

1C.51

DIGITAL TOUCH CHRONOTHERMOSTAT



finder®
SWITCH TO THE FUTURE

TECHNICAL DATA	page 2
DIMENSIONS	page 2
INSTALLATION	page 3
ELECTRICAL CONNECTIONS	page 5
BATTERY	page 6
START UP	page 7
KEYS	page 8
SYMBOLS	page 9
TIME/DATE SETTING	page 10
MANUAL MODE	page 12
DISPLAY LOCK	page 13
FULL THERMOSTAT LOCK MODE (WITH PIN)	page 14
TEMPERATURE SETTING	page 16
PROGRAMMING	page 17
TIMED MANUAL FUNCTION (VACATION PROGRAM)	page 20
PARTY FUNCTION	page 21
FROST PROTECTION FUNCTION	page 22
REMOTE CONTROL	page 23
ADVANCED MENU	page 24

Power supply: **2 Alkaline Batteries 1.5 V AAA**

WINTER temperature range: **(+5...+37)°C**

SUMMER temperature range: **(+5...+37)°C**

MANUAL temperature range: **(+5...+37)°C**

FROST protection temperature range: **(+2...+8)°C**

Temperature differential ΔT : **(0.1...0.9)°C**

Internal sensor accuracy: **+/- 0.5°C**

Minimum programming interval: **1 hour**

Degree protection: **IP20**

Output: **relay 1 CO (volt-free contact)**

Contact rating: **5A 250VAC**

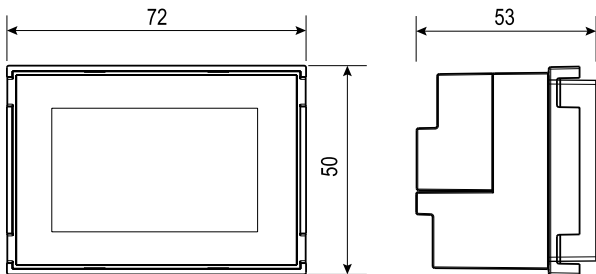
Mounting: **recess mount in wall or box**

ADDITIONAL NOTES

There are 3 audible alerts:

- **SHORT BEEP**: confirmation that key is pressed
- **3 LONG BEEPS**: confirmation that the information is saved
- **TRILL**: error

DIMENSIONS



SAFETY REQUIREMENTS

Before connecting to this programmable thermostat, make sure that the load (heater, pump, etc.) is not connected to the supply and that the load is within the ratings marked on the thermostat.

POSITIONING

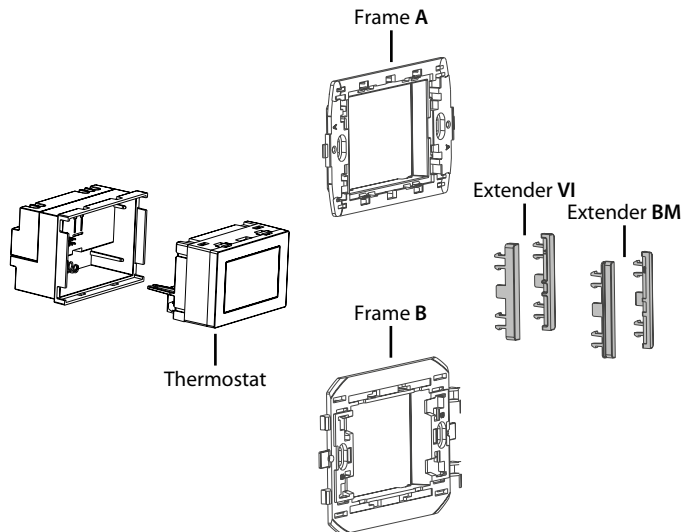
Install the programmable thermostat away from sources of heat (heaters, direct sunlight, kitchens) and from doors/windows, at a height of about 1.5 m above the floor.

CLEANING

For cleaning-use only a damp cloth.

