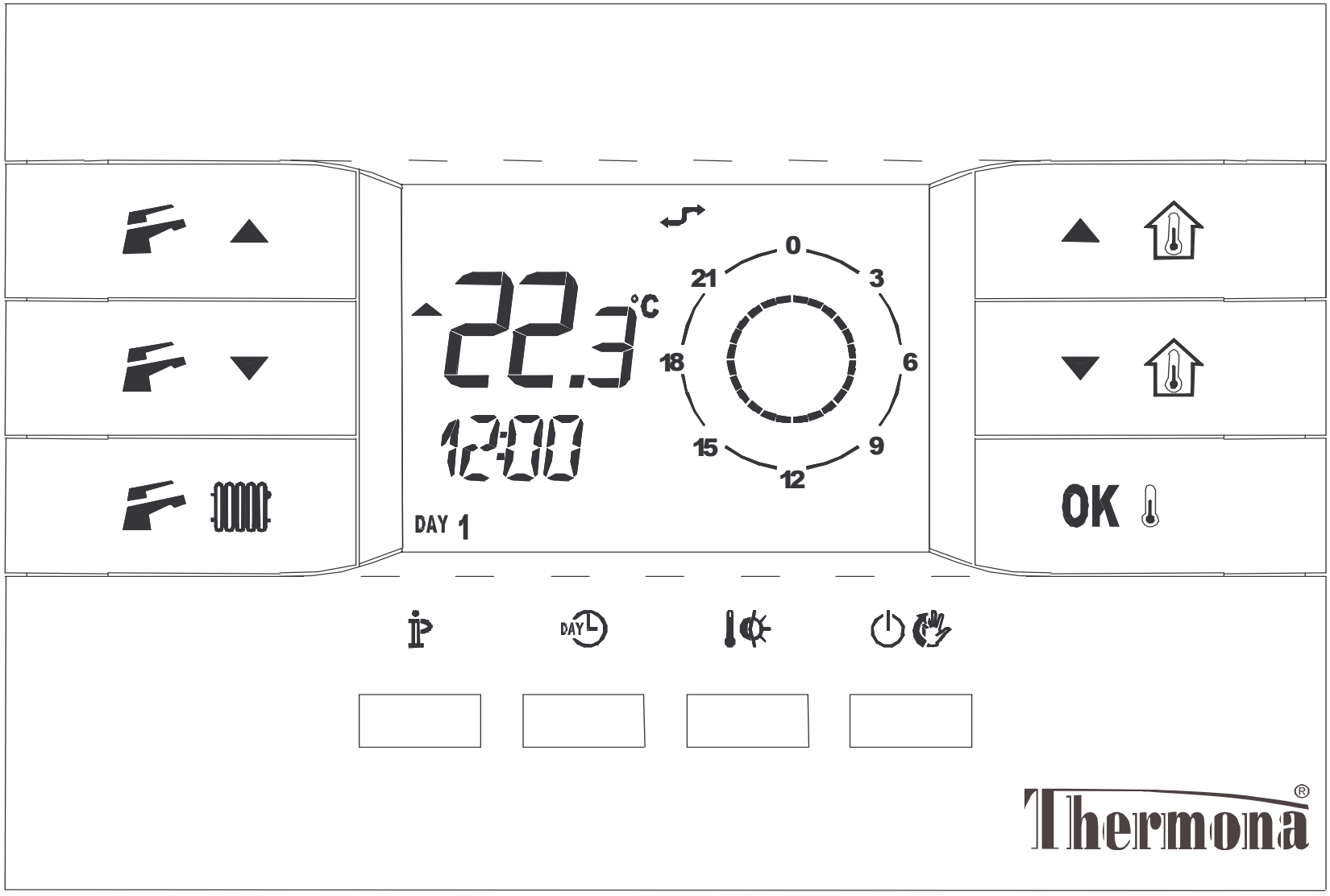
Installation Features and Remote Control Use

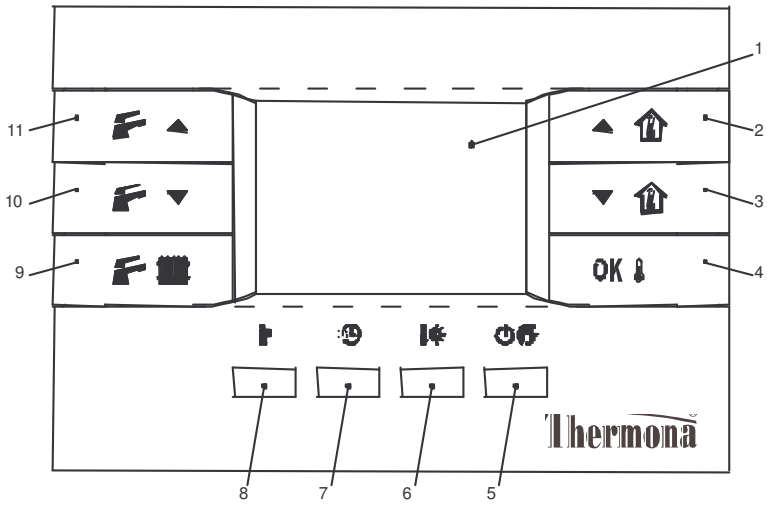


RC03

INDEX

USE & REMOTE CONTROL PROGRAMMING

1 Remote Central Heating



1 Functions Display

2 Room Set-Point Temperature Increase

3 Room Set-Point Temperature Decrease

4 Room Temperature Display / Confirm Settings

5 Change Functions into *Automatic* or *Manual* or *Off* (Stand-by)

6 Load *Set Comfort* (sun) or *Economy* (moon)

7 Load *Timer* Function (if it is in manual mode) or *Holiday* (if it is in automatic mode)

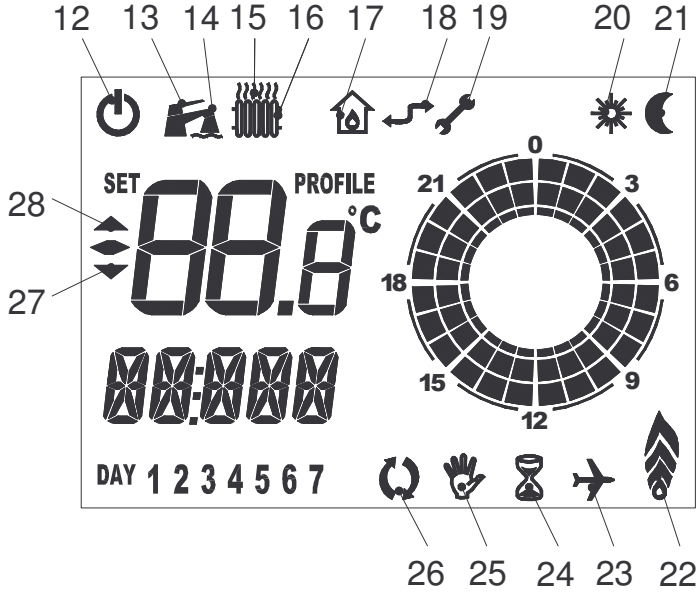
8 Enter into *Programming Mode* (PROGR) or *Information* (INFO)

9 *Only Domestic Hot Water* Enabling – *Domestic Hot Water/Central Heating* – *None*

10 Domestic Hot Water Set-Point Temperature Decrease

11 Domestic Hot Water Set-Point Temperature Increase

Display Information



12 Central Heating in OFF

13 Domestic Hot Water Function Enabled (SHOWER mode in progress if blinking)

14 Domestic Hot Water Request

15 Central Heating Request

16 Central Heating Function Enabled (ANTI-FROST in progress if blinking)

17 Data of CENTRAL HEATING

18 Communication REMOTE – CENTRAL HEATING activated

19 Error or Service Request

20 COMFORT temperature in progress (SUN)

21 ECONOMY temperature in progress (MOON)

22 Boiler Flame Status – Central Heating power modulation

23 OFF TIMED Function or HOLIDAY MODE active

24 TIMED function active

25 MANUAL/FORCED function active

26 AUTOMATIC/FORCED function active

27 Room Temperature decreasing

28 Room Temperature increasing

2 Functioning Mode

The Remote has three main operation modes:

- Normal Operation (***RUN***)
- User Programming Mode (***PROGR***)
- Advanced Information Mode (***INFO***)

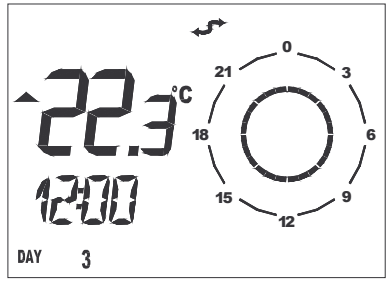
The first mode serves an ordinary use, it executes pre-set functions and user requests.

By using the second mode, you can set time and day of the week, then temperature settings and time programs.

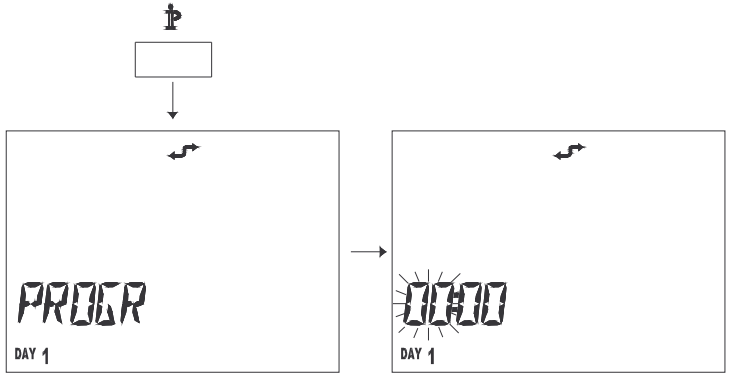
By using the third mode, you can set or display the regulation parameters or the ones related to the connected CENTRAL HEATING.

The transition between Operating Modes is performed as follows:

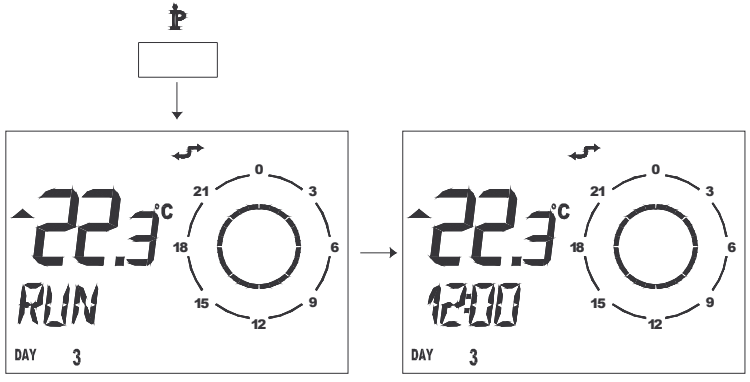
- User Programming Mode (**PROGR**)



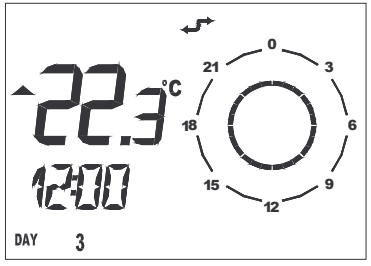
To shift from ***RUN*** to ***PROGR***, briefly push the ℙ button, PROGR text will scroll for few seconds



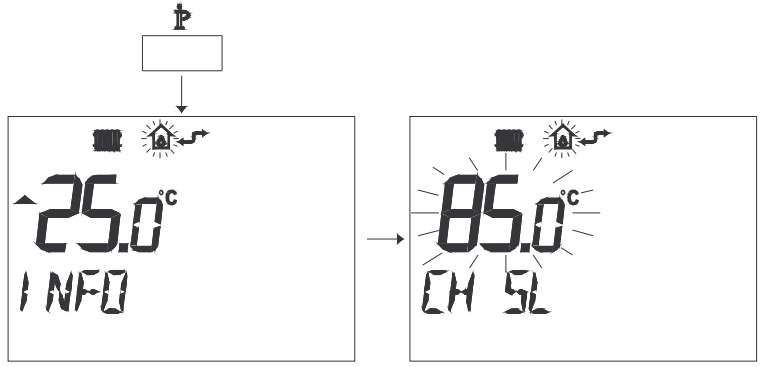
To return from ***PROGR*** to ***RUN***, briefly push the ℙ button, RUN text will scroll for few seconds



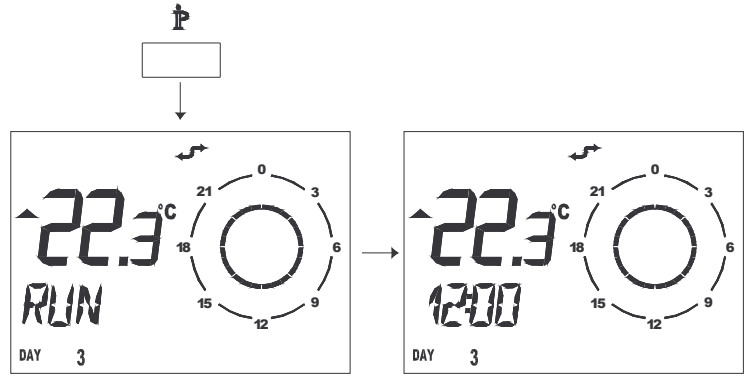
- Advanced Information Mode (***INFO***)



