Bitte scannen Sie den QR-Code, um das deutsche Handbuch, das Installationsvideo und die Funktions führung zu erhalten

Escanee el código QR para obtener el manual en español, el video de instalación y la introducción de la función Veuillez scanner le code QR pour obtenir le manuel en français, la vidéo d'installation et l'introduction des

Отсканируйте QR-код, чтобы получить руководство на русском языке, видео по установке и описание функций · Leia o código QR para obter o manual em português, o vídeo de instalação e a introdução das funções



User Guide

1. Information about this manual

In mormation about this manual
 Please read this manual completely and carefully before starting to use the device. The manual contains important information about the intended use of the device. Especially observe the safety notes. Keep the manual for later consultation. If you hand over the device to other persons for use, please hand over the operating manual as well.

2. Product Description

2. Product Description
Thermostatic radiator valve (TRV) is a self–regulating
valve fitted to hot water heating system radiator, to
control the temperature of a room by changing the flow of
hot water to the radiator. With the TRV TVO2 you can
conveniently adjust the room temperature between 5–30
°C, and save more than 15% of energy.
The radiator thermostat fits to all common radiator valves
and is easy to mount–without having to drain any water or

Comfortable temperature ECO temperatur mperature display Manual mode

intervene in the heating system. The additional boost

because of the radiated heat

Pair (hold press)

function enables the radiator to be heated up quickly for a brief period of time by opening the valve for 5 minutes. There will be a pleasant room temperature right away

3. Start-up

3.1 Before we get started -2 x AA batteries are required for TRV to work, please

3.2 Inserting(replacing) batteries

--Insert 2 new LR6(mignon/AA) batteries in the battery compartment, making sure they are the right way round.



The service life of new alkaline batteries is approximately 1.5 years. A battery symbol (\$\frac{1}{2}\$) on the display indicates that the batteries need to be replaced. After removing the empty batteries, wait approx. 1 minute before inserting the new ones. This device does not support operation with

3.3 Run adaptive

3.3 nun adaptive
The display of 'inS' with the rotating '\(\begin{align*}\) shows that the motor is still travelling back.

—When 'AdA' is shown in the display, the radiator thermostat can be installed on the valve. After installation, press the pair button to run adaptive.

—The display of 'AdA' with the rotating '\(\begin{align*}\) shows that an adaptive is a closely in the context of the co

adapting run to adapt the thermostat to the valve.

 $ilde{igwedge}$ If the adapting runs is initiated before installation, press pair button and the motor travels back to the 'InS' position. If an error message(F1,F2,F3) is displayed, press the Pair/Boost button and the motor similarly travels back to the

4. Installation of the radiator thermostat

The radiator thermostat is easy to install and can be done without draining heating water or intervening in the heating system. No special tools are required, nor does the heating

have to be switched off. The ring nut attached to the radiator thermostat can be used universally and without accessories for all valves with a thread size of M30 \times 1.5 from the most popular manufacturers such as:
Danfoss Heimeier MNG Junkers
Landis&Gyr (Duodyr)
Oventrop Schlösser Comap Valf Sanayii
Mertik Maxitrol Watts Wingenroth (Wiroflex)
Idmar54 R.B.M Tiemme Jaga
Siemens

By means of the adapters in the delivery, the device can be installed on radiator valves of type Danfoss RA, Danfoss RAV and Danfoss RAVL.

4.1 Unscrew your existing radiator thermostat No worries, water will not leak during this process

4.2 M30 x 1.5

Screw the TV02 smart radiator thermostat directly onto the radiator if the connector type is $M30 \times 1.5$ (picture shown as below). You can adjust the angle to make the led facing the





4.3 Danfoss RAVL Valve

4.3 Danfoss RAVL Valve

--Check the @ is active.

--The valve bodied have elongated notches around their circumference, which ensure that the adapter is properly seated when it snaps on: snap on the adapter completely,so that the pins inside the adapter are lined up with the notches on the valve.