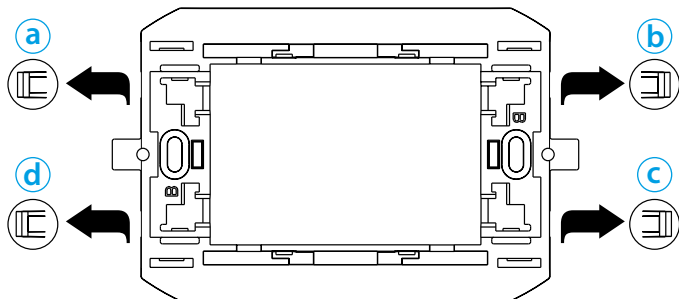
START UP

Install the thermostat using the correct accessories (see the table in the following page).

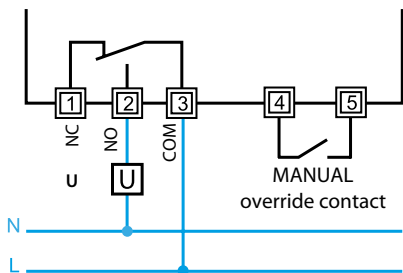


	Frame A	Frame B	Extender VI	Extender BM
ABB: Chiara				
ABB: Mylos				
Ave: Serie 44				
Bticino: Living, Light, Light Tech, Livinglight, Axolute				
Bticino: Matix		*		
Gewiss: Chorus		*		
Vimar: Arke				
Vimar: Eikon, Eikon Evo, Plana				
Vimar: Idea				
Bticino: Livinglight Air	with 01C.51			

* = remove the side supports (a - b - c - d)



WIRING DIAGRAM



Insert the batteries into the battery compartment, observing the correct polarity.



ATTENTION

- Incorrect placement of the batteries (reverse polarity) may damage the thermostat
- If the battery charge falls below the minimum level, the thermostat is placed in the OFF state and the output relay releases
- If the thermostat remains unused for long periods it is advisable to remove the batteries




The thermostat provides 3 different reports of battery condition:



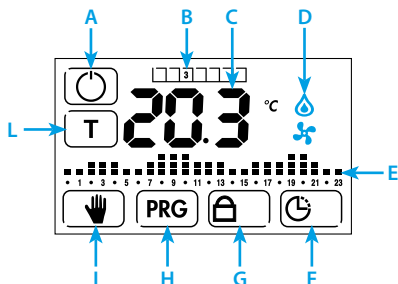
- With the battery **ON (STEADY)**, operation of the thermostat will soon be compromised
- With the battery **FLASHING** imminent replacement of batteries is necessary
- With the **bat/OFF** **FLASHING** the thermostat is in the OFF state and the output relay releases

NOTE

Replacing the batteries at the initial warning ON (STEADY) and taking no more than 40 seconds, the date and time will not be erased.

Insert the batteries and for a few seconds the display will show all the symbols, keys and the software version - before entering the time and date routine. Set the latter by using the keys   to modify the values and  to confirm (see pages 10/11).













After that, the thermostat will revert to the main screen:




- A Thermostat ON/OFF switch
- B Days of the week (indicated numerically from 1 to 7)
- C Temperature display in Celsius
- D Active icons (eg: fan = Cooling ON, flame = Heating ON)
- E Time/temperature profile
(The column corresponding to the current time will flash)
- F Allows the TIME and DATE to be set
- G Key to activate or de-activate the LOCK mode
- H Key to enter programming
- I Key to activate MANUAL
- L Key to set the 3 levels of temperature


NOTE


A tap to the center of the display will activate the back-light for 4 seconds. A second tap within the 4 seconds will display the current time of day, for 4 seconds.

-  Thermostat ON/OFF switch
-  Display/setting the three temperature levels
-  Activates and sets the MANUAL mode. Pressed for 3 seconds it is possible to program the TIMER MANUAL mode
-  Programming. Pressed for 3 seconds activates the PARTY mode
-  Pressed for 3 seconds activates or deactivates the LOCK mode
-  Allows the TIME and DATE to be set
-  Pressed for 3 seconds, it is possible to access at the advanced menu
-  Changes the data displayed (increase)
-  Changes the data displayed (decrease)
-  Confirms the information displayed on the display
-  Press once to return to the previous data.
Press for 3 seconds to exit the menu displayed
-  Returns to the previous data (in the advanced menu)

 Displayed during the TIME/DATE setup or when time is shown

 Heating ON (in WINTER mode)

 Cooling ON (in SUMMER mode)


 Frost protection ON

 Displays Low battery

°C Unit of measurement

ΔT Temperature differential

 Indicates the LOCK mode active


 24 hour time/temperature profile
0 1 2

1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Displays the days of the week



1	2	3	4	5	6	7
---	---	---	---	---	---	---

 Displays the days of the week selected


To set time and date press .

