1C.61

SLIDER CHRONOTHERMOSTAT

finder®

SWITCH TO THE FUTURE

INDEX

Power supply: **2 Alkaline batteries 1.5 V AAA**
Winter temperature range: **(+6…+24)°C**
Summer temperature range: **(+18…+30)°C**
Manual temperature range: **(+5…+37)°C**
Frost protection temperature range: **(+2…+8)°C**
ON/OFF hysteresis: **(0.1…0.9)°C**
Internal sensor accuracy: **+/– 0.5°C**
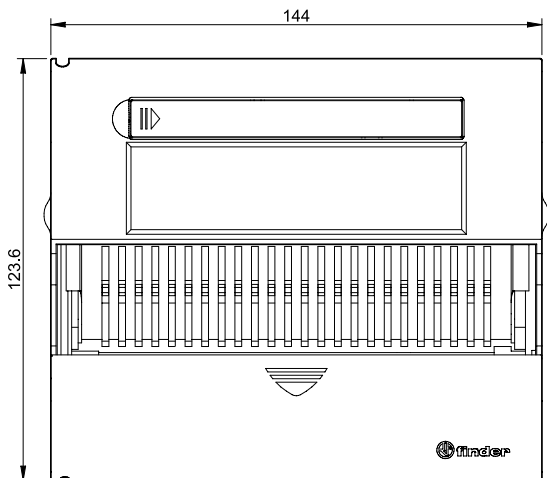Minimum programming interval: **1 hour (15 min with delayed startup activated)**
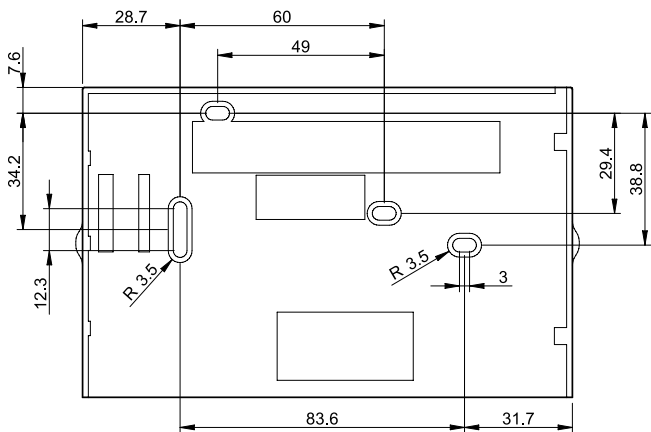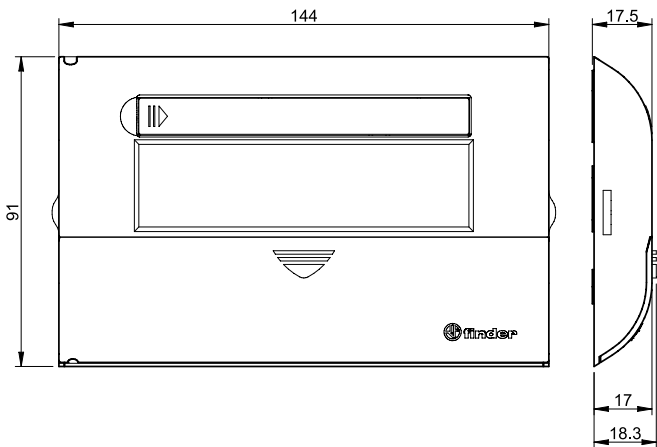
Degree protection: **IP20**
Output: **relay 1 CO (volt free contact)**
Contact rating: **5 A 250 V AC**
Mounting: **to the wall**

144

17.5

91

17

18.3

28.7

60

49

7.6

34.2

29.4

38.8

12.3

R 3.5

R 3.5

3

83.6

31.7

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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 shown inside the thermostat.

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

CLEANING
For cleaning - use only a damp cloth.

