



C800WIFIOTRQ

ENG

OPENTHERM® WI-FI SMART REMOTE CONTROL  
FOR HEAT GENERATORS

USE AND INSTALLATION MANUAL

# OPENTHERM® WI-FI SMART REMOTE CONTROL FOR HEAT GENERATORS

Dear customer, thank you for purchasing the Fantini Cosmi smart remote control model C800WIFIOTRQ suitable for OpenTherm® heat generators for the management of heating systems and sanitary hot water.

This manual holds all the information required for a correct installation and configuration.

You can also download this manual in digital format and in different languages by framing the QR code below and entering the product code.



pdf.fantinicosmi.it



C800WIFIOTRQ



ITA  
ENG  
FRA  
ESP  
DEU  
RUS

## Package contents

- C800WIFIOTRQ remote control
- Rectangular base
- Manual

## Warnings



Carefully read the installation instructions, safety warnings, operating and maintenance instructions in this booklet, which should be kept for further reference.

- After removing the packaging, check the integrity of the appliance; if in doubt, do not use it.
- Installation of the appliance should only be carried out by qualified technicians in compliance with the current standards.
- The use of any electrical appliance involves observing certain basic rules. In particular:
  - DO NOT touch the device with wet hands or wet feet or bare feet.
  - DO NOT expose the device to the weather (rain, sun, etc.).
  - Before carrying out any maintenance or cleaning work, switch off the power supply.
  - DO NOT power the appliance with the cover open.

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# 1 - TECHNICAL DATA

Power supply	230 V - 50 Hz (Power supply unit C800AL) 2 AA 1.5 V alkaline batteries
Battery life	> 1 year
Communication protocol	OpenTherm
Max. mains power consumption	1 W
LEDS switch-off	5 / 10 s from last press; always ON (only with 230V mains supply)
Temperature adjustment scale	2 ÷ 40 °C; increase 0.1 °C
Measurement scale/room T display	-9 to +50 °C; resolution 0.1 °C
Temperature display	Celsius/Fahrenheit
Nominal conductor cross-section for flexible cables	0.5 to 1 mm <sup>2</sup>
Minimum adjusting differential	STD (0,1 ÷ 0,3) °C;
Thermal gradient of reference	4 K/h
Maximum room temperature	45°C
Storage temperature	-10 - +60°C
Software	Class A
Insulation class	Class II
Protection rating	IP32
Degree of pollution	2
Mounting	On the wall or on a flush-mounted box type 500-502-503
Remote control dimensions	98 x 98 x 20 mm (square base) 125 x 98 x 20 mm (rectangular base)
C800AL power supply unit dimensions	43 x 43/48 x 35 mm
Weight	0.100 kg
Compliant with standards: EN 60730-1 and second parts;	
Directive 2014/53/EU (RED); 2014/30/EU (EMC); 2014/35/EU (LVD)	

ErP classification (Reg. EU 811/2013 - 813/2013): V; 3% or VI; 4% when combined with a boiler with external probe.

Product manufactured in Italy.

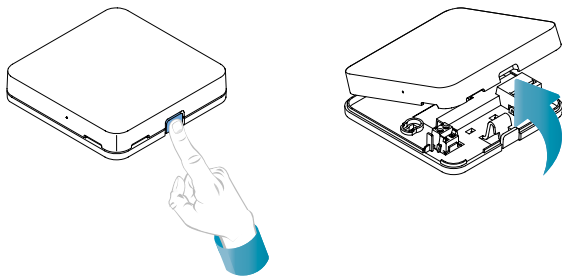
## 2 - INSTALLATION



Installation and maintenance operations must be carried out with the system's electrical voltage switched off and by qualified personnel, in compliance with the regulations in force.