Data to be set appears in the following order:

HOURS/MINUTES/DAY/MONTH/YEAR

Figures that are flashing, can be changed using the keys  .



Confirm with  and advance to the next parameter.

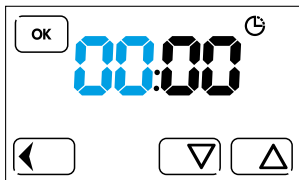
To step back or exit from the menu, press .


EXAMPLE

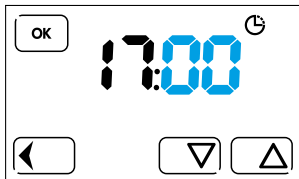
Press .


The **HOUR** flashes.

Enter the correct time through keys  .

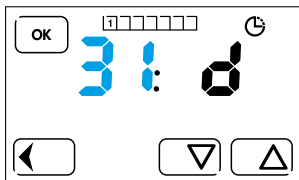


Pressing  confirms the hour setting and it is then possible to set the **MINUTES**, using the same method.

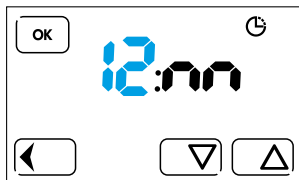


Press  to confirm the minutes setting.

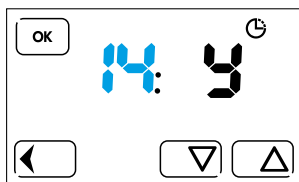
Then proceed to set the **DAY**



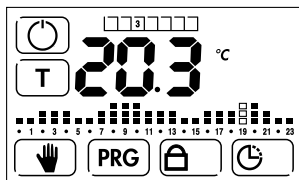
Press **OK** to confirm the **DAY** and proceed to set the **MONTH**





Press **OK** to confirm the **MONTH** and proceed to set the **YEAR**




Press **OK** to confirm and exit the Time/Date setting menu.
The display will then show the main screen.

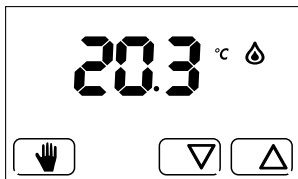




NOTES


- Removing the batteries, the thermostat has a power reserve of 40 seconds, after which, settings, hours, minutes, day, month, year, will be lost
- The day of the week number is automatically set based on the calendar
- Pressing  you can step back to the previous setting
- Pressing  for more than 3 seconds, you will return to the main screen, saving however, all confirmed values up to that point with the key **OK**

From the main screen press .

The display shows the manual temperature, previously set.






To change it, use  to increase or  to decrease the value.

To confirm and exit, press .


NOTE


If you do not touch the display for 3 seconds, the screen will revert to show the current measured temperature.


To set a new temperature press either  or .

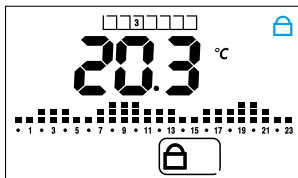
To exit and return to the main screen, press .

This function protects the thermostat from accidental touch, blocking ONLY the display.

To activate, it is necessary to press  for 3 seconds.

The symbol  flashes adjacent to the displayed temperature indicating that the lock is activated.

To deactivate, press  for 3 seconds.






(display locked)

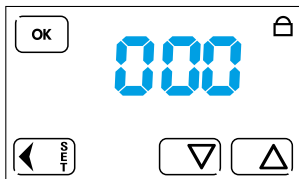
NOTE






To use the DISPLAY LOCK, it is necessary that the PIN set in the FULL THERMOSTAT LOCK mode menu is **000** (see page 28).

This advanced feature, serves to completely lock the thermostat. To enable it, you must set a 3-digit PIN that will be required every time you want to lock or unlock the thermostat.

