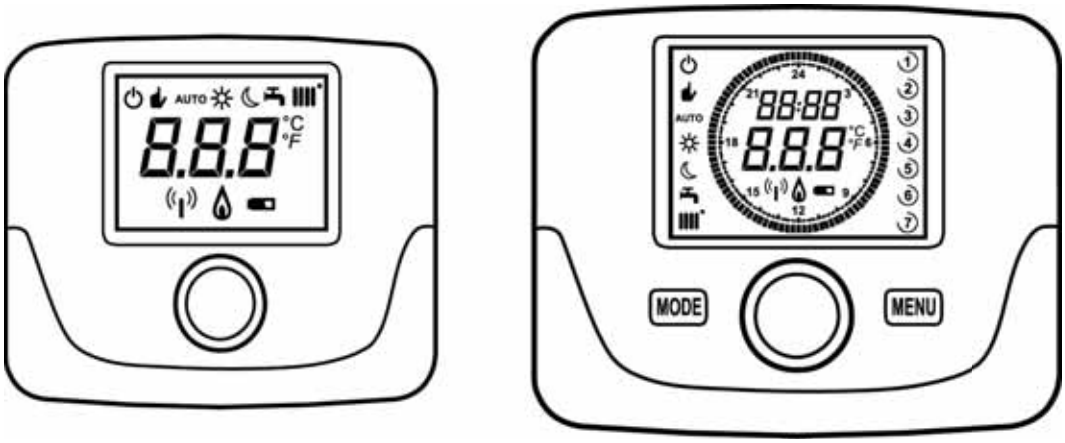


it	**KIT UNITÀ AMBIENTE E INTERFACCIA A LED**
	PER IL CONTROLLO DELLA TEMPERATURA AMBIENTE DEL LOCALE

en	**KIT ROOM UNIT AND LED INTERFACE**
	ROOM TEMPERATURE CONTROL ACCESSORY

de	**RAUMGERÄT UND LED-SCHNITTSTELLE**
	FÜR DIE ÜBERWACHUNG DER RAUMTEMPERATUR

cs	**SADA PROSTOROVÉHO PŘÍSTROJE A ROZHRANÍ LED**
	PRO KONTROLU TEPLOTY V MÍSTNOSTI

sk	**SÚPRAVA IZBOVÉHO PRÍSTROJA A ROZHRANIA LED**
	NA KONTROLU TEPLOTY V MIESTNOSTI

hu	**BELTÉRI EGYSÉG LED-ES INTERFÉSZ KÉSZLET**
	A HELYISÉG KÖRNYEZETI HŐMÉRSÉKLETÉNEK VEZÉRLÉSÉHEZ

fr	**KIT APPAREIL D'AMBIANCE ET INTERFACE À LEDS**
	POUR LE CONTRÔLE DE LA TEMPÉRATURE AMBIANTE

nl	**RUIMTEUNIT- EN LEDINTERFACESET**
	VOOR DE REGELING VAN DE RUIMTETEMPERATUUR IN HET VERTREK

es	**UNIDAD DE AMBIENTE**
	PARA EL CONTROL DE LA TEMPERATURA AMBIENTE DEL LOCAL

pt	**UNIDADE AMBIENTE**
	PARA O CONTROLO DA TEMPERATURA AMBIENTE DO LOCAL

Dear Customer,
Our company is confident our new product will meet all your requirements. Buying one of our products guarantees all your expectations: good performance combined with simple and rational use.
Please do not put this booklet away without reading it first: it contains useful information for the correct and efficient use of your product.

The appliance can be used by children aged 8 or over and by people with reduced physical, sensory or mental faculties, or who do not have the required experience or knowledge, provided they are supervised or have received instructions on using the appliance safely and understanding its intrinsic hazards. Children must not play with the appliance. The cleaning and maintenance operations reserved to the user must not be performed by unsupervised children.

CONTENT

1. INTRODUCTION

The room unit accessory is used to control the temperature in the room to be heated. It acts as a modulating climate adjuster and can adjust the boiler flow temperature in order to obtain the required room temperature as efficiently as possible. In the programmable version (thermostat timer), it is also possible to set time bands to programme the operating time of the CH circuit and the DHW circuit if a storage boiler is fitted.

