

Mod. **TUO Wi-Fi Lite**

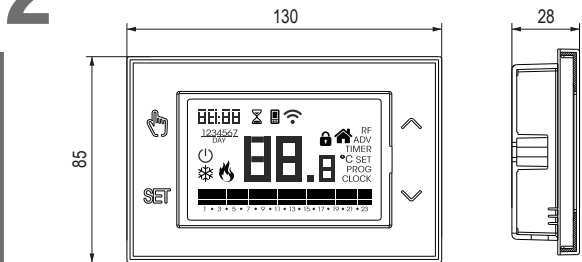
Vemer S.p.A.

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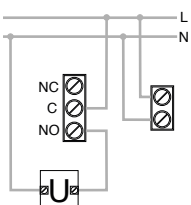
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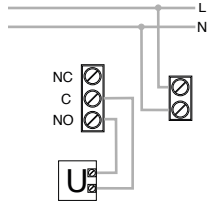
2 DIMENSIONS



3 CONNECTION DIAGRAM

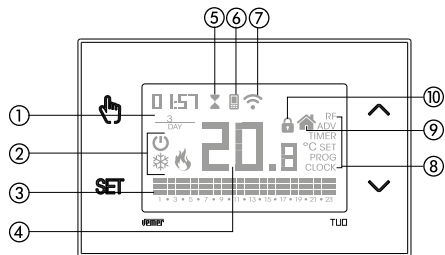


Connection diagram for the supply of circulation pumps, solenoid valves, etc. at 230V ~



Connection diagram for the control of the boiler, heat pumps, etc.

4 DEVICE DESCRIPTION



- ① Clock, day of the week
- ② Off operation, conditioning mode, heating mode
- ③ Running daily program divided into 24 histograms, one for each hour of the day.
Each hour can be associated with one temperatures: T1, T2 and T3
- ④ Measured temperature
- ⑤ Active timed operation
- ⑥ Synchronization with settings on the Vemer Cloud in progress
- ⑦ Connection to the active Wi-Fi network
- ⑧ Programming menu
- ⑨ Local active operation
- ⑩ Active keypad lock

information to users pursuant to art. 14 of the directive 2012/19 / EU of the european parliament and of the council of 4 july 2012 on waste electrical and electronic equipment (WEEE)



If the crossed-out bin symbol appears on the equipment or packaging, this means the product must not be included with other general waste at the end of its working life.

The user must take the worn product to a sorted waste center, or return it to the retailer when purchasing a new one.

Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least 400 m², if they measure less than 25 cm.

An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

1 User Manual

WALL-MOUNTING WI-FI CHRONOTHERMOSTAT

Read all instructions carefully

Wi-Fi wall-mounting chronothermostat powered by mains (230 V~), suitable for the control of heating and air-conditioning systems. The integrated Wi-Fi module allows the remote control of the device via your smartphone or tablet. It's necessary to connect the device to the home router and then install the appropriate App on your smartphone or tablet available free for iOS and Android devices.

Code	Model	Description
VE785700	Tuo Wi-Fi Lite Bianco	Weekly chronothermostat white colour
VE793800	Tuo Wi-Fi Lite Nero	Weekly chronothermostat black colour

SAFETY WARNINGS

During installation and operation of the device, it is necessary to comply with the following instructions:

- 1) The device must be installed by a skilled person, in strict compliance with the connection diagrams.
- 2) Do not power on or connect the device if any part of it is damaged.
- 3) After installation, inaccessibility to the connection terminals without appropriate tools must be guaranteed
- 4) The device must be installed and activated in compliance with current electric systems standards.
- 5) Before accessing the connection terminals, verify that the leads are not live.
- 6) In the electrical system of the building where the device must be installed, a protection device from the overcurrents must be present.
- 7) The device performs actions of 1B type and is suitable for environments with pollution degree 2 and overvoltage category III (EN 60730-1).