### 2.1 - POWER SUPPLY

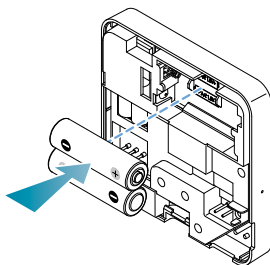
Separate the front cover from the base by pressing the button on the bottom edge of the cover and releasing the housing upwards, as shown in the figure.



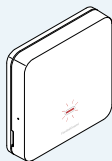
#### BATTERY POWER SUPPLY

To power the device with batteries, use 2 AA 1.5V alkaline batteries.

Insert the batteries in the battery compartment at the rear of the device, observing the indicated polarities.



**Note:** If the device is powered by 230V mains don't insert batteries.



### LOW BATTERY WARNING

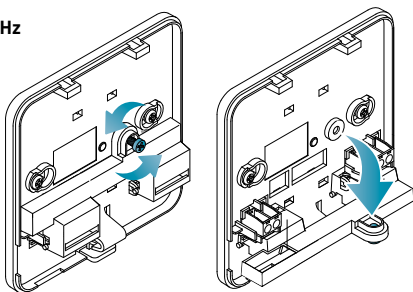
- **1 flash per minute on display in Stand-by:** the batteries are running low and it is still possible to operate the device but they need to be replaced.
- **1 flash per minute and Low Bat appears on the display in Stand-by:** the batteries are exhausted the device can no longer be operated and will go to OFF.

Batteries can be replaced at any time without losing the stored settings.

### MAINS POWER SUPPLY 230V - 50Hz

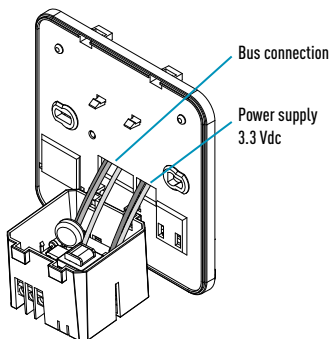
It is possible to power the device using the C800AL power supply unit (optional) which requires the flush-mounting.

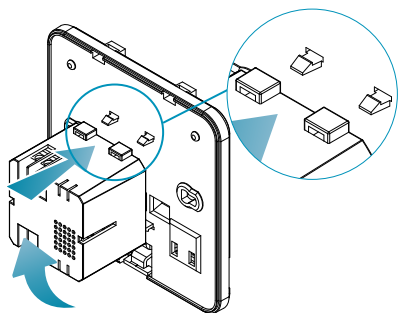
Unscrew the screw as shown in the drawing and lower the plastic cover to gain access to the terminal block for the electrical connections.



**Note:** Use the square base for 500 and 502 flush-mounting boxes and the rectangular base for 503 flush-mounting box (see page 11).

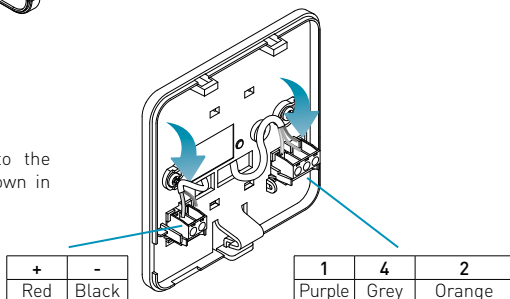
Insert the cables coming out from the C800AL power supply unit to the C800WIFIOTRQ base.



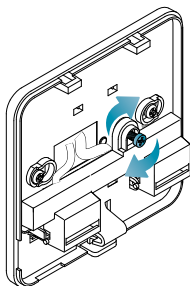


Hook the C800AL up to the 4 tabs of the base, making sure that the fixing is secure.

Connect the cables to the terminal block, as shown in the table.



Close and screw on the terminal block cover.



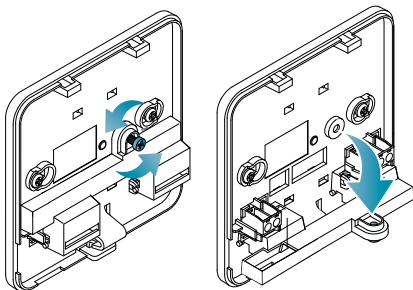
## 2.2 - CONNECTION TO THE SYSTEM



Installation and maintenance operations must be carried out with the system's electrical voltage switched off and by qualified personnel, in compliance with the regulations in force.

