

1C.61

SLIDER CHRONOTHERMOSTAT



finder®
SWITCH TO THE FUTURE

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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 (voltage free contact)**

Contact rating: **5 A 250 V AC**

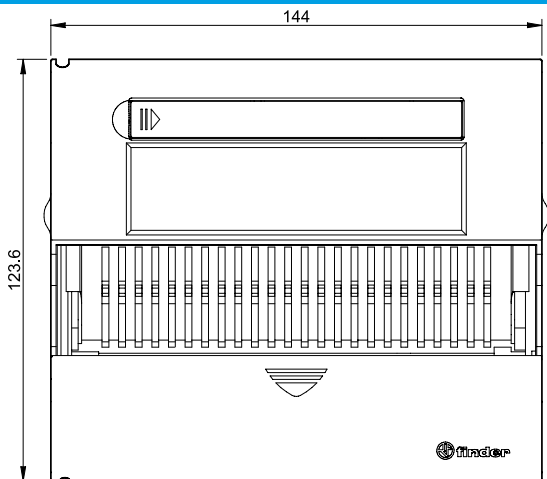
Mounting: **to the wall**

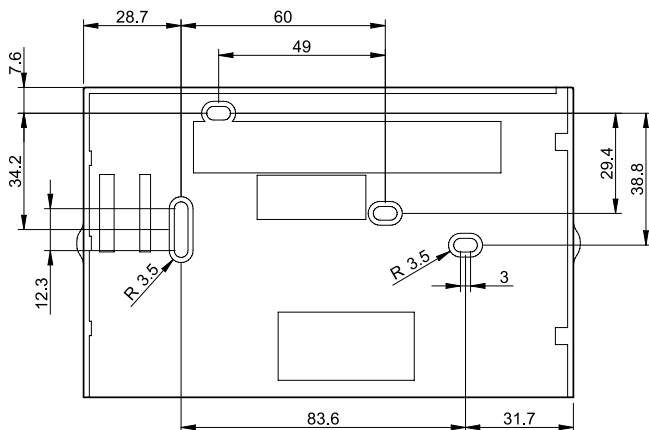
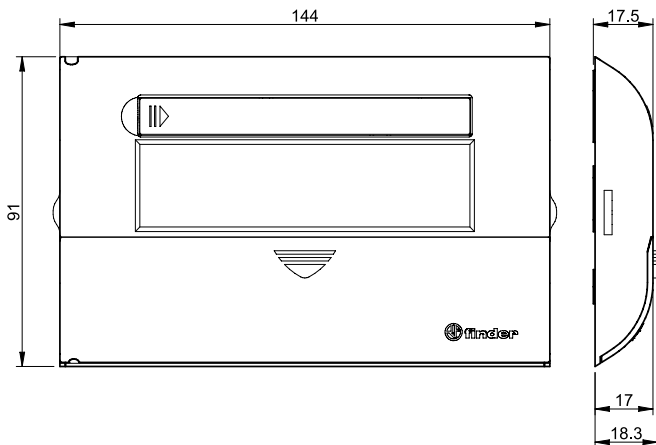
ADDITIONAL NOTES

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 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)