2. GENERAL DESCRIPTION

The room unit has two menus and the following functions:

USER MENU (section 4.1.1)

- Temperature adjustment.
- Required room temperature (comfort).
- Reduced room temperature (if enabled by the installer).
- DHW temperature (if enabled by the installer).
- Time bands (only for programmable timer).
- Hourly programming in CH and DHW.
- Daily or weekly programming (set by installer). If daily programming is used, it is repeated every day of the week.
- 3 pre-set hourly programmes available for the user.
- Room temperature indication.
- Operating mode in CH (OFF / Reduced / Comfort / Auto).
- Operating mode in DHW (ON / OFF).
- Standby.
- Date and time.

INSTALLER MENU (section 4.1.2)

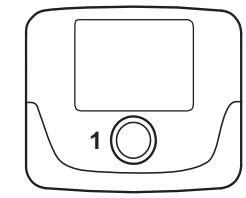
- Room temperature offset.
- Temperature enable / disable
- DHW enable / disable
- Type of DHW hourly programming.
- Activation of wireless connection (if available).
- Setting of displayed unit of measurement
- Setting of antifreeze level.
- Selection of OTC curve.
- Enabling/Disabling of room sensor and modulation.
- Setting of maximum heating temperature.
-

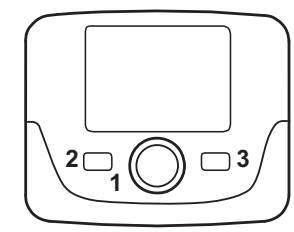
TECHNICAL SPECIFICATIONS

- Electrical input: O.T. (Open Therm protocol) for the transmitter and AA LR06 batteries for the receiver.
- Insulation class II
- Transmission frequency 868 MHz (WIRELESS radio version) - NOT CONTEMPLATED FOR THE U.S.A./CANADA
- Operating temperature from +0°C to +40°C (32°F to 104°F)
- Cable type: 2x0.75 mm² (2x0.0012 in²) - Maximum length 50 m (164 ft)

To temporarily change the required room temperature, simply the knob to select the new value and to confirm. This modification will remain active for the entire current time band.

SYMBOLS FOR ROOM UNIT		
	Turn the knob (1)	
	Press the knob (1)	
	MODE / MENU(2) / (3)	Press the corresponding button to access the respective menus (only for THERMOSTAT TIMER room units)

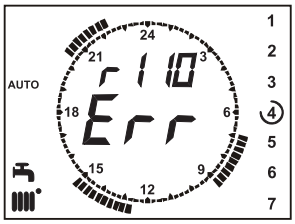




FAULTS DISPLAY

FAULTS INDICATED ON THE ROOM UNIT DISPLAY
The faults shown on the display are identified with the message Err and a number (fault code). For a complete list of faults, consult the boiler manual. If r appears on the display of the Room Unit the fault must be **RESET** by the user.

To **RESET** the boiler until rSt is displayed and then it. If faults are displayed frequently, call the Authorised Service Centre.



3. WALL INSTALLATION

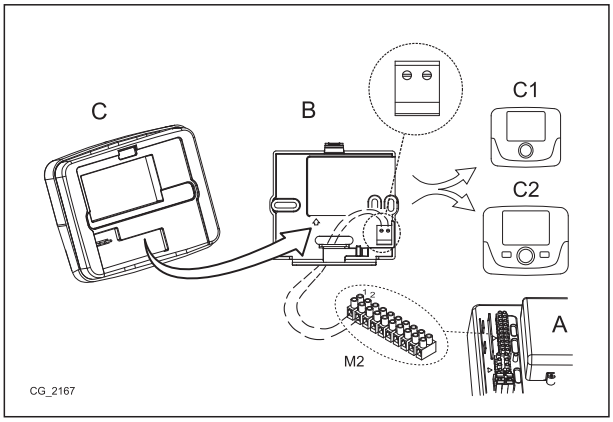
There are two versions of room unit, the standard version and the programmable version. The standard version is smaller and does not feature a programmable timer. The room units can be wired or wireless.

