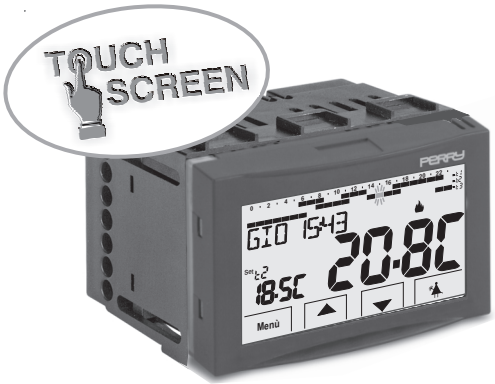
DIGITAL PROGRAMMABLE THERMOSTAT
TOUCH SCREEN BACKLIT DISPLAY AND MENU NAVIGATION
Recessed installation - h 45 mm



Mod. CRCDS27

Battery-powered
Weekly, Winter / Summer
3 temperature levels + antifreeze
Input for remote contact
Input for remote temperature probe

ELECTRIC
PERRY
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PE - DECRNN049EN 06/15

ENGLISH

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PRESENTATION

Dear Customer, thank you for choosing our product.

The weekly timer thermostat, suitable for all heating and/or cooling system, is fitted with a large and clear backlit TOUCH-SCREEN display to keep all its functions under control in real time. The timer thermostat is **pre-programmed in the factory**, therefore it is immediately ready for use **after connecting and inserting the batteries**, displaying current date and time (automatic standard/daylight saving time change: EURO = Central Europe UTC+1) and with standard temperature/time profile in Winter mode (heating). The fundamental feature is its easy to use menu navigation, which makes it extremely user-friendly despite its comprehensive range of functions. Two winter and two summer programs are already set in its permanent memory with 3 temperature levels + antifreeze feature, designed to offer the utmost comfort, although changing them only takes few seconds to select the desired temperatures throughout the day (even every 30 minutes!) and for every day of the week. The timer thermostat is factory-set to adjust temperature in a Differential ON/OFF manner and hysteresis can be set from 0.2°C to 1.2°C to adapt to the thermal inertia of your specific installation. Alternatively, modulating Proportional operation may be selected with settable duration cycles (from 7 to 20 minutes): this system ensures the desired temperature is maintained more stable, increasing user comfort and is particularly suitable for installations with high thermal inertia such as, for instance, for underfloor radiant panels. The set temperature scale is in degrees Centigrade (Celsius) with the option to calibrate room temperature measurement setting a correction value (from -3 to +3 °C); when switching to the Fahrenheit scale all displayed temperature values are updated accordingly. The timer thermostat can be connected to a separate remote controllable temperature probe (optional) which may then be set according to one's installation needs: remote, floor, external.
Special attention was devoted to energy saving: temporary or permanent override with independent SET temperature from the current weekly program, the Holiday program, pausing for household cleaning, optional Set temperature (MAX/MIN) lock, adjustable anti-freeze temperature value, control through an external contact (e.g. optional telephone programmer), are conducive to avoiding wasting energy with consequent savings. See the following pages for a description of these as well as of other features.

COMPATIBILITY TO THE MOST COMMON RESIDENTIAL SERIES PLATES

IMPORTANT: For the installation procedure of the programmable thermostat with the selected civil series plate, follow the instructions provided in the specific compatibility sheet included in the package.

⚠ WARNINGS!

Read this manual carefully before using the product as it provides important guidelines regarding safety, installation and use. The manual must be preserved with care for future reference.

The installation and electrical connection of the programmable thermostat must be implemented by qualified personnel and in conformity with current laws and regulations.

Disconnect the 230V~ mains power supply before installing the programmable thermostat.

The timer thermostat is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or by those with a lack of experience and knowledge of the instructions, unless they are supervised or have received the necessary instructions concerning use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device.

The timer thermostat is equipped with a "Touch screen" lit display. Pressure on the display for use or for programming of functions must be carried out lightly and within the **four sensitive areas concerned**. In case of touch screen difficulty, we recommend using a small, non-metallic tool, for example the back of a pencil or the cap of a ballpoint pen.

If **-5 °C or +37.7 °C** (+23°F or + 99.9 °F) room temperature flashes on the display, **the measured temperature is beyond the scale.**

If **"Err"** flashes on the display, it indicates faulty probe: any temperature control activity is suspended.

Once the programmable thermostat is installed, if the mains power supply is interrupted, the display switches off while preserving all the settings. When the power supply is restored, the display turns on and the device returns to normal operation.

If necessary, gently clean the thermostat and the display with a soft, dry cloth.

The manufacturer reserves the right to introduce any technical and/or constructive changes deemed necessary, with no prior notice.

DISPOSAL OF OLD ELECTRICAL AND ELECTRONIC EQUIPMENT

When this symbol is found on the product or on its packaging, it indicates that this product cannot be disposed of as household waste.
It must be delivered to a specific collection point where electrical and electronic equipment is recycled, such as:
- retail outlets, if a new product is bought, similar to that being disposed of
- local collection points (waste collection centres, local recycling centres, etc).

By ensuring that the product is disposed of correctly, you will help prevent potential negative consequences for the environment and health, which can be caused by this product being disposed of inappropriately. Recycling the materials will help conserve natural resources. For more detailed information about recycling this product, please contact your Local Council, household waste disposal service or the shop where you purchased the product.

The equipment contains a non-removable battery and it must not be disposed of as urban waste but recycled in order to protect the environment. Failure to comply with the requirements of EU Directive 2006/66, and the national legislations for implementation of this Directive, for the disposal of products at the end of their service life, is punishable by law.

1 - TECHNICAL DATA

Power supply:	230V~ 50/60 Hz
White backlighting of the display	timed 6 sec. / always on / always off
Type of action, disconnection and device:	1 / B / U / Elettronico
Type of output:	voltage free relay with COM / NO / NC changeover contact, max 5(3)A/250 V ~
Software:	class A
Rated impulse voltage:	4 kV
Cross-section of wires to terminals:	1,5 mm^2 ÷ 2,5 mm^2
Contact input for remote switching on:	for contact free from potential
Type of insulation:	classe II ⧈
Degree of protection:	IP 30
Pollution rating:	2
Number of temperature levels:	n° 3 « comfort», «attività» (pre-confort), «economy» + antigelo
Ambient temperature display range:	- 5.0 °C ÷ +37.7 °C (+ 23 °F ÷ +99.9 °F)
Relay ON signal:	Flashing + ON (winter) or ❄ + ON (summer)
Room temperature indicator resolution:	0.1 °C (0.1 °F)
Temperature Set adjustment range (t1/t2/t3)::	+5 °C ÷ +37.7 °C (+41.0°F ÷ +99.9 °F) limitable
Setting temperature Set:	a step di 0.1 °C / 0.1 °F
Temperature correction (Offset):	adjustable from -3.0 °C (5.4°F) to +3.0 °C (5.4°F) default 0.0 °C/0,0 °F
Antifreeze temperature: (t ❄)	adjustable + 5 °C ÷ <t3 (41,0 °F ÷ <t3) default 6 °C (42.8 °F)
Type of temperature adjustment: - DIFFERENTIAL ON/OFF (default) - MODULATING PROPORTIONAL	adjustable from 0.2 °C to 1.2 °C (from 0,3 °F to 2.1 °F) default 0,3 °C (0,4°F) cycles adjustable from 7 to 20 minutes (default 10 minutes)
ErP energy rating:	Class I, 1% Reg. EU 811/2013 (in Differential ON/OFF mode) Class IV, 2% Reg. EU 811/2013 (in Modulating Proportional mode)
Thermal gradient:	max 1°K / 15 min
Temperature reading tolerance:	± 0,5°C (± 0,9°F)
Operating temperature limits:	0 °C ÷ +45 °C
Operating temperature limits:	-10 °C ÷ +60 °C
Reference regulations for CE markings:	LVD - EMC EN60730-2-7 EN60730-2-9

2 - FACTORY SETTINGS

The timer thermostat is pre-programmed in the factory, ready to be used upon first switch-on.
The data entered refer to operation defined as «Standard». The following chapters describe all customisable functions, in order to satisfy any ambient comfort need.

FACTORY SETTINGS TABLE (default)

Parameter	Default	Restore «reset»
Language	IT (Italian)	Last value
Year/month/day/hour-minutes	Current	Current
Daylight saving/ Standard time	Euro (UTC+1)	Last value
Active season	Winter	Default
Temperature unit of measure	°C (Celsius)	Last value
Set Winter t1	20.0°C	Default
Set Winter t2	18.0°C	Default
Set Winter t3	15.0°C	Default
Set antifreeze t❄	6.0°C	Default
Set Summer t1	24.0°C	Default
Set Summer t2	27.0°C	Default
Set Summer t3	33.0°C	Default
Temp. locks Winter	Disabled	Default
Temp. locks Summer	Disabled	Default
Weekly hourly profile 🔥	P01	Default
Weekly hourly profile ❄	P03 (not active)	Default
Temp. adjustment mode	DIFF. ON/OFF	Default
Differential hysteresis	0.3°C	Default
Modulating proportional	Prop (not active)	Default
Modulating period	10 min. (not active)	Default
Room temp. correction 🔥	0,0 °C	Default
Room temp. correction ❄	0,0 °C	Default
Anti-scale protection cycle	Disabled	Last value
Display contrast	Level 6	Default
Display back-lighting	Timed 6 sec.	Default

Parameter	Default	Restore «reset»
Remote probe	(not active)	Last value
External input	(not active)	Last value
User password	none	Default
Installer password	none	Default
Password reset code	0927	Default

RESTORE «Installer RESET»

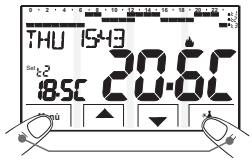
Restore many factory settings (default)

RESTORE brings the timer thermostat back to factory settings with the exception of some items as shown in the table; to perform the operation follow the instructions in paragraph 11.14.

RESTART

It does not cancel the entered settings

Should the timer thermostat feature malfunctioning, wrong displays or other incorrect conditions, perform a ***«User reset»***. Simultaneously press for 4 sec. the **Menu** and keys. The timer thermostat resumes normal operation.



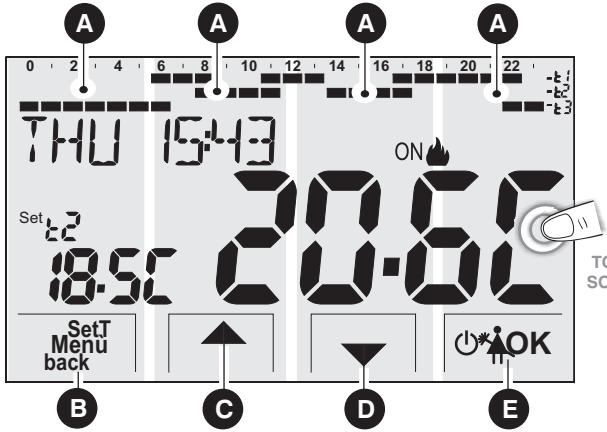
Press simultaneously for 4 seconds

3 - TOUCH SCREEN DISPLAY KEY FUNCTIONS

A ***TOUCH SCREEN:***

The touch screen has 4 touch sensitive areas. **Upon first touching** any point of the touch screen the keys on the display light up: press the key or relevant area within 5 sec. to change settings (note: a 5 sec time-out is activated each time a key or relevant area is touched).