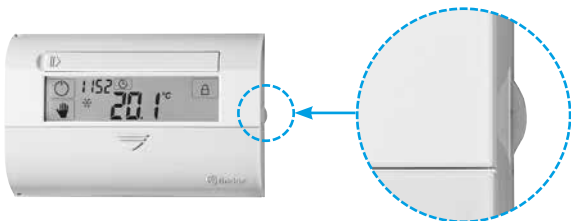


fig.1

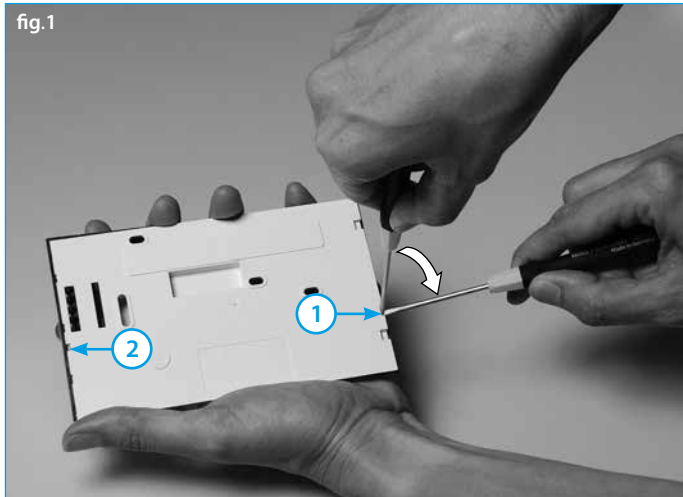
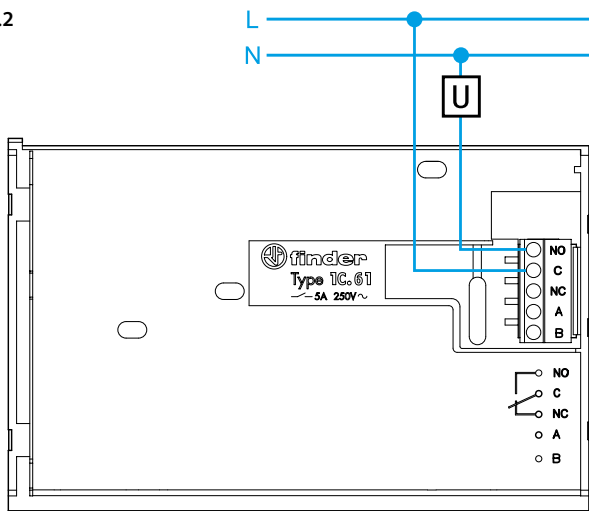


fig.2



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





ATTENTION


- Incorrect placement of the batteries (reverse polarity) may damage the thermostat.
- To increase battery life, always keep the slider cover of the thermostat closed.
- 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  **ON (STEADY)**, operation of the thermostat will soon be compromised.

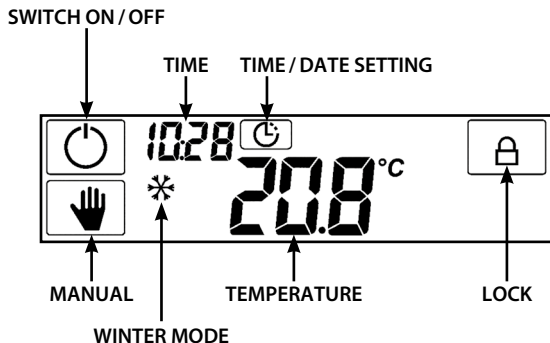
With the battery icon  **FLASHING** imminent replacement of batteries is necessary.

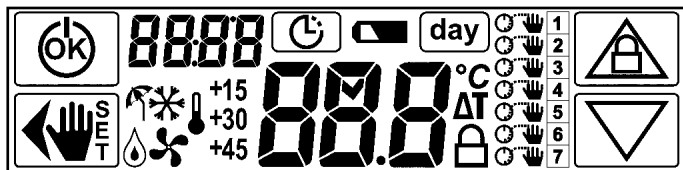
With the  **FLASHING** the thermostat is in the OFF state and the output relay releases.

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














WITH THERMOSTAT OFF

-  Switch on the thermostat
-  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
-  (Visible only if activated in the advanced menu). Allows the DAY mode to be enabled or disabled

ADVANCED SETTINGS

-  Confirms the information displayed on the display and advances to the next screen
-  Changes the data displayed (increase)
-  Changes the data displayed (decrease)
-  Press once to return to the previous data.
Press for 3 seconds to exit the menu displayed

The display is back-lit. Each time that the display is touched, a key pressed, the protective door opened 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



ON/OFF hysteresis



Indicates that the LOCK mode is active



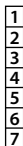
In the DAY mode - indicates
Thermostat OFF




In the DAY mode - indicates
Programming by sliders



In the DAY mode - indicates
Manual setting






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  .

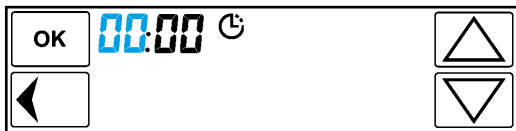
Confirm with  and advance to the next parameter.