INSTALLATION
- Press to release the small catch with the aid of a screwdriver (fig.1)
- Fix the base to the wall
- Connect the load to the terminals following the wiring diagram (fig.2)

ELECTRICAL CONNECTIONS (fig.2)
U = equipment load
C = common terminal
NO = normally open terminal
NC = normally closed terminal

ATTENTION
- **Fix the base on a flat surface**
- **Use only the screws provided**
- **When installing do not twist the base of the thermostat**
- **Do not poke the base, or insert the screws in areas not intended**
- **Once mounted, to extract the thermostat, pull from the wall, using the two the side flaps (do not twist or rotate the structure)**
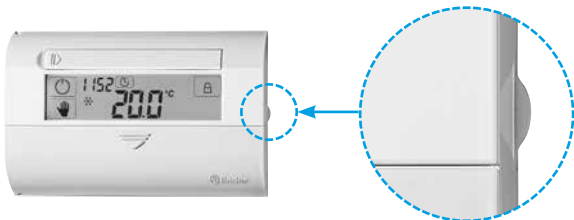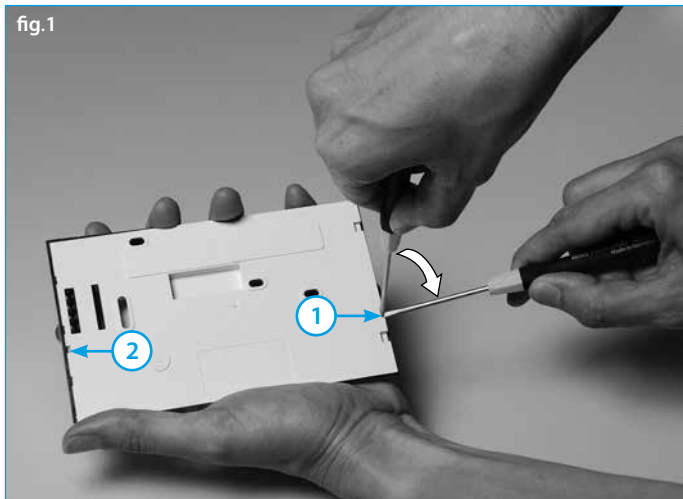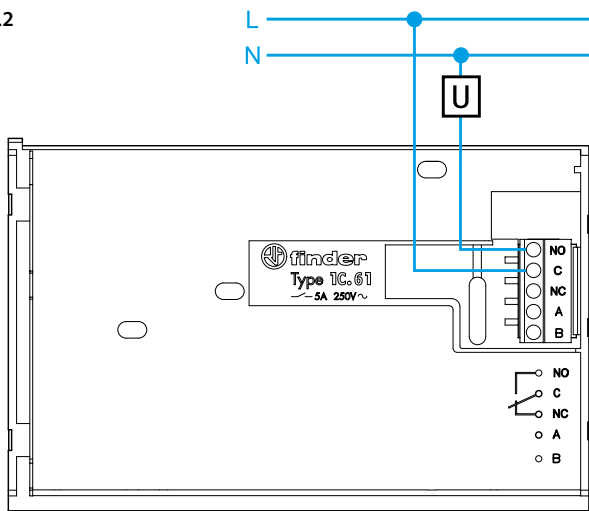
fig.1

fig.2

To insert or change the batteries, see the picture below.

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 icon **[icon] ON** (STEADY), operation of the thermostat will soon be compromised.

With the battery icon **[icon] FLASHING** imminent replacement of batteries is necessary.

With the **BAT OFF FLASHING** the thermostat is in the OFF state and the output relay releases.

Insert the batteries, the display will show the software version.
And, after a few seconds, the thermostat will automatically turn on, showing
the main screen:

SWITCH ON / OFF

TIME   TIME / DATE SETTING

MANUAL   TEMPERATURE   LOCK

WINTER MODE
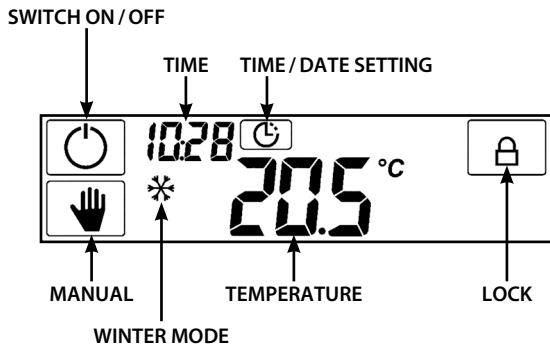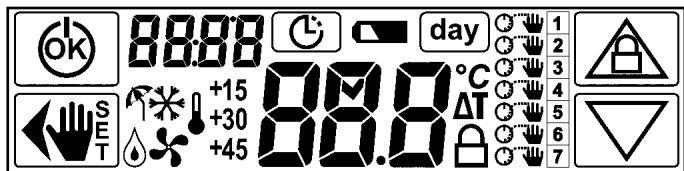
WITH THERMOSTAT OFF

⏻ Switch on the thermostat

SET Pressed for 3 seconds, it is possible to access at the advanced menu

WITH THERMOSTAT ON

⏻ Switch off the thermostat

✋ Activates the MANUAL mode. Pressed for 3 seconds it is possible to program the TIMED MANUAL mode (HOLIDAY function)

🕐 Allows the time and date to be set

🔓 Activates or de-activates the LOCK mode

day (Visible only if activated in the advanced menu). Allows the DAY mode to be enabled or disabled

ADVANCED SETTINGS

OK Confirms the information displayed on the display and advances to the next screen

△ Changes the data displayed (increase)

▽ Changes the data displayed (decrease)

◀ SET Press once to return to the previous data. Press for 3 seconds to exit the menu displayed

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The display is back-lit. Each time that the display is touched, a key pressed or the sliders moved, the display will activate the backlight for about 5 seconds. The symbols showed on the display are:

|	
☂	Summer setting (cooling)
❋	Winter setting (heating)
◊	Heating ON
❈	Cooling ON
🌡	Frost protection ON
+15 **+30** **+45**	Shows time segment is delayed by 15, 30 or 45 minutes, compared with the time indicated by the slider
▬	Low battery
°C	Unit of measurement
ΔT	ON/OFF hysteresis
🔒	Indicates that the LOCK mode is active
◷	In the DAY mode - indicates **Thermostat OFF**
⌇	In the DAY mode - indicates **Programming by sliders**
✋	In the DAY mode - indicates **Manual setting**
1 2 3 4 5 6 7	Indicates days of the week
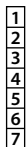
To set time and date press the button 🕒.
Data to be set appears in the following order:
HOURS/MINUTES/DAY/MONTH/YEAR
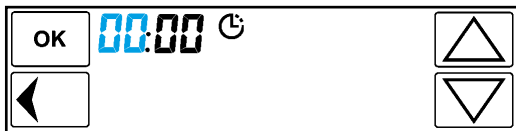Figures that are flashing, can be changed using the keys △ ▽.
Confirm with OK and advance to the next parameter.
To go back or exit from the menu, press ◀.

EXAMPLE
Press 🕒.
The hour flashes. Enter the correct time through keys △ ▽.

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

Press OK to confirm the minutes setting. Then proceed to set the **DAY**.

Press OK 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.

From the main screen press 🖐

the manual temperature previously set will flash.

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 the measured (current) temperature.

This function protects the thermostat from accidental touch, blocking ONLY the display keys.
To activate, it is necessary to press 🔒 for 2 seconds.
The symbol 🔒 appears adjacent to the displayed temperature indicating that the lock is activated. To deactivate, press 🔒 for 2 seconds.
Note: it is still possible to vary the set temperature, using the sliders.

(**display locked**)

This advanced feature, serves to completely block the thermostat (**both the display and sliders**).
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 OK until the screen shows **CODE** which then allows the personal PIN code to be entered

Press the keys △ ▽ to attain the PIN number and confirm with OK.
It is now possible to exit from the Advanced settings, pressing key OK several times or key ◀.
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

With the keys $\triangle$ or ∇ enter the PIN previously set in the advanced settings and press $\boxed{\text{OK}}$.
The chronothermostat will show the following screen

The temperatures set by the position of the sliders before the block, will be stored.
The display will be locked (showing current time and temperature) and the sliders disabled.
To unlock the thermostat, press and hold key $\boxed{\text{🔒}}$ for 3 seconds.
The display will show **CODE**.
Enter the PIN and confirm $\boxed{\text{OK}}$.