Note: with the backlight set to always on (par. 11.12), the keys will also remain visible.



B **Multifunction Key Area: Set. T, Menu, back,** its use changes depending on function or active menu:
Menu = access to menus, **back** = go back to previous item, **Set. T** = change time profile (program)

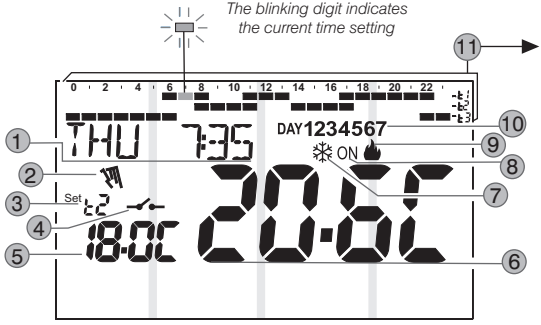
C ▲ **Key Zone** navigation through the menus: to increase a setting value
(within some functions the key turns into ◀: it lets you set or scroll the information on the left)

D ▼ **Key Zone** navigation through the menus: to decrease a setting value
(within some functions the key turns into ▶: it lets you set or scroll the information on the right)
Press the pulse arrow key to increase/decrease per unit and keep pressed to increase/decrease rapidly.

E **Multifunction Key** Zone ⏻ OK
⏻ timer thermostat in OFF (disabled temperature control)
current program pause for household cleaning
OK **short pressure:** access to selected menu / confirm function or set value (within the menus)
prolonged pressure (4 sec.): save modified time/thermal program (PROGRAM menu)

Note: *more particular button functions are described in the specific paragraphs.*

4 - DISPLAY FEATURES



Time and thermal scale programmed over 24 hours:

- **Upper digit position** = **Comfort** temperature **t1**
- **Intermediate digit position** = **Working** temperature **t2**
- **Lower digit position** = **Economy** temperature **t3**
- **lack of Digits** = *temperature* ***t*** ❄ ***Antifreeze*** *(in Winter) or disabled temperature control (in Summer)*

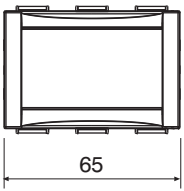
2 digit one above the other: HALF-HOUR (½ h) operation for each type of temperature denoted by the two digits.

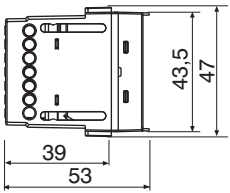
1	Current day, time and minutes
2	Temporary or permanent override
3	Currently active set temperature depending on ongoing program: **t1** Comfort or **t2** Activity (pre-comfort) or **t3** Economy (saving) or **t** ❄ antifreeze
4	Enabling timer thermostat from remote control
5	Display set temperature
6	Detected room temperature
7	Cooling mode (❄ Summer) active
8	Signalling operating user = **ON** and 🔥 flashing (e.g. boiler on) Signalling operating user = ❄ and **ON** flashing (e.g. conditioner on)
9	Heating mode (🔥 Winter) active
10	Days of the week (visible in the PROGRAM menu)

Note: *further displays are described in the specific operation paragraphs*

5 - INSTALLATION

5.1 - DIMENSIONS





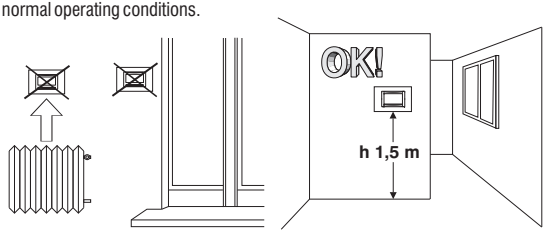
5.2 - INSTALLATION RULES

Important: the installation and electrical connection of the devices and equipements must be carried out by qualified personnel and in compliance with the applicable standards and regulations.

The manufacturer accepts no responsibility for the use of products that must comply with specific environmental and/or installation standards, the responsibility for which rests solely with the installer.

Installation of the programmable thermostat: standalone – fixed

- flush-mounted in a 3-module rectangular box.
- Install the programmable thermostat approximately 1.5–1.7 m above the floor, away from heat sources, windows, or anything else that could affect its normal operating conditions.



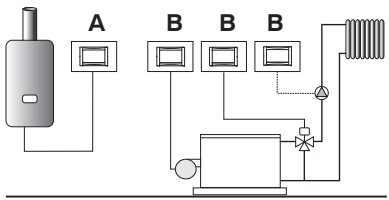
5.3 - INSTALLATION EXAMPLE

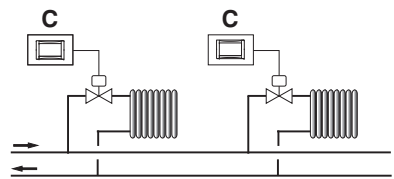
Warning: before installing, deactivate the mains voltage of the device to be controlled.

Examples of installation in heating systems with a programmable thermostat that controls:

A) Wall mounted boiler
B) Burner or Circulation pump or Motorized solenoid valve
C) Zone solenoid valve
(example for floor system or other)

N.B.: the examples contained in this documentation are in principle..





5 - INSTALLATION

5.4 - ELECTRICAL CONNECTIONS

Disconnect the 230V~ mains voltage

230V~ power supply terminals

- Connect line voltage power supply to the terminals:
  n° **13** - **NEUTRAL**
  n° **14** - **LINE**

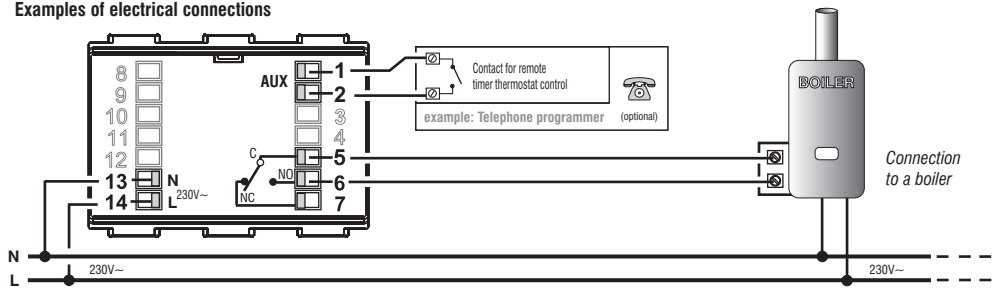
Relay terminals

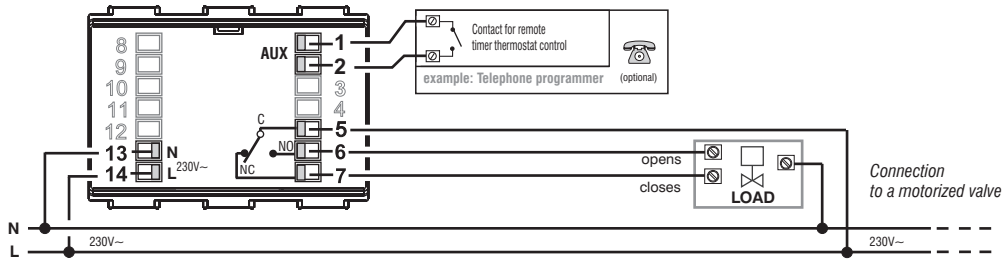
- connect the device to be controlled to the terminal
  n° **5** - common (C)
  n° **6** - normally open contact (NO)
  n° **7** - normally closed contact (NC)

AUX Terminals (remote contact)

- Terminals **1** and **2** may be connected to a telephone programmer (or switch) for remote thermostat programmable enabling *(see paragraph 11. for 9 external contact setting)*

Examples of electrical connections

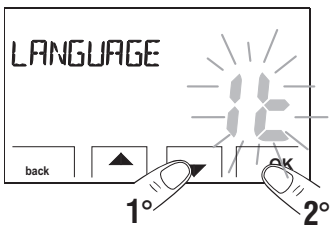




6 - START THE TIMER THERMOSTAT

6.1 - FIRST START-UP

Upon first inserting the batteries, the timer thermostat performs a lamp-test by switching on all display segments, displaying the software program version for a few seconds. When this phase is over, the timer thermostat asks to select the language of use.



Select the desired language by scrolling through the available languages using the ▲ ▼ keys. Confirm pressing the **OK** key.

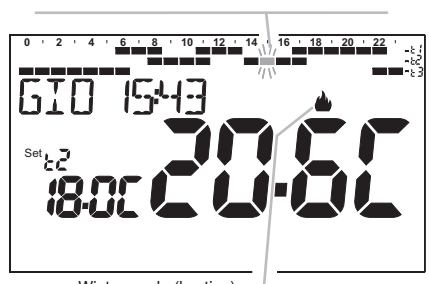
The selectable languages are: ITALIAN = ***It,*** ENGLISH = ***En,***
GERMAN = ***dE,*** FRENCH = ***Fr***, SPANISH = ***ES.***

ⓘ *first switch on factory setting ITALIAN = **It***

The timer thermostat is preprogrammed in the factory and is immediately operative, displaying: current hour and minutes, current day, **Winter** «heating» mode, standard time/thermal profile for every day of the week (PROGRAM P01).

The flashing digit indicates current time corresponding to the set level and temperature.

Program P01 times:



t1	06,30 ÷ 08,30 11,30 ÷ 14,00 17,30 ÷ 22,30
t2	08,30 ÷ 11,30 14,00 ÷ 17,30
t3	00,00 ÷ 06,30 22,30 ÷ 24,00

Temperature:
t1 = Comfort
t2 = Activity
t3 = Economy

Winter mode (heating)
ON + 🔥 flashing = e.g. operating boiler

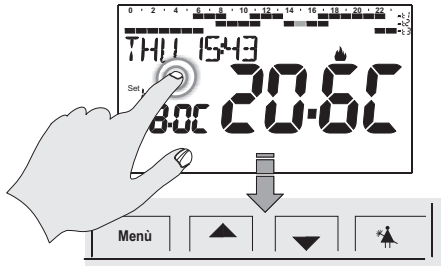
In order for the timer thermostat to follow the correct time/temperature profile the time and day must be current. Otherwise update them as described in paragraph 11.4: Change: year, month, day, hours and minutes (current). See paragraph 10.1 for adjusting the Set (level) temperature.
Important: should you wish to change operating mode from Winter 🔥 (heating) to ❄ Summer (cooling) see paragraph 11.3.

6.2 - SUBSEQUENT START-UPS

Even without batteries, the timer thermostat ensures the current hour, minutes and day of the week, selected program and settings are maintained. The current date and time can, however, be manually updated in case of need (see par. 11.4).

7 - IMMEDIATE ACTIVATION OF THE MOST COMMONLY USED FUNCTIONS

From normal timer thermostat operation in stand-by, press briefly any point of the display and it lights up (unless back-lighting has been disabled) and the selection and navigation keys appear.



In this timer thermostat status, some operating functions (the most commonly used ones) may be quickly activated without being obliged to access the more specific menus:

Temporary override operation (see complete description in par.10.2.1.A)

Press the ▲ or ▼ key to activate temporary override (pausing the current program): the current symbol and Set temperature start flashing.