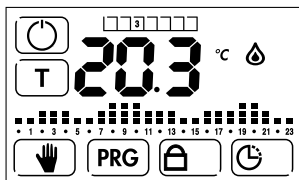
To set and register the PIN:



- Turn off the thermostat with the key 
- Press  for 3 seconds to enter into the ADVANCED SETTINGS
- Press  until the screen shows **000** which then allows the personal PIN code to be entered



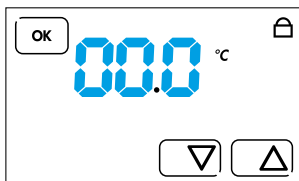
Press keys  or  to attain the PIN number and confirm with . It is now possible to exit from the Advanced settings, pressing key  several times or key  until three beeps confirm that the PIN is successfully registered.




The thermostat remains turned off.

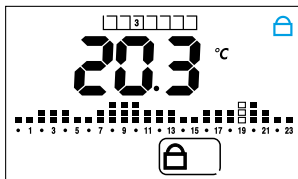




To activate the thermostat lock function with the PIN, press  to turn on the device and then press  for 3 seconds.

The following screen appears



Using keys  or  enter the PIN previously set in the advanced settings and press . 3 beeps will confirm that the lock is active and the display will show the following screen



To unlock the thermostat, press and hold key  for 3 seconds. The display will show **000**. Enter the PIN and confirm with . 3 beeps confirm that the lock has been disabled.

ATTENTION

After 3 failed attempts, it will not be able to enter any PIN for 20 seconds. The **ERR** message will remain fixed on the display.

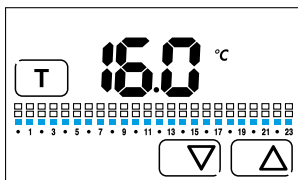
NOTE

Also, on removing and inserting the batteries, the thermostat will remain with the display locked.

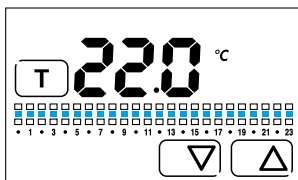
If you forget the PIN it is possible to enter **the unlock code 513**.

Once unlocked, you may want to return to the advanced settings to check and/or change the PIN, previously entered.

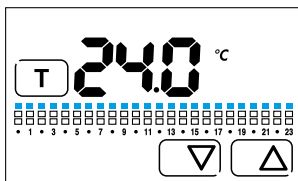
Press **T**, and the first level of temperature will flash.



Set the desired temperature using the keys **Δ** or **▽**.
Press **T** to confirm and to pass to next temperature level.



Set the desired temperature using the keys **Δ** or **▽**.
Press **T** to confirm and to pass to next temperature level.



Set the desired temperature using the keys **Δ** or **▽**.
Press **T** finally to return to the main screen.

NOTE

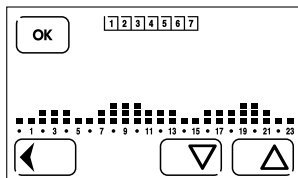
- Level 1 will be the lowest temperature of the 3 levels.
Levels 2 and 3 being progressively higher.
- With the SUMMER setting, the association between Level and temperature is reversed (ie. Level 3 represents the lowest temperature).

Press **PRG** to enter programming menu.

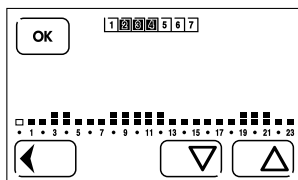
SELECT THE DAY(S) TO BE PROGRAMMED

Starting with day 1 (Monday) blinking, move across each day in turn by pressing

△ or **▽**.



During this process select using the key **OK** those day(s) required to have the same time/temperature profile. Day(s) so selected will now appear on a black background. Press in the middle of the profile to pass to programming the time/temperature profile.



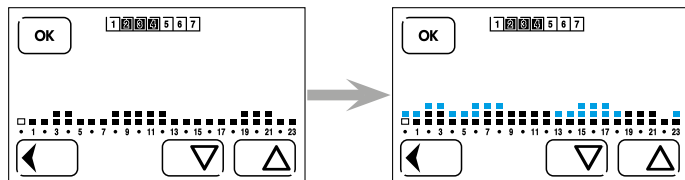
PROGRAMMING THE 24 HOUR TIME/TEMPERATURE PROFILE

Starting with the zero hour segment of the profile blinking.

With **△** or **▽** select the required level of temperature.

Confirm with **OK** and pass to next hour segment.