To shift from ***RUN*** to ***INFO***, push the ℙ button for at least 3 seconds, INFO text will scroll for few seconds

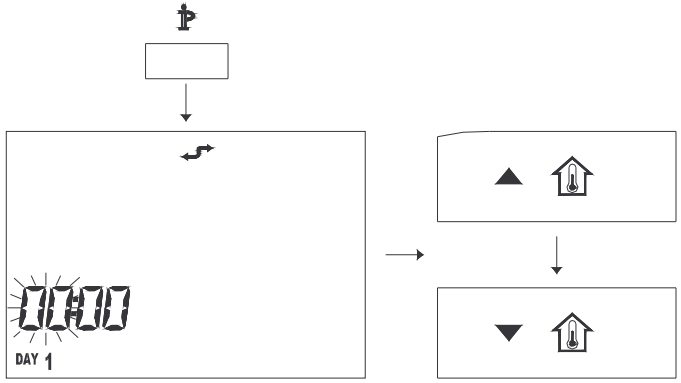


To return from ***INFO*** a ***RUN***, briefly push the ℙ button, RUN text will scroll for few seconds

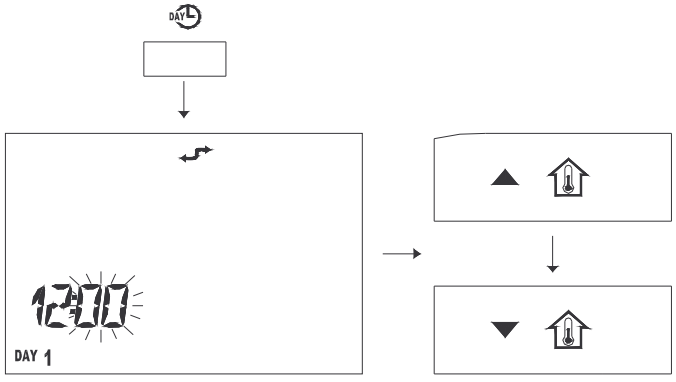


3 TIME/DATE Setting

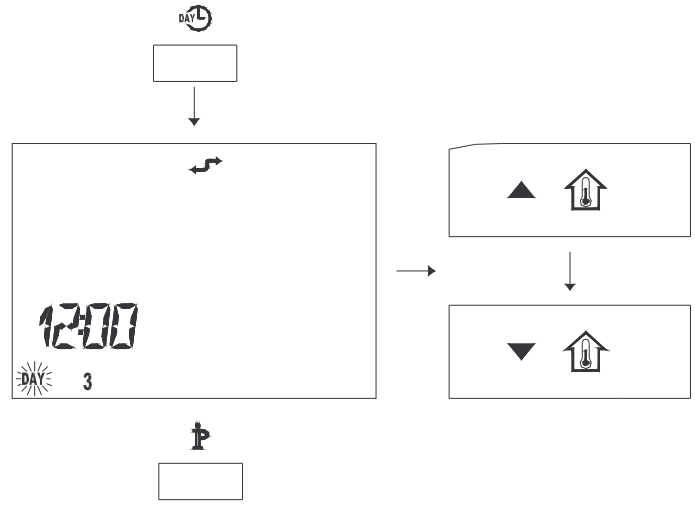
Push ℙ button to enter into *programming mode.*



By using ▲ or ▼ buttons, it is possible to change the blinking value (Hours).
Push DAY or **OK** buttons to select next value (Minutes).



By using ▲ or ▼ buttons, it is possible to change the blinking set value (Minutes).
Push DAY or **OK** buttons to select next value (Day of Week).



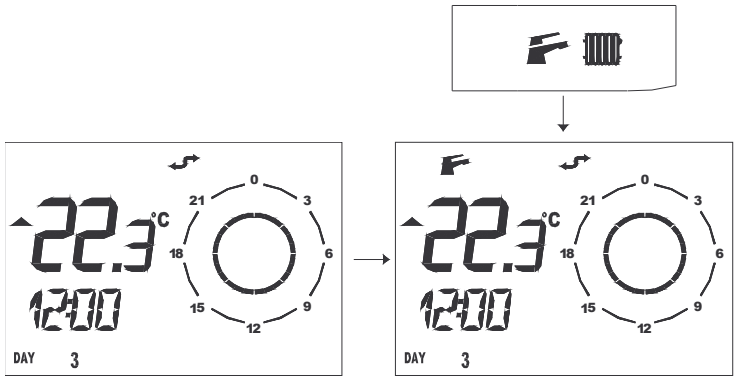
By using ▲ or ▼ buttons, it is possible to set the blinking desired value (Day of Week).
Push button to exit and return to *run mode.*

4 Central Heating and/or Domestic Hot Water enable

It is possible to enable or disable the Only Domestic Hot Water and/or Central Heating functions, by pushing eventually several times.

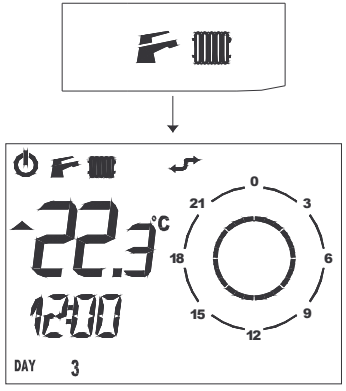
Only Domestic Hot Water enabled (SUMMER)

Push .



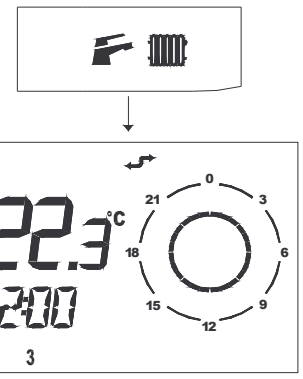
Central Heating/Domestic Hot Water enabled (WINTER)

Push .



Central Heating and/or Domestic Hot Water Functions disabled (STAND-BY)

Push .



Special programs or enabled functions are indicated by the presence of the following icons:

- Domestic Hot Water and Central Heating Functions enabled.
- **Blinking** Anti-frost Mode active.
- Only Domestic Hot Water enabled.
- **Blinking** Shower Mode active.

5 Automatic, Manual, Off Functions

There are three main operating programs with relating sub-programs of the chronothermostat: *Automatic, Manual, Off*:

- *Automatic*, room temperature has a changing course which depends on the time scheduling profiles and set points (regulation thermal profile).
- *Manual,* room temperature is regulated at a fixed user programmed set-point.

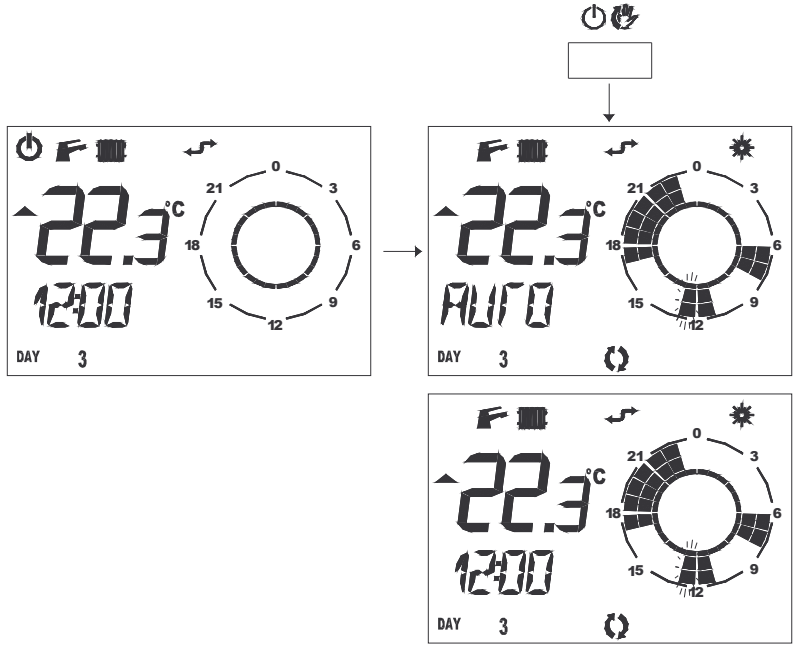
- *Off,* the *central heating* system is in stand-by (eventually it activates, if the temperature goes below the Anti-Frost Mode when enabled).

Timed sub-programs:

- *Automatic Forced*, a timed temperature is fixed until the next set point and it works separately from the regulation profile in use.
- *Timed Manual*, the system proceeds in manual function mode (user-programmed set-point) for a programmable period of time and then the temperature controller shifts to Automatic Function mode.
- *Timed Off or Holiday Mode*, the system keeps OFF mode for a programmable period of time and then the temperature controller shifts to Automatic Function mode. The function in progress is shown by the presence of the following blinking icons ⌛ (Timed functions) or ✈ (Holiday).

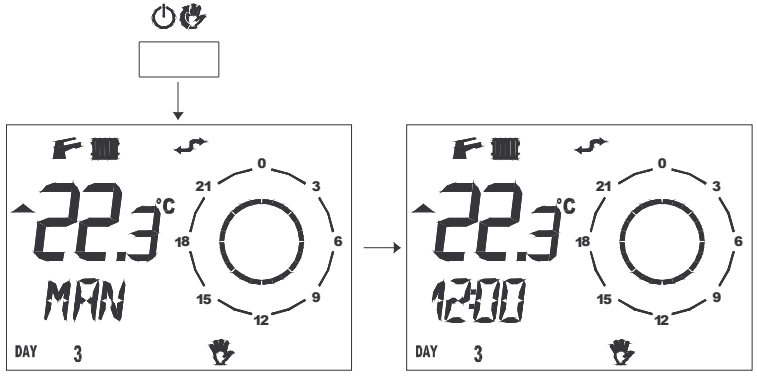
Temperature Controller in Automatic Mode

Push ⏻✋ .



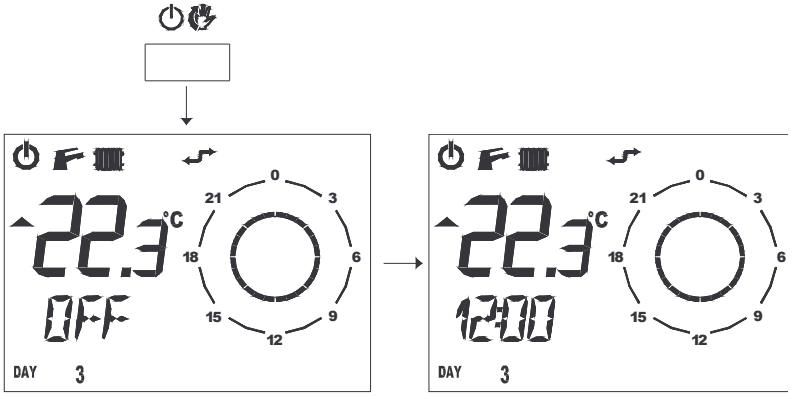
Temperature Controller in Manual Mode

Push ⏻✋.



Temperature Controller in Off Mode

Push ⏻✋ .



Special programs or enabled functions are indicated by the presence of the following icons:

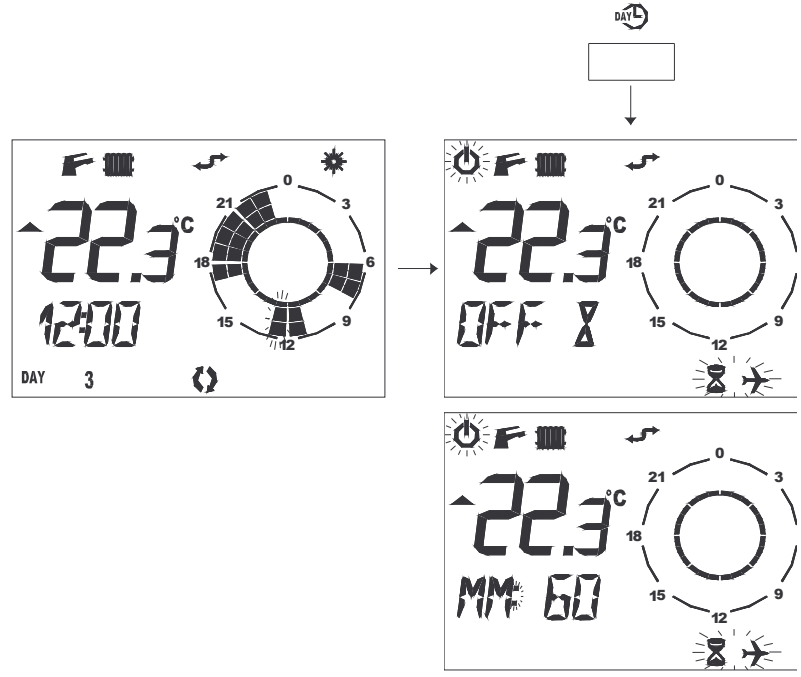
- *Automatic* Function
- *Automatic Forced* Function
- *Manual* Function
- *Timed Manual* Function
- *Off*
- *Timed Off*
- *Holiday Function*

6 Timed Functions

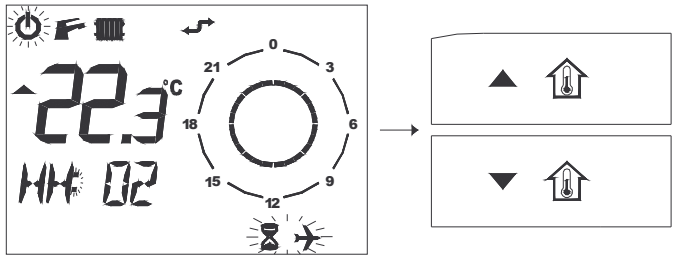
From Automatic to Timed Off

By pushing DAY button, it is possible to activate TIMED OFF or HOLIDAY PROGRAM from the AUTOMATIC function. In this case, the starting of that function will be shown below through the scrolling line OFF and time in minutes for the function OFF, which can be pre-set through the ▲ and ▼ buttons. After this sequence the Remote Control will proceed to activate the AUTOMATIC program.