--Install the adapter, Plane A is aligned with Plane B.

--Install the round tube into the device.

--Install the device.



4.4 Danfoss RAV Valve

--Check the is active. --The valve bodied have elongated notches around their circumference, which ensure that the adapter is properly seated when it snaps on: snap on the
adapter completely, so that the pins inside the adapter are
lined up with the notches on the valve.

—Install the adapter, Plane A is aligned with Plane B.

—Union nut.

Lestell the de



4.5 Danfoss RA Valve

4.5 Danfoss RA Valve

--Rotate the thermostat dial to the maximum value, "N" Align Dial.

--Check the is active.

--The valve bodied have elongated notches around their circumference, which ensure that the adapter is properly seated when it snaps on: snap on the adapter completely,so that the pins inside the adapter are lined up with the notches on the valve.

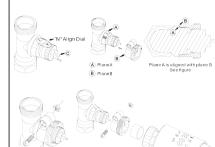
--Install the adapter,Plane A is aligned with Plane B.

--Union nut.

--Install the round tube into the device.

--Install the device.

Switching auto/manual /holiday mode (press)



4.6 M28x1.5mm

Select the length of the ejector rod according to the following brands or valve sizes, and the size of ejector rod s 15 / 17 / 19 / 24mm.
 To install the ejector rod with the correct size into the



		LJ .	
1	SAM,Slovarm	<u> </u>	24mm
	Others (See list)		
	D	Ejector rod	
	11.5-13mm	15mm	
	9.0-11.5mm	[
	7.0-9.0mm	[



1.To install the adapter onto the Giacomini valve in the correct direction;2. To install the GIA ejector rod into the



1.Open the valve flow to the maximum, as shown in pic 1;2. To install the adapter onto the Caleffi valve in the



to the maximum value

Rotate the thermostat dial

pic 1

2 ② 2.6mm



4.9 Use the Ejector rod

Due to the dimensional and assembly tolerance of the metal valve, it may result in the following situations:

1. When the device is failure, F2 is displayed

2. The metal valve cannot be fully closed and is kept heating all

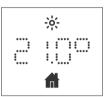
Handling method : Please use the ejector rod 1.6mm (1)first, if the above two situations still exist, try to use the ejector rod2.6mm(2) instead.

1 1.6mm





5. Interface display



To press the reset button to change the digital display direction for your choice.

6.Software Installation





6.2 Register Or Login



an account by entering your phone number to get verification code and "Set password". Choose "Log in"if you already have a MOES account.

Enter the Register/Login interface; tap "Register" to create

6.3 Add Thermostat Radiator Valve

—Open MOES App, use your phone number or email address to register and login. Tap + on the top right, choose Gateway. Control ->Wireless Gateway (Zigbee) and simply follow the inbuilt setup wizard for device installation and

configuration.

—After the Zigbee smart gateway hub is added successfully, you can add the sub-device on the gateway hub interface.

--Long press Pair button on the radiator thermostat for 5

seconds until the Zigbee signal icon flashed, which means the device has entered the pairing

-The blue LED indicator of gateway hub flashes during

-When the radiator thermostat is successfully added, the device Zigbee signal is always on.

7. Product features

7.1 Auto Mode

7.1 Auto Mode
In automatic mode, the temperature is controlled in accordance with the set heating profile. Manual changes are activated until the next point at which the profile changes. Afterwards, the defined heating profile will be activated again. To activate the automatic mode, please proceed as follows:

Press the mode button to select() icon.

Default temperature: 17°C and 21°C.

Temperature rapper 5-20°C. step: 0.5°C. Temperature range: 5–30 °C, step: 0.5 °C.

App operation: Click the auto mode icon in the App

7.2 Manual Mode In manual mode, the temperature is controlled in accordance with the current temperature set via knob button. The temperature remains activated until the next manual change. To activate the manual mode, please proceed as follows: Press the mode button to select () icon. Default temperature: 20°C. Temperature range: 5–30°C, step: 0.5 °C. App operation: Click the manual mode icon in the App control panel.