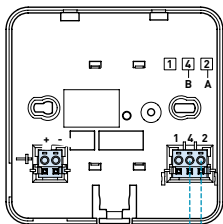
For a correct installation, prepare a dedicated line for the bus connection.

### CONNECTION WITH BATTERY POWER SUPPLY



Unscrew the screw as shown in the drawing and lower the plastic cover to gain access to the terminal block for the electrical connections.

Connect the terminals 2 and 4 to the heating system.



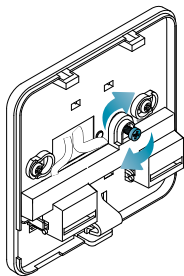
Bus cable length  
20m max

- 4: Boiler input contact
- 2: Boiler input contact
- 1: Not used

#### Connection example



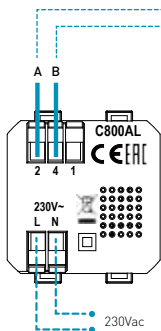




Close and screw the terminal box cover. Hang up the front cover to the base.

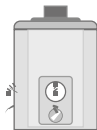
## CONNECTION WITH MAINS POWER SUPPLY 230V - 50HZ

If supplied with 230V, connect the C800AL terminals to the electrical and heating systems as follows:



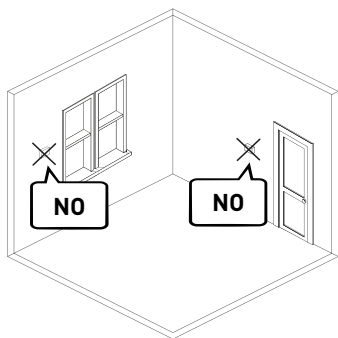
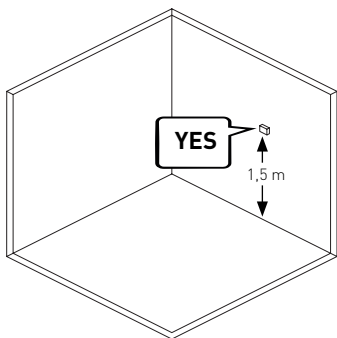
- 4: Boiler input contact
- 2: Boiler input contact
- 1: Not used

### Connection example



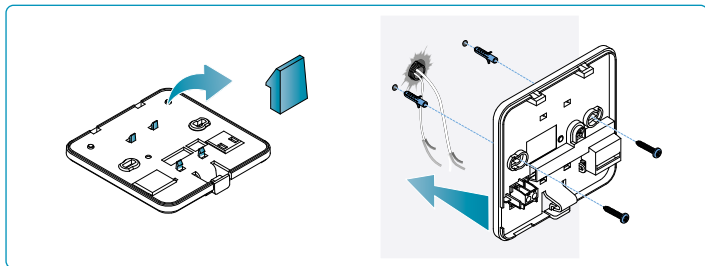
## 2.3 - WALL FASTENING

For an optimal operation of the device, it is advisable to install the remote control at a height of approx. 1.5 mt above the floor, in a suitable position to correctly detect the room temperature (see the example in the drawing).