TECHNICAL CHARACTERISTICS

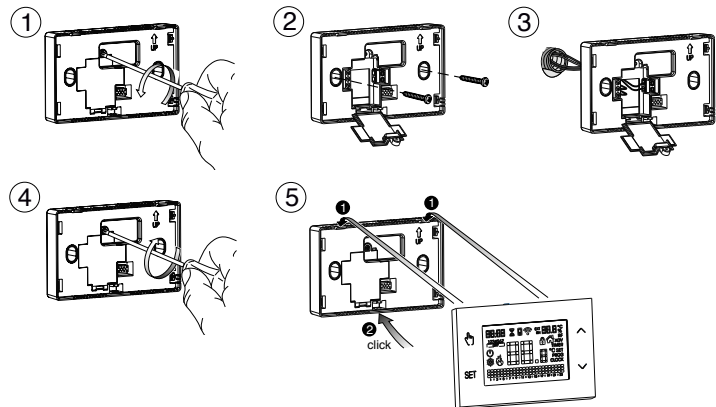
- Power supply: 230 Vac \pm 10% 50/60 Hz
- Output: bistable relay with changeover contact 5 A / 250 Vac
- Weekly programming with 3 settable temperatures: T1, T2, T3
- Daily resolution: 1h
- Switch-on delay set between 15, 30 or 45 minutes (independent for each hour)
- Measured temperature scale: 0°C \div 50°C
- Measured and displayed temperature resolution: 0.1°C
- Temperature regulation range: 2.0°C \div 50°C
- Measurement update: every 20 seconds
- Measurement accuracy: \pm 0.5 °C
- Temperature regulation:
 - on/off with adjustable differential between 0.1°C and 1°C
 - proportional with settable band and regulation period
- Operating mode: heating (winter) or conditioning (summer)
- Display with blue backlighting
- Automatic winter time/summer time
- Keypad lock with password for installation in public places
- Wall installation (or covering the box 503)
- Terminal block for cables with section of 1.5 mm²
- Operating frequency band: 2.4 GHz IEEE 802.11 b/g/n
- Maximum power of transmitted radiofrequency: 18.3 dBm
- Operating temperature: 0°C \div 50°C
- Operating humidity: 20% \div 90% non condensing
- Storage temperature: -20°C \div 65°C
- Degree of protection: IP: XXD

5 INSTALLATION

The device can be installed on the wall or to cover the 3-module flush-mounting box (type 503). We recommend positioning at a height of 1.5 meters from the floor, in an area that respects as much as possible the average temperature conditions of the entire environment.

Make sure that the distance between the router and the device is such as to guarantee stable communication.

Avoid installation near doors or windows, in niches, behind doors and curtains or in positions with excess or total lack of ventilation, to avoid that the reading of the temperature measured by the probe is in some way offset.



6 CONFIGURATION WITH REMOTE CONTROL

1) Install and connect the device according to the connection diagrams shown in this manual

2) Install and start the "Clima Wi-Fi Vemer" App on your smartphone (or tablet).

Create a Vemer account to associate the Tuo Wi-Fi Lite device:

- choose "Register" and fill in the "e-mail" and "password" fields and confirm by choosing "Register".

For security reasons it is recommended to choose a password different from the one used to access your e-mail box.

- check your e-mail box confirm the activation of the account by clicking on the link contained in the e-mail received.

3) Enter e-mail and password of your Vemer account to access into the App.

4) Add your Wi-Fi Lite to your Vemer account:

- on your Wi-Fi Lite, hold down the and keys simultaneously until the display shows **CONF. NET**.

- Start the App, choose "**New Thermostat**", select **TUO** chronothermostat model from those available in the list and press "**Next**".

- Connect to the "**iwmm...**" network generated by the device and follow the instructions on the App. Wait for the device display show the icon to indicate successful connection between the app and the device.

- Now choose (with Android) or enter (with iOS) the complete name of the Wi-Fi network where connect the device and enter the password, **be careful to digit faithfully all characters** (uppercase, lowercase, spaces, digits) that compose them. Confirm to continue.

- Enter a name that identifies your Wi-Fi Lite, the PIN (4 digits displayed on the display of your Wi-Fi Lite), choose an icon that helps identify the device from those proposed and confirm.

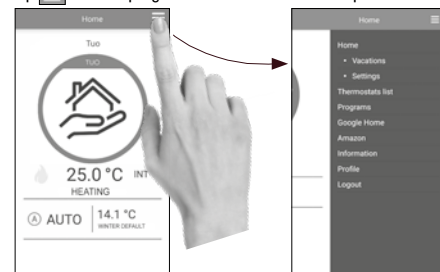
5) The configuration procedure is finished:

- The App displays the list of devices associated with your account, among which the newly associated device must also appear.