To go back or exit from the menu, press .

EXAMPLE


Press .

The hour flashes. Enter the correct time through keys  .



Pressing  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** 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.

DISPLAY LOCK

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  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 .




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




With the 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




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  for 3 seconds.

The display will show **CODE**.

Enter the PIN and confirm .

3 beeps confirm that the device 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

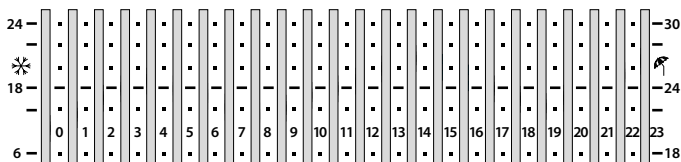
Also removing and inserting the batteries, the thermostat will remain with the display locked.

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 20.8°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

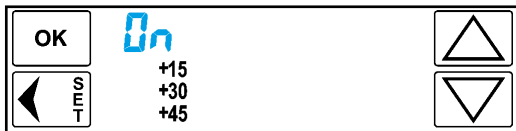
Turn off the thermostat with the button .



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


Press  several times until the following screen is seen.




Press either   to enable the function and confirm with .




It is now possible to exit from the advanced settings by pressing  repeatedly or  for 3 seconds, until you hear three beeps that will confirm the change. 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.



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.

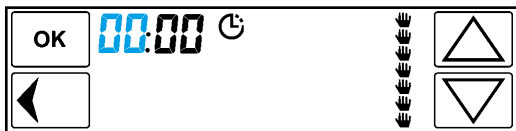
This function serves to maintain a specified temperature for a specific time, set by the user.




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  and proceed to set the minutes in the same way. Then you need to set (with the same procedure) the day



the month



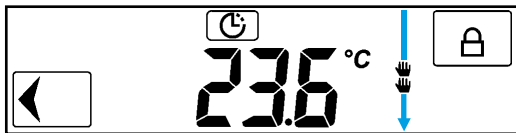
and the year



Confirming with it is then possible to set the desired temperature, using the keys .



Confirm the temperature with , 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 until you reach the screen with the value to be modified.

Change with and confirm with , 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 - EXTERNAL TEMPERATURE SENSOR
- 10 - 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  to confirm and proceed to the next menu.

To exit, press the key  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 **▲** **▼** 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.

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

3 - ON/OFF HYSTERESIS

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



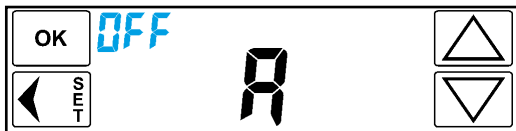
Using keys **▲** **▼** it is possible to set the value of the ON/OFF Hysteresis between 0.1 and 0.9.

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

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   the value 120 (120 hours = 5 days) and confirming with , 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  the thermostat will automatically change to daylight savings time.

With the keys   it is possible to change this value to  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 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 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 .

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 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 , 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 .

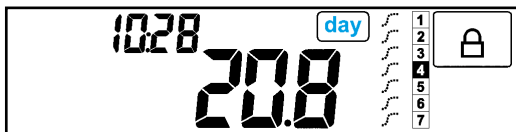
You will then see the following screen



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




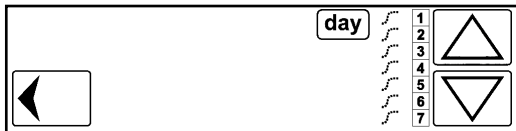
Pressing the key  will activate the DAY function and the display shows the modes pre-programmed for each day of the week.





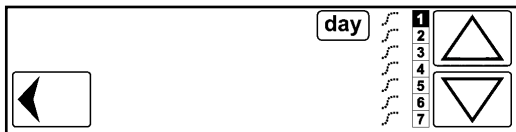
NOTE








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  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  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].

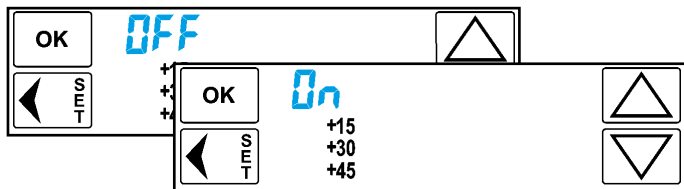
If the mode AUTO (☁) is operative, it is possible to change the temperature by the sliders.