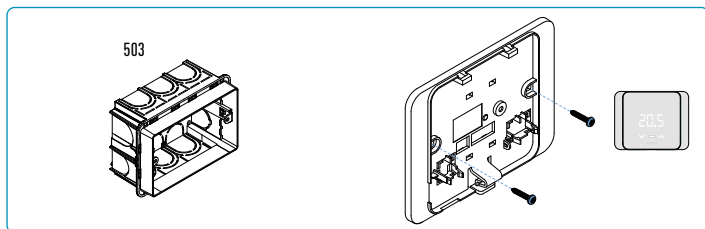
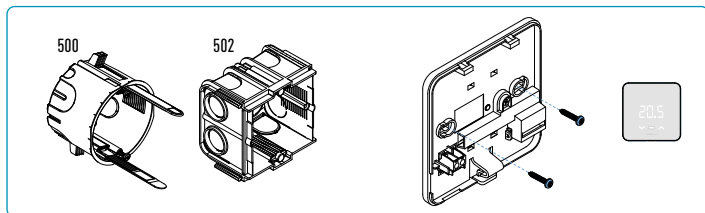
### WALL MOUNTING (for battery power supply only)

The tabs on the back of the base must be removed for the wall mounting. In this way the remote control will properly adhere to the wall.

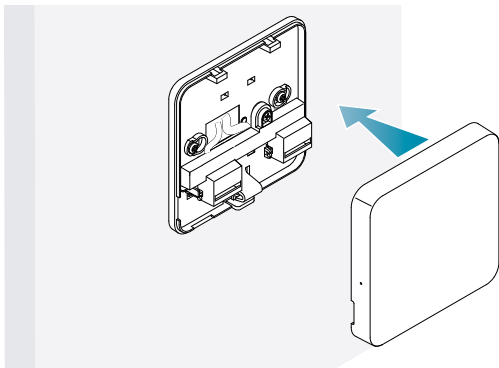


## FIXING ON FLUSH-MOUNTED BOXES

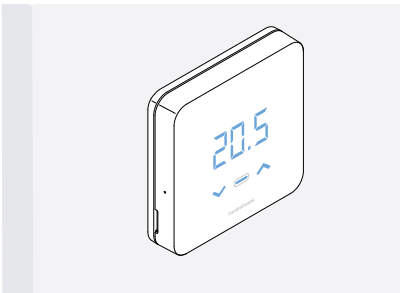
The remote control is supplied with a square and a rectangular bases to allow the fixing on flush-mounted boxes type 500-502-503.



Hang up the front cover.



It is now possible to restore power to the system.



When switching on for the first time, wait for the device to communicate with the boiler.  
When the display LEDs switch off, the device is ready.

### 3 - USE FROM THE DEVICE

From the device it is possible to select the regulation type of the heating system, the operating modes and the desired current temperatures, along with the management of the sanitary hot water. To customize the program and choose the temperatures of the heating system, it is necessary to pair the device with the *Intelliclima+* App and proceed with the relevant configuration (see page 25 and/or APP manual on pdf.fantiniCosmi.it).

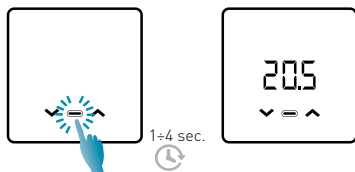


#### 3.1 - DISPLAY ACTIVATION

When the remote control is in Stand-by the display is switched off.

**Press the central MODE button until the screen is activated to display the ambient temperature.**

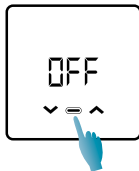
When first turned on, and whether the system is switched off, OFF will be displayed.



## 3.2 - OPERATING MODE SELECTION

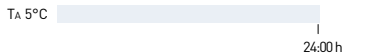
With the display switched on, press the central MODE button to view the current operating mode.

Press the central MODE button again to select the desired operating mode:



### OFF - SHUTDOWN PROGRAM

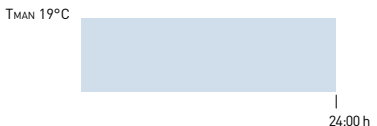
In OFF mode, the heating system is switched off. During the WINTER season it maintains the antifreeze temperature, if not disabled (see the APP manual on pdf.fantincosmi.it).