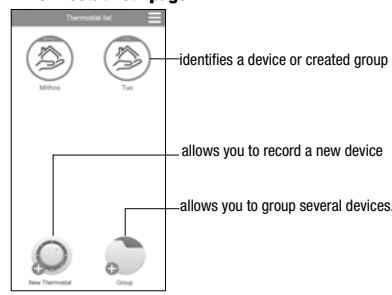
- Your Wi-Fi Lite displays the main screen. Check that the icon is solid and that the time displayed in the upper left is correct.

Configuration menu

Tap at the top right to access advanced setup.



"Thermostat list" page



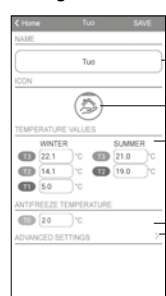
NOTE: The programmable thermostat is compatible with Google Home and Amazon Echo. By associating with your Google or Amazon account, you can interact with the device by speaking to the Voice Assistant via the voice-activated speaker by issuing the desired commands.

Modify a program

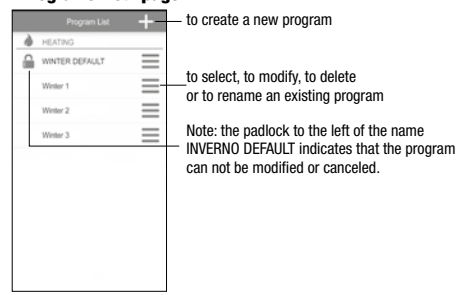


To modify an existing program, select the profile program of the day to be modified. On the screen that opens, assign at any time of day one of the temperature among T1, T2 and T3 (marked by blue, green and red colours). Created a program for a day, it's possible to copy it to any other day of the week ("Copy" function). Note: on the tablet the whole weekly programming is visible on a single screen.

Settings

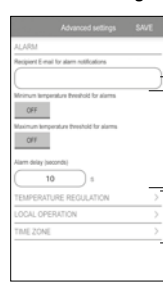


"Programs List" page



Note: the padlock to the left of the name **INVERNO DEFAULT** indicates that the program can not be modified or canceled.

Advanced settings



HOW TO DO IN CASE OF REPLACEMENT OF THE ROUTER

In case of replacement of the router of the home network, it is necessary to connect the device to the new wi-fi network. Proceed as follows:

1. On Tuo Wi-Fi:
 - a. Hold down the keys and simultaneously until the display shows "**CONF. NET**"
2. On the App:
 - b. Choose "**New thermostat**" \rightarrow Tuo \rightarrow "Next"
 - c. Connect to the "**iwmm...**" network generated by the device and follow the instructions on the App. Wait for the device display show the icon to indicate successful connection between the app and the device.
 - d. Now choose (with Android) or enter (with iOS) the complete name of the Wi-Fi network where connect the device and enter the password, **be careful to digit faithfully all characters** (uppercase, lowercase, spaces, digits) that compose them. Confirm to continue.
 - e. Exit the App **without entering** the name and PIN serial number

HOW TO REMOVE THE DEVICE FROM YOUR ACCOUNT

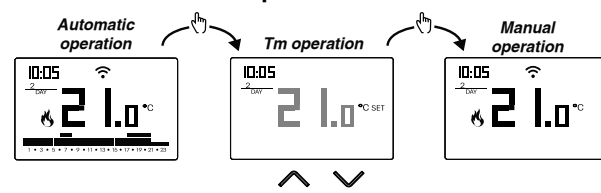
If it is necessary to assign control of the device to another user (typical situation for example when the device is installed in a rented house and the tenants change), proceed as follows:

1. Disconnect the device from the old user (via one of the following two alternative ways):
 - a. Access the ADV \rightarrow PIN menu and hold down the and keys simultaneously until the display shows "**DEL**".
 - b. On the old user's app, access the "Device list" page and hold down the icon of the device to be deleted until the deletion confirmation request appears. At the end of one of the two operations for deleting the device from your account, the icon will start flashing on the chronothermostat display.
2. On the new tenant app:
 - If you already have a personal Vemer account:
 - c. Choose "**New Thermostat**" \rightarrow Tuo \rightarrow "Already configured"
 - d. Enter the name, the PIN (to view the PIN, see **Configuring the Wi-Fi connection** in BOX 7) and an icon that helps identify the device. Choose "Save"
 - If you do not have a personal Vemer account yet, follow the registration procedure described in BOX 6 and start again from point "**c**" described above.