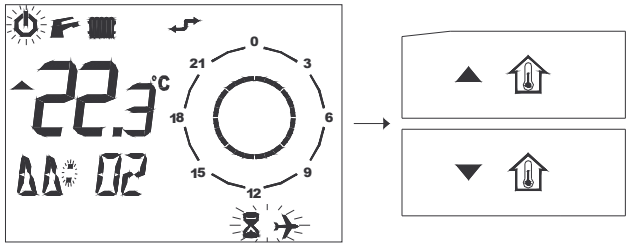
During the whole process, the remaining time at the timed function ending will be shown on the LCD. This period can vary between 10 – 90 minutes (***MM*:** nn), it can be increased or decreased of 10 minute steps, or it can be in hours from 2 to 47 (***HH***: nn), with 1 hour steps, or in days from 2 to 45 (***GG***: nn), with 1 day steps. In this case the timed function is the HOLIDAY PROGRAM.



From *AUTOMATIC*, push DAY button to activate TIMED OFF function.



Using ▲ and ▼ buttons, set time period of TIMED OFF function.



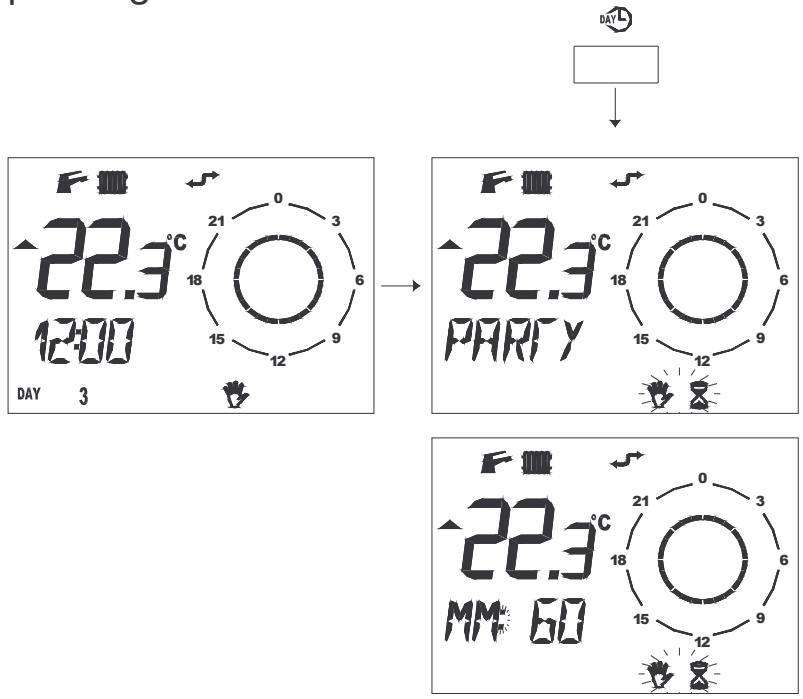
It is possible to stop timed functions by pushing when desired.

From Manual to Timed Manual

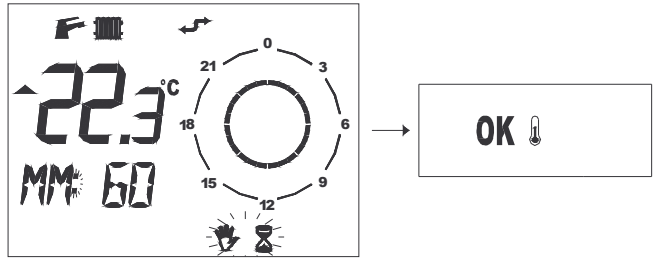
From the MANUAL function you can access the TIMED MANUAL function by pushing DAY button.

It is also possible to stop the timed functions linked to the setting of the room temperature by selecting to choose the desired function.

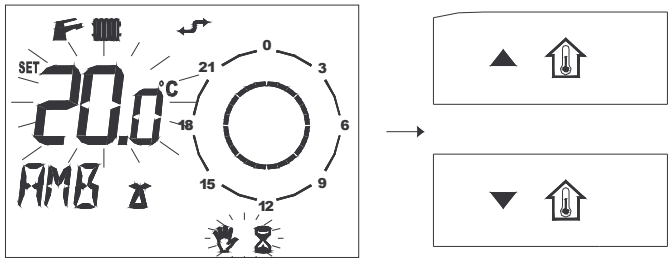
During timed functions it is possible to change the temporary setting through ▲, ▼ and buttons, after pushing OK .



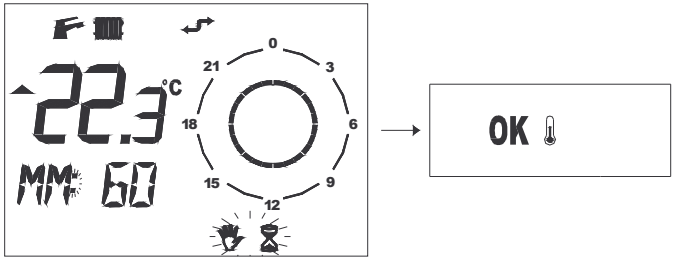
From *MANUAL*, push DAY to activate the *TIMED MANUAL* function.



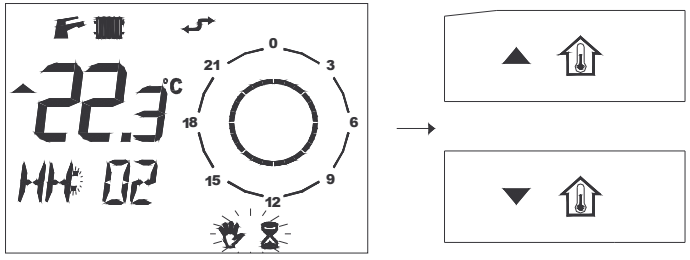
During Timed Functions to change room set-point temperature for timed period, push OK.



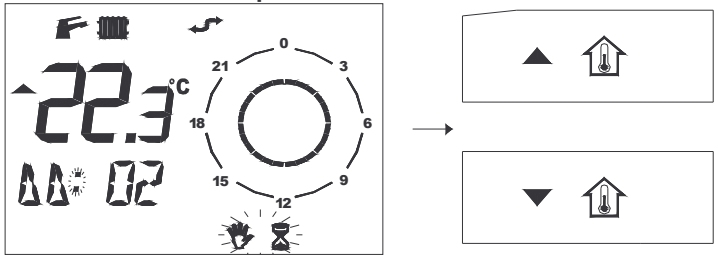
Use ▲ and ▼ buttons to increase or decrease the room set-point temperature.



Push OK to confirm the change.
Use ▲ and ▼ buttons for setting the time period of *TIMED MANUAL* function.

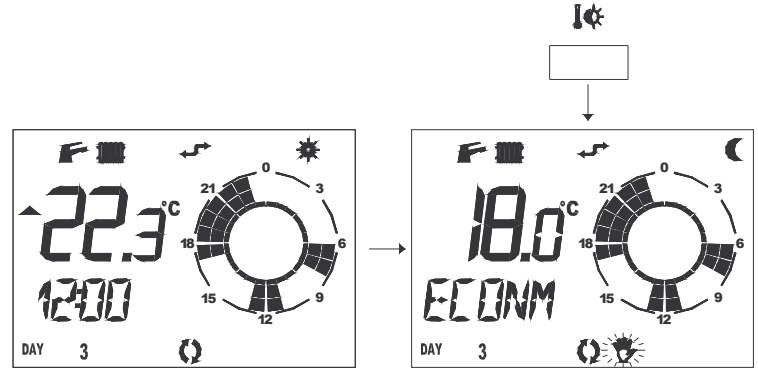


Another example

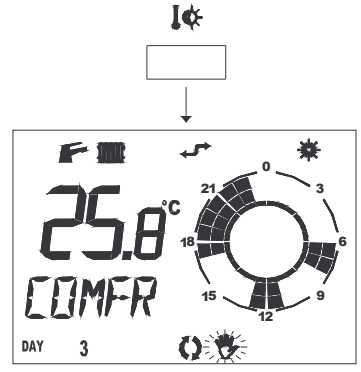


From Automatic to Forced Automatic

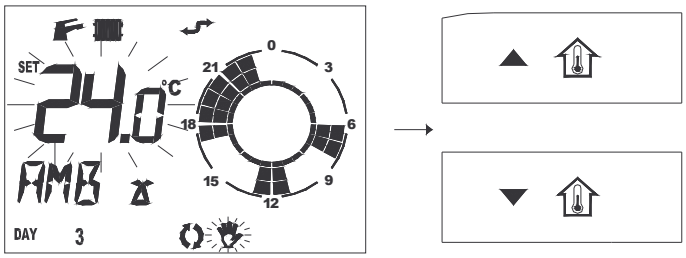
From the AUTOMATIC function you can access the FORCED AUTOMATIC function by pushing , so you can set the function for example from a COMFR temperature to an ECONM temperature.



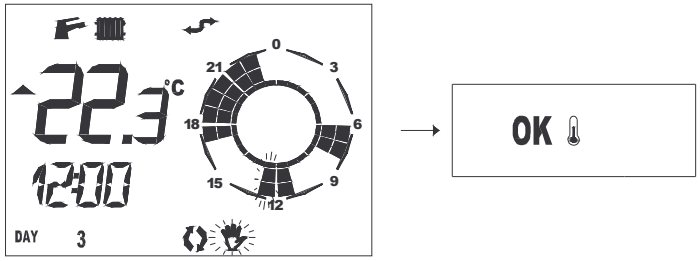
By pushing the button, you can change for example from ECONM to COMFR.



It is possible to change ROOM TEMPERATURE by selecting ▲ and ▼ buttons, in order to have the desired set-point value.



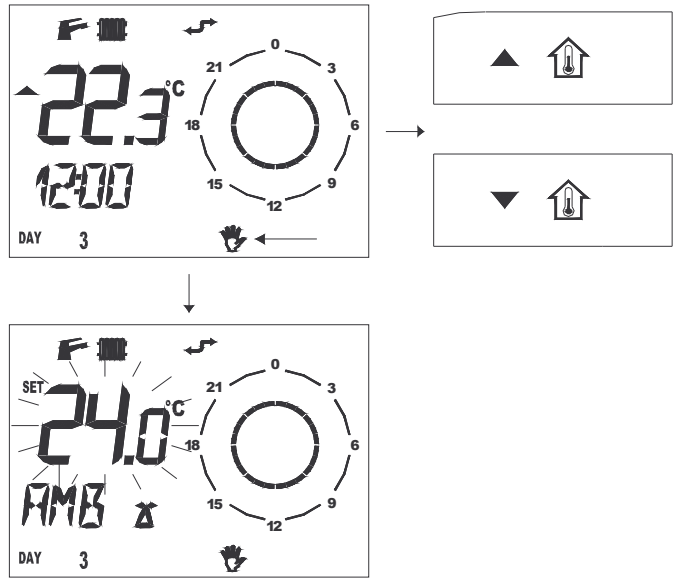
Push **OK** to confirm and exit.



These functions and ROOM TEMPERATURE are kept until the next programmed SET-POINT in the AUTOMATIC function. When it reaches that set-point, the function will turn to AUTOMATIC with the programmed temperature setting.
By using , the FORCED AUTOMATIC function can be interrupted at any time.

7 Modification Set-Point Room Temperature

From the manual mode it is possible to change the ROOM SETTING in each instance.

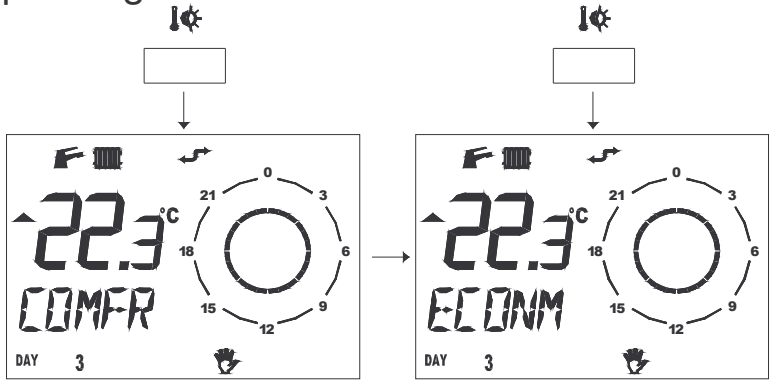


Push ▲ (increase) and ▼ (decrease) buttons to change room set-point temperature (ROOM SETTING).
Push **OK** to confirm and exit.
Push to load the *COMFORT* and *ECONOMY* settings.
It is possible to change ROOM SETTING in each instance, simply by selecting ▲ and ▼ buttons. The increase or the decrease will be 1/10 degree and it will be displayed for few seconds by blinking text below AMB.