T<sub>A</sub> antifreeze settable from 2 ÷ 7 °C

### MAN - MANUAL PROGRAM

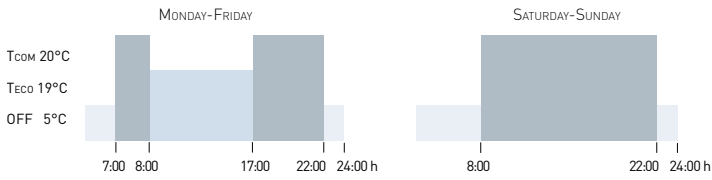
The remote control maintains a fixed temperature, for an unlimited time, until when another program is selected.



T<sub>MAN</sub> settable from 2 ÷ 40°C

**PLT - "AUTO" WEEKLY PROGRAM \***

The device follows the weekly profile set in PROGRAMS. It is possible to associate one of the three programmable temperatures (off/antifreeze, comfort temperature and economy temperature) every quarter of an hour, for every day of the week (see the APP manual on pdf.fantiniCosmi.it).



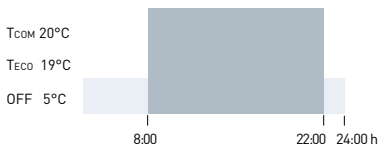
T<sub>COM</sub> settable from 2 ÷ 40 °C

T<sub>Eco</sub> settable from 2 ÷ 40 °C

Note: T<sub>COM</sub> > T<sub>Eco</sub>

**HQL - "HOLIDAY" DAILY PROGRAM \***

The device follows the daily profile set in PROGRAMS. It is possible to associate one of the three programmable temperatures (off/antifreeze, comfort temperature and economy temperature) every quarter of an hour (see the APP manual on pdf.fantiniCosmi.it). This sequence will be repeated, identical, every day.



T<sub>COM</sub> settable from 2 ÷ 40 °C

T<sub>Eco</sub> settable from 2 ÷ 40 °C

Note: T<sub>COM</sub> > T<sub>Eco</sub>

\* To use this mode it is necessary to set the current day and time from the user menu (see page 19) and/or via APP (see the APP manual on pdf.fantiniCosmi.it).

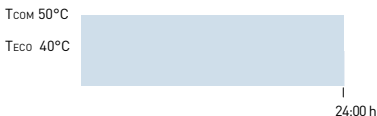
**RES - SANITARY HOT WATER PROGRAM (DAILY) \*\***

This function is available only if the boiler board is configured to manage the production of sanitary hot water.

If the ACS operating mode is enabled (see page 21), during SUMMER or WINTER operation the remote control is also able to manage a temperature program in certain time slots of the day for the production of sanitary hot water.

The remote control holds a standard program to manage the production of sanitary hot water that can be freely modified by the user associating one of the two temperature levels  $T_{COM}$  and  $T_{ECO}$  (comfort temperature and economy temperature) every quarter of an hour (see the APP manual on pdf.fantinosmi.it).

By accessing this mode from the device it is possible to temporarily modify the current  $T_{COM}$  /  $T_{ECO}$  temperature . Upon the subsequent advancement on the profile band it will return to the values set initially. To permanently modify the temperature it is necessary to access the *IntelliClima+* App (see the APP manual on pdf.fantinosmi.it).



$T_{COM}$  settable according to the boiler limits

$T_{ECO}$  settable according to the boiler limits

Note:  $T_{COM} > T_{ECO}$

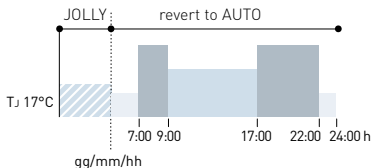
\*\* Mode only visible if activated via the device (see page 21-22) and/or via APP (see the APP manual on pdf.fantinosmi.it).

\* To use this mode it is necessary to set the current day and time from the user menu (see page 19) and/or via APP (see the APP manual on pdf.fantinosmi.it).



### JOLLY - "JOLLY" TEMPORARY PROGRAM \*\*\*

It is possible to maintain a certain temperature for a certain number of hours; after the system will revert to the previously active program.