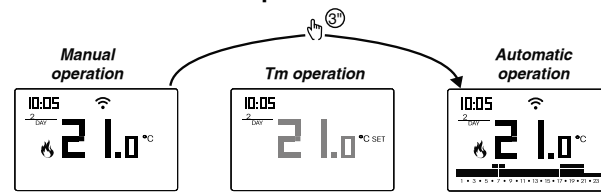
HOW TO DO WITHOUT CONNECTION

If device is unable to reach the Vemer Cloud for connectivity problems, **LOCAL OPERATION** allows the programming and configuration of the chronothermostat by acting on its keyboard without changing the settings in the Cloud. When used, it is indicated on the device with the icon and can be interrupted at any time by the App.

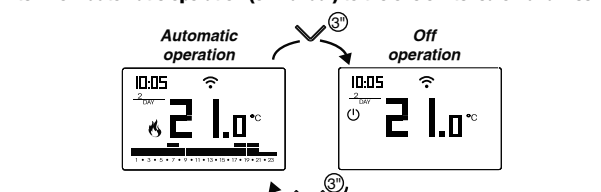
To switch from automatic to manual operation



To switch from manual to automatic operation



To switch from automatic operation (or manual) to the one switched off and vice versa



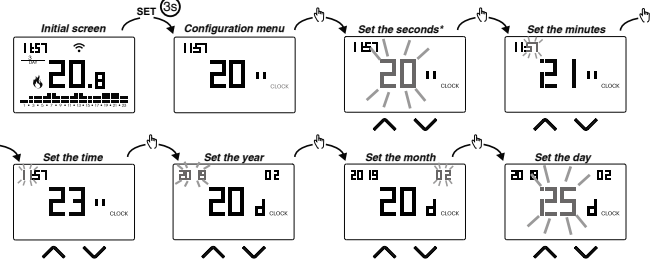
ENABLED / DISABLED LOCAL OPERATION

LOCAL OPERATION can be enabled or disabled in the "Advanced settings" of the App. If disabled, the icon appears on the device display and any setting made with the device keyboard is ignored.

7 LOCAL OPERATION - CONFIGURATION AND PROGRAMMING

CLOCK MENU - DATE AND TIME SETTING

When connected to the Wi-Fi network, the device acquires the date and time settings from the server and no settings are required. However, if you need to manually set the date and time values, proceed as follows:



To exit the date and time setting:

- press the key **SET** once to return to the configuration menu
- press the key **SET** twice to exit the menu and return to the initial screen
- to change the settings of the summer/winter time change, press and hold for a long time the key **⏸** (see "Configuration of the summer/winter time change")

Configuration of the summer / winter time change

You can configure the device to independently manage the summer time update.

The factory setting includes:

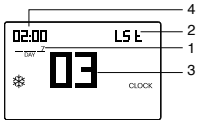
- the passage winter time → summer time (+1h) the last Sunday of March at 2:00 o'clock
- the passage summer time → winter time (-1h) the last Sunday of October at 3:00 o'clock

To change the configuration of the summer/winter time change:

- when changing any of the clock parameters (seconds, minutes, hour, year, month or day), keep the key **⏸** pressed for a long time until the display shows AUTO

If the function is enabled (AUTO ON), it is necessary to set:

- 1 the day of the week (1= Monday,...,7= Sunday)
- 2 the week of the month (1st= first, 2nd= second,...,Lst= last)
- 3 the month of the year
- 4 time



using the keys **⏸** and **⏹** to set the value and the key **⏸** to confirm and move on to the next parameter.

To exit the summer/winter time change configuration:

- press the key **SET** once to return to the configuration menu
- press the key **SET** twice to exit the menu

Note: the winter time change → summer time is identified by the symbol **☀**, the summer time change → winter time is identified by the symbol **☀**.

