

# Design Thermostat Flush Mounted 230V + RF Model: CRTDW



Quick Guide

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## INTRODUCTION

The CRTDW is a temperature controller with a built-in 3A relay and wifi chip for connection as a transmitter in a RF or SMART system. The room thermostat can be connected conventionally, wired to a wiring centre CKL6230N. However, it can be integrated into an RF systems and the SMART Home System at any time (even retrospectively) and thus offers an upgrade of the existing system. To control the CRTDW via the Internet and the Smart Home app (ONLINE mode), it must be installed together with the Universal Gateway **CGW** (sold separately).

## **PRODUCT COMPLIANCE**

This product complies with the essential requirements and other relevant provisions of the following EU Directives EMC 2014/30/EU, LVD 2014/35/EU, RED 2014/53/EU and RoHS 2011/65/EU

## **SAFETY INFORMATION**

Use in accordance to national and EU regulations. Use the device as intended, keeping it in dry condition. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations. Disconnect your equipment before cleaning it with a dry cloth.

Warning: Please always ensure the AC 230V mains power is switched off before installing or working on any components.

## **TECHNICAL SPECIFICATION**

Power Supply	AC 230 V
Temperature range	5-35°C
Display temperature accuracy	0.5°C or 0.1°C
Control algorithm	ITLC SPAN (±0.25°C / ±0.5°C) THB
S1-S2 Input (multifunctional input)	Floor temperature Air temperature Occupancy sensor One Touch Changeover (heating/cooling)
Output control	COM – NO (volt-free)
Max current	3 (1) A
Communication protocol	ZigBee 2,4GHz
Mounting	Flush mounting
Working temperature	0-45°C
IP protection class	IP30
Dimensions [Width x Height x Deep]	86 x 86 x 10 mm

## PROPER THERMOSTAT PLACEMENT



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## MOUNTING

To mount thermostat you can use included accessories (mounting screws). Remove plate from the back to mount it to the wall. After that just put thermostat on the plate.

## LCD ICON DESCRIPTION



1. Menu/Settings description + Clock 2. AM/PM 3. Temperature unit 4. Heating indicator (icon is animating when there is heating demand) 5. Cooling indicator (icon is animating when there is cooling demand) 6. RF Connection indicator 7. Internet connection indicator 8. Occupancy sensor (hotel

10. Standby mode icon 11. Current Temperature / Setpoint Temperature 12. Holiday mode 15. External / Floor temp sensor indicator 16. Schedule program number 17. Schedule mode icon 18. Day indicator/ SET information 19. Current Humidity value

## **BUTTON FUNCTIONS**

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BUTTON	FUNCTION
Ξ	<ol> <li>Menu button / Return button.</li> <li>In the MAIN SCREEN: Press and hold for 3 sec to change the thermostat operating mode (Schedule mode / Permanent mode / Temporary override mode).</li> <li>In the SETTINGS SCREEN: Press and hold for 3 sec to go back without saving the changes.</li> <li>In the PAIRING SCREEN (in SYSTEM TYPE Menu): Press and hold for 3 sec to see other pairing options.</li> </ol>
$\sim$	"Down" Button (Decrease parameter value/ moving on the menu in 'DOWN' direction)
	"Up" Button (Increase parameter value/moving on the menu in 'UP' direction)
۷	<ol> <li>"OK / Tick" Button (Confirm parameter value / Go to the next menu / Save settings).</li> <li>In the MAIN SCREEN: Press and hold for 3 seconds to enter Standby mode.</li> <li>In the SETTINGS SCREEN: Press and hold for 3 sec to go back to the MAIN SCREEN &amp; SAVE all the changes.</li> </ol>
+	In the MAIN SCREEN - press and hold these buttons together for 3 seconds to LOCK /

## WIRING DIAGRAM

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AC 230V

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## SYMBOLS EXPLANATION:

- s volt-free contact
- T temperature sensor

L. N - 230V AC pover supply

COM, NO - Voltage free output

S1, S2 Terminals: air or floor temperature

sensor - external volt-free contact to connect any ON/OFF switch or occupancy sensor (Hotel card)

#### SELECT THE COORDINATOR ΤΥΡΕ OF ZIGBEE



## FIRST POWER UP SEQUENCE

For easier installation, please make sure you have already added other devices to your ZigBee network, such as Underfloor Heating Wiring Centre (CFKL8)

1 To power on the Thermostat you have to connect it to the 230V power then the display will show all icons and then thermostat will display the software version.



(SOF TWARE VERSION Us = ~ ~ ~ Δ CONNECT WITH THE NETWORK

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Ľs L  $\equiv$   $\sim$   $\sim$ YES - ONLINE, OFFLINE

Smart Home system.

Now, choose your language using 🗸 or buttons. Confirm your language using 🗸 button.

MODE You can configure your thermostat with Universal Gateway or the Coordinator. That is, add it to the Salus

## NO - STANDALONE

 $\ensuremath{\mathsf{CRTDW}}$  can work without the Gateway or the Coordinator as a standalone device. You can directly connect thermostat to selected device without any network system.



9. Key lock function

13. Temporary override mode 14. Settings icon

## **INSTALLATION IN ONLINE MODE**

After Language selection follow below steps to add your device to the Smart Home app and pair with other devices:







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After that thermostat will show main screen You succesfully configured the **CRTDW** Thermostat.





schedule options. Use ✓ or ∕ buttons to select an option and confirm by pressing the √ button.



SCHED<mark>U</mark>LE MD-ER+SA-SU



SCHEDULE MO-SU o  $\checkmark_{\circ}$ 



One schedule for WHOLE WEEK

Seven separate schedules for SINGLE DAYS

## SCHEDULE PROGRAMMING EXAMPLE FOR THE WHOLE WEEK



✓ button to confirm.

Use ~ or ~ buttons to set temperature setpoint. Press 🍾 button to confirm.

6 Thermostat will move to the next program (next time period). If you made a mistake, you can go back to the previous step using  $\equiv$  button (changes will not be saved). Repeat steps 4 and 5 for the next time periods in the schedule. No time --:-on the display means given program is skipped. There are 6 programs/time perdiods in the schedule. Hold  $\checkmark_{0}$  button for 3 seconds to save and exit schedule editing.

## SETTING TIME AND DATE

Time or date changes can be done only in Offline mode. In Online Mode thermostat will synchronise current time and date based on information taken from the Internet.



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3 TIME/DATE C  $\equiv$ 





Use 🗸 or 🦟 buttons

to set the time. Press  $\checkmark_{*}$  button to confirm.

Go to clock settings.





Go to date settings.

Use 🗸 or 🦟 buttons to set the date. Press  $\checkmark_{\circ}$  button to confirm.



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**INSTALLATION IN OFFLINE MODE** 

Install the wiring centre according to the instructions attached

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CONNECT WITH THE NETWORK

SYSTEM TYPE UNDERFLOOR

Select system type:

~ 1

PAIRING WITH CFKL8

CONNECT WITH THE NETWORK

= ~ ~ ~

3 Open the ZigBee network

OR

SELECT THE CONTROL BOX

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to the product.

your thermostat with additional zones. Select one more zone or finish the pairing process by using  $\checkmark_{\scriptscriptstyle 0}$  button.

9 Close the ZigBee network



# **PROGRAMMING IN OFFLINE MODE**

12:00

18.0

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12:00

~ 1

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Use ~ and ~ buttons to select the Wiring Centre number (press PAIR button on the Wiring Centre to see its address number) Press V<sub>5</sub> button to confirm.

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Use  $\checkmark$  or  $\frown$  buttons to select the zone number. Press 🗸 button to confirm.