By keeping one of the two buttons pushed, a faster variation can be obtained in continuous acceleration.

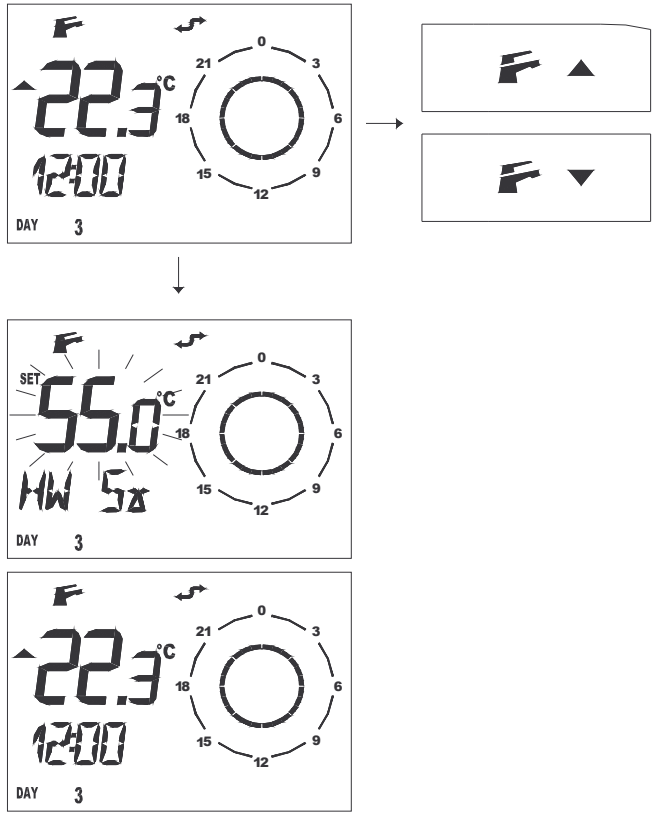
Push **OK** to confirm and exit.

Select to load directly either the *COMFORT* or the *ECONOMY* setting, by pushing the same button more times.



8 Domestic Hot Water Temperature

If you enable the domestic hot water function icon, Domestic Hot Water temperature (*DOMESTIC HOT WATER SETTING*) can be modified in each instance by pushing the ▲ and ▼ buttons, in that case "HW SET" (Hot Water Set) message will flash for a few seconds on the LCD.
The value of the setting can be adjusted within a preset range depending on the higher and lower limits allowed by the central heating system.



Push ▲ and ▼ buttons to modify DOMESTIC HOT WATER SET-POINT.
Push OK to confirm and exit.
Domestic Hot Water Temperature in progress on Shower Mode (second domestic hot water temperature) where it is enabled.
If you enable the domestic hot water icon, Domestic Hot Water Temperature *Shower* (Comfort Domestic Hot Water Setting) can be started in each instance by pushing the ▲ or ▼ buttons and then push DAY. In that case, "SHOWR"

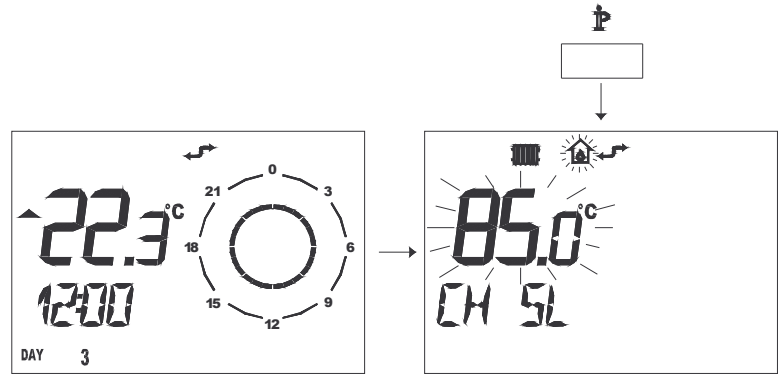
message will flash for few seconds at the bottom and icon will flash at the top.

This is a timed function and it lasts 1 hour, it is shown by the presence of the blinking icon for all its duration time. To reset the ordinary domestic hot water temperature, push ▲ or ▼ buttons and then push DAY. Icon stops to flash. Domestic hot water setting for that function can be set within the ***PROGR*** mode.

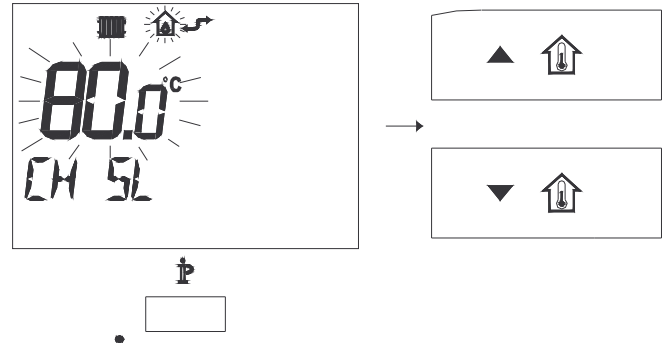
9 Central Heating Circuit Temperature

If the Heating function is enabled, Heating circuit water temperature (*MAXIMUM SETPOINT RISC=CH SET LIMIT*) automatically calculated can be limited in superior temperatures, in order to prevent excessively high temperatures within the system.

Keep i pressed for at least 3 seconds to go into ***INFO*** mode and enter into CH SL menu.



By pushing ▲ (increase) and ▼ (decrease), you can modify the superior limit for temperature within the Heating Circuit (*MAXIMUM SETPOINT RISC=CH SET LIMIT*), which value is associated with the connected Heating system type .

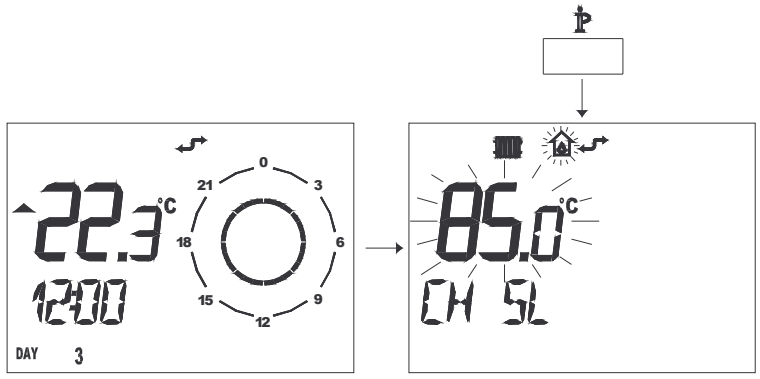


Push i to exit and return to RUN MODE.

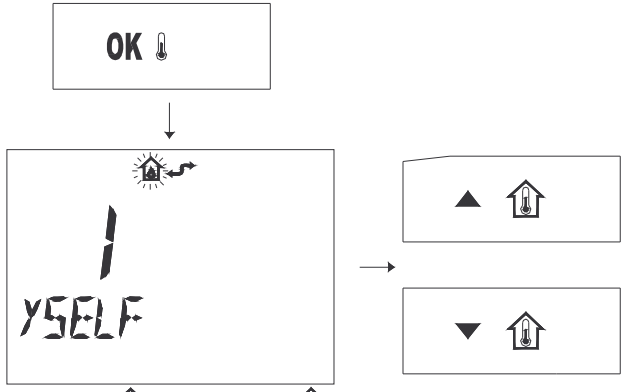
10 Enabling or Disabling Self-Learning

It is possible to enable/disable the SELF-LEARNING function by entering into

INFO mode. Keep ℹP pressed for at least 3 seconds to enter into ***INFO*** mode.



Push OK 🌡 several times to enter into the YSELF menu.

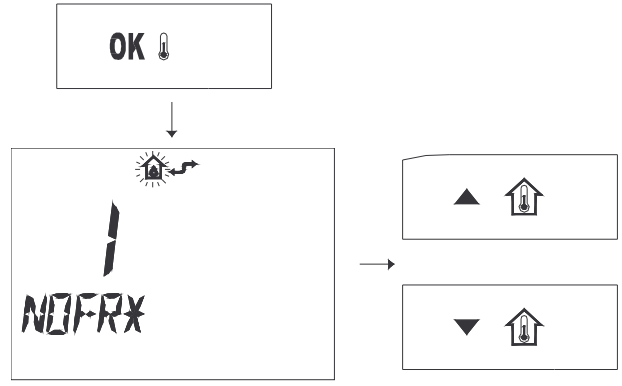


Push ▲ 🏠 and ▼ 🏠 buttons to enable ***1*** or disable ***0*** the function.
Push ℹP to exit and return to RUN MODE.

11 Enabling or Disabling Anti-Frost

It is possible to enable or disable the ANTI-FROST protection function by entering into ***INFO*** mode.

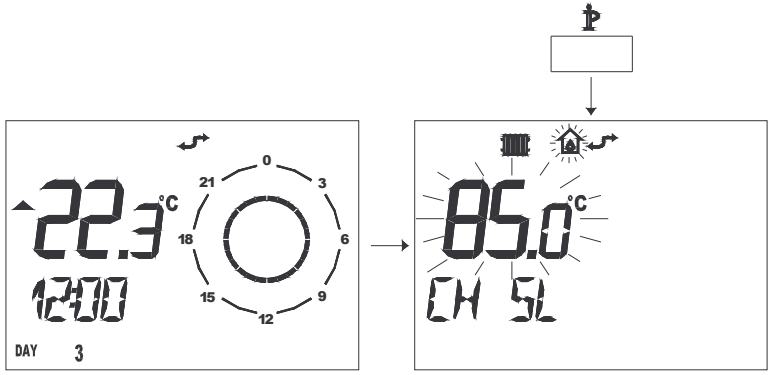
Keep ℹP pressed for at least 3 seconds to enter into ***INFO*** mode.
Push OK 🌡 several times to enter into the NOFRX menu.



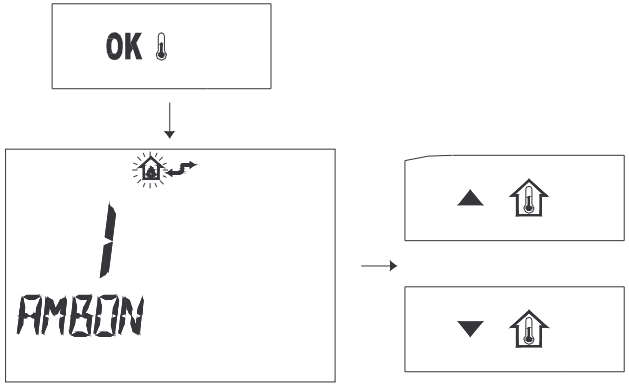
Push ▲ 🏠 and ▼ 🏠 buttons to enable ***1*** or disable ***0*** the function.
Push ℹP to exit and return to RUN MODE.

12 Enabling or Disabling Room Temperature Sensor

It is possible to enable or disable the section of the TEMPERATURE CONTROLLER of the REMOTE (room temperature sensor) by entering into ***INFO*** mode.
Keep ℹP pressed for at least 3 seconds to enter into ***INFO*** mode.



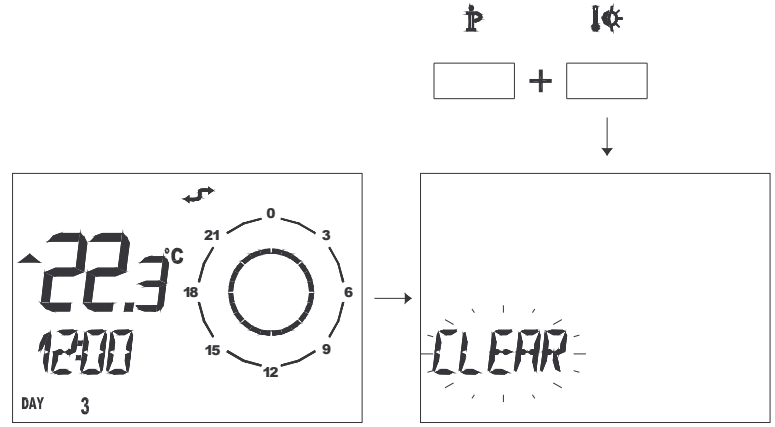
Push **OK** several times to enter into the AMBON menu.



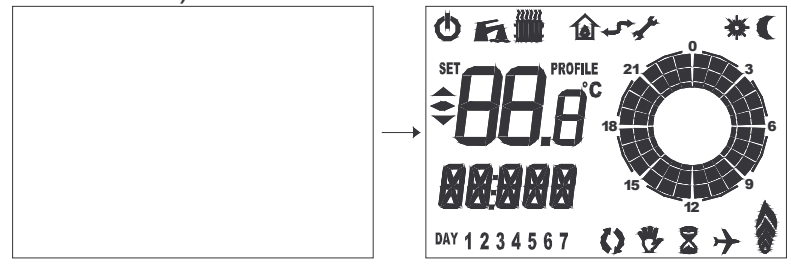
Push ▲ and ▼ buttons to enable ***1*** or disable ***0*** the function.
Push to exit and return to RUN MODE.