Press ▲ ▼ keys to set **the desired independent temperature set point**; after 4 sec. or by pressing the **OK** key **h 01** (default) is displayed, they keys turn into ◀ ▶ and it is possible to set how long the temporary override operation must last: 1h or from override activation time to midnight at the latest (the digits corresponding to the set hours start flashing).

At the end of the set number of hours, the timer thermostat will resume normal operation from the program running before the temporary override.

It is however possible to quit the temporary override by pressing the **back** key.

Note: in the above condition with ◀ ▶ keys displayed press **OK** for 4 sec. to activate directly **override operation «Permanent override»** (see complete description in paragraph 10.2.1.B).

To quit **«Permanent override»** press the **OK** key or see menu procedure in paragraph 10.2.1.C.

Program pause for household cleaning (see complete description in par. 10.2.2.)

Press the key to switch off the connected user for a max 3-hour period during which the timer thermostat will enter antifreeze mode (**t**. ❄) .

After 3 hours the timer thermostat resumes the interrupted program.

To reactivate the interrupted program before the 3 hours elapse, press **«back»:** the word «CLEANING» disappears.

Note: in the above condition «CLEANING», if you press the ⏻ key for 4 sec. the timer thermostat is turned OFF with consequent **«System switch off»** (see complete description in paragraph 10.3).

To quit the timer thermostat OFF condition briefly press the ⏻ key .

8 - STRUCTURE OF THE MAIN MENUS (use and configuration)

Available Menu structure:

① SET TEMP
(change Set temperature points)

for winter mode 🔥 **:**
- **t1** (comfort)
- **t2** (pre-comfort)
- **t3** (economy)
- **t❄** antifreeze

for summer mode ❄ **:**
- **t1** (comfort)
- **t2** (pre-comfort)
- **t3** (economy)

② PROFILE
- **OVERRIDE** (temporary or permanent override)
- **CLEANING** (pausing the current program for household cleaning)
- **HOLIDAY** (pausing the current program for a holiday period)
- **OFF** (timer thermostat switch off/on)

③ PROGRAM
(display, change, copy programmed time profiles)
- **P01** weekly winter program 🔥
- **P02** weekly winter program 🔥
- **P03** weekly summer program ❄
- **P04** weekly summer program ❄

④ USER PASSWORD
- **USER PASSWORD** (set user password)

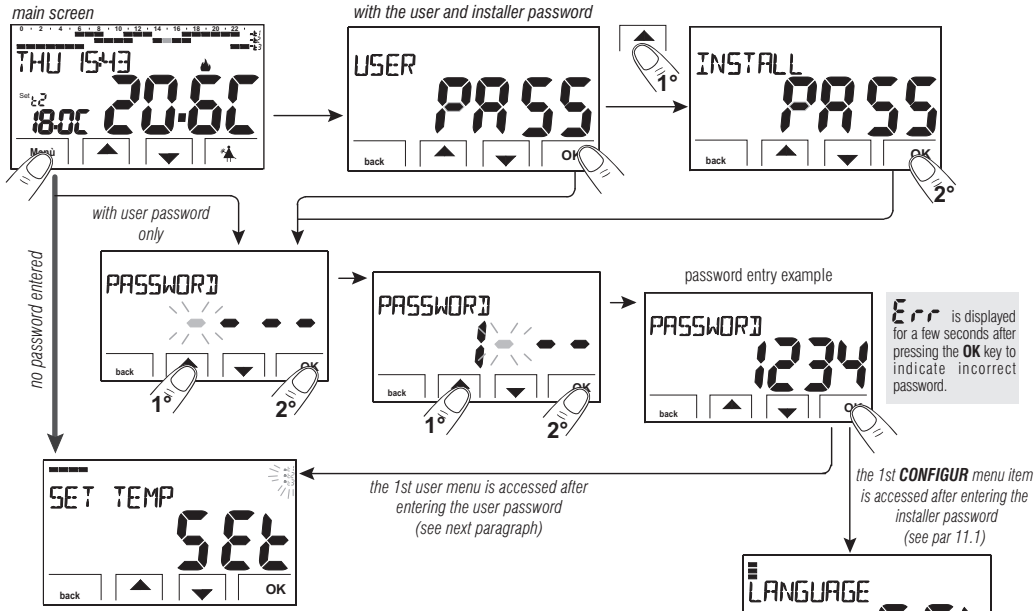
⑤ CONFIGUR
(installer or skilled user menu)
- **LANGUAGE** (menu language selection)
- **SEASON** (Winter or Summer mode)
- **TIME** (setting of current date, hour, minutes and daylight saving/standard time change)
- **RULE** (selection of temperature control mode)
- **UNIT** (selection of temperature unit of measure °C/°F)
- **OFFSET** (correction of detected room temperature)
- **BLOCKS** (it lets you limit the value of set temperature points)
- **INPUT** (setting an external contact for remotely enabling / disabling the timer thermostat)
- **PUMP ON** (disabling / enabling the descaling function)
- **CONTRAST** (to change display contrast)
- **BACKLIGHT** (to enable/disable display backlighting)
- **PASSWORD** (to restrict the use of user and/or installer functions of the timer thermostat)
- **RESTORE** (RESET operation)
- **INFO SW** (information about the firmware version installed)

The Menus are arranged in sequential order

9 - ACCESS TO MENUS

From the normal timer thermostat operation press the **Menu** key to access the first available menu.

Or, if a secret user and/or installer access code **has been previously entered**, follow the steps below to access the user or installer menus



The ▲▼ keys are used to scroll through the menus: press **OK** to enter the selected menu, press back to go back to the previous item. Settings in the menus must be confirmed by pressing the **OK** key where required, otherwise, after 3 minutes have elapsed, the timer thermostat goes **back** to normal stand-by operation and changes will not be saved.

10 - USER MENU

10.1 - «SET TEMP» Menu modification of SET temperatures

In the event the factory Set temperatures:

for winter		for summer	
Operating boiler with room temperature lower than:		Conditioner operating with room temperature higher than:	
t1 = 20,0 °C	(68.0 °F)	t1 = 24,0 °C	(75.2 °F)
t2 = 18,0 °C	(64.4 °F)	t2 = 27,0 °C	(80.6 °F)
t3 = 15,0 °C	(59,0 °F)	t3 = 33,0 °C	(91.4 °F)
t❄ = 6.0 °C antifreeze			

should not satisfy your requirements, they may be modified at will, from +5 °C to +37.7°C (+41.0°F ÷ 99.9°F).

1- Through the key path **Menu** -> Display menu **SET TEMP SET** and confirm with **OK.**

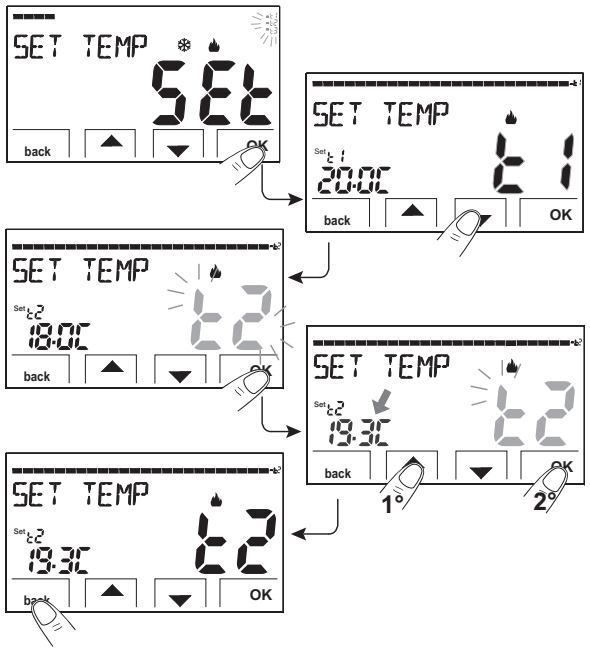
2- Scroll with keys ▲ ▼ (sequentially) until displaying the SET temperature level (winter or summer) to be modified and confirm with **OK.**

3- Set with keys ▲ ▼ the new temperature set point and confirm with **OK**.

4- Choose with ▲ ▼ keys another temperature level to be modified or press the **back** key **twice** to go back to normal timer thermostat operation.

To disable antifreeze temperature t ❄, go below +5.0 °C (41.0 °F).

In the presence of max and min. temperature locks (see paragraph 11.8) it is not possible to set a **Set t** higher or lower than the entered locks. The display will signal impossibility to perform the operation by displaying LOCK.



Attention!

The timer thermostat allows temperature values that satisfy the following conditions:

Winter: ***t1*** *greater than or equal to* ***t2*** *greater than or equal to* ***t3*** *greater than or equal to* ***t*** ❄

Summer: ***t3*** *greater than or equal to* ***t2*** *greater than or equal to* ***t1***

10 - USER MENU

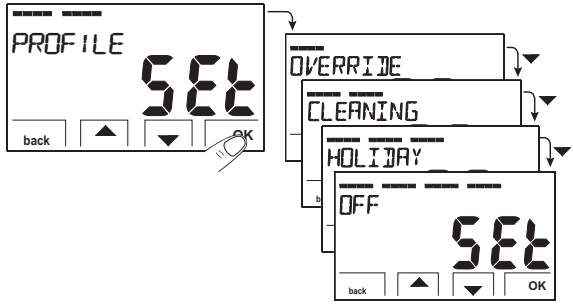
10.2 - Timer thermostat «PROFILES» menu

1- Display the main menu ***SEt PROFILE*** and confirm with **OK.**

2- Select with keys ▲▼ the desired profile among available options:

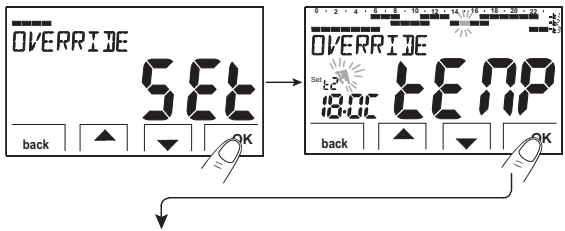
- ***SEt OVERRIDE*** (temporary or permanent override)
- ***SEt CLEANING*** (pausing program in use for cleaning)
- ***SEt HOLIDAY*** (pausing program in use for a holiday period)
- ***OFF Set*** (timer thermostat switch off/on)

3- Confirm the selected item by pressing **OK.**



10.2.1 - OVERRIDE OPERATION

Two override operating modes are possible **temporary** or **permanent** with a pause in the current program.
Both overrides have their own modifiable set temperature and **completely independent from** the current program.



10.2.1.A - Temporary override operation

1- Through the key path **Menu** -> ***SEt PROFILE*** -> ***SEt OVERRIDE***, select item **TEMP OVERRIDE** and confirm with **OK:** the symbol and the independent temperature **Set point** flash.

2- The desired temperature Set point may be set with the ▲▼ keys; wait 4 sec. or confirm by pressing **OK.**

3- **h 01** (default) and keys ◀ ▶ will be displayed.