For example, in Italy the summer time starts the last (LST) Sunday (7) of March (03) at 2:00 o'clock and the last (LST) Sunday (7) of October (10) at 3:00 o'clock.

PROG MENU - PROGRAMS SETTING

Access the PROG menu to change the programming of the automatic operation.

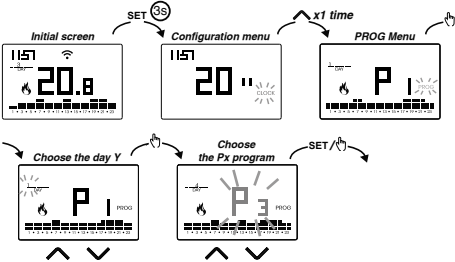
The factory setting includes:

- the P1 program from Monday to Friday
- the P2 program on Saturday and Sunday

If this program is not suitable for your needs, you can:

- assign a different program for one or more days of the week
- modify one or more existing programs by personalizing the profile, that is, assigning different temperature levels for one or more hours of the day.

How to choose a different program for the day Y



If the program meets the needs:

- press the key **SET** once to confirm and choose another day to which to assign a different program
- press the key **SET** twice to return to the configuration menu
- press the key **SET** three times to exit the menu and return to the initial screen

If no program meets the needs:

- choose the one that is closest to you and press the key **⏸** to customize the profile:
 - starting from midnight 00:00, press the keys **⏸** and **⏹** to assign to each hour of the day one of the 3 possible temperatures (T1, T2, T3) and the key **⏸** to confirm and go to the next hour.
 - to enter a switching delay for the selected hour, press the key **⏸** for a long time.

For more information about switching delay, see "How the switching delay works".

When the profile program is suitable for your needs:

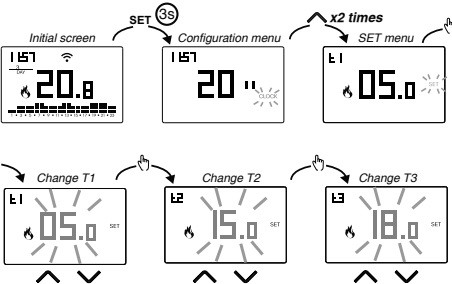
- press the key **SET** to exit the customization.

SET MENU - TEMPERATURES T1,T2,T3 SETTING

Access the SET menu to change the values of the 3 temperatures used in automatic operation. The factory setting includes:

- T1 = 5°C, T2 = 15°C, T3 = 18°C (heating/winter operation **☀**)
- T1 = off, T2 = 23°C, T3 = 25°C (conditioning/summer operation **☀**)

How to change the temperature values T1/ T2/ T3



To exit the temperature change:

- press the key **SET** once to return to the configuration menu
- press the key **SET** twice to exit the menu and return to the initial screen

Note: temperature values between LQ (minimum value) and H I (maximum value) are allowed.

These factory values are: LQ = 2°C, H I = 50°C but can be modified through the ADV menu.

Note: the condition T1 ≤ T2 ≤ T3 must be respected.

TIMER MENU - TIMING SETTING

Set a timing to prolong the current operation for the duration of the timing itself.

There are 3 timings available:

- Timed manual:** set a timing during manual operation to maintain this operation until timing has elapsed.

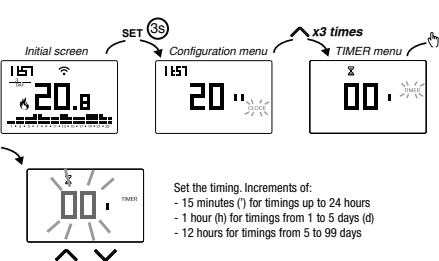
At the end of the timing, the device activates the automatic operation.

- Timed automatic:** set a timing during the automatic operation to maintain this operation until the timing has elapsed.

At the end of the timing, the device activates the off operation

- Off timed:** set a timing during off operation to maintain this operation until timing has elapsed. At the end of the timing, the device activates automatic or manual operation, depending on which operation was active before switching off.

How to set a timing



To exit the timing change:

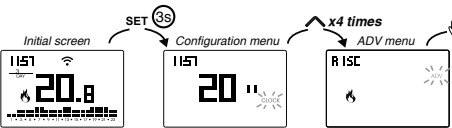
- press the key **SET** once to return to the configuration menu
- press the key **SET** twice to exit the menu and return to the initial screen

When a timing is in progress, the symbol **⌚** is lit.