7.3 Holiday Mode When you go out or go to a party, you will use the holiday mode. The holiday mode will automatically start at the set time starting point and run the holiday temperature. When the holiday mode is not activated, and you want to view

the holiday mode settings, please press the Mode button to view, the holiday mode icon will flash for 5 seconds an then it will automatically return to the auto mode. If you want to end your holiday mode earlier, press the Mode

App operation: Click the Mode icon to switch to the holiday mode in the App control panel, and switch to any other mode to cancel the holiday mode.

The device automatically stop heating when it detects a sudden temperature drop(5°C in 5 minutes as default). This is usually caused by an opened window or door and the open window icon will display(@PER)on the device. The device will operate according to the preset window. Press

the pair button to cancel. App operation: Click the open window icon in App control anel to cancel the window opening function.

-The open window detection only operates in automatic mode and manual mode.

7.5 Offset Temperature

As the temperature
As the temperature is measured on the radiator thermostat, the temperature distribution can vary throughout a room. To adjust this, a temperature offset of 5°C can be set. If a nominal temperature of e.g. 20°C is set but the room presents with only 18°C, an offset of -2°C needs to be set. In app settings, the offset temperature is 0 degrees by default. To adjust the offset temperature, please proceed as follows:

App operation: Click the offset icon (±) in settings.

7.6 Eco and Commorative lemperature
The comfort and Eco temperature icon makes switching
between comfort and Eco temperature simple and user
friendly. These have been set at the factory at 21°C
(comfort temperature) and 17°C (Eco temperature).
App operation: Click the Comfortable(%)/Eco(@)
temperature icon in the App control panel to select the
corresponding temperature mode.

Even in auto mode, the temperature can be changed at any

time using the button. It will then remain the same until the next point at which the program changes

7.7 Child Lock

Operation of the device can be locked to avoid settings being changed unintended(e.g. through involuntary touch). To activate/deactivate the child lock, please proceed as follows:

App operation: Click the child lock icon in the App settings screen. The device display "LOC".

7.8 Anti-Freezing Mode

You can use this function when you go out in winter or when you are not at home for a long time. When this function is activated, the temperature in the house is kept at 8 $^\circ\!\text{C}$,the device display "AF".press the pair button to cancel.

7.9 Heating stop (Power Saving) Mode

App operation: Click the Heating stop icon (||||||||) to turn on/off the function in the App settings screen. Note: Once the function is activated, other functions are not available unless the function is deactivated.

Battery life can be prolonged by switching the heating off. Fo achieve this, the valve is closed fully. To activate the neating stop, the device display"HS", press the pair button o cancel. please proceed as follows:

7.10 Anti-Calcification (Descaling) Protection The equipment will automatically run for a period of time every week to prevent calcification of the valve.

11. Low Battery

Sometimes people go home earlier than usual, and the rapid heating function will make you feel the warmth of the room faster. When activated, the valve will be fully opened for 5 minutes. The heating of a room takes longer than 5 minutes, but the heat given off by the radiator can be felt immediately.

--The boost function is activated . The remaining time for the function will be counted down in seconds ('299' to

-After these 5 minutes have elapsed, the actuator changes to the mode which was previously active(au to/manual) with the previously set temperature.
--End this function ahead of time, press the pair button

App operation: Select the mode of APP interface to activate the boost .Click the Boost icon () in the App control panel to cancel the boost function

8.1 Date

8. Setting Click the settings icon(﴿\$\hat{Q}\$) in the App control panel

8.2 Week Programming Stage In this menu item, you can create a heating profile with heating and cooling phases according to your personal

needs. You can set up to ten stages of temperature every day. The factory default is five stages.

--Click the week programming stage icon () in the App

--Click the week programming and secontrol panel.

--Select single days of the week, all weekdays, the weekend or the entire week for your heating profile.

--Click time to select the end time of each period, and click temperature to select the required temperature.