Continue →

10 - USER MENU

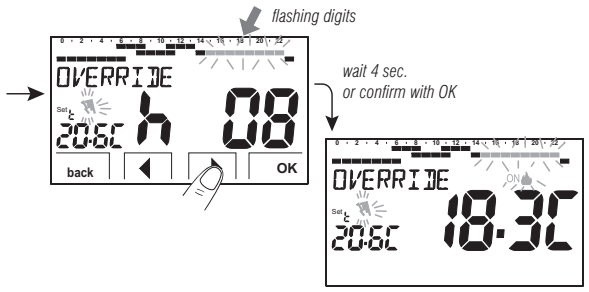
4- With the keys◀ ▶ it is possible to enter the number of hours of temporary override operation: 1h or from override activation time to midnight of the current day at the latest (the digits corresponding to the set hours start flashing).

5- Wait 4 sec. or confirm by pressing **OK.**

Note: *the duration of temporary pause of the current program, limited to one hour only (h 01), will start at current hour and minutes from activation, to the start of the next whole hour.*

At the end of the set number of hours, the timer thermostat will resume normal operation from the program **running before the temporary override** with the relevant temperature set points.

Press **back to quit** temporary operation **early.**



*With enabled temporary override function it is possible to modify the independent temperature set point at a later stage by pressing the keys ▲▼ or its duration by pressing **OK** followed by ◀ ▶.*

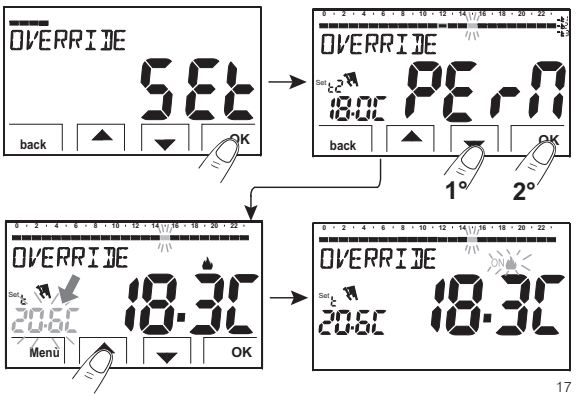
10.2.1.B - Permanent override operation

1- Through the key path **Menu** -> ***SEt PROFILE*** -> ***SEt OVERRIDE***, select item ***PERM OVERRIDE***, then press **OK:** the fixed symbol is displayed and the temperature level is applied to all hours of the day.

2- The desired independent temperature Set point may be modified at any time, by pressing keys ▲▼.

Permanent override operation remains active indefinitely.

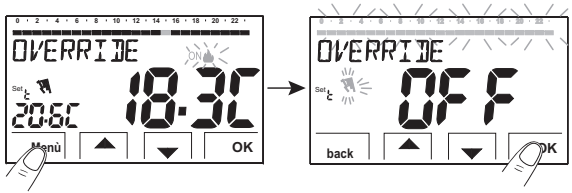
To disable permanent override operation press the **OK** key, or if operating in the menus, follow the procedure in the next paragraph.



10.2.1.C - Disabling permanent override operation

To go back to automatic operation from program, through the path: **Menu** button **-> *SEt PROFILE*** -> display item ***OVERRIDE OFF***, confirm by pressing **OK.**

The temperature scale will be displayed and the relevant Set points of the current day, according to the program in use before permanent override operation was enabled.



10.2.2 - PAUSING THE CURRENT PROGRAM FOR HOUSEHOLD CLEANING

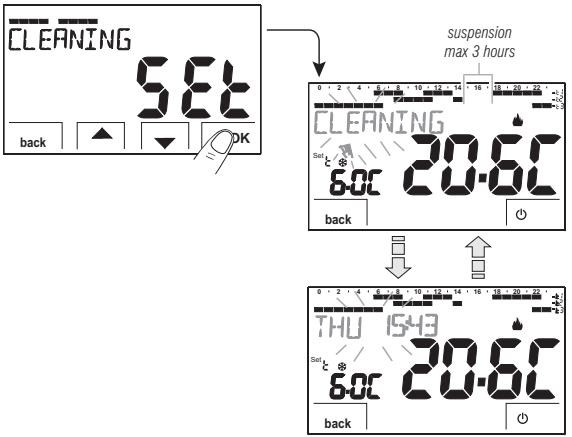
1- From normal timer thermostat operation, through the path **Menu -> *SEt PROFILE* ->**, display the item ***SEt CLEANING*** confirm by clicking **OK.**

2- The connected user will switch off for a max 3-hour period from the current time, during which the timer thermostat will enter antifreeze mode (❄).

Enabling this function is shown by the word **«CLEANING»** alternating with current day and time on the display. After 3 hours the timer thermostat returns to the interrupted program.

To reactivate the interrupted program before the 3 hours have elapsed, press **back** or ⏻ : the word **«CLEANING»** disappears.

Note: in the event antifreeze temperature or "Summer" operation has been permanently disabled, the connected user (e.g. boiler or conditioner) will remain disabled for 3 hours maximum.



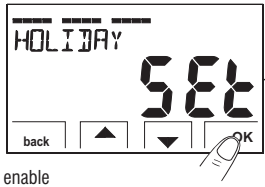
With enabled CLEANING function it will be possible to disable the timer thermostat «OFF» (see paragraph 10.3) by keeping ⏻ pressed for 4 seconds.

10.2.3 - HOLIDAY PROGRAM *(e.g.: absence for holidays)*

*This program is useful in the event one should need to leave the house for several days (temperature control pause); your habitual program in use (winter or summer) will be re-enabled at the end of the period set with the **HOLIDAY** program, so you may find the desired temperature on your return.*

All the settings required by the HOLIDAY program must be confirmed by pressing OK, otherwise the timer thermostat goes back to normal operation after 3 minutes have elapsed and the modifications will not be stored.

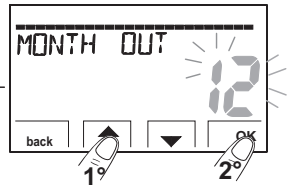
Through the button path ***Menu -> SEt PROFILE -*** > select the item ***SEt HOLIDAY*** then press **OK.**
The HOLIDAY program will adopt the «Winter 🔥» or «Summer ❄» season of the program in use.



Holiday start setting «OUT» (leaving the home)

1- The current month flashes on the display.
2- With the keys ▲▼, set the month «OUT» when you wish to enable the HOLIDAY program (leave the home); confirm by pressing **OK.**

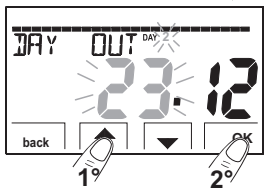
⚠ *It is not possible to select a month prior to the current one. Up to 12 months **after** the current one may be set.*



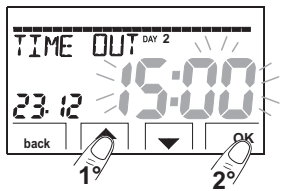
3- The current day flashes on the display.
4- With keys ▲▼ set the day «OUT» when you wish to enable the HOLIDAY program (leave the home).

ⓘ *the day of the week will be updated automatically based on the set month and day.*

5- confirm by pressing **OK**.



⚠ *It is not possible to select a day **prior** to the current day.*



6- The current time flashes on the display **rounded by zeroing the minutes** (if the current date has been set) or the time **0:00** (if another program activation date has been set).
With the keys ▲▼, set the time «OUT» when you wish to enable the HOLIDAY program (leave the home); confirm by pressing **OK.**

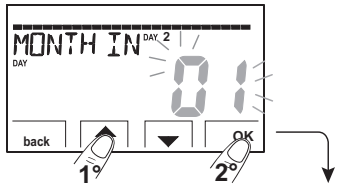
continues on the next page

10 - USER MENU

Setting end of holidays «IN» (coming back home)

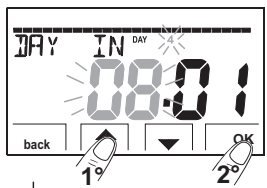
*The display shows the **IN** page where to enter when the program countdown must end and normal temperature control of the timer thermostat should resume (according to the original program).*

7- The month previously set in the OUT function flashes on the display, use keys ▲▼ to set the month when you wish to end the countdown (coming back home); confirm by pressing **OK**.

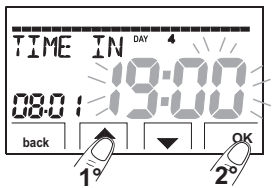


⚠ *It is not possible to select a month **prior** to the one set in the **OUT** function.*
*It is possible **to move forward** by 12 months at the most with respect to the month set in the **OUT** function.*

8- The day previously set in the OUT function flashes on the display: use keys ▲▼ to set the day when you wish to end the countdown (coming back home). The day of the week will be updated automatically based on the set month and day.
Confirm by pressing **OK.**



9- The current time + 1h flashes on the display rounded by zeroing the minutes *(if the current date and time has been set in OUT*) or the time **0:00** (*if another date or time for program activation has been set in OUT*).
With keys ▲▼, set the time when you wish to disable the HOLIDAY program (come back home) and confirm by pressing **OK.**
The display goes back to stand-by mode.

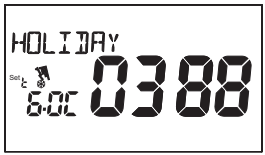


ⓘ *settable: minimum 1 hour and maximum 8759 hours (corresponding to 365 less 1h)*

10 - USER MENU

Upon completing data entry, two different views may be displayed (depending on the data entered):

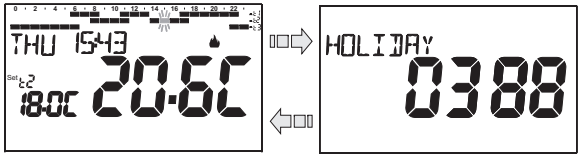
A) OUT Date <u>the same as the current one</u>



The timer thermostat starts the countdown (e.g. in the figure: 388 hours) until exhausting the programmed hours; in WINTER mode the connected user will only be activated if the room temperature should go below the Set antifreeze temperature point (default 6.0 °C). At the end of the countdown the HOLIDAY program will re-activate your usual program.

B) OUT Date <u>after the current one</u>

The timer thermostat goes back to the program running before entering the data in the HOLIDAY program, pending its activation. The screen of the HOLIDAY program will appear on the display for 2 seconds every minute as a reminder that it is in **stand-by.**



Normal operation screen — *display for 2 seconds every minute*

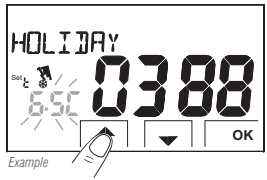
To cancel the HOLIDAY program with postponed activation, through the path **Menu -> *SEt PROFILE* - >** select item ***SEt HOLIDAY*** confirm with **OK**; press **back** twice to quit.

When the **stand-by time** has elapsed, the timer thermostat starts the countdown (example in figure: 388 hours) until exhausting the programmed hours; in WINTER mode the connected user will only be activated if the room temperature should go below the Set antifreeze temperature point (default 6.0 °C). At the end of the countdown the HOLIDAY program will re-activate your usual program.

In the event the antifreeze temperature has been permanently disabled (paragraph 10.1) or in "SUMMER" operation, the HOLIDAY program will keep the connected user disabled (e.g. boiler or conditioner) throughout the whole programmed time.

When the **HOLIDAY** program is running:
- press ▲ ▼ keys to change the independent antifreeze temperature Set point (unless previously disabled);
- press **OK to cancel** the HOLIDAY program before the end of the programmed hours.