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

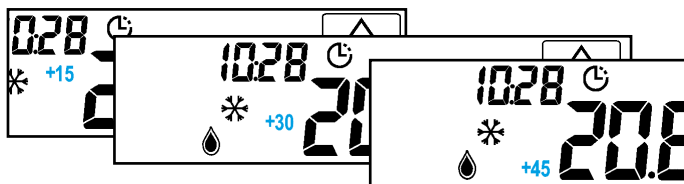
Entering this menu via the Advanced setting routine, and using the keys [▲] [▼] you can alternately turn the Delayed Segment Start feature ON or OFF. This feature allows you to delay the start of any of the 24 time "segments" by 15, 30 or 45 minutes.



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 - EXTERNAL TEMPERATURE SENSOR

By connecting an external sensor (01C.61 not supplied) between terminals A and B (see page 62), the thermostat can display, or be controlled by, the external temperature - according to the option selected.

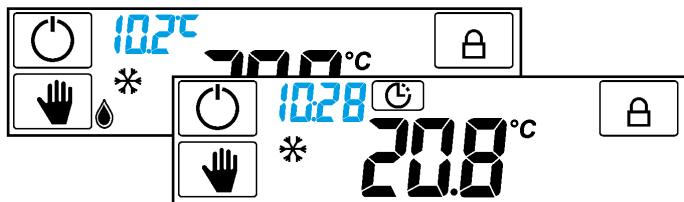


Using keys  or  select the required option.

OFF: with this setting the external sensor has no effect.



On: with this setting, the "Time" display alternates, every 2 seconds, between showing the current time and the external temperature.



2: with this setting, the thermostat is controlled by the external sensor and the main display shows the external temperature.
°C blinks to indicate this mode of operation.



NOTE

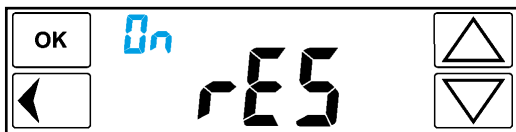
Cannot be used with remote control (page 61).


10 - RESET

This will restore all factory settings.



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



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 thermostat is equipped with two input terminals, A and B, dedicated to remote control (see page 37, figure 2).

You can connect a contact to force the thermostat into the AUTO-ON condition. The display will show the message **EE**.

It is possible to program two modes of operation:

- 1) With the LOCK mode enabled without PIN (PIN = 000), it will be possible to adjust the temperature of the thermostat with the sliders.



- 2) With the LOCK mode enabled with PIN (PIN other than 000), it will not be possible to make any adjustment of temperature



NOTE

Cannot be used with external sensor (page 62).


Example: “landlord”.

The thermostat can be turned on remotely, when the room is occupied.




It is possible to realize the situations whereby:

- 1) If you have not previously entered your PIN, the tenant can act on thermostat and change the sliders to suit his needs
- 2) If you have previously entered your PIN, the thermostat will follow the temperature pre-set via the sliders and the user cannot make any changes.

Conversely, the thermostat can be turned off remotely (for example utilizing a relay contact or a time switch, or other device).

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



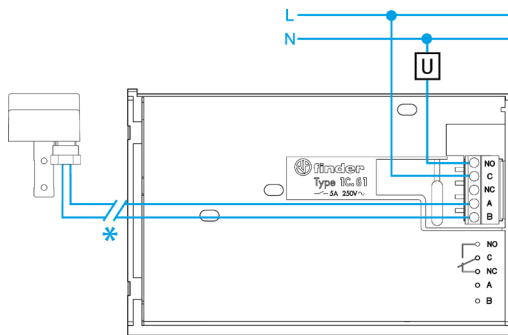
Using keys  or  to set the desired value and then press  key to exit calibration.

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).

EXTERNAL SENSOR

It can be useful to have the provision for an external sensor **01C.61** (not supplied) in order to read (or be controlled by) the temperature in a location, or environment, different to where the thermostat is installed.



* Maximum cable length: 20 m



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