--Time range: 00:00-24:00, step: 10 minutes.

--Temperature range: 5-30 °C, step: 0.5 °C.

8.3 Open Window Click the open window icon() in the App settings

screen. --Select the desired temperature. --Temperature range: 5-30°C, step: 0.5°C.

8.4 Comfortable Temperature Click the comfortable temperature icon (-o-) in the App settings screen.

--Select the desired temperature.

--Temperature range: 5–30 °C, step: 0.5 °C.

8.5 ECO Temperature

Click the ECO temperature icon () in the App settings screen. --Select the desired temperature. --Temperature range: 5-30 $^{\circ}$ C, step: 0.5 $^{\circ}$ C.

8.6 Offset Click the Offset temperature icon (±)in the App settings

-Select the desired temperature --Temperature range: -5-5 °C, step: 0.1 °C.

8.7 Holiday Setting

Click the holiday mode icon (*)in the App settings

Select the end date and the start date.

Amazon Alexa is an intelligent personal assistant

--Select the end date and the stat. 3 date --Select the desired temperature. --Temperature range: 5-30 °C, step: 0.5 °C.

9. Voice Control 9.1 Amazon Alexa

oped by Amazon, and is capable of voice interaction to regulate the temperature of each room in your system by using a wake-word and an instruction. The wake-work is "Alexa" followed by an instruction such as "increase temperature." Currently, Amazon has made interaction and communication with Alexa only available in English Alexa requires explicit instructions. You must inform Alexa Alexa requires explicit instructions. You must inform Alexa of the room to which you wish to address followed by an instruction, such as "increase temperature." If no specific room is mentioned, Alexa will ask you which room you want to address, and then will increase the setpoint temperature by 1°C only based on the room reply from you. If you want the setpoint temperature to increase by 4°C in the living room, you must explicitly state to Alexa of increase the temperature in the living room by 4°C in to "increase the temperature in the living room by 4°C. Note: If Alexa is asked to increase the temperature by 2°C, then Alexa will add 2°C to your set-point. If the

room temperature is 19°C and you ask Alexa to increase the temperature by 2°C – the current set– point will change to 18°C but the heating will not start because the room temperature is already higher than 18°C.

by 4 degrees"/"Alexa, make it cooler in here."
—Increase Temperature: "Alexa, increase the DEVICE
NAME by 3 degrees", "Alexa, make it warmer in here."
—Set Temperature: "Alexa, set the DEVICE NAME to 20

degrees." ---Get Temperature: "Alexa, what is the DEVICE NAME

temperature?" --Get Set Point: "Alexa, what is the upstairs set to?"

Note: Alexa considers the smart thermostat and room

names as the devices.

10. Set an automation scenarios linkage If you have a door sensor installed in your home, then you can realize an automation scenarios linkage between TRN

--Listed below are common commands used with Alexa:
--Discover Devices: "Alexa, discover devices."

Reduce Temperature: "Alexa, decrease the DEVICE NAME

If you have a door sensor installed in your nome, then you can realize an automation scenarios linkage between TRV and door sensor. Under "Automation" in the "Smart" page, click"+" on the upper right comer, you will see a page called —Create Smart that will guide you through the setting. —Here, we take When device status changes setting. —After you click When device status changes, you will see all the devices you added to the Tuya Smart app. —Select Smart Door Sensor—Select Function—Smart Door Sensor—SoN/OFF—Set up Task—Run the device—YRV—Open Window Detection—ON/OFF—Save—Next—Save. —A prompt box "Automation created Start using it?" will pop up, select "Yes", you can see all the automation scenarios you've created. When the door/window sensor is opened, the Tuya Smart app interface will pop up a message that the door/window sensor is turned on, and an()) icon will appear on the TRV device interface.

When the door/window sensor is closed, the Tuya Smart app interface will pop up a message that the door/window sensor is turned off, and an () icon will disappear on

Press the reset buttons for 5 seconds, the device will display "FAC". The device run reset. After the device runs reset, the data will not be saved,the device needs to be repaired.