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 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.

On the chronothermostat there are 24 sliders, each one identifies a one hour time segment in the day.
Each slider can adjust the temperature from 6°C to 24°C in the WINTER mode and from 18°C to 30°C in the SUMMER mode.
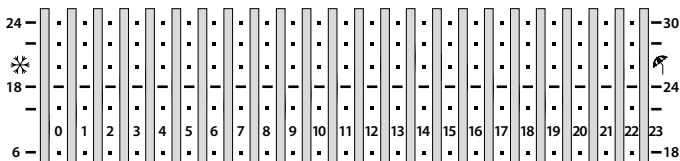
For every movement of the slider, the display will show for a few seconds, the hour in the day and the temperature being set, related to that slider.

NOTE
In this example, the slider for the 12th hour of the day has been set for a temperature of 20.5°C.

This feature allows you to delay the start of any of the 24 time "segments" by 15, 30 or 45 minutes.

This has the effect of being able to time the start of a temperature change to the nearest 15 minutes, rather than 60 minutes.

To activate, it is necessary to enter into the advanced settings and enable the corresponding function.

Enable the function in the advanced menu

Turn off the thermostat with the button ⏻

Press for 3 seconds to enter **ADVANCED SETTINGS**.

Press OK several times until the following screen is seen.

Press either △ ▽ to enable the function and confirm with OK .

It is now possible to exit from the advanced settings by pressing OK repeatedly or for 3 seconds.

The thermostat remains turned OFF.

Now press ⏻ to turn the thermostat ON.

Using the DELAYED START TO TIME SEGMENT feature

After enabling the feature in the advanced settings, and starting from the main screen, open the slider protective cover and move the slider concerned. This movement causes the display to show the time segment and temperature associated with that slider, and also the key △ .

By pressing △ set the delay to either 15, 30 or 45 minutes after the time as defined by the slider.

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After a few seconds, the value will be stored and the display will return to show the main screen.

NOTE
When the delay program is running and the segment time is reached, the display will show the set delay i.e. **+15**, **+30**, **+45**.

This function serves to maintain a specified temperature for a specific time, set by the user.
After the timeout, the device will return to normal conditions of use, showing the main screen again.

Starting from the main display

press 🖐 for 2 seconds. You will see the following screen
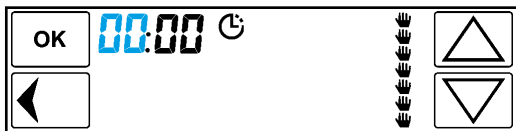
With keys △ ▽ set the time (hour) at which this function will terminate.
Confirm with ⟨OK⟩ and proceed to set the minutes in the same way.
Then you need to set (with the same procedure) the day

the month

and the year

Confirming with [OK] it is then possible to set the desired temperature, using the keys [△][▽].

Confirm the temperature with [OK], and the thermostat starts the function (as indicated on the right side, by a sequence of hands which run from top to bottom).

NOTE
When the function is active, the display shows the measured (current) temperature and not the temperature set.
If you want to see or change the set time, it is necessary press [🕒].
Proceed with the key [OK] until you reach the screen with the value to be modified.
Change with [△][▽] and confirm with [OK], until come out again from the menu.
To deactivate the function in progress, press [◀] to return to see the main screen.

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

1 - **SUMMER-WINTER mode**
2 - **FROST PROTECTION Function**
3 - **ON/OFF HYSTERESIS Function**
4 - **ANTI-SEIZE PUMP Function**
5 - **DAYLIGHT SAVING Function**
6 - **FULL THERMOSTAT LOCK mode (with PIN)**
7 - **DAY Mode**
8 - **DELAYED SEGMENT START**
9 - **RESET**

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


Press ⌷ for 3 seconds.

1 - **SUMMER-WINTER mode**
The display shows one of the following screens

If required, change using △ ▽.
Press OK to confirm and proceed to the next menu.
To exit, press the key ◀ or OK until the message OFF, appears on the screen.