Program in the same way, all the time segments.

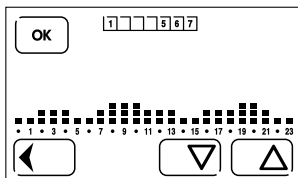



NOTE With **◀** it is possible to step back to the previous hour.


Pressed for 2 sec, it is possible to exit from the programming, saving all the changes confirmed until that moment.

After all 24 hours have been programmed, 3 beeps will confirm acceptance of the program and the display will show only the days yet to be programmed (the days that at the beginning were not selected).

Now is possible to continue the programming of the remaining day(s), by the same process described above or exit from the menu with the key .





When the programming is finished, press the key  to exit from the advanced menu.

Everything confirmed with the key  will be saved.

The display will then show the main screen.

NOTE

- At any time it is possible to exit from the programming by pressing  for 3 sec, returning to the main screen.
- To review the schedule for each day of the week. From the main screen, press  and scroll with the arrows, through the days, numbered 1-7.
- Each day will show the profile programmed.

COPY FUNCTION

Press **PRG** to enter the programming menu.

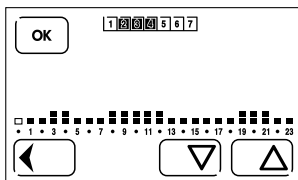
Day 1 blinks (Monday).

Navigate between days by pressing **▲** or **▼**.

For example, to copy the program of day 2 into days 3 and 4, select (by **OK**)

the day 2 before selecting the days 3 and 4.

These days will be highlighted by a black background

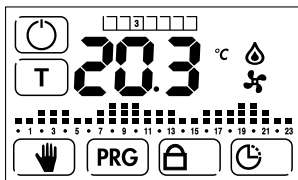


Press the time/temperature profile.

With the first hour of the profile flashing, press key **◀** for 3 seconds.




3 beeps confirm that the copy of the program is registered.

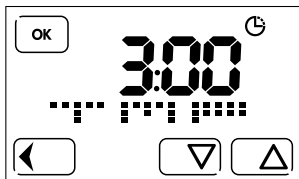
Press **◀** to exit the copy program.







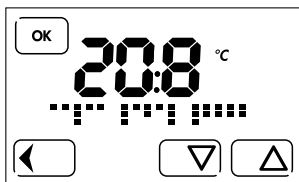
NOTE

To review the schedule for each day of the week, from the main screen, press **PRG** and scroll with the arrows through the days numbered 1-7. Each day will show the profile programmed.

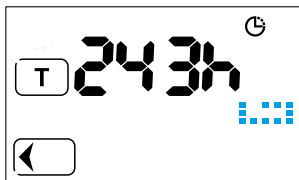
This function serves to maintain a specified temperature for a specific time, set by the user. Starting from the main display press  for 3 seconds. You will see the following screen. With keys  or  set the time (hour) after which this function will terminate. The maximum is 9999 hours.





Confirm with  and proceed to set the temperature in the same way by the keys  or . Confirm with .



Following confirmation, a digital countdown plus a circular motion graphic will be displayed.



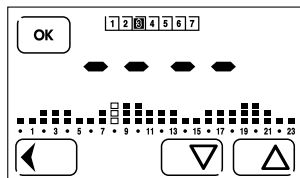
Press  to view the set temperature. To exit from the vacation program, press the key .

- Shows "hours:minutes" until 99 hours and 59 minutes
- Shows only the hours with the "h" symbol, until to 999 hours.
- Shows only the hours without the "h" symbol, from 1000 to 9999 hours

With this function, you can temporarily change the values set for the 24 hour profile.

The function will last 24 hours and will not be saved.

Starting from the Main screen, press **PRG** for 2 seconds



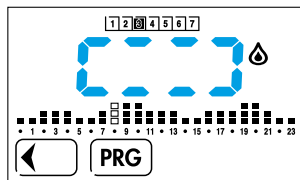
The display shows the profile for the current day, with the current time segment, flashing (eg hour 8).

With **▲** or **▼** it is possible to change the temperature level.

Confirming with **OK** move to the right towards the other hours of the day, while using the key **◀** it is possible to go back to the previous hour value.

After the change(s) there is no need to press any other keys.

After a few moments, the function starts, indicated on the display by a sequential circular motion.