The timer thermostat resumes normal operation re-enabling your habitual program.

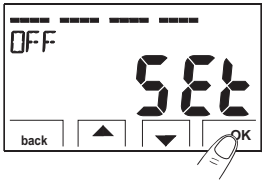


Example

10 - USER MENU

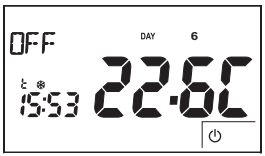
10.3 - OFF Menu (disabling the timer thermostat)

This setting has the purpose of locking timer thermostat functions when heating or cooling must remain off.



1- Through the button path **Menu -> *SEt PROFILE* ->**, select item ***OFF SEt*** and confirm with **OK** to disable the timer thermostat.

2- The display shows **OFF**, to indicate that the timer thermostat is disabled and all functions are inactive; the display only shows day, current time, room temperature reading and (in WINTER mode) the antifreeze protection symbol **t** ❄.



*in WINTER mode with antifreeze temperature disabled or in Summer mode, the **t** ❄ symbol will not be visible.*

3- Press key ⏻ **to reactivate the timer thermostat** and go back to the previously set program.

10 - USER MENU

10.4 - PROGRAM Menu (list of pre-set programs, display, change, copy programmed time profiles)

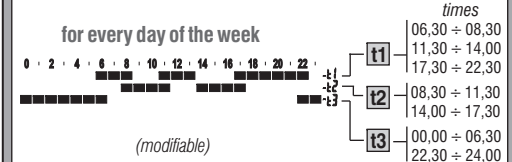
10.4.1 - LIST OF PRE-SET PROGRAMS

The box shows factory-entered programs with relevant time profiles: P01 and P02 WINTER; P03 and P04 SUMMER.
In the event none of the pre-set programs should meet your needs, they may be modified (see next paragraphs).

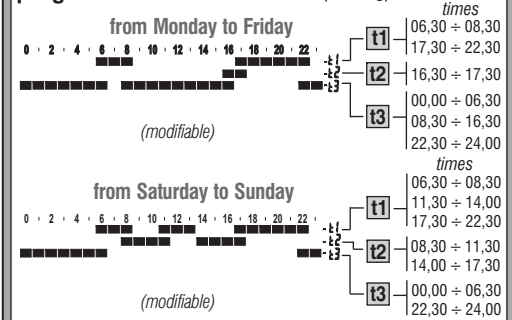
Programs with days, times and temperature levels on the 24h scale.

Temperature levels: t1 = Comfort t2 = Activity (pre-comfort) t3 = Economy (saving)
+ ❄ = Antifreeze in Winter mode (if present the digits are not visible). Note: in Summer mode the cooling system is disabled

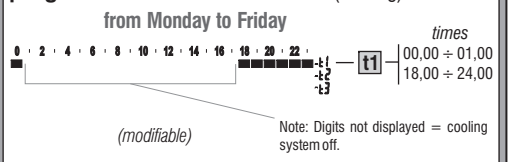
program: P01 **Winter mode** (Heating)

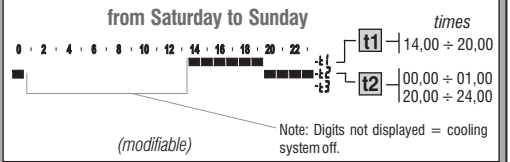


program: P02 **Winter mode** (Heating)

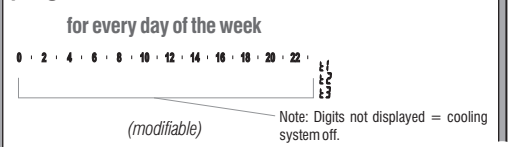


program: P03 **Summer mode** ❄ (Cooling)





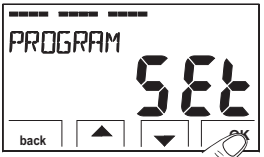
program: P04 **Summer mode** ❄ (Cooling)



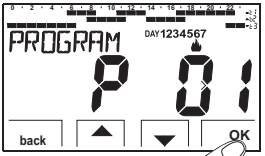
10 - USER MENU

10.4.2 - PROGRAM SELECTION

1- Through the path ***Menu*** button -> with buttons ▲▼, select item ***PROGRAM SEt*** e confirm with **OK.**



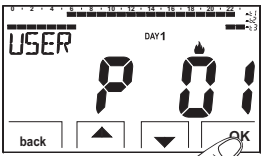
e.g. Factory set program



2- The programs in the memory (P01🔥, P02🔥, P03❄, P04❄) may be scrolled through with the ▲▼ buttons.

i If a program has been previously modified by the User, only the first day of the week will be displayed (DAY 1 = Monday) with the word **USER,** indicating a modification has been made on the factory pre-set program.

e.g. Program modified by the user

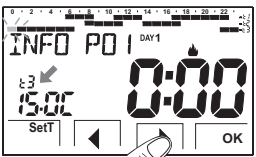


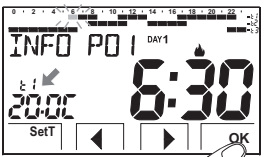
3- press **back** twice to go back to normal timer thermostat operation;

4- or press **OK** to opt to display the settings of the desired program.

10.4.3 - DISPLAY SETTINGS OF THE SELECTED PROGRAM

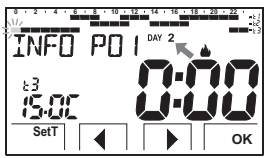
1- after confirming with OK (described above under item 4), the display shows **INFO**, the day profile **1** (Monday), the flashing digits at 0:00 and the relevant temperature level: the program may be scrolled through with ◀ ▶ keys (switched to left and right), by half hours, viewing times and temperatures.





2- Press **OK** once or more to view the time profile of the following day/s.

Important! in this and subsequent conditions **it is possible to go back to program selection by pressing the SetT button for 4 sec.** (par. 10.4.2) without saving any setting.



3- Keep OK pressed for 4 sec. The timer thermostat resumes normal operation following the profile of the chosen program.

Or modify the selected program as per the following paragraph.

10 - USER MENU

10.4.4 - MODIFY PROGRAM

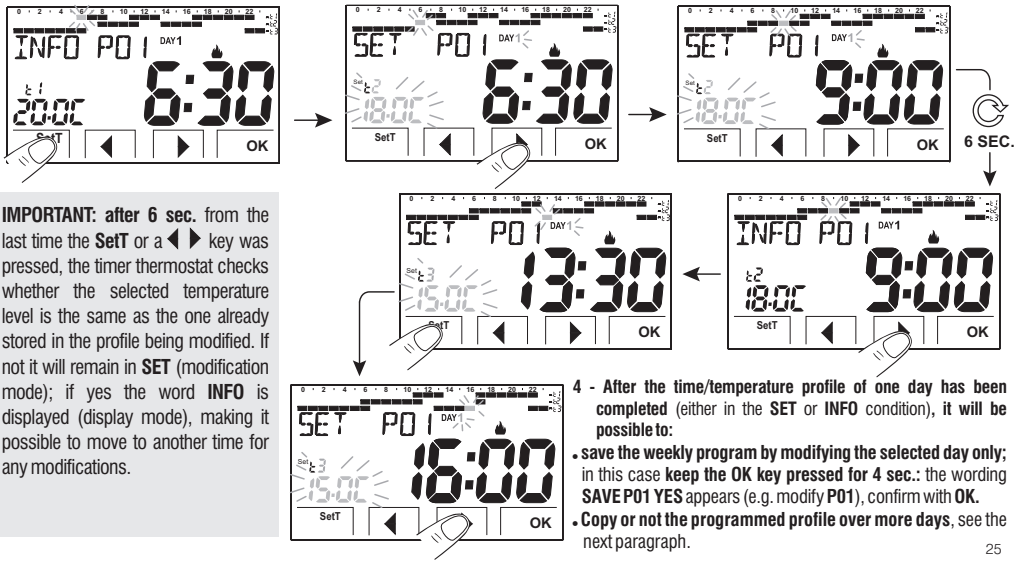
There are 4 available programs, all freely programmable for every hour of the day (with half hour steps) and differently for every day of the week, on 3 different temperature levels: **t1** comfort (upper digits), **t2** activity (intermediate digits), **t3** economy (lower digits), plus one level of antifreeze temperature **t** ❄ for the winter mode (digits not visible), or cooling system switched off for the summer mode.

1- Should you wish to modify a program, from the **INFO** screen go to the desired day and scroll through the profile with the ◀ ▶ keys until displaying the time you wish to modify, in 30-minute steps (see previous paragraph).

2 - Press once or more the **SetT** key to select which new temperature level you wish to assign to the desired time: the modification is effective.

Set point rotation starts from the set ***t*** *x , according to the diagram* ***t1, t2, t3, t*** ❄. *The Set point in question and the digit of reference flash, the words* ***INFO POX*** *(P01 in this case) will change to* ***SET POX*** *(modification mode). Note: if you go back to the original Set point (level) no modification will take place.*

3 - By pressing the ◀ ▶ keys the **new selected Set point** may be dragged to the next (or previous) half hour and/or hours; modify the temperature level or not as indicated under item 2.



IMPORTANT: after 6 sec. from the last time the **SetT** or a ◀ ▶ key was pressed, the timer thermostat checks whether the selected temperature level is the same as the one already stored in the profile being modified. If not it will remain in **SET** (modification mode); if yes the word **INFO** is displayed (display mode), making it possible to move to another time for any modifications.

4 - After the time/temperature profile of one day has been completed (either in the **SET** or **INFO** condition)**, it will be possible to:**

- **save the weekly program by modifying the selected day only;** in this case **keep the OK key pressed for 4 sec.:** the wording **SAVE P01 YES** appears (e.g. modify **P01**), confirm with **OK.**
- **Copy or not the programmed profile over more days**, see the next paragraph.

10.4.5 - COPY OF THE MODIFIED DAY

After completing the modification of the temperature/time profile of one day (see previous paragraph) it is possible to **copy** it over one or more days. Press **OK,** confirmation will be asked whether to copy the modification over other days **(LOAD YES/LOAD NO)**: choose the desired option with the ▲▼ keys and confirm with **OK.**

If **LOAD NO** is confirmed, no copy operation will be performed, the display will go back to the **INFO** screen showing the day after the modified one.