13 Reset with Reloading of Factory Values

It is possible to return to the original factory settings (temperature levels, time and settings, etc…) firstly by pushing and holding button, then immediately (within 2 seconds) push also button, until "CLEAR" appears on LCD.



Keep both buttons pushed for 6 seconds until the *COMPLETE* system *RESET* (display switch-off).



To delete the settings, simply release the buttons.
ATTENTION: After the operation all individual settings will be lost and a new operation mode will be set again, in case other different settings are required instead of factory values.

14 Central Heating Error Signals and Block/Release from Remote

There are two main errors displayed by the Remote.

If ***ERRORS*** occur, blinking icons and appear with the ERROR message.

In the centre of the screen, a code related to the error in progress is shown, followed by letter **E**.

ERROR

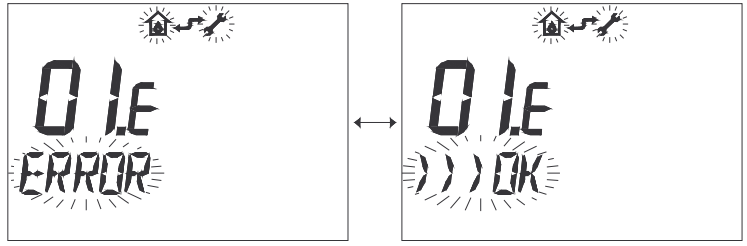
When error ends, the system will automatically reset the ordinary functioning.

Central Heating error may be occurred by many different factors (for ex., low pressure or lack of water in the heating circuit) – see booklet equipped with the central heating.

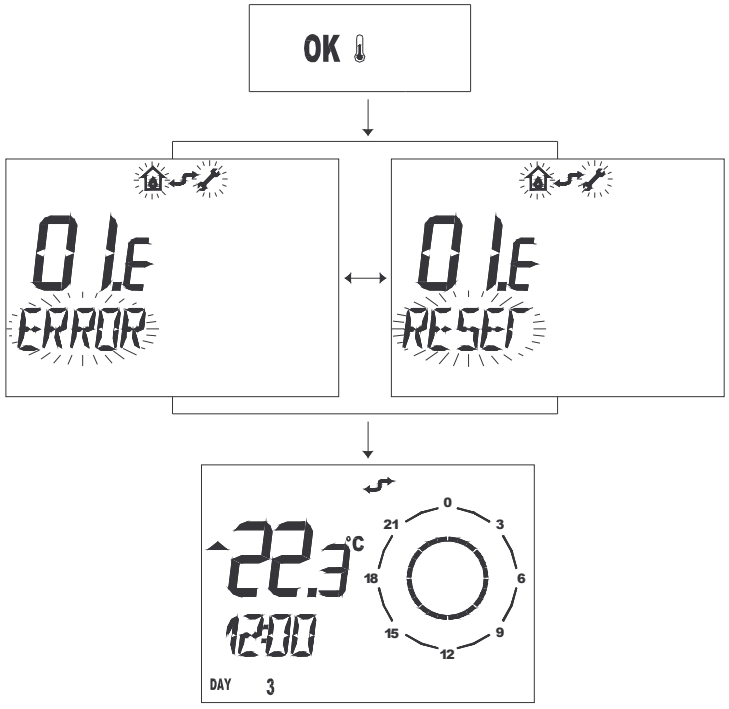
If error persists, call **technical assistance**.

If ***LOCK*** occurs, blinking icons and appear with the ERROR message, which alternate to)))OK message every 2 seconds. This means it is possible to lock-out the system by pushing OK button.

LOCK - LOCK OUT



In the centre of the screen, a code related to the lock in progress is shown, followed by letter **E**.
Push OK button to release the central heating.

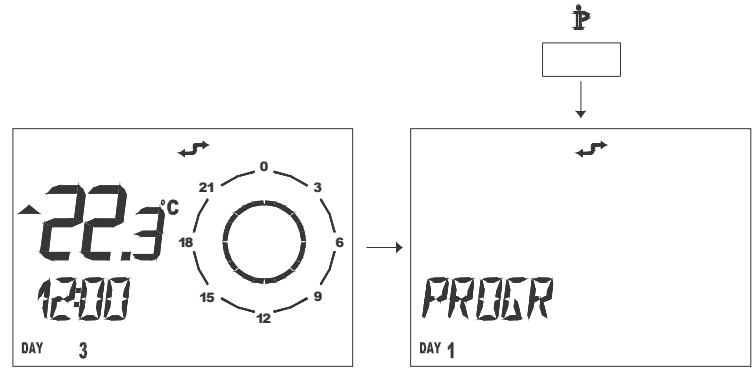


After pushing **OK** button, the remote sends the order to *LOCK-OUT* indicated by the blinking button RESET which alternates to the blinking message ERROR every 2 seconds, until the central heating turns automatically working ordinarily.

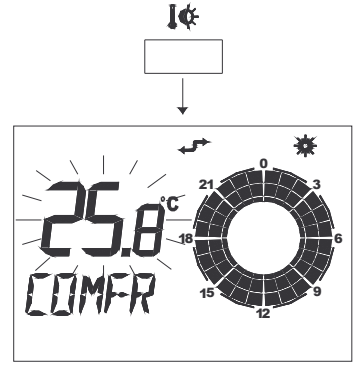
15 Room and Domestic Hot Water Temperature

Once entered into the programming menu, it is possible to see the *COMFORT*, *ECONOMY* (Reduced), *OFF* (Anti-Frost NOFRX) and *SHOWER* (Comfort Domestic Hot Water) programming menu by pushing button repeatedly.

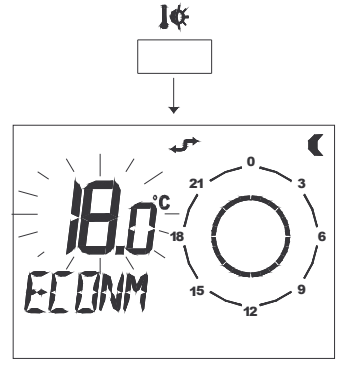
Push button to enter into *PROGRAMMING* mode.



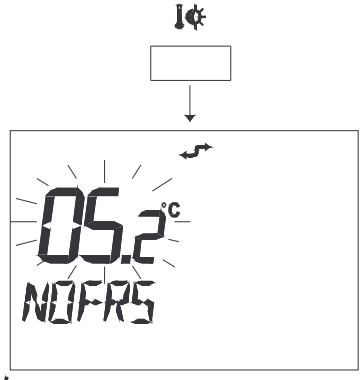
Push button to see the *COMFORT* temperature set-point.



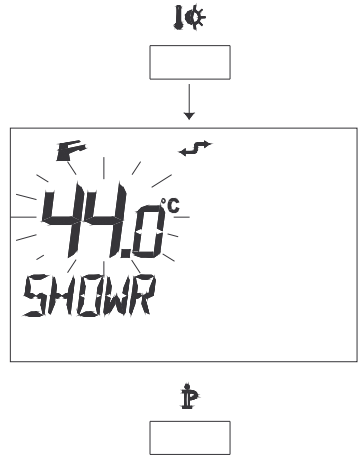
Push button to see the *ECONOMY* temperature set-point.



Push button to see the *OFF* temperature set-point (Anti-frost NOFRX) or *Off Set.*



Push button to see the *SHOWER* temperature set-point (Comfort Domestic Hot Water setting) according to the temperature set in the domestic hot water.

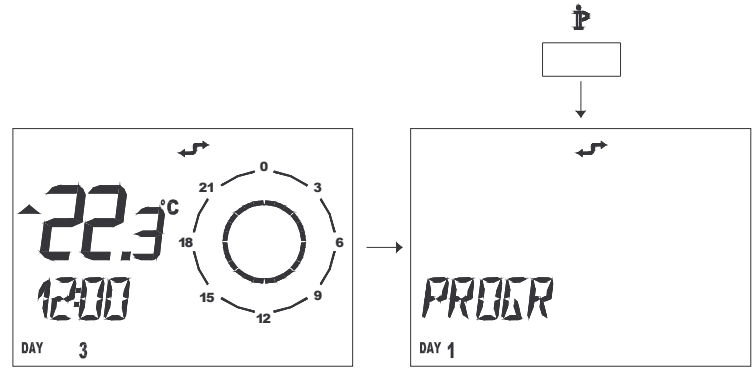


Push button to exit and return to *RUN MODE.*

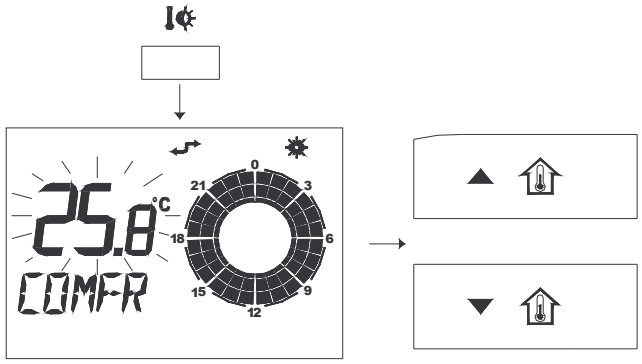
16 Room and Domestic Hot Water Set-point Temperatures

The *COMFORT* Room temperature can be set between 10 °C and 35 °C in increments of 0,1 °C. This is possible also for the *ECONOMY* Room temperature.

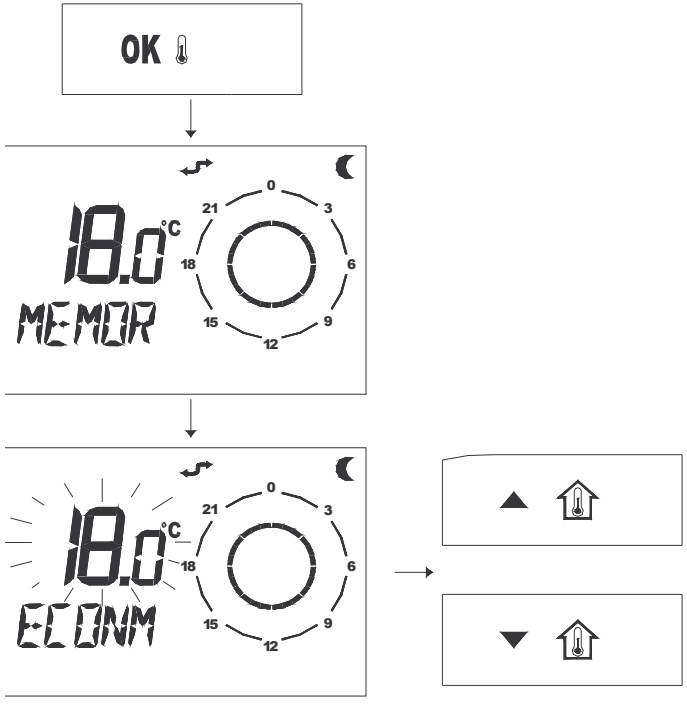
The *OFF* temperature (Anti-Frost) can vary between 0 ° C and 10 ° C by steps of 0,1 ° C each.



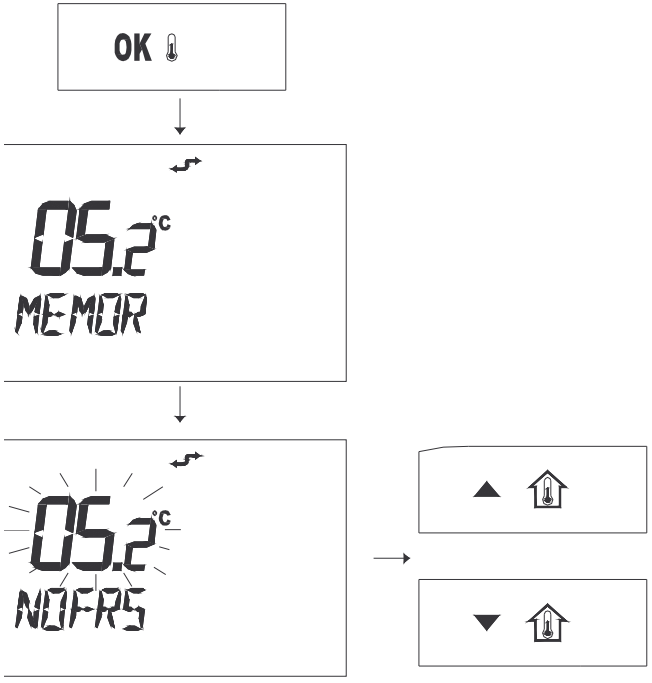
Push button to enter into *PROGRAMMING* mode.