Tj: settable from 2 ÷ 40°C.

Example: Automatic + Jolly at 17°C for 1 week. Once the Jolly period is over, the remote control resumes the operation with the automatic program.

\*\*\* Mode only visible if activated via APP (see the APP manual on pdf.fantincosmi.it).

**Saving of changes is confirmed by a flashing of the last parameter displayed. After saving, the display will return to Stand-by.**

## 3.3 - TEMPERATURE SETTING









When the display is switched on, it is possible to modify the temperature value (Set Point) by pressing the UP or DOWN arrows. The value is increased or decreased in steps of 0.1°C.

In AUT, HOL and ACS modes the temperature modification made by the device will be temporary and it will return to the values initially set upon subsequent advancement along the profile band. To permanently modify the temperature it is necessary to access the Intellilima+ App (see the APP manual on pdf.fantincosmi.it).

**Saving of changes is confirmed by a flashing of the last parameter displayed. After saving, the display will return to Stand-by.**

## 3.4 - BASIC SETTINGS

To modify the basic settings you can access to the basic menu:

<p>1</p>  <p>1+4 sec.</p>  <p>Keep the MODE button pressed until the remote control is reactivated;</p>	<p>2</p>  <p>3 sec.</p>  <p>Press and hold MODE again for more than 3 seconds.</p>	<p>3</p>  <p>Use the central MODE button to scroll through the menu items (see the list).</p>	<p>4</p>  <p>Use the arrows to change the settings of the selected item.</p>
---	--	--	---

Saving of changes is confirmed by a flashing of the last parameter displayed. After saving, the display will return to Stand-by.

### BASIC SETTINGS MENU

#### AP Access point

It allows to start the association procedure between the device and the App (see page 25 and/or the APP manual on [pdf.fantiniCosmi.it](http://pdf.fantiniCosmi.it)).

After approximately 15 minutes the device will return to the default OFF setting.

Default value = OFF

OFF Access Point disabled

ON Access Point enabled

**dRy Current day setting \***

It allows to set the current day necessary to manage the weekly program (AUT mode).

Default value at startup = 1

Settable values = 1 ÷ 7

1=Monday; 2=Tuesday; 3=Wednesday; 4=Thursday; 5=Friday; 6=Saturday; 7=Sunday;

**h Current time setting (hour) \***

It allows to set the current hour necessary to manage the daily and weekly program (AUT, HOL and ACS mode).

Default value at startup = 00

Settable values = 00 ÷ 23

**H n Current time setting (minutes) \***

It allows to set the current time necessary to manage the daily and weekly program (AUT, HOL and ACS mode).

Default value at startup = 00

Settable values = 00 ÷ 59

**Fw Firmware**

You can see the firmware release version on this screen.

**5tE Sanitary hot water Teco**

It allows to set the sanitary hot water temperature in "economy" mode for a better energy saving, such as during the night or when you are absent for short periods of time.

Default Setpoint value = 40°C

Settable values = Automatic update with boiler limits

Note: T<sub>COM</sub> > T<sub>ECO</sub>

\* When the device is configured in WiFi, the date and time will be set automatically.

### 5tC Sanitary hot water T<sub>COM</sub>

It allows set the sanitary hot water temperature in "comfort" mode for a regulation suitable to the moments spent at home.

Default Setpoint value = 40°C

Settable values = Automatic update with boiler limits

Note: T<sub>COM</sub> > T<sub>ECO</sub>

### C<sub>om</sub> Instant communication

It allows an instant communication between device and APP during the battery operation. Once the communication has taken place, the device will return to communicate with the pre-set cadences (default every 30 minutes, see the APP manual on [pdf.fantiniCosmi.it](http://pdf.fantiniCosmi.it)).

Default value = OFF

OFF disabled

ON enabled

Note: during the 230V mains operation, the communication automatically switches to instantaneous frequency and this function is not visible.