When the battery power is less than 12%, the low power prompt icon ($\S_R \succeq$) will be displayed. Please replace the battery as soon as possible When the the device only displays ($\S_R \succeq$)the device is not available.

· 5 seconds [RESET 整 侃 引 0 % de

13. Troubleshooting and maintenance

Error code on display	Problem	Solution
Low 등유는 Battery	Battery output too low	Replace batteries
F1	Valve drive sluggish	Check installation, check the heating valve
F2	Actuating range too wide	Please check the fastening of the radiator thermostat
F3	Adjustment range too small	Please check whether the valve pin is stuck

14. Technical Data

14. I eCnnical Data
Batteries: 2×1.5 V LR6/mignon/AA
Temperature range: 5–30°C
Display: LED
Maximum radiated power: 10dBm
Dimensions(W x H x D): 56.5*56.5*100 mm
Weight: 190g(inc). batteries)/140g(inicl. batteries)
Working temperature: –10°C–40°C

Safety :CE/ROHS requency: 2.4GHz Degree of protection: Ip20 Battery life: 1.5 years

15. Package contents

ZigBee Radiator Thermostat 1.5V mignon/LR6/AA batteries (Optional) Adapters for Danfoss(RA,RAV and RAVL), M28x1.5mm, Caleffi, Giacomini, Ejector rod Screw for adapter Operating manual

 Operating manua 16. Instructions for disposal

The device is not a toy, do not allow children to play with it. Do not leave packaging material lying around.

Plastic films/bags, pieces of polystyrene, etc. can be

dangerous in the hands of a child.

ambient temperature is already >2°C above the current

set-point then the actual temperature will not change and smart radiator thermostat will not turn the heating ON.

Used batteries should not be disposed of with regular domestic waste! Instead, take them to your local regular domestic waste! Instead, take them to your lo battery disposal point. This device complies with the EN62368/EN300328/ EN301489 of the CE Rules.
This device complies with the ROHS 2.0 Rules.

1. During the free warranty period, if the product breaks down during normal use, we will offer free maintenance for the product.

5.Our company may update or change the products without notice. Please refer to the official website for the

beyond the warranty scope shall be executed by the third

disassembly and repair without the permission of our company, no warranty card, products beyond the free warranty period, etc., are not within the scope of free 3.Any commitment (oral or written) made by the third

party (including the dealer/service provider) to the user

updates.

RECYCLING INFORMATION

All products marked with the symbol for separate ction of waste electrical and electronic equipment (WEEE Directive 2012/19 / EU) must be disposed of separately from unsorted municipal waste. To protect your health and the environment, this equipment must be disposed of at designated collection points for electrical and electronic equipment designated by the government or local authorities.

Correct disposal and recycling will help prevent potential negative consequences for the environment and human health. To find out where these collection points are and how they work, contact the installer or your local authority.

WARRANTY CARD

Product Information Product Name_ Product Type Purchase Date_ Warranty Period Customer's Name Customer Address_

Thank you for your support and purchase at we Moes, we are

FOLOW US d @moes_smart @ @moes_smart @ www.moes.net

 \star \star \star \star

EVATOST CONSULTING LTD
Address: Suite 11, First Floor, Moy Road
Business Centre, Taffs Well, Cardiff, Wales, Tel: +44-292-1680945

EC REP AMZLAB GmbH Laubenhof 23, 45326 Essen

After Service Email: service@moeshouse.co

Cause Of Issue

Maintenance Records

Failure date

Reset (long press

If you have any other need, please do not hesitate to contact us first, we will try to meet your demand.

Address: Power Science and Technology Innovation Center, NO.238, Wei 11 Road, Yueqing Economic Development Zone, Yueqing, Zhejiang, China Tel: +86-577-57186815

Made In China Maker: WENZHOU NOVA NEW ENERGY CO.,LTD

Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.