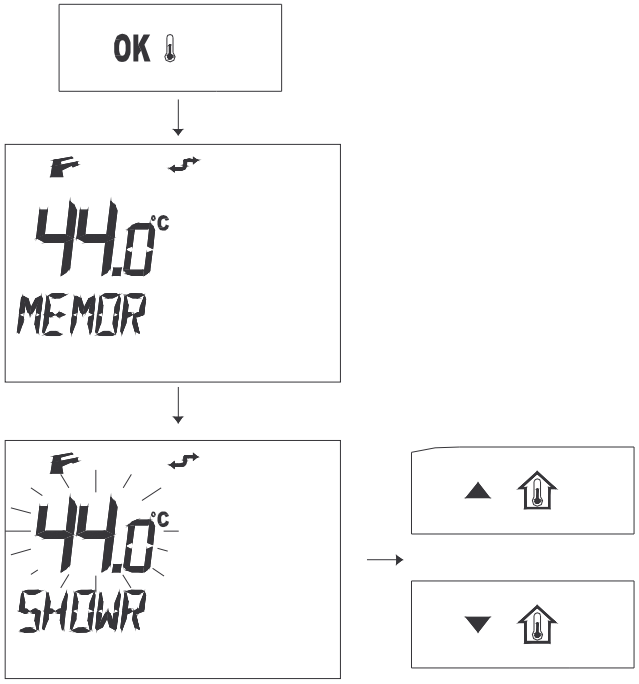
Push button to see the *COMFORT* temperature set-point.
To modify temperature settings, push either ▲ or ▼ buttons.
Push **OK** button to save the new *COMFORT* set-point value or see the *ECONOMY* set-point value.



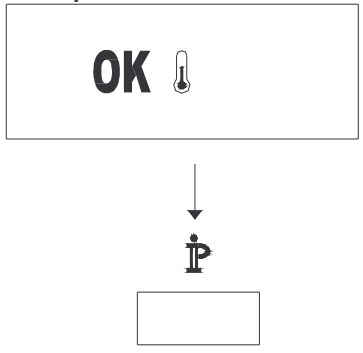
To modify temperature settings, push either ▲ or ▼ buttons.
Push **OK** button to save the new *ECONOMY* set-point value or to see the *OFF* set-point value (Anti-Frost NOFRX) or *OFF Set.*



To modify temperature settings, push either ▲ or ▼ buttons
Push **OK** button to save the new *OFF* set-point value or to see the *SHOWER* set-point value (Comfort Domestic Hot Water Setting).



To modify temperature settings, push either ▲ or ▼ buttons
Push **OK** to save the changed *SHOWER* set-point value.



Push button to exit and return to *RUN MODE*.

17 Time Scheduling Profiles Programming

DAY/DAYS GROUP SELECTION

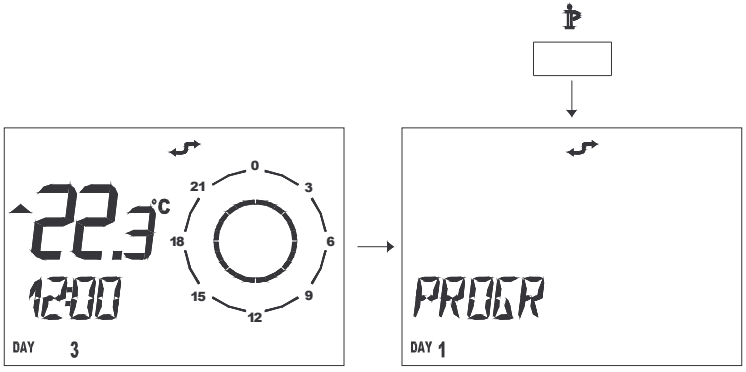
Once entered into programming mode by first pressing and then , it is possible to see the DAY/DAYS GROUP selection menu. From here can be displayed the associated time programming menu which is related to the **Automatic** functioning.

By pressing ▲ and ▼ buttons, it is possible to select a single day (from Monday to Sunday) or a group of days, to which the associated *PROFILE* or *TIME PROGRAM* can be assigned as defined below:

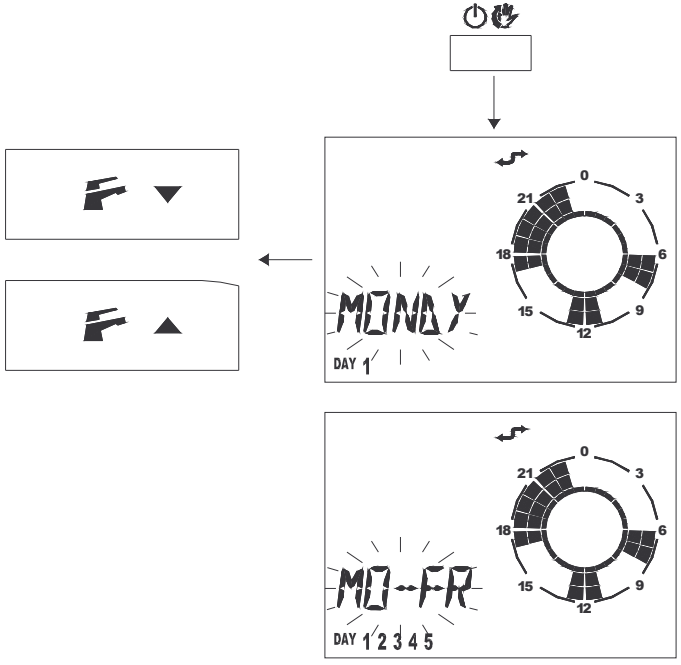
a) Single Day: MONDY (LU), TUEDY (MA), WEDDY (ME), THUDY (GI), FRIDY (VE), SATDY (SA), SUNDY (DO)
b) Group: MO-FR (from Monday to Friday)
c) Group: SA-SU (Saturday and Sunday)
d) Group: MO-SA(from Monday to Saturday)
e) Group: MO-SU (every day)

Push **OK** button to select a single day or group and by keeping it pressed you will enter the menu relating to **time settings, about ON/OFF time definition.**

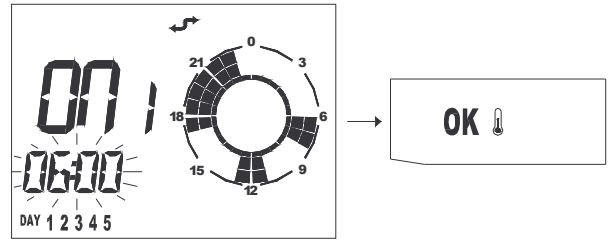
Push P button to enter into *PROGRAMMING* mode.



Push ⏻ to enter into the DAY/DAYS selection menu.



Push ▲ and ▼ buttons to select a single day or days group.



Push OK to enter into the first range of time.

SET ON/OFF TIME DEFINITION

Within a 24 hour period, it is possible to define a maximum of 4 COMFORT ranges (see Section 18) each setting is defined by an **ON/OFF** period (ON, OFF).

If you use for example only 3 ranges in a single day, you can set the ON, OFF times for the fourth range at 24:00, so its management will not be included.

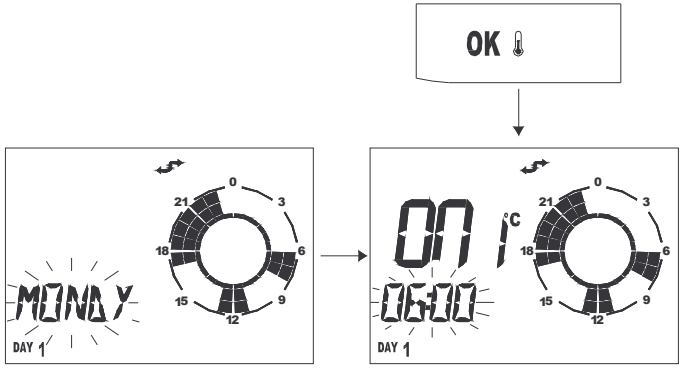
At any moment you can exit from the programming menu by pressing P button.

Once entered into the time range programming menu, you can proceed by using ▲ and ▼ buttons to define the time of the first switching on ON 1.

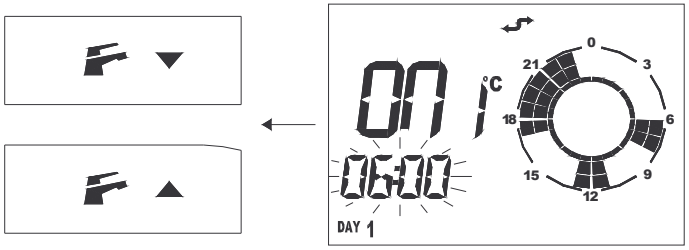
By pressing OK button you can save that time range and proceed to the first switching off time setting OF 1.

By ▲ and ▼ buttons you can modify that time and by pressing OK you can save it, then proceed to the time of the second switching on. You can repeat these steps until the last time of

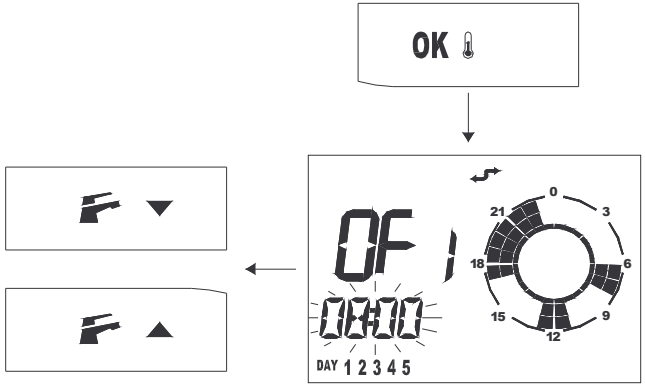
the fourth switching off **OFF4**. Push **OK** button to enter into the first range of time.



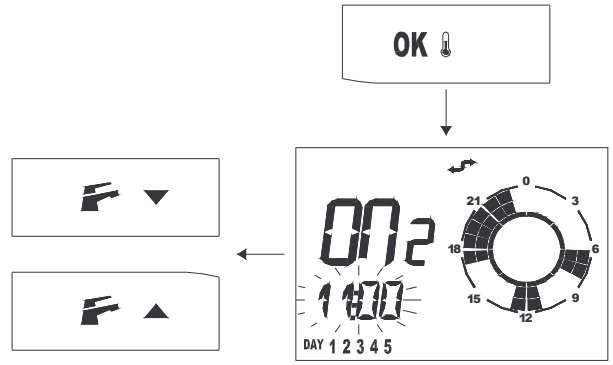
Push ▲ and ▼ buttons to modify the first switching-on range of time.



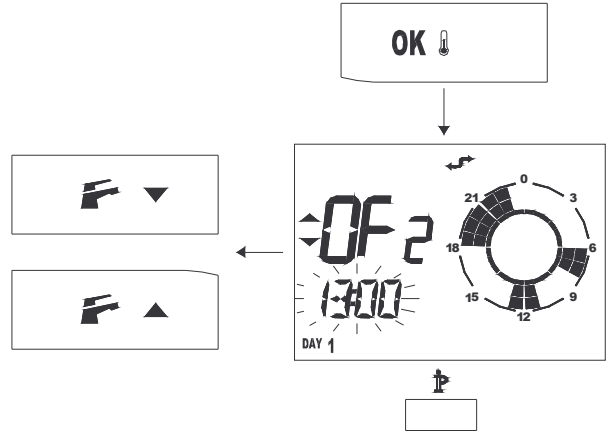
Push **OK** to save that time and select the first switching-off range of time.
Push ▲ and ▼ buttons to modify the first switching-off range of time.



Push **OK** button to save that time and select the second switching-on range of time.



Push ▲ and ▼ buttons to change the second switching-on range of time. Push **OK** button to save that time and select the second switching-off range of time.



Push ▲ and ▼ buttons to change the second switching-off range of time. Push **OK** to save that time and select other ranges of time.
Push **P** to exit and return to *RUN MODE*.

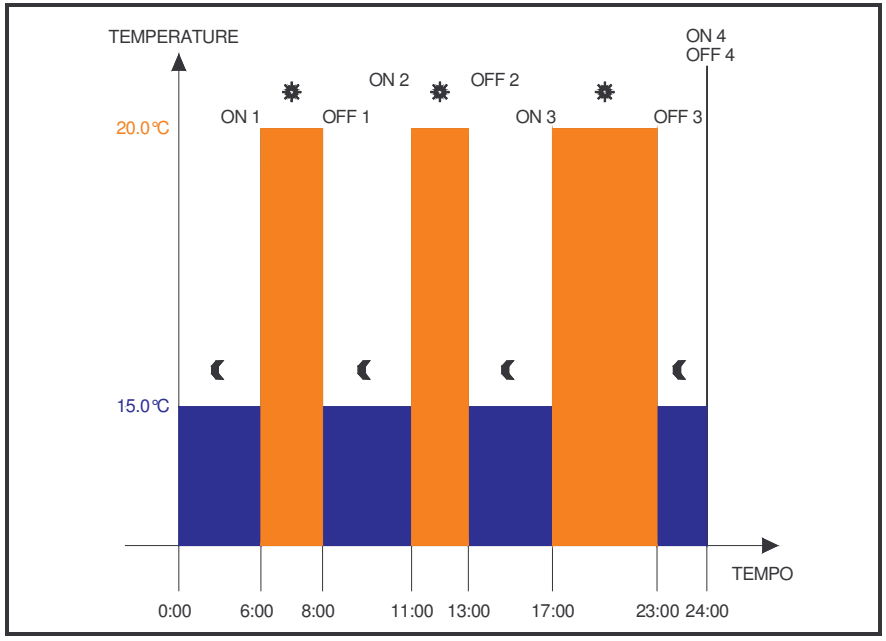
18 Time Scheduling Profiles

TIME SCHEDULING represents the course of the desired room temperature within a 24hr period.
In this case, the display will show time intervals in succession while temperature is kept on a constant level.