### r5T Reset basic parameters (user menu)

After enabling reset and confirmed it, the display switches off and the user menu settings are reset to default values.

Default value = NO

NO Reset disabled

YES Reset enabled

### P<sub>w</sub> Password






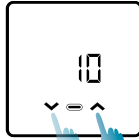
To prevent other users from changing the remote control settings, a password can be entered to lock the keys.

To enable this function, choose an access code with a value from 1 to 999. This code must be entered, followed by the MODE button, in order to access any setting, from the temperature control to the basic or advanced parameters.

To disable the key lock, set the value to "0".

## 3.5 - ADVANCED FUNCTIONS

Further remote control settings can be changed in the Advanced Functions menu:

<p>1</p>  <p>1÷4 sec.</p>  <p>Keep the MODE button pressed until the remote control is reactivated;</p>	<p>2</p>  <p>3 sec.</p>  <p>Press and hold both the UP and DOWN arrows for 3 seconds.</p>	<p>3</p>  <p>Use the central MODE button to scroll through the menu items (see the list on page 22).</p>	<p>4</p>  <p>Use the arrows to change the settings of the selected item.</p>
---	---	---	---



It is advisable that a competent and a qualified personnel change the P01 to P07 parameter values.

Saving of changes is confirmed by a flashing of the last parameter displayed. After saving, the display will return to Stand-by.

## ADVANCED FUNCTIONS MENU

### P01 Communication protocol

This function displays the protocol used to communicate with the boiler.

PLS = OpenTherm® Plus

### P02 ACS Enabling

This function enables the sanitary hot water (ACS) management.

Default value = OFF

OFF Disabled

ON Enabled

### P03 Heating water temperature with fixed point regulation

This function allows to set the delivery hot water temperature with the fixed point regulation.

By default the device is pre-set for RADIATOR systems; these settings can be changed from the APP (see the APP manual on [pdf.fantiniCosmi.it](http://pdf.fantiniCosmi.it)).

Default value = RADIATORS 70°C 20°C ÷ 80°C\*

FAN COIL = 46°C 30°C ÷ 50°C\*

RADIANT PANELS = 42°C 20°C ÷ 45°C\*

\* These values automatically update with boiler limits.

### P04 Antifreeze temperature

This function avoids blocking the system due to the possible freezing of pipes during the winter period.

Default value = 5°C

OFF = switched off

2.0°C ÷ 7.0°C Antifreeze values



**P05 Regulation type**

It is possible to select the type of adjustment you want to use.

- Fixed point: the delivery water fixed temperature is set according to the selected system type: Radiators, Fan Coils, Radiant Panels (see also page 21 - parameter P03);
- Climatic regulation: the delivery temperature is corrected according to the outside temperature to obtain a constant ambient temperature. Relevant parameters are set by default for RADIATOR systems and can be customized only via APP (see the APP manual on pdf.fantiniCosmi.it).
- Ambient correction: the delivery temperature required by the device is corrected according to the set correction parameter value.

Default value = FP

FP: Fixed point

FPC: Fixed point with ambient correction

CL: Climatic

CLC: Climatic with ambient correction

**P06 Season**

Modify the season to activate the regulation in heating mode with ACS or ACS only.

Default value = WI

WI = Winter (Heating + ACS if enabled)

SU = Summer (ACS only if enabled)

**P07 Advanced functions reset**

After enabling the reset, all the settings are reset to default values.