If **LOAD YES** is confirmed, you will be asked on what other days to copy the modification: press **OK** to confirm copying over the indicated day (e.g. TUESDAY) moving to the next day, whereas if you press ▶, you will skip the next day and exclude it from copying. The sequence will be requested until completing the week, signalled by the wording **END.**

In this condition you may:

a) Press ▶ to scroll through the week again, *(press **OK** to disable a day you have previously selected by mistake).*

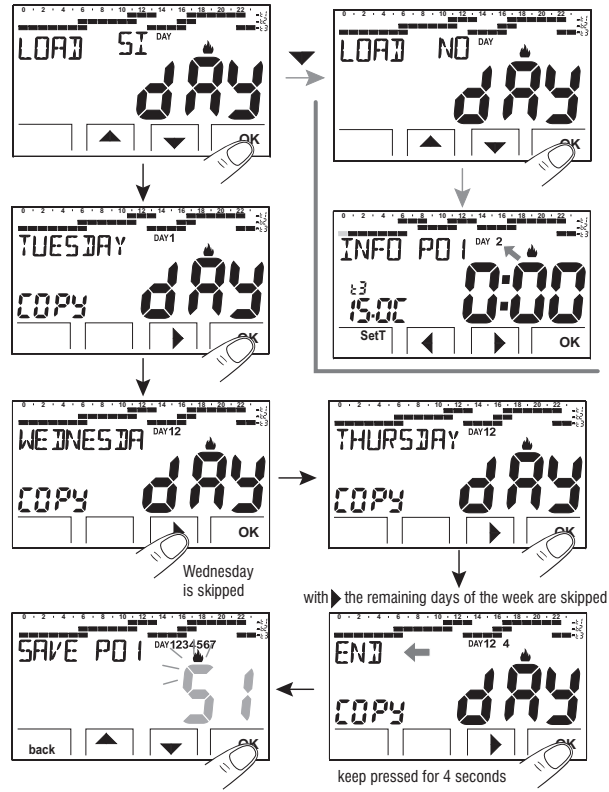
b) Press **OK** to confirm copy of the selected days and go back to the **INFO** screen displaying the first non modified day.

c) Keep **OK** pressed for 4 sec.: the words **SAVE P01 YES** are displayed (e.g. modify **P01**); confirm with **OK**, the modified weekly program will be saved.

The timer thermostat goes in normal operation (stand-by) following the new temperature/time profile.

If you do not wish to save, select with the ▲▼ keys **SAVE P01 NO** and confirm with **OK**, to go back to the **INFO** screen of the first subsequent non modified day.

example copy of Monday onto Tuesday and Thursday



10 - USER MENU

10.5 - USER PASSWORD Menu (user)

10.5.1 - Entering the user password

No code is set in the factory configuration.

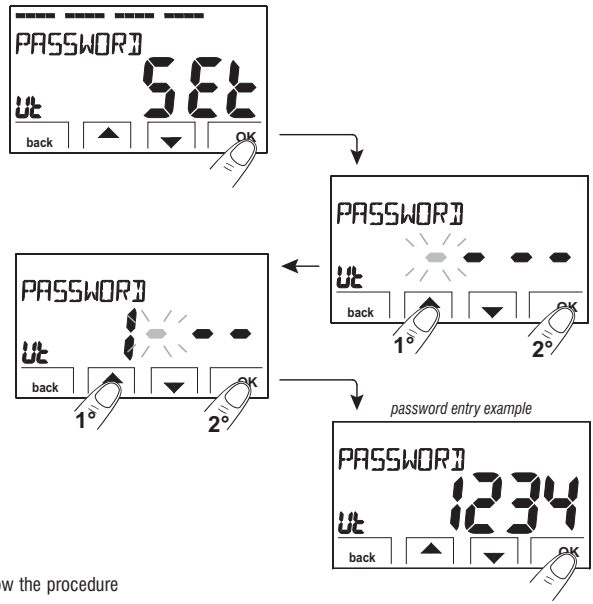
1- Through the path **Menu ->,** *select item* ***USER PASSWORD SEt*** -> and confirm with **OK**.

2- Use the ▲ ▼, keys enter 4 digits (dashes not included) between **0000** and **9999**, individually confirm them with «**OK**».

The timer thermostat enters normal operation

From now on, the password will be required when the menu key is pressed.

Certain quickly activated functions may be used in any case from the normal operation condition (stand by) of the timer thermostat (see chapter 7).



10.5.2 - Password modification or cancellation

Press **MENU**, and enter the previously set password; follow the procedure described above to access the User PASSWORD SEt menu:

- set 4 hyphens (- - - -), the password will be cancelled,
- set another number and it will be modified.

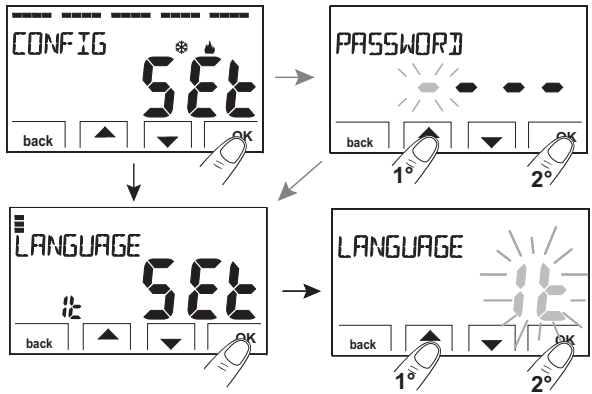
11 - CONFIGURATION MENU (installer)

11.1 - Access to configuration menu

ATTENTION: access to the configuration menu is recommended for the installer or experienced users since the modification of some settings might affect correct system operation.

Through the **Menu** -> *path select the **CONFIGUR SEt*** menu and confirm with **OK:** access the 1st item ***LANGUAGE SEt*** of the menu (see chapter 8 for the list of available items).

If only an installer password was entered the display requests entering the 4 digits, which may be selected using the ▲▼; keys; individually confirm them with **«OK».**



11.2 - CHANGE SET LANGUAGE

When ***LANGUAGE SEt*** is displayed, press **OK** to confirm.

- Use the ▲ ▼ keys to select the desired language scrolling through available ones.
- Confirm by pressing **OK.**

The selectable languages are: ITALIAN = ***It*** *(default),* ENGLISH = ***En,*** GERMAN = ***dE,*** FRENCH = ***Fr,*** SPANISH = ***ES.***

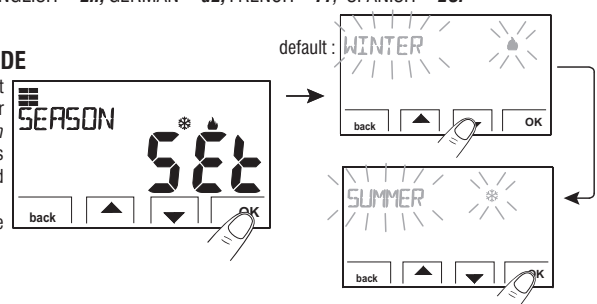
- Press the «back» key to exit.

11.3 - SET WINTER 🔥 OR SUMMER ❄ MODE

The season may be changed by selecting an already set program for the other season (see par. 10.4.1/10.4.2), or through the **Menu** -> ***CONFIGUR SEt*** -> *path under item* ***SEt SEASON*** confirm with **OK**. Select with the ▲▼ keys the WINTER (heating) or SUMMER (cooling) mode and confirm with **OK.**

In this case the last program used for the season about to be set will be automatically selected.

Press the «**back**» key to exit.



11 - CONFIGURATION MENU (installer)

11.4 - CHANGE: YEAR - MONTH - DAY TIME - MINUTES (CURRENT)- AUTOMATIC DAYLIGHT SAVING / STANDARD TIME CHANGE

In order to simplify programming, the timer thermostat is pre-set in the factory with current date/time and automatic time change (default EURO area Central Europe UTC + 1).

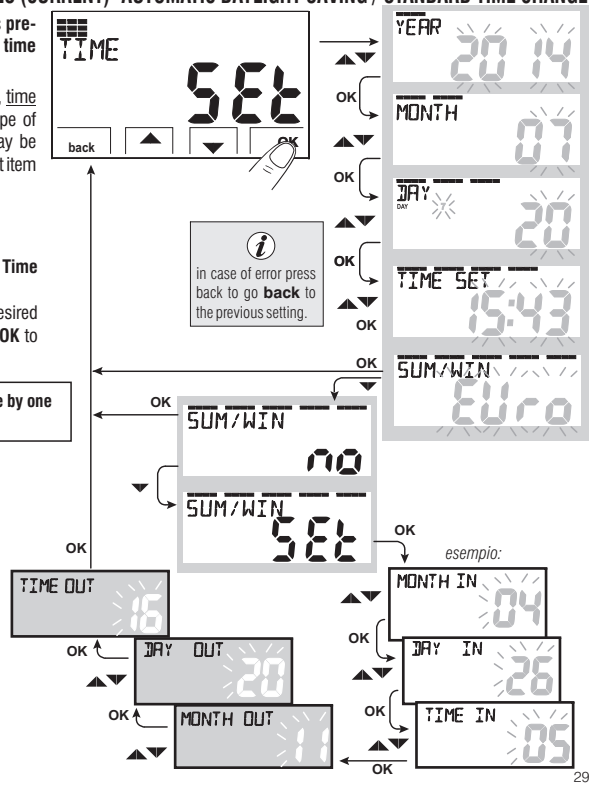
Upon first switching on or in case of need, if the current date, time and minutes are not correct, if you wish to change the type of automatic time change activation or de-activation, these may be modified through the key path ***Menu -> CONFIGUR SEt***: select item ***TIME SEt*** and press **OK** to confirm.

In sequence, it will be requested to modify:
Year -> Month -> Day -> Hour minutes (time set) -> **Time change** (see possible selections in the table)
Use the keys ▲▼, keys to set (if required) the current or desired values from time to time; at the end of each selection press **OK** to move to the next item.

> **Press the ▲▼ impulse keys to increase or decrease by one unit, prolonged pressure activates rapid scrolling.**

When ***TIME SEt*** is displayed, press «**back**» to quit.

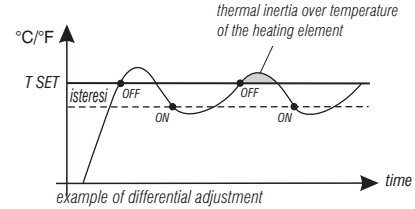
SUM/WIN **Possible selections on the display**	**Summer switch +1h** (daylight saving time)	**Winter switch -1h** (standard time)
(default) EUro (Central Europe UTC+1)	Last Sunday in March	Last Sunday in October
no	None	None
SEt	**freely programmable** IN Month / Day / Time	**freely programmable** OUT Month / Day / Time



11 - CONFIGURATION MENU (installer)

11.5 - TYPE TEMPERATURE ADJUSTMENT METHODS

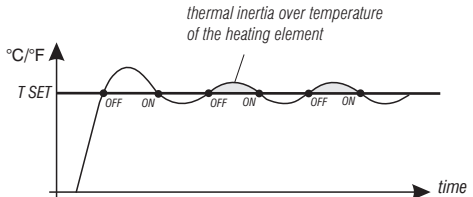
The timer thermostat is factory set to work in **DIFFERENTIAL MODE ON/OFF** with a preset differential value (Hysteresis) of 0,3 °C.
Note: adjustable from 0,2 °C to 1,2 °C *(from 0,3 °F to 2,1 °F).*
The hysteresis value must be set according to the system's thermal inertia; a low value is recommended for systems with radiators made of e.g. cast iron and a high value for systems with fan coils.



example of differential adjustment

As opposed to the differential, the temperature can be adjusted **PROPORTIONALLY (PROP)** setting cycles from 7 to 20 minutes (default 10 minutes).
This system maintains the desired temperature more stable, whilst increasing the user's comfort sensation and saving on energy consumption.