Time scheduling allows a maximum of 4 *COMFORT* intervals within a 24hr period, each one of them is shown by a SWITCHING-ON (ON) and OFF (OFF) time, higher than the previous one.

Example of time Scheduling in 3 Comfort intervals (Standard Program Mon-Fri)

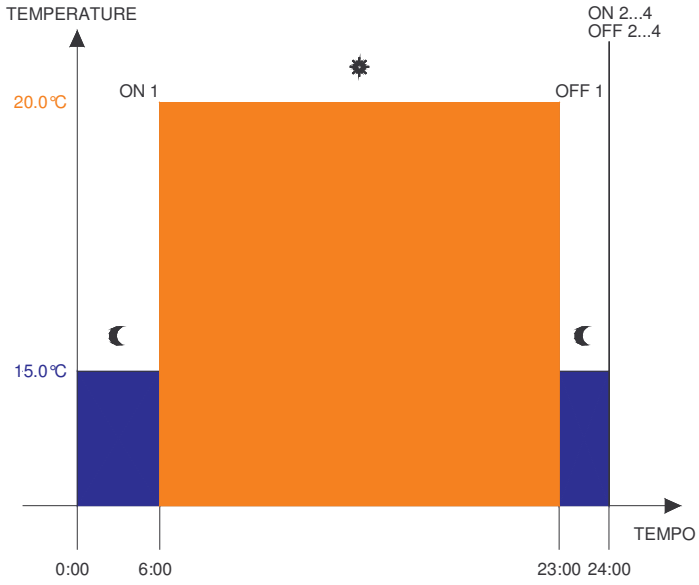
Temp. COMFORT	20.0°C	from 06:00 to 08:00, from 11:00 to 13:00, from 17:00 to 23:00
Temp. ECONOMY	15.0°C	from 00:00 to 06:00, from 08:00 to 11:00, from 13:00 to 17:00 from 23:00 to 24:00



COMFORT: 6:00 – 8:00, 11:00–13:00, 17:00–23:00
ECONOMY: 0:00 – 6:00, 8:00–11:00; 13:00–17:00; 23:00 – 24:00

Example of time Scheduling in 1 Comfort interval (Standard Program Sat-Sun):

Temp. COMFORT	20.0°C	from 06:00 to 23:00
Temp. ECONOMY	15.0°C	from 00:00 to 06:00, from 23:00 to 24:00



COMFORT: 6:00 – 23:00
ECONOMY: 0:00 – 6:00, 23:00 – 24:00

19 Central Heating Circuit Information Menu

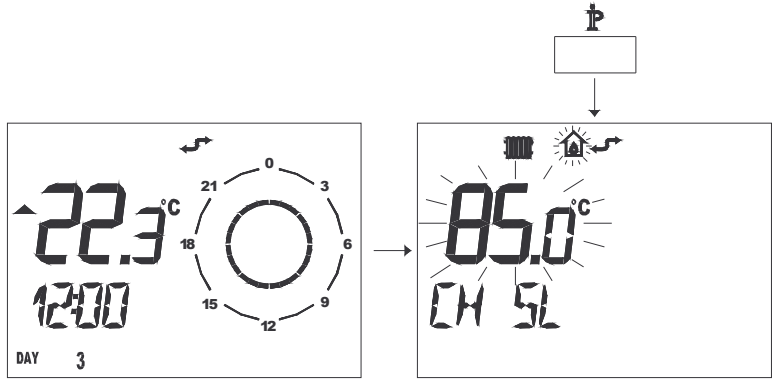
To enter into *INFORMATION* mode press ℹP button for at least 3 seconds.
INFO message will be shown on the LCD and you are then in *INFO* mode, to exit briefly press the same button ℹP.

To shift from one menu to another, just press **OK**. As the large flashing figures appear on the LCD, by pressing ▲ and ▼ **UP** buttons it is possible to modify the value linked to the displayed parameter (layout).

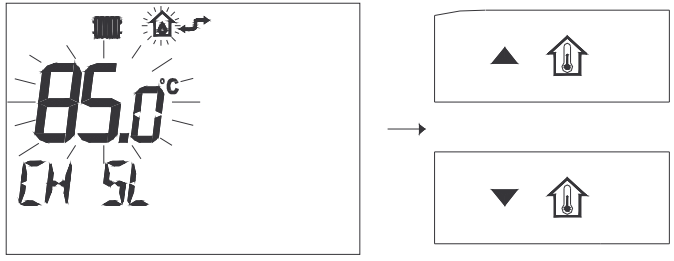
If the parameter is not administered by the central heating connected to the Remote, some dashes will appear in place of the value

---.

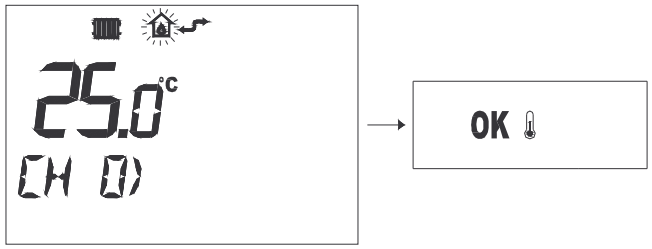
Push ℹP button and keep it pushed for at least 3 seconds to enter into *INFO* mode.



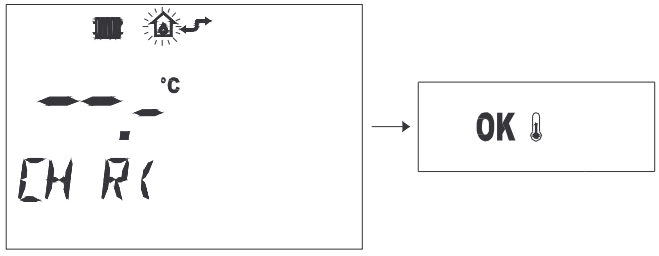
Push ▲ and ▼ buttons to set the maximum temperature to the heating circuit (Max CH Water Set-Point)



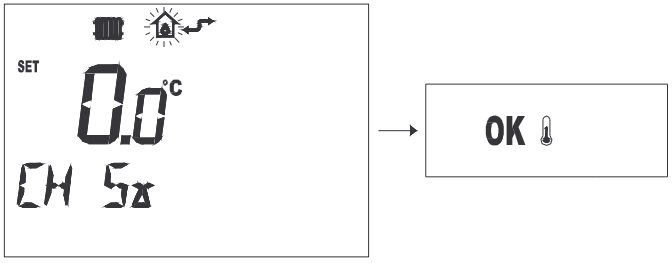
Push **OK** button to shift from one menu to another (Boiler Flow Water Temperature).



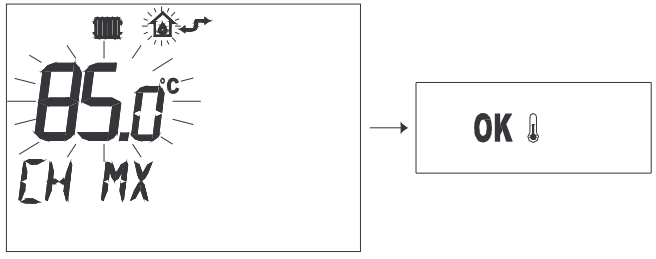
Push **OK** button to pass from one menu to another (Return Water Temperature).



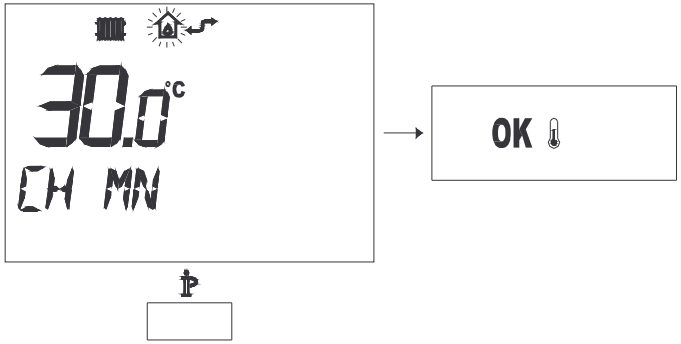
Push **OK** button to pass from one menu to another (CH Set-Point Temperature).



Push **OK** button to pass from one menu to another (maximum heating temperature).



Push **OK** button to pass from one menu to another (minimum heating temperature).

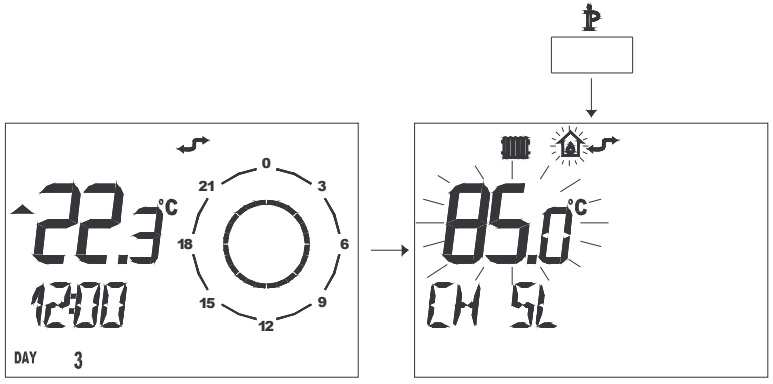


Push button to exit and return to *RUN MODE.*

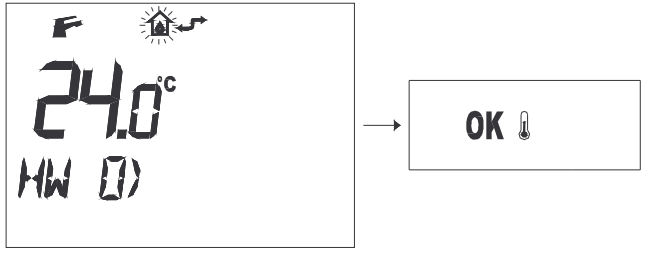
20 Domestic Hot Water Circuit Information Menu

- Real domestic hot water temperature in outlet: HW O) message.
- Temperature setting for hot water supply (domestic hot water circuit set point), HW SX message. Push F ▲ and F ▼ to regulate the temperature.

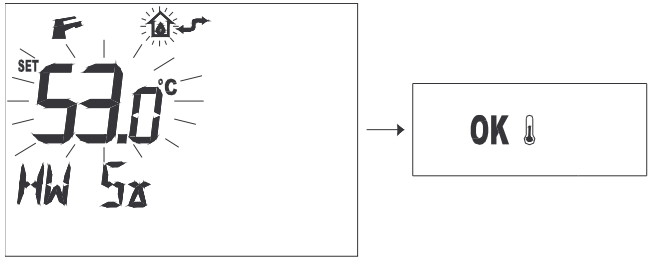
Push i button and keep it pushed for more than 3 seconds to enter into *INFO* mode.



Push OK button to enter into HW O) menu.

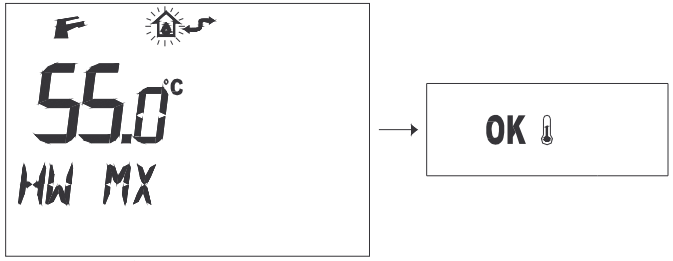


Push OK button to shift from one menu to another.

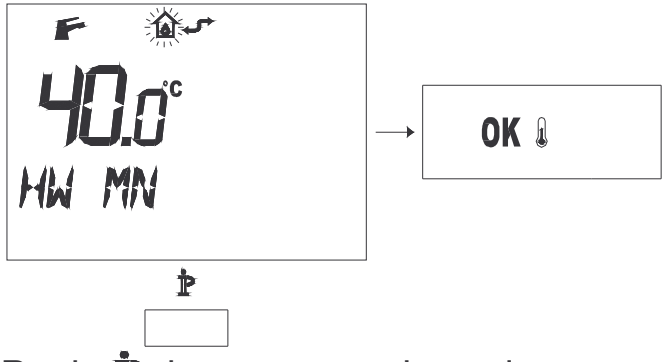


- Maximum temperature for hot water supply (maximum domestic hot water circuit set point), HW MX message.
- Minimum temperature (minimum domestic hot water circuit set point), HW MN message.

Push OK button to shift from one menu to another.



Push OK button to shift from one menu to another.