NOTE



The changes you make will be active for 24 hours, then return back to original programming.

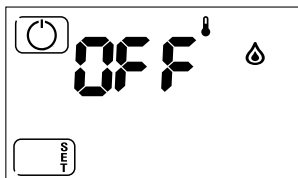
After the operation, the display will show the main screen.


At any time, is possible to end the Party Function with **◀**, while to view or edit the profile you will need to press **PRG** and repeat the process of change.

The frost protection function is active only when the thermostat is set to WINTER and is OFF.



It serves to protect the system against very low temperatures.

Upon reaching the set threshold, the function will be activated and the display will show the icons  .



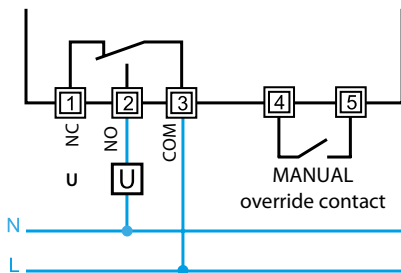
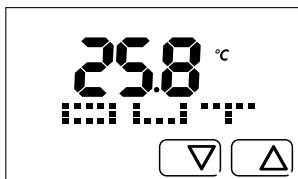
At any time, press  to turn on the thermostat and view the main screen.

Closing the remote control contact forces the thermostat into the MANUAL mode.

In this state, the temperature can be adjusted only by using the  or  keys.


NOTE


The temperature initially displayed will be the temperature previously set in the Manual mode



The advanced settings are useful for customizing the thermostat.
The settings are:

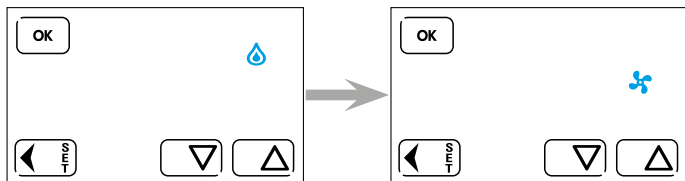
- 1 - SUMMER-WINTER mode
- 2 - FROST PROTECTION Function
- 3 - TEMPERATURE DIFFERENTIAL
- 4 - ANTI-SEIZE PUMP Function
- 5 - DAYLIGHT SAVING Function
- 6 - FULL THERMOSTAT LOCK mode (with PIN)
- 7 - RESET



To enter to advanced settings, start from the main screen, press  to turn off the thermostat.


Press the key  for 3 second.



1 - SUMMER-WINTER mode

The display shows one of the following screens



Choose the desired mode using the key  or .

Press  to confirm and proceed to the next menu.

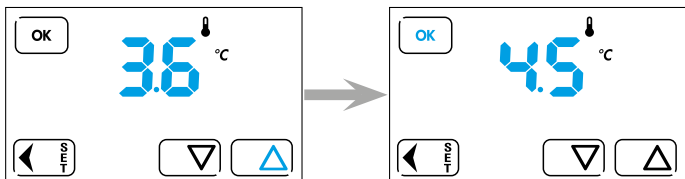
To exit, press  or  until the message OFF appears on the screen.

If a change has been made, 3 beeps will confirm it has been accepted.

2 - FROST PROTECTION function

After setting the Summer or Winter mode, pressing **OK** the display will show the following screen.

With the keys **▲** or **▼** it is possible to set the desired value, between 2°C and 8°C. Press **OK** to confirm and proceed to the next menu.

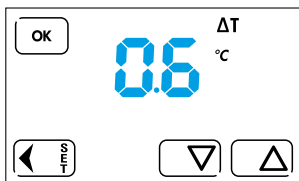


To step back in the menu press **SET**, while to exit, press the key **SET** for 3 seconds or press **OK** repeatedly until the message OFF appears on the screen.

If something has been changed, 3 beeps will confirm the successful change.

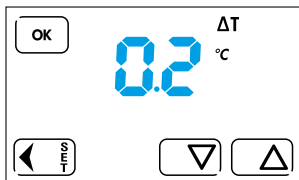
3 - THERMAL DIFFERENTIAL




After confirming with the button **OK** the desired value of the frost protection, the display will show the following screen.




Using keys **▲** or **▼** it is possible to set the value of the thermal differential between 0.1 and 0.9.