2 - FROST PROTECTION function

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

With the keys [△] [▽] 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 exit, press the key [◄] for 3 seconds or press [OK] repeatedly until the message OFF appears on the screen.

3 - ON/OFF HYSTERESIS

After confirming with the key [OK] the desired value of the frost protection, the display will show the following screen.

Using keys [△] [▽] it is possible to set the value of the ON/OFF Hysteresis between 0.1 and 0.9.
Confirm with the [OK] key and proceed to the next menu.
To exit, press the key [◄] for 3 seconds or press [OK] repeatedly until the message OFF appears on the screen.

4 - ANTI-SEIZE PUMP function

After programming the ON/OFF Hysteresis, press [OK] to display the following screen
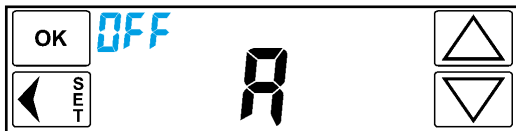

(**anti-seize function OFF**)

The anti-seize pump function is a function that will configure the thermostat as an asymmetrical timer.

By setting a value between 1 and 999 HOURS, the thermostat will close the output contact for 30 seconds, every time the set time value has elapsed. Example:

By setting with keys $\triangle$ $\triangledown$ the value 120 (120 hours = 5 days) and confirming with $\boxed{\text{OK}}$, the thermostat will close the relay contact for 30 seconds, every 5 days.

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

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
- Enables the choice of either Monday or Sunday to be day "1"

The screens appear as follows:

Confirming with $\boxed{\text{OK}}$ the thermostat will automatically change to daylight savings time.

With the keys $\triangle$ $\triangledown$ it is possible to change this value to θ so that the daylight saving changeover does not happen automatically.

Using ▲ ▽ to set the value to 2 enables the choice of either Monday or Sunday to be day "1".
(The choice itself will be made after exiting the Advanced Settings menu).

Press OK to confirm. It is now necessary to exit the Advanced setting menu and proceed to make the choice for day "1", as follows.
Press ◀ for 3 seconds (screen shows OFF). Press ⏻ to turn ON.
Press 🕔, then press OK twice to step through the HOUR and MINUTES settings. The display now shows the days of the week column.

Use ▲ ▽ keys to select the current day number appropriate to the desired day "1". For example: if current day is Wednesday and Sunday is to be day "1", then select 4 on the screen and confirm with OK.

NOTE
Only 1 of the 3 options can be selected.
Consequently, if 1 or 0 is selected Day "1" defaults to Monday.
If 2 is selected then Daylight Saving defaults to no Automatic change.

6 - FULL THERMOSTAT LOCK mode (with PIN)
This feature, enables the facility to completely block the thermostat (both the display and sliders) (see page 45 and 46).
In the advanced menu, press the OK key to display the following screen

Use keys △ ▽ to set a personal PIN selecting a number between 001 and 999. Confirm the PIN number with ⏎OK⏎, and advancing to the next stage of the menu.
Now, everytime you wish to lock the thermostat, it will be necessary press the key 🔒 on the main screen.

NOTE
The PIN will be required each time you wish to lock or unlock the thermostat. it will be necessary to press the button 🔒 on the main screen.
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 - **DAY mode**
This function enables you to manage each day of the week with one of 3 different program modes:

⏻ **OFF** the device will remain in the OFF state (but in WINTER mode, the frost protection function remains active)
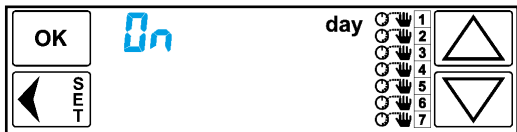⌁ **AUTO** the device will operate according to the temperature set by the sliders
🖑 **MANUAL** the device will operate according to the temperature set by the MANUAL key. To enable this function, follow the screens below
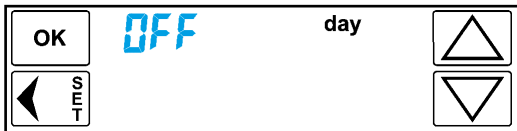

