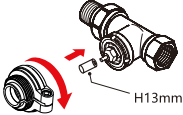
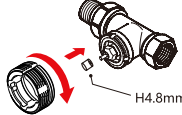
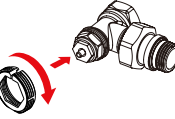
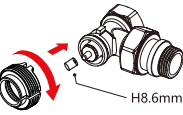
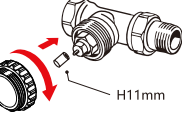
- ④ Press the middle button and then "Rd" start blinking, the device enter valve-adjusting process. After several minutes, the process is completed when initialized screen is displayed.



04

Installation

How to install the adapter correctly

For Danfoss RA valves	For Danfoss RAV valves	For Danfoss RAVL valves
		
For Caleffi valves	For Giacomini valves	For M28 valves
		

Function Introduction

Tempe. control mode

Press the middle button to switch between Auto mode and Manual mode.

- **Auto mode**

When “🕒” is displayed on the screen, it is under Auto mode. Four time periods and setting temperature could be programmed per day, one week as a cycle, based on customized needs.

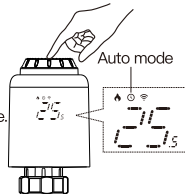
- **Manual mode**

When “🕒” is not displayed on the screen, it is under Manual mode. The device will work according to current setting temperature, without controlled by the time period program.

- **Temporary mode**

Under Auto mode, “🕒” will be blinking after setting temperature, and then it will enter Temporary mode. The device is switched to Manual mode temporarily, without controlled by the time period program. It will return to Auto mode by next time period.

*** Attention:** Only Manual mode is available when the device is not connected to Internet.



Function Introduction

Stop heating and pause heating

- **ON:** In summer, rotate the knob clockwise until “*ON*” is displayed under manual mode to stop heating. At this time, the heating valve is fully open. This can extend the use life of valve.



- **OFF:** In winter, rotate the knob counterclockwise until “*OF*” is displayed under manual mode to pause heating temporarily. At this time, the heating valve is closed and the frost protection is activated.

***Attention:** After the antifreeze function is activated, the valve will open when the room temperature is lower than 5°C, and the valve will be closed when the room temperature exceeds 7°C to prevent damage to the radiator thermostatic valve due to freezing

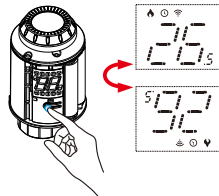


Function Introduction

- **Adjust setting temperature:** Rotate the knob to adjust setting temperature, stepping by 0.5°C.



- **Screen rotation:** Long press the Set Button for 3 seconds to switch the screen display direction.



Function Introduction

- **Open-window function:** First, enter the APP home page to turn on the window detection function, the device will automatically identify whether the window is open. When it is detected that there is cold wind, and the temperature drops by more than 1.5°C within 4.5 min, the open-window function will be activated.

At this time, the screen displays “OP”, and is set to



the temperature 12°C.

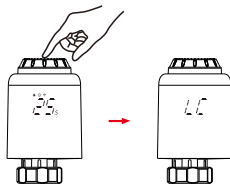


- **Anti-scale:** TRV executes routine decalcification every Monday at 12:00 to protect the valve from calcification. “CA” will be displayed on the screen during decalcification.

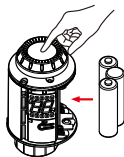
***Attention:** Attention: While the open-window function is activated, following operations will terminate it from taking effect. ① Temperature setting operation on the APP or device. ② The detected temperature rises by more than 1.5°C within 4.5 minutes. ③ No operation on the APP or device within 30 minutes.

Function Introduction

- **Child lock function:** Long press the middle button for 3 seconds until “LC” is displayed on the screen to activate the child lock. While the device is locked, long press middle button for 3 seconds until “LC” disappear to deactivate the child lock.



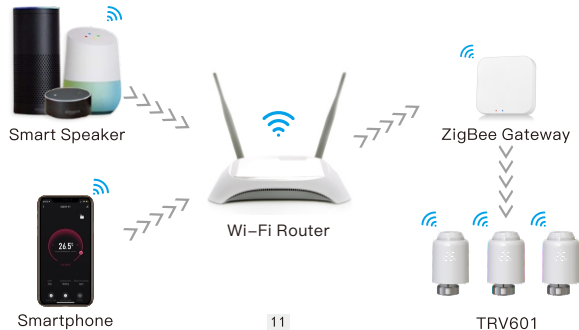
- **Restore factory settings:** Long press the middle button and insert the battery at the same time until “FR” is displayed on the screen and blinking for 3 seconds, the device will be restored to factory settings and restarted.