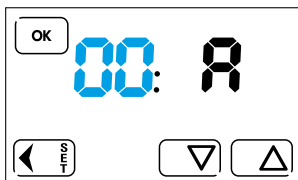
Confirm with the key **OK** and proceed to the next menu.



To step back in the menu press , while to exit, press the key  for 3 seconds or press  repeatedly until the message OFF appears on the screen. If something has been changed, 3 beeps will confirm the successful change.

4 - ANTI-SEIZE PUMP function

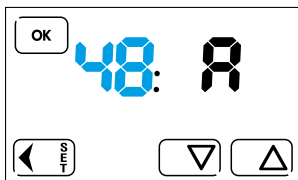
After programming the thermal differential, press  to display the following screen






(Anti-seize function OFF)




The anti-seize pump function is a function that will configure the thermostat as an asymmetrical timer. By setting a value between 1 and 99 hours, the thermostat will close the output contact for 30 seconds, every time the set time value has elapsed.

Example:



By setting with keys  or  the value 48 (48 hours = 2 days) and confirming with , the thermostat will close the relay contact for 30 seconds, every 2 days.

After enabling the function in the menu, the count will start after the last switching off of the relay.

To step back in the menu press , while to exit the Advanced Menu, press and hold the  for 3 seconds, or press  repeatedly, until the screen shows OFF.

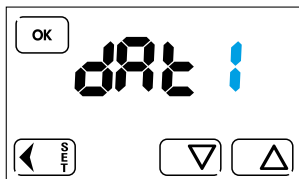
If something has been changed, 3 beeps will confirm the successful change.

5 - DAYLIGHT SAVING function

This function allows you to set the thermostat such that:

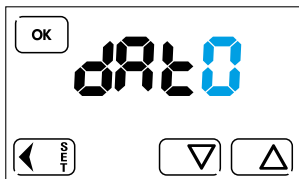
- Daylight saving time changes automatically
- Daylight saving time does not change automatically

The screens appear as follows:



Confirming with **OK** the thermostat will automatically change to daylight savings time.

With the keys **▲** or **▼** it is possible to change this value to **0** ZERO so that the daylight saving changeover does not happen automatically.



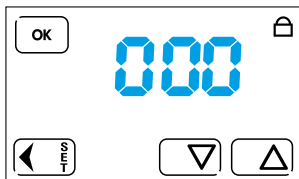
Press **OK** to confirm and proceed to the next menu.

To step back in the menu press **◀ SET** while to exit from the Advanced Menu, press and hold the **◀ SET** for 3 seconds, or press **OK** repeatedly, until the screen shows OFF.

If something has been changed, 3 beeps will confirm the change.

6 - FULL THERMOSTAT LOCK MODE (WITH PIN)

Through this menu, you can enable the LOCK function for just the display, or for the entire thermostat, thus avoiding tampering (see p. 13 and 14). On the Advanced Menu, press **OK** until the following screen is displayed:



To enable the lock mode for the display only, set the PIN to 000 using the **▲** or **▼** keys.

To enable the lock mode for the entire thermostat set the PIN to a number between 001 and 999.

When in service, if it is required to lock the display just press the key **🔒** for 3 seconds (see pag. 13). To lock the entire thermostat press **🔒** for 3 seconds, enter the PIN set previously, and confirm with **OK** (see p.14).

To unlock, repeat the same procedure.

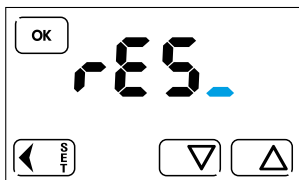
NOTE

If the PIN has been forgotten, enter the **unlock code 513**.

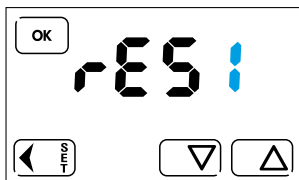
Once unlocked you may want to return to the advanced menu to verify and/or change the PIN previously entered.


7 - RESET

This will restore all factory settings.



Using  or , set rES i.



Confirming with  the thermostat will turn off completely and then turn back on showing first the version of the software and then the main screen. The product will be reset to its factory settings.

NOTE

Time and date will not be cleared/reset.



finder[®]
SWITCH TO THE FUTURE