Note: to cancel a timing in progress or to exit without activating the timer, set 00'.

Note: the timing ends in the case of changes to the operating mode.

ADV MENU - ADVANCED PARAMETERS SETTING



In the ADV menu, the parameters related to the advanced configuration of the device are proposed in sequence. Press:

- the keys **⏸** and **⏹** to change the value of the selected parameter
- the key **⏸** to go to the next parameter
- the key **SET** to exit and confirm the changes

Note: the device exits the menu after about 40 seconds without any key being pressed.

Operating mode

Setting up:

- R ISC** if the device is connected to a heating system (winter operation)
- Cond** if the device is connected to an air conditioning system (summer operation)

Factory value: R ISC (heating).

Type of regulation

(this menu is active only if operating mode = heating)

Setting up:

- ⏸** to choose on/off regulation.
- P** to choose proportional regulation.

Factory value: **⏸** (on/off).

Note: the on/off regulation is suitable for most home situations.

Therefore it is advisable to modify this parameter only in case of real need.

Parameters for the regulation type

(this menu varies depending on the chosen regulation type)

If the chosen regulation type is on/off, set the differential **d IF**.

Allowed values: 0.1°C ÷ 1°C Factory value: 0.3 °C

If the chosen regulation type is proportional,

set the band **band** and the period **PER**.

Allowed values: 0.5°C ÷ 5°C (band), 10, 20 or 30 minutes (period).

Factory value: 0.5 °C (band), 10 minutes (period).

Antifreeze temperature

(this menu is active only if operating mode = heating)

The antifreeze temperature avoids the risk of freezing of the system when on the chronothermostat is set the off operation **⏸**.

Allowed values: ---, 1°C ÷ 50°C Factory value: 6 °C.

Note: the " --- " setting excludes the antifreeze function; in this case, when the device is off, no minimum temperature is guaranteed

Adjustment of the measured temperature

In particular installation conditions, it can happen that the temperature measured by the device deviates from the average temperature present in the room. In this case, introduce an adjustment temperature with the ADJ menu.

Allowed values: -5°C ÷ 5°C Factory value: 0 °C.

Note: the temperature value shown on the display during normal operation is inclusive of any adjustment introduced.

Wi-Fi connection configuration

This sub-menu consists of 3 different screens and described below.

To switch from one screen to another, use the keys **⏸** and **⏹**.

- the device PIN. It is a 4-digit number necessary to associate the device with your Verner account.

This screen also shows:

- the status of the Wi-Fi connection:

☀ on fixed: device connected to the home network

☀ flashing: search for Wi-Fi network in progress

- the association between the device and Verner account:

☀ on fixed: associated with a Verner account

☀ flashing: not associated with any Verner account

Note: during the first 20 seconds or so of this screen viewing the icon **⏸** is always flashing.

- The MAC address of the device is a sequence alphanumeric that uniquely identifies a device within a network of devices. Reading must be done from left to right by scrolling through the 2 dedicated pages using the arrows (in the example: AA-F8-FA-C2-8d-7b).

- the intensity of the signal between the device and the router (FLD).

For values:

- higher than -60dB: excellent signal quality
- between -60dB and -90dB: good signal quality
- lower than -90dB: poor signal quality that could compromise communication between device and router. In this case, bring the device closer to the router.

Minimum/Maximum settable temperature

Under particular installation conditions, for example in public buildings, hotels, etc., it may be useful to limit the range of values that the temperatures T1/T2/T3 and Tm can assume, in order to prevent incorrect settings by the user.

- LQ** is the lower limit
Allowed values: 2°C ÷ H I Factory value: 2°C

- H I** is the upper limit
Allowed values: LQ ÷ 50°C Factory value: 50°C

Password for key lock

Under particular installation conditions, for example in public buildings, hotels, etc., it may be necessary to lock the keypad to prevent changes to the settings by unauthorized persons.

To activate the keypad lock, set a password between 001 and 999.

To deactivate the lock, press the key **⏹** until you set "--".

When the keypad lock is active, the symbol **⏸** appears on the display and, after pressing a key, the word BLOC appears.