***Attention:** Once the device is restored to factory settings, all previous settings can not be recovered.

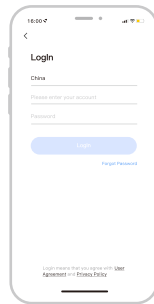
Function Introduction

APP remote control and voice control



Network Configuration

Download Smart Life APP



Scan the QR code above or search "Smart Life" on App Store and Google Play to download the Smart Life APP.

Network Configuration

Add gateway

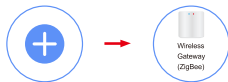
- ① When the gateway is powered on, hold button for 5 seconds until the red light blinks rapidly.



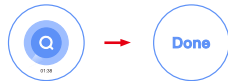
- ③ Select 2.4GHz Wi-Fi network and enter password, click “Next”, confirm the indicator is blinking rapidly, and then click “Next”.



- ② Enter the Home page, click “+” in the upper right corner, select Gateway Control – Wireless Gateway (ZigBee).



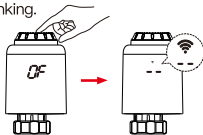
- ④ Wait a moment until the device is found and initialized, then click “Done” to finish.



Network Configuration

Add device

- ① Under manual mode, rotate the knob counterclockwise until “OF” is displayed. Then long press the middle button for 3 seconds until “Wi-Fi” is blinking.



***Attention:** Network configuration can only be done under manual mode.

The gateway must be added before adding TRV.
The TRV must be added in the page of gateway.

- ② In the page of gateway, click “Add subdevice”, click “LED already blink”, wait a moment until the icon of TRV appears, then click “Done”.



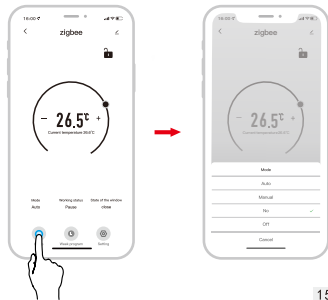
- ③ Set the device name, and click “Done” to finish. The device has been added successfully.



APP Features

Mode selection

- Click “**A**” to select mode.



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***Attention:** Click “+” or “-” to adjust the setting temperature.

Auto mode: Four time periods and setting temp. could be programmed per day, one week as a cycle, based on customized needs.

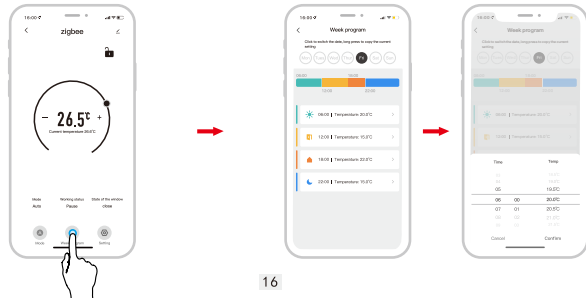
Manual mode: The device will work according to current setting temp. without controlled by the time period program.

Off mode: The valve will be closed to stop heating.

APP Features

Week program setting

- ① Click “**L**” to enter the week program setting page.
- ② Set four time periods and setting temperature based on customized needs.

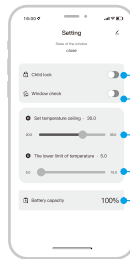


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APP Features

Advanced setting

- Click “



Child lock switch

Window check switch

Set temperature ceiling

The lower limit of temperature

Battery capacity

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APP Features

Device sharing function

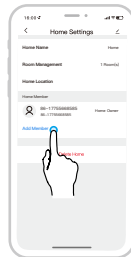
- Share the device to other family members, allowing them to remotely control the TRV device.



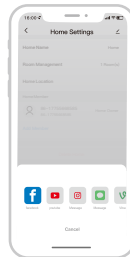
① Click the Menu button, then click “Share Device”



② Click “Add home member”.



③ Fill in account information of home member.



④ Choose an invitation method.

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APP Features

Voice control

- After waking up the speaker, you can say:

Amazon Alexa : Alexa,

- * Set the living room to 26 degree
- * Drop the living room by 1 degree
- * Raise the living room by 1 degree
- * Make the living room warmer
- * Turn on the living room child lock
- * Turn off the living room child lock
- * What temperature is the living room set to
- * What is battery on the living room


Google Assistant : OK google,

- * Set the living room to 23 degree
- * Turn on the living room child lock
- * Turn off the living room child lock
- * IS my living room child lock on?
- * Turn on child lock for the living room
- * Turn off child lock for the living room
- * Set the living room to auto
- * Set the living room to manual

***Attention:** " living room " is the device name, you can also name it yourself.
The temperature unit of TRV and smart speaker must be identical.

Error code

Troubleshooting and maintenance

Error code	Problem	Solution
F0	Temperature sensor abnormality	Contact after-sales staff
F1	Slow valve operation	Check the installation and heating valve
F2	The stroke is too long	Check the fastening of TRV
F3	The stroke is too short	Check the heating valve
F4	Running out of battery	Replace batteries immediately
Battery symbol ()	Low battery	Replace batteries within 4 weeks