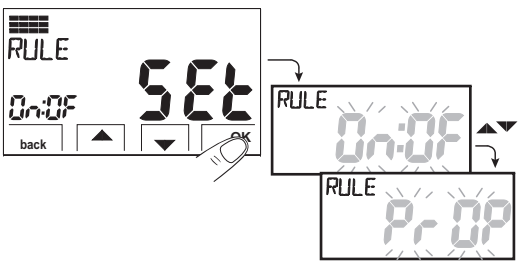
A long cycle is recommended for systems with high thermal inertia (cast iron radiators, floor systems) and a short cycle for systems with low thermal inertia (fan coils).



example of modulating proportional adjustment

11.5.1 - SELECTION OF THE TEMPERATURE ADJUSTMENT MODE (DIFFERENTIAL ON/OFF OR PROPORTIONAL)

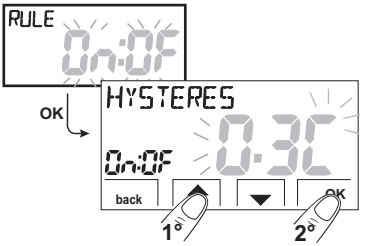
Through the path **Menu-> *CONFIGUR SEt->***, *select item **RULE SEt***.
Press **OK** to confirm.
It will be possible to select temperature adjustment mode between **Thermal differential (On:OFF)** factory setting or **Modulating proportional (PrOP)** operation.
Use the ▲ ▼, keys to select the desired temperature adjustment mode. After making your choice press **OK** to confirm and display the screen to set **HYSTERESIS** if you have opted for **On:OFF,** or to set the **PERIOD** if you have opted for **PrOP** (see next paragraphs: 11.5.2 and 11.5.3).



11 - CONFIGURATION MENU (installer)

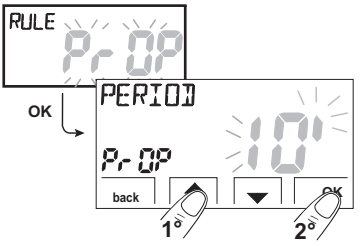
11.5.2 - Setting hysteresis for thermal differential ON-OFF

- Through the path ***Menu -> CONFIGUR SEt -> RULE SEt ->*** *select* ***On:OFF,*** then press **OK**.
- With the keys ▲▼ enter the desired hysteresis value (values may be set from 0.2 °C to 1.2 °C / from 0.3 °F to 2.1 °F - default 0.3 °C/0.4 °F).
- Press **OK** to confirm.
- Press the **back** key to exit.



11.5.3 - Setting period duration for modulating Proportional

- Through the path ***Menu -> CONFIGUR SEt -> RULE SEt ->*** *select* ***PrOP,*** then press **OK**.
- With the ▲▼ keys enter the duration of the desired period (settable from 7 to 20 minutes, default 10 min.).
- Press **OK** to confirm.
- Press the **back** key to exit.



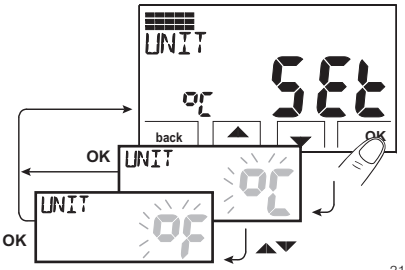
11.6 - CHANGE UNIT OF MEASURE FOR TEMPERATURE READING

The timer thermostat is pre-set in the factory to display temperatures in degrees Centigrade (Celsius), it is possible to switch to the Fahrenheit scale or vice versa with the following procedure:

- Through the path ***Menu -> CONFIGUR SEt ->*** *select* ***UNIT SEt*** then press **OK**.
- Select the desired unit of measure with the ▲▼ keys: °C or °F, then press **OK** to confirm.

All temperature set points will be updated according to the new scale.

- Press the **back** key to exit.



11.7 - CORRECTION OF ROOM TEMPERATURE READING

If for any reason the timer thermostat must be installed in a position where the measured room temperature might be affected (e.g. perimeter wall which is on average colder in winter and warmer in summer than the rest of the dwelling) the device has 2 separate parameters to adjust the room temperature measured in the ***Winter*** *and* ***Summer modes****.*

- Through the path ***Menu -> CONFIGUR SEt ->*** *select item* ***OFFSET SEt.***
  Press **OK** to confirm..

OFFSET for winter mode ( )

The display alternates the empty fields to be inserted (**- - - -**) with the current temperature value.

• Use the ▲ key to enter positive values, the ▼ key to enter negative values (sign «-»).

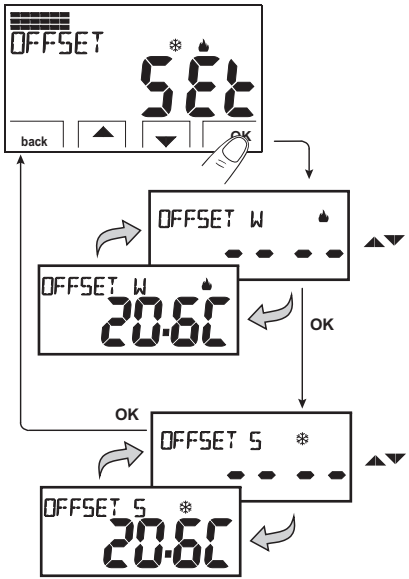
Possible correction -3.0 °C *(-5.4 °F)* ÷ **3.0 °C** *(5.4 °F)*

default 0.0 °C/°F = **- - - -**

At each selection the display will show the new correction value (e.g.: 0.6°C) alternated to the detected temperature value (e.g.: 21.2°C).

• After performing the correction press «**OK**».

The display shows the **OFFSET for the Summer mode** (❄); proceed with the correction as per the above procedure or press **back** to quit.



to cancel any previously set temperature corrections take OFFSET back to - - - - .

11.8 - MAX AND MIN SET TEMPERATURE LOCK (Winter and Summer mode)

In certain timer thermostat installations (public buildings, hotels, etc.) it might be useful to limit the maximum and minimum temperature set points. This avoids incorrect settings by unauthorised personnel (energy savings).

It is possible to limit (lock) the maximum, minimum or both temperature values settable on the timer thermostat. The restriction may be applied either to the **Winter** or **Summer** mode.

11 - CONFIGURATION MENU (installer)

• Through the path **Menu -> *CONFIGUR SEt* ->**, select item ***LOCKS SEt***. Press **OK** to confirm.

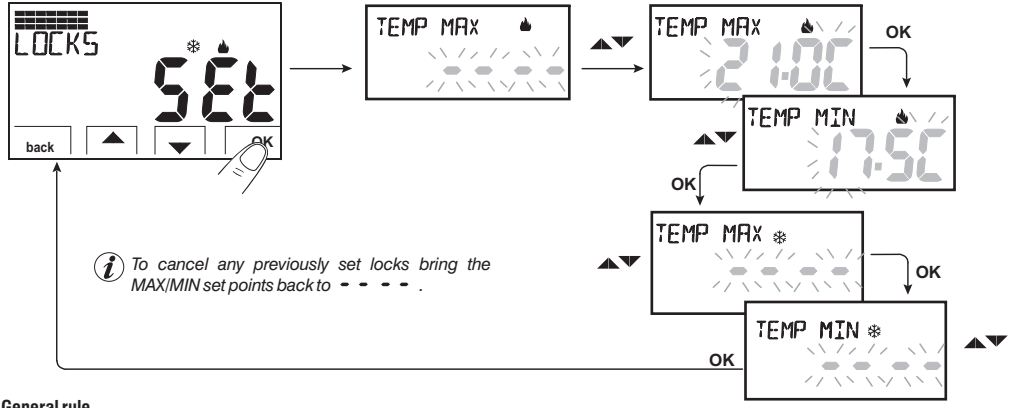
In a sequential manner it is possible to set maximum temperature locks **(comfort ti)** and/or minimum (**antifreeze t❄**) for the **winter mode** and/or maximum temperature **(t1 comfort)** and/or minimum **(t3 economy)** for the **Summer mode** ❄.

If no locks have been entered yet, the display shows empty flashing fields (**- - - -**).

• Use the ▲▼, keys to set the desired temperature lock values from time to time.

• Upon completing each setting press **OK** to confirm and move to the next lock item.

*Press the **OK** impulse key to move to a different item. Press the **back** key to exit.*



To cancel any previously set locks bring the MAX/MIN set points back to - - - - .

General rule

If **Set temperature t1** (comfort) is **greater than the maximum entered lock**, it will level out with it.

If **Set temperature t❄ or t3** is **less than the minimum entered lock**, it will level out with it.

The following rule will apply to all other temperatures: WINTER (🔥) = **t1** > **t2** > **t3** > **t❄** - SUMMER (❄) = **t1** < **t2** < **t3**

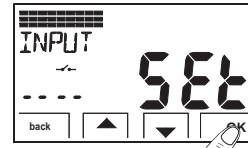
During timer thermostat operation, the user may not set a **Set t** higher or lower than the max and min. locks entered.

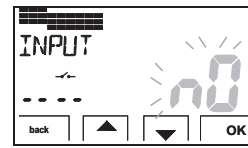
The display will signal impossibility to perform the operation by displaying LOCK.

The maximum and/or minimum locks will also be applied to **independent Set t** of the following timer thermostat operation modes: Temporary and permanent override, Holiday Program.

11 - CONFIGURATION MENU (installer)

11.9 - CONNECTION TO EXTERNAL CONTACT FOR REMOTE TIMER THERMOSTAT SWITCHING ON/OFF





⚠ Before enabling any item of the «INPUT» menu listed below ensure you have connected an external contact to terminals 1 and 2 (AUX)

A remote device may be connected to the timer thermostat (e.g. telephone programmer, hourly switch, switch) able to remotely enable/disable the timer thermostat. Through the path **Menu -> *CONFIGUR SEt* ->**, select item **INPUT SEt**.

Press **OK** to confirm.

Various operation modes may be selected depending on the type of contact free from potential (NO or NC) and type of device connected to the terminals **1** and **2 «AUX»** (see par. 5.4 electrical connections):

- **INPUT nO** = NO activation external contact (factory setting);
- **PHONE nC** = for «Normally Closed» contact of a telephone Programmer;
- **PHONE nA** = for «Normally Open» contact of a telephone Programmer;
- **DUTY nA** = for «Normally Open» contact e.g.: switch;
- **DUTY nC** = for «Normally Closed» contact e.g.: switch.

11.9.1 - ACTIVATION / DISABLING WITH A TELEPHONE PROGRAMMER

After connecting the Telephone programmer (optional) to the timer thermostat or other control device, it will be possible to select the **nC (normally closed contact)** or **nA** (**normally open contact** «NO») contact type setting on the telephone programmer.

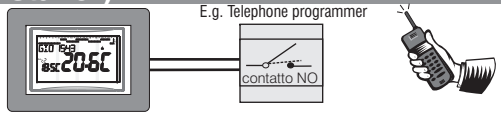
Through the path: ***Menu*** *key* **-> *CONFIGUR SEt* ->** *display item* ***INPUT SEt,*** press **«OK»** and with keys ▲▼ choose item **PHONE nC** or **PHONE nA**. Press **«OK»** to confirm. Press the **back** key to exit.

e.g. Telephone programmer (NC contact)	Timer timer thermostat operation
Contact closure	in **OFF** mode with **t❄ antifreeze**
Contact opening	in **permanent override mode** with **t(1) comfort**

e.g. Telephone programmer (NO contact)	Timer timer thermostat operation
Contact closure	in **permanent override mode** with **t(1) comfort**
Contact opening	in **OFF** mode with **t❄ antifreeze**

11 - CONFIGURATION MENU (installer)

11.9.1 - Example of remote timer thermostat switching on/off, connected to a telephone programmer with «nA» contact (NO normally open).