To find out how to unlock the keypad, see "Keypad unlock"

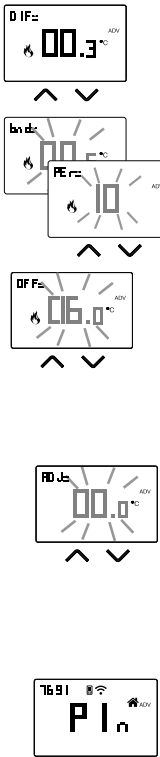
Hour meter of system operation

It displays the operating hours of the system (relay contacts on C-NA).

The device has two counters (5-digit) independent for heating operation and for the conditioning operation, but is displayed only the counter of the selected operation mode.

To reset the counter, press the key **⏸** for a long time during the display.

The maximum count is 65535h (about 7 years), when this digit is reached, the counter resumes the count from 0h.

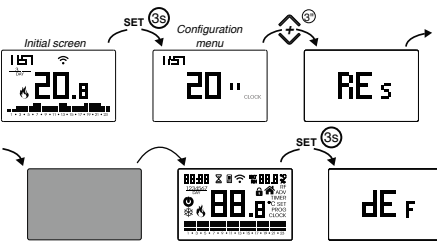


DEVICE RESET

Perform a reset to delete the settings entered and restore the device to the factory settings (excluding the network settings for remote control which can be changed as described in BOX 6).

To reset:

- from the initial screen, press the key **SET** to enter the configuration menu.
- The CLOCK indication flashes.
- press the keys **⏸** and **⏹** simultaneously until "r-ES" appears on the display.
- when the display shows all the segments, press the key **SET** until "dEF" appears



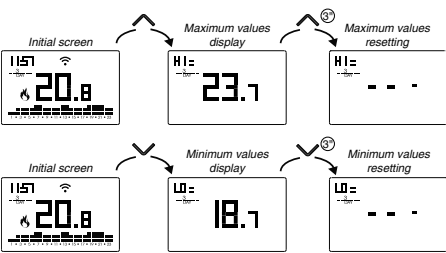
- ⚠ To reset if the key lock is active and you do not know the unlock password, you must remove and restore power and, when the display shows all the segments, press the key **SET** until "dEF" appears.

Operation mode	heating (winter)	Add. ADJ temperature	0 °C
Regulation type	on/off	Min. settable temperature	2 °C
Differential (on/off)	0.3 °C	Max. settable temperature	50 °C
Band (proportional)	0.5 °C	Hour meter operation ☀	0 h
Period (proportional)	10 minutes	Automatic summer time change	active (according to EU rules)
Antifreeze temperature OFF	6 °C	Backlighting	active
		Key lock password	deactivated

OTHER FUNCTIONS OF THE DEVICE

Display of minimum/maximum daily temperature

The device stores the minimum and maximum temperature values measured during the day.



Keypad unlock

When the key lock is active, the device adjusts the temperature using the set programming. In this condition, after pressing a key, the display shows the writing "bL Qc".

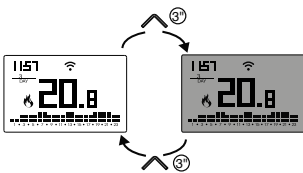
To unlock the keypad:

- While displaying the writing "bL Qc" press the key any of the 4 keys for a long time until the display show " --- ".
- Enter the correct password using the keys **⏸** and **⏹** and confirm with the key **⏸**. The keypad remains unlocked for about 45 seconds from the last press of a key, after which the keypad reactivates the lock. To remove the key lock, see "Password for key lock".

Display backlighting

The blue backlighting of the display during normal operation is on but can be turned off if the installation requires it (for example in bedrooms).

In this condition, the thermostat continues to work normally and the backlighting turns on when you enter the setpoint modification, advanced programming, pin insertion.



REFERENCE STANDARDS

EU Conformity Declaration

Verner declares that the device complies with the Community Directive 2014/53/EU (RED) with reference to the following standards:

- EN 60730-2-7 • EN 60730-2-9 • ETSI EN 300 328 • ETSI EN 301 489-1 • ETSI EN 301 489-17

The full text of the EU Conformity Declaration is available at www.verner.it address.