Change the status OFF to ON by the keys △ or ▽.
You will then see the following screen

Leaving the advanced settings (Press ⬅️ for 3 seconds then press ⏻), the main screen will show the day key.
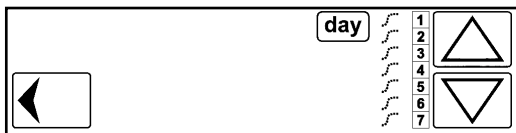

Pressing the key day will activate the DAY function and the display shows the modes pre-programmed for each day of the week.

NOTE
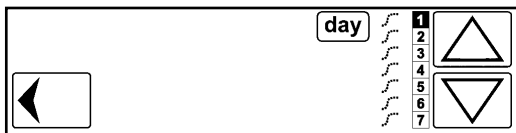When the function is activated "day" flashes and to the right is shown the bar of the week, with the mode set for each day (OFF, Automatic, Manual).

To program every single day with one of the 3 modes, press and hold the key day for 3 seconds.

Then, use the keys △ or ▽ to select the day that you wish to program. The chosen day will flash on a black background.

With the key ◀ select one of three possible modes (⏻ - 📅 - ✋) then press keys △ or ▽ to select and then to program additional days.
Press day to exit from the setting.

NOTE

If mode OFF (⏻) is set, you can reactivate the thermostat and gain access to the full main screen by pressing `day`.

If the mode **AUTO** (𝄐) is operative, it is possible to change the temperature by the sliders.

If mode MANUAL (✋) is operative, it is possible to change the temperature by pressing ✋ and using the keys △ ▽.

To deactivate the DAY function, press the key `day`, which will cease flashing. The display will then return to showing the main screen.

8 - DELAYED SEGMENT START

Entering this menu via the Advanced setting routine, and using the keys △ ▽ you can alternately turn the Delayed Segment Start feature ON or OFF. This feature allows you to delay the start of any of the 24 time "segments" by 15, 30 or 45 minutes.
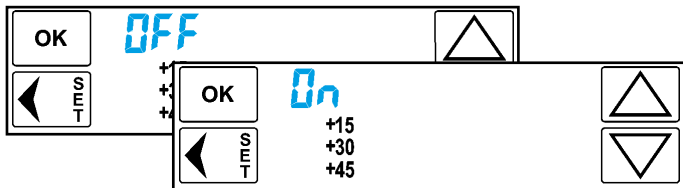

If Off was selected confirm with `OK`.

If On was selected then exit the advanced settings (Press ◀ for 3 seconds then press ⏻) and return to the main screen.

Open the slider protective door and fractionally move the slider concerned. This will cause the time "segment" and the temperature setting associated with that slider to be displayed, together with △ button, which if pressed immediately after moving the slider, will select/set the required start delay of 15, 30 or 45 minutes.
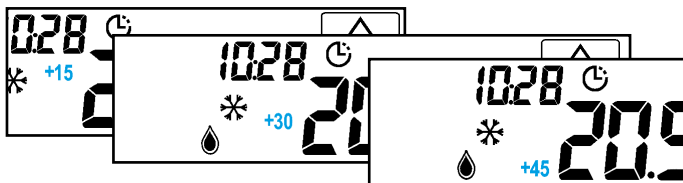
9 - RESET

This will restore all factory settings.

Using △ or ▽, you can enable the RESET function by selecting the ON state.

Confirming with OK the thermostat will turn off completely and then turn back on showing first the version of the software and then the main screen.

The thermostat comes pre-calibrated from the factory.
If it is required to recalibrate, precede as follows.
In the main display press the key ⟨⏻⟩ for 6 seconds.
The following screen appears

Using keys ⟨△⟩ or ⟨▽⟩ to set the desired value and then press ⟨◀⟩ key to exit calibration.
If you do not touch any key, after a few seconds, the product will recalibrate itself and present the main screen again.
Wanting instead to restore the factory settings, enter the advanced settings menu and reset the thermostat (page 52).

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