Default value = NO

NO = Reset disabled

YES = Reset enabled

### 3.6 MAIN EDITABLE FUNCTIONS

	C800WIFIOTRQ	APP <i>IntelliClima+</i>
Mode selection (OFF - MAN - AUT - HOL)	•	•
Time profiles scheduling (AUT - HOL - JOL - ACS)	-	•
ACS Enabling	•	•
Ambient temperature display	•	•
Comfort and Economy temperature setpoint variation	Temporary	•
Antifreeze temperature setpoint (only in winter)	•	•
Summer/Winter operating modes (only ACS / Heating + ACS)	•	•
Key Lock setting	•	•
Ambient temperature correction (OFFSET)	-	•
Lower and upper temperature limits (Heating and ACS)	-	•
LED brightness level	-	•
AP (Access Point) activation	•	-
Firmware/Software Version	•	•
Device serial number	Label	•
Device reset	•	•
Device battery status	•	•

#### ADDITIONAL SETTINGS FROM THE APP

BOILER INFO display	•
WiFi router configuration	•
Definition of synchronization periods device - App	•
Last device communication - App	•
APP language selection (ITA-EN-FR-DE-ES-RU)	•
Device sharing with other users	•
SMART function: Self-learning (AGC)	•
SMART function: Geolocation	•
SMART function: CO <sub>2</sub> energy saving display	•
SMART function: Window opening management	•
Summer/standard time setting	•
APP notifications	•



## 4 - USE FROM APP

It is possible to proceed with the system parameters configuration only without the need to configure the device to the final WiFi home network (see the APP manual on pdf.fantiniCosmi.it).

### 4.1 - APP INSTALLATION

Download the *IntelliClima+* APP, available free of charge from Google Play Store and Apple Store.

Frame the QR code to be directed to the link directly.

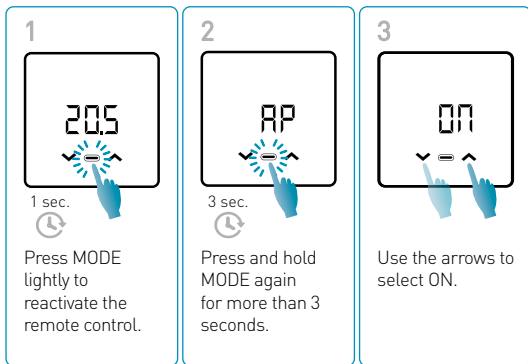


**Install the APP** and, upon the first activation, **create an account** by entering the user name and password (an active data connection is required for this).

Proceed with the configuration **creating a HOUSE** and follow the APP wizard. Alternatively, you can **add the DEVICE** to a previously configured house.

## 4.2 - DEVICE PAIRING

Enable the device in AP mode from the user menu:



**Saving of changes is confirmed by a flashing of the last parameter displayed. After saving, the display will return to Stand-by.**

The device will remain in active AP mode for approximately 15 minutes.

Proceed with the configuration by adding the C800WIFIOTRQ device and follow the APP wizard (see the APP manual on [pdf.fantiniCosmi.it](http://pdf.fantiniCosmi.it)).

The device Serial Number is indicated on the label inside the product.

**Note:** for further specifications on the device operation via *IntelliClima+* APP, please refer to the relevant manual, available in digital format and in several languages by framing the QR code below and typing in product code C800WIFIOTRQ.



pdf.fantiniCosmi.it



C800WIFIOTRQ



ITA  
ENG  
FRA  
ESP  
DEU  
RUS

For further information and assistance, contact your trusted installer or write to [export@fantiniCosmi.it](mailto:export@fantiniCosmi.it) indicating the model in use and the problem found.

## 5 - DISPOSAL



The symbol of the crossed-out wheeled bin indicates that the products must be collected and disposed of separately from household waste. The batteries and integrated accumulators may be disposed of together with the product. They will be separated at the recycling facilities. A black bar indicates that the product was placed on the market after August 13th, 2005. Participating in the separate collection of products and batteries contributes to the correct disposal of these materials and therefore avoids possible negative consequences for the environment and human health. For more detailed information on the collection and recycling programs available in your country, contact the local authorities or the sales point where the product was purchased.

## 6 - WARRANTY CONDITIONS

The conventional warranty lasts 24 months, starting from the date the equipment is installed. The warranty covers all parts of the equipment, except those subject to normal wear and tear resulting from use.

EAC CE



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