- **Programmer contact closure** (change of state): **causes permanent comfort override** and displaying associated symbols/setpoints and the icon " " After that it will be possible to change the operation mode on the spot by manually acting on the timer thermostat keypad, even if the telephone programmer contact remains closed; at the first change the icon becomes steady to indicate the end of the telephone override status and displays contact status still closed.
- **Programmer contact opening** (change of state): **causes operation status override OFF** (par. 10.3 - Timer thermostat disabling) with antifreeze function unless it is disabled; the display shows **OFF** (steady) and icon flashing, indicating incoming telephone override. After that it will be possible to go back to normal timer thermostat operation by pressing the key , the icon will go out indicating the end of telephone override.

Note: contact opening and closure controls are operative within 10 sec.

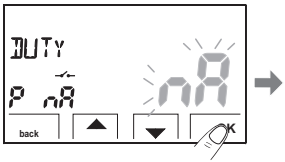
Note: If the user is unsure of the current status of the programmable thermostat and/or programmer, they can receive the status of the programmer's control output via telephone. If in doubt about possible manual changes after the last telephone override, it is advisable to perform a double switch to return the programmable thermostat to a safe override state via telephone, regardless of any manual operations performed on-site.

For example, if you need to override the comfort mode and are unsure about the programmer's status, you must perform an open-close contact. Conversely, to override the OFF/antifreeze mode, you must perform a close-open contact.

11 - CONFIGURATION MENU (installer)

11.9.2 - «nA» Duty - for normally open contact (NO)

By selecting this function it is possible to connect a NO remote contact which upon closing sets the timer thermostat in the **OFF** mode with antifreeze temperature t❄, unless it has been previously disabled.
In this condition it will not be possible to act on the timer thermostat keys to change operation status.
Open the contact and the timer thermostat resumes normal operation from the program active before overriding.
From path **Menu** key **-> *CONFIGUR SEt* -> *INPUT SEt* ->** select item **nA DUTY**. Press «**OK**» to confirm.
Press the **back** key to exit.



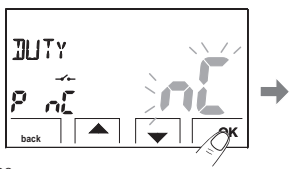
e.g. Switch	Timer thermostat operation
Contact closure	in **OFF** mode with **t❄ antifreeze**
Contact opening	operation from running program

Note: contact opening and closure controls are operative within 10 sec.

11.9.3 - «nC» DUTY - for normally closed contact (NC)

Attention: do not enable the nC DUTY item prior to connecting a switch or other device that allows change of state from **OFF** mode to automatic operation (running program) and vice versa to terminals 1 and 2 (AUX).

By selecting this function it is possible to connect a NC remote contact which upon opening sets the timer thermostat in the **OFF** mode with antifreeze temperature t ❄, unless it has been previously disabled.
In this condition it will not be possible to act on the timer thermostat keys to change operation status.
Close the contact and the timer thermostat resumes normal operation from the program active before overriding.
From path **Menu** key **-> *CONFIGUR SEt* -> *INPUT SEt* ->** select item **nC DUTY**. Press «**OK**» to confirm.
Press the **back** key to exit.



e.g. Switch	Timer thermostat operation
Contact closure	operation from running program
Contact opening	in **OFF** mode with **t❄ antifreeze**

Note: contact opening and closure controls are operative within 10 sec.

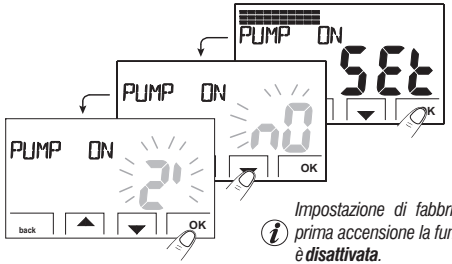
11 - CONFIGURATION MENU (installer)

11.10 - DESCALING CYCLE

If the function is activated, the timer thermostat activates every day of the year at 12:00, for 2 minutes. It activates the controlled device (pump, valve etc.) to prevent scaling or jamming caused by prolonged inactivity.

The timer thermostat activates only if the connected load was never switched on in the previous 24 hours.

From path **Menu key -> *CONFIGUR SEt* -> *PUMP ON SEt* ->** press **«OK»** and with the ▲▼ keys select the desired item: **PUMP ON nO** (NO) or **PUMP ON 2'**.
Press **«OK»** to confirm. Press the **back** key to exit.

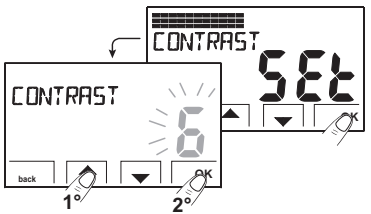


*Impostazione di fabbrica in prima accensione la funzione è **disattivata**.*

11.11 - DISPLAY CONTRAST ADJUSTMENT

8 adjustment levels are available. Level 6 is set in the factory. From path **Menu key -> *CONFIGUR SEt* ->** use ▲▼ keys to select item ***CONTRAST SEt***.
Press **OK** to confirm.

Select the desired level with the ▲▼ keys. The contrast variation obtained will be visible at every selection.
Press **OK** to confirm. Press the **back** key to exit.

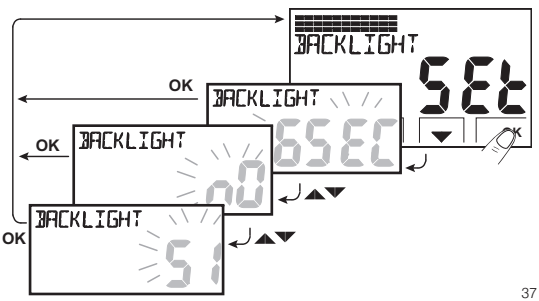


11.12 - BACKLIGHTING

It lets you enable or disable timed display backlighting. From path **Menu key -> *CONFIGUR SEt* ->** use ▲▼ keys to select item ***BACKLIGHTING SEt***. Press **OK** to confirm

With the ▲ ▼ keys select the desired item: timed backlighting **6sec** or disabled backlighting **nO** (NO).
Press **OK** to confirm. Press the **back** key to exit.

Note: with the backlight set to always on, the keys will also remain visible.



11 - CONFIGURATION MENU (installer)

11.13 - ENTERING AND MANAGING PASSWORDS

Some functions of this timer thermostat may be protected by a user Password **(User)** and/or installer **(Inst)**, so that they may be only modified by authorised persons. No password is active in factory settings.

11.14.1 - ENTERING THE NEW PASSWORD

- From the path **Menu key -> *CONFIGUR Set -> PASSWORD SEt ->*** press **«OK»** to access the screen to create a secret **User code** (***PASSWORD SEt User***) confirm with **OK**, or select item ***PASSWORD SEt InSt*** with the ▲▼, keys and confirm with **OK** to create the **Installer code**.

- Using the ▲▼, keys enter 4 digits (dashes not included) between **0000** and **9999,** individually confirm them with **«OK».**
  Press the **back** key to exit.

*The **«User»** password lets you access available functions through the **Menu key.** If an installer password is also present the **CONFIGUR SEt** menu may not be accessed.*

*The **«Installer»** password lets you access all **«Configurations» (CONFIGUR SEt)** menu functions as well as **User settings.***

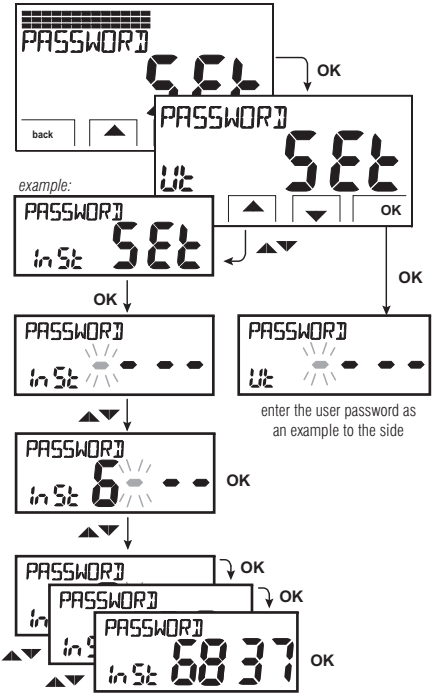
i With a password, certain quickly activated functions may still be used (see chapter 7).

PASSWORD MODIFICATION OR CANCELLATION

When required, enter the previously created User or Installer password; follow the above procedure and access item ***PASSWORD SEt User*** or ***InSt*** :

- enter 4 hyphens (- - - -) to cancel the password

- enter 4 new digits to modify the password



Information reserved to installer or expert user only

in the event of forgotten password enter the reset code 0927 when user or installer access is requested.
The secret user or installer code will be cancelled.

11 - CONFIGURATION MENU (installer)

11.14 - RESTORE (RESET)

IMPORTANT! The RESTORE (Reset) operation is recommended for the installer or expert user. In fact, this operation deletes many previous settings and programs carried out also according to the type of system.

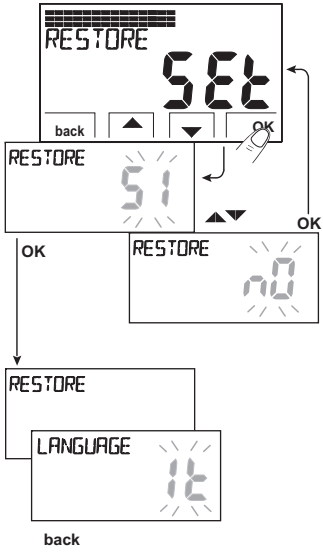
- The operation may be carried out following the path **Menu key -> *CONFIGUR SEt* ->:** using keys ▲▼ select item ***RESTORE SEt*** confirm with **OK**.

The display will ask to choose between restore **«YES»** and **«NO»**.

- Use the ▲▼ keys, to select then press **OK** to confirm.
- If you opt for **NO** the display exits the function and goes back to the initial ***RESTORE SEt*** screen. Press the **back** key to exit.
- If you confirm **YES «RESTORE»** will be displayed for 3 seconds, then the system will restart and display the language screen.
- Use the ▲▼ keys to select the desired language scrolling through available ones.
- Confirm by pressing **OK.**

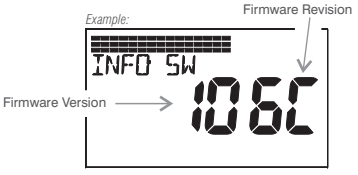
important: the timer thermostat restores many factory settings (default) with the exception of some special items that use the last set value (see summary table in chapter 2).
The timer thermostat is operable.

The RESTORE operation deletes any user and/or installer password entered.



11.15 - SYSTEM SOFTWARE INFORMATION

Follow the path ***Menu*** button -> ***CONFIG SEt*** -> and use the buttons ▲ ▼ to navigate to the ***INFO SW*** item to view information about the installed firmware.
Press the **back** button to return to the previous menu or press **OK** to exit the menus.



This parameter is useful if technical assistance is required.