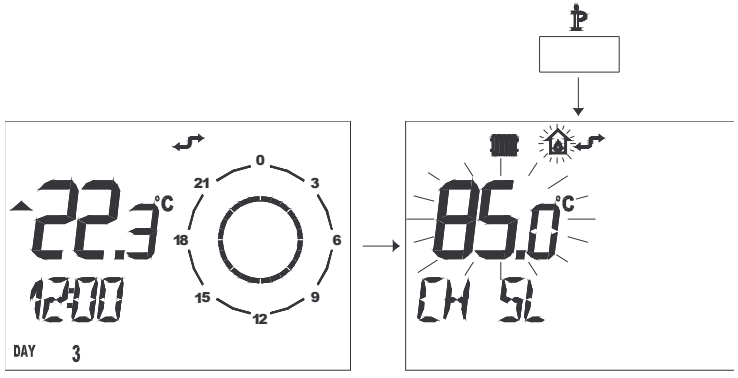


Push i button to exit and return to *RUN MODE.*

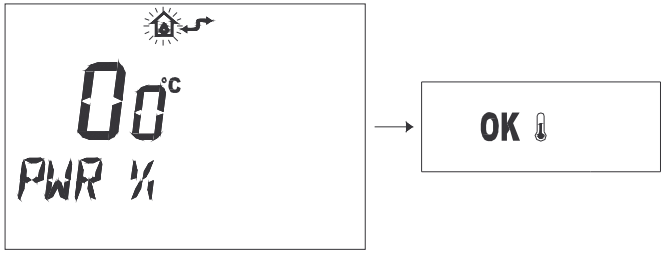
21 Advanced Menu Information

- Level power/modulation of flame (0…100%), **PWR%** message.
- Heating circuit water pressure (0,0…5,0bar), ***P BAR*** message.
- Domestic hot water flow in outlet (0,0…16,0litri/min), ***F L/M*** message.
- Outside temperature (-40…99°C), ***EXT°C*** message.

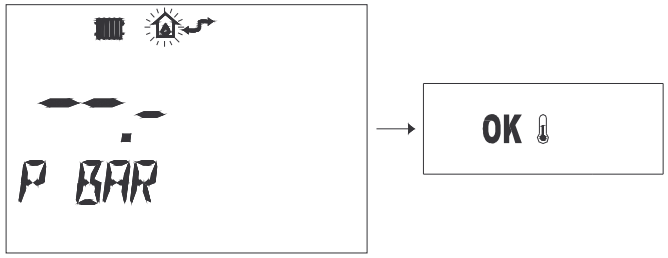
Push ℹP button and keep it pushed for more than 3 seconds to enter into *INFO* mode.



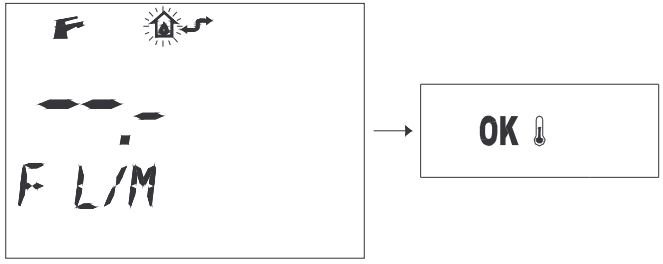
Push **OK** button (several times) to enter into ***PWR%*** menu.



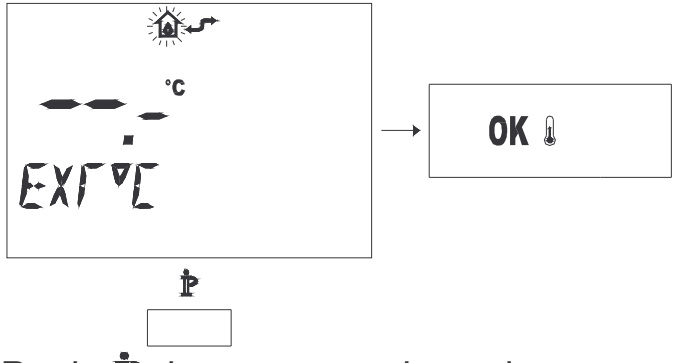
Push **OK** button to shift from one menu to another.



Push **OK** button to shift from one menu to another.



Push **OK** button to shift from one menu to another.



Push ℹP button to exit and return to *RUN MODE.*

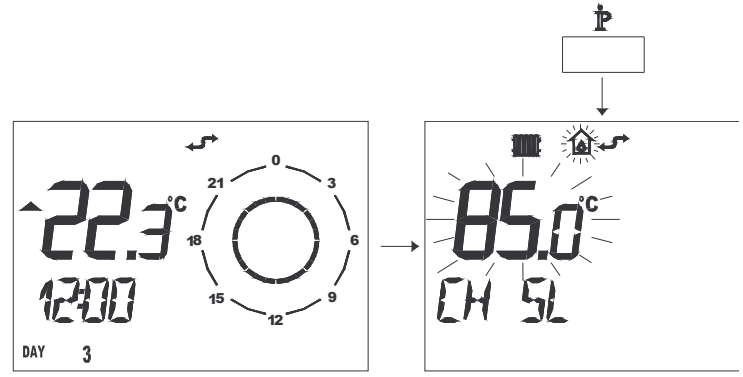
22 Regulation Algorithm Parameters Menu

- External Sensor regulation constant (eventually self-learning algorithm)

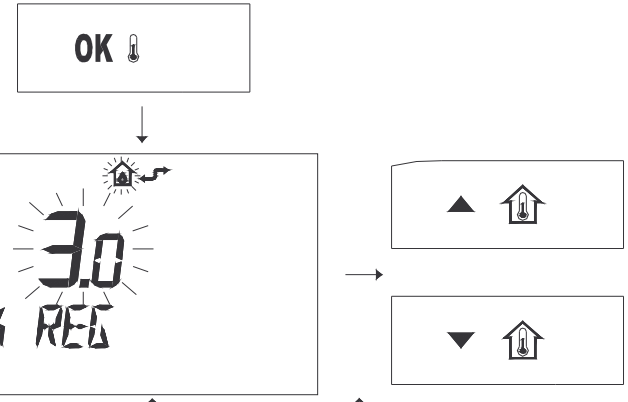
(0,5..6,5), ***K_REG*** message. By pushing ▲ and ▼ buttons you can set a value and vary it according to the data processed by the algorithm. A high value makes the temperature rise within the heating circuit (depending on the external temperature).

- Parameter building size for regulation (1..10), ***BUILD*** message. ▲ and ▼ buttons allow the value setting. A high value is associated with a building/heating system with a high inertia in the temperature (i.e.: large rooms with slow systems), otherwise a low value is associated to small rooms or systems with low inertia in the temperature (convector heaters).
- Functioning (self-learning function), ***YSELF*** message. By pushing ▲ and ▼ buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning.
- Functioning room temperature sensor, ***AMBON*** message. By pushing ▲ and ▼ buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning. If the room temperature sensor is disabled, the regulation is possible using the central heating set point directly.
- Functioning variable central heating temperature according to the presence of the external sensor, ***MODUL*** message. By pushing ▲ and ▼ buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning.
- Functioning Anti-Frost function, ***NOFR**** message. By pushing ▲ and ▼ buttons you can set a value. “0” indicates non-functioning, whereas “1” indicates functioning.

Push **i** button and keep it pushed for 3 seconds to enter into ***INFO*** mode.

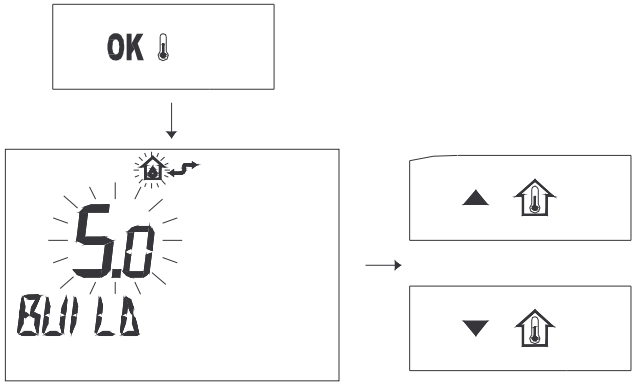


Push **OK** button to enter into ***K REG*** menu.

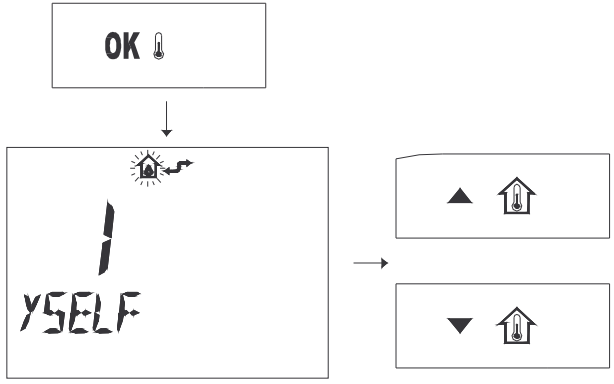


Push ▲ and ▼ buttons to modify value.

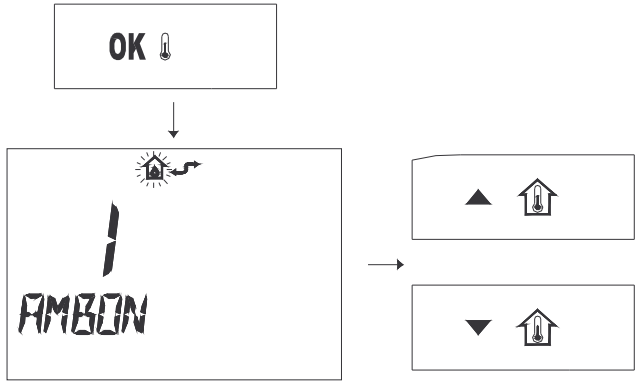
Push **OK** button to shift from one menu to another.



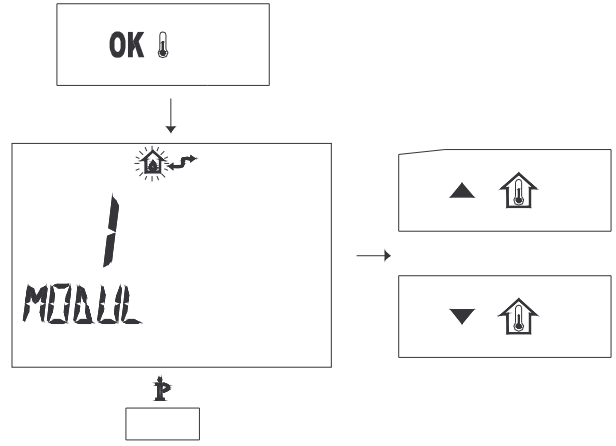
Push ▲ and ▼ buttons to modify value.
Push **OK** button to shift from one menu to another.



Push ▲ and ▼ buttons to modify value.
Push **OK** button to shift from one menu to another.



Push ▲ and ▼ buttons to modify value.
Push **OK** button to shift from one menu to another.



Push ▲ and ▼ buttons to modify value.
Push **OK** button to shift from one menu to another.

Push **IP** button to exit and return to *RUN MODE.*

23 Warnings

Electrical installation must be complied with technical regulations; in particular:

- **electrical conductors for the Remote control connection to the heating system** must run through different ductable units from the ones at a voltage tension of 230V, because powered by a low security voltage.

On no account, the manufacturer will be responsible if all instructions and precautions described in this booklet are not observed.

24 Remote Installation

For a proper functioning, it is important that the Remote control is installed far away from places near air currents or heat, to avoid that the temperature controller registers temperature levels which are different from the real room temperature. Height from the floor should be approximately of 1,5 meters.

fig.1

It can be fixed straight to the wall or predisposed for mounting in flush-mounted box with three outputs.
If it is fixed to the wall, this has to be flat, without strains or tensions that may cause troubles to its proper functioning as time goes by.

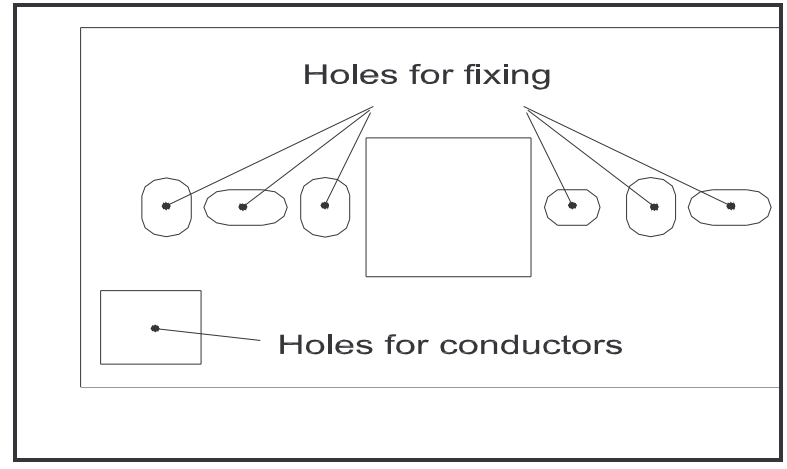


fig.2

Electrical conductors for the Remote control connection to the heating system must run through different ductable units from the ones at a voltage tension of 230V, because powered by a low security voltage and their length must be inferior to 50 meters.

1 Put a small straight blade screwdriver into the slot as indicated in figure1 and lever to release the remote control from its base.

2 Fix the base to the wall or on the flush-mounted box (figure 2)