When the Room Unit is connected to the boiler all the function are trasferred over to the Remote Unit except the Chimney, Commissioning, Combustion Adjusment Functions (see also the Boiler Instructions Manual). The Boiler Information Menu is available only on the Boiler Control Panel.

3.1 WIRED ROOM UNIT

Before mounting the accessory, consult the boiler manual. Make sure the accessory refers to the boiler model installed. Proceed as follows:

- Disconnect the boiler from the mains power supply.
- Pass the two wires from the boiler **A** terminal block **M2** or from another Open Therm (OT) terminal of the same boiler through the hole in the base **B** to apply to the wall.
- Connect wires **1-2** (non-polarised) of the boiler **A** terminal block to the terminals of the base terminal block **B** respectively.
- Fix the base **B** to the wall using the expansion grips and screws supplied with the accessory.
- Apply the room unit **C1/C2** to the base fixed to the wall, taking care not to apply excessive force.
- Power the boiler and make sure the room unit switches on.

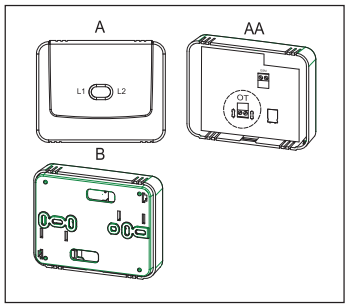


If the error code "E83" is displayed there is a communication fault between the main board and the Control Unit. Probable short circuit on wiring. Avoid placing cables near sources of heat, high voltage and magnetic fields.

IMPORTANT

THE RADIO VERSION (WIRELESS) IS NOT CONTEMPLATED FOR THE U.S.A./CANADA.

3.2 WIRELESS ROOM UNIT( )



Before mounting the **WIRELESS** base on the wall, perform the TEST to check the signal quality in the chosen installation point. The test procedure is the following:

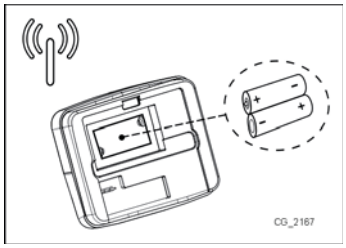
- to access the parameters configuration menu (press and hold down for approx. 6 seconds);
- anticlockwise until parameter tSt is displayed;
- to select the parameter tSt: "**Off**" flashes;
- and select "**On**"
- to start the test. The test lasts 8 minutes. During the test the display shows a number (updated every second) ranging from 0=no signal to 4=signal excellent. Position the units so as to obtain a signal ranging from 3 to 4.
- to interrupt the test.

To install the wireless base, proceed as follows:

.

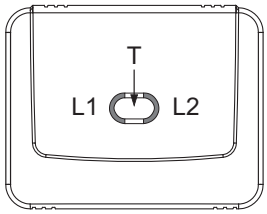
- Pass the two wires from the terminal block **M2** or from another Open Therm (OT) terminal of the boiler through the hole in the base **B** to apply to the wall.
- Connect wires **1-2** (non-polarised) of the boiler terminal block to the transmitter terminal **AA** (the terminal is marked "**OT**" - see figure at the side).
- Fix the base **B** to the wall using the expansion grips and screws supplied with the accessory.
- Apply the transmitting unit **AA** to the base **B** fixed to the wall, taking care not to apply excessive force.
- Power the boiler;

The **WIRELESS** version is powered with 2 **AA LR06** batteries (included in the kit), as shown in the box in the following figure. When the symbol appears on the display, the charge will last approximately 1 month before the room unit switches off. Do not use rechargeable batteries.



If the house is to remain empty for a certain period replace the used batteries with new ones.

3.2.1 INTERFACING THE WIRELESS ROOM UNIT WITH THE BOILER

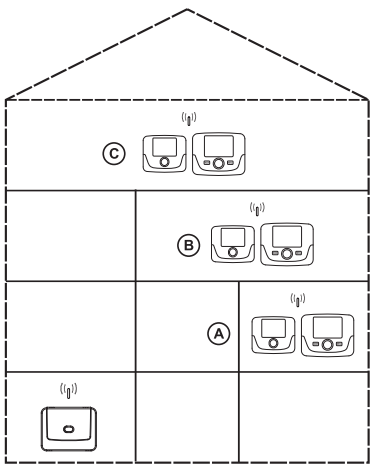


To communicate with the boiler, the **WIRELESS** room unit must be recognised by the base. The procedure to follow is described below:

- to access the parameters configuration menu (press and hold down for 6 seconds), until the symbol **HC1 OFF** appears on the display;
- anti-clockwise until parameter **SnC** is displayed;
- to select the parameter **SnC**: the message "**OFF**" flashes;
- by one position. "**On**" appears on the display (this phase lasts 60 seconds);
- Before continuing take the **WIRELESS** base (led L1 flashes quickly) **T** and hold it down until led L1 starts flashing slowly (the base starts searching the room unit for approx. 10 seconds)
- Return to the room unit and to confirm. A countdown begins starting from n° 4. Afterwards press knob 1 and then button 3 to exit.

If the sequence has been performed correctly, "**End**" appears on the display. Press the knob. The room unit is now communicating with the boiler unit. If this is not the case "**Err**" appears on the display and the entire procedure must be repeated.

If fault E 85 is displayed there is a communication problem between the WIRELESS base and the room unit. Move the the room unit towards the base. Do not place the unit near heat sources, high voltages and magnetic fields. When fault E85 is displayed, the WIRELESS base continues to attempt to reconnect to the room unit once every 15 minutes (flashes during this phase). If necessary, repeat the synchronisation procedure described in chapter 3.2.1.



The* WIRELESS *room unit must be combined with the "2-LED Interface" base included in the kit. The maximum distance between the LED interface and the room unit depends on the typology of the house. For a general house model it is possible to follow the rule of three between floors and walls as illustrated in the figure below (example* A*: 1 floor + 2 walls; example* B*: 2 floors + 1 wall; example* C*: three floors without walls).

DIAGNOSTIC

Observing the way in which the LED's **L1** and **L2** (see figure above) flash, it is possible to check the correct operation of the accessory. The diagnostics features 5 different signals:

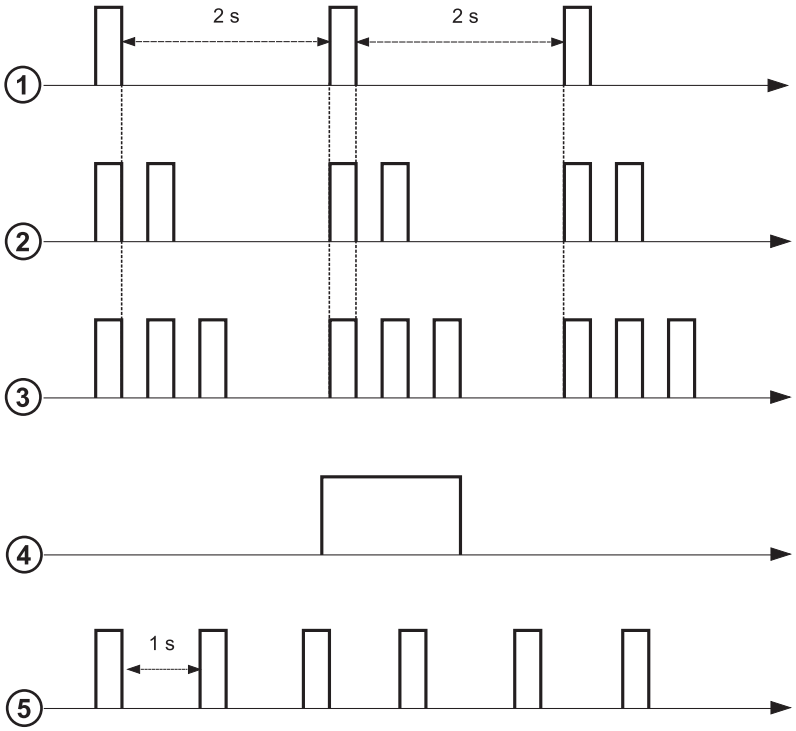
1) LED 1 flashes followed by a two second pause: normal operation;

2) LED L1 flashes twice followed by a 2-second pause: transmitting unit not connected (wiring) to the boiler.

3) LED L1 flashes three times followed by a 2-second pause: no communication (wireless) between the transmitting unit and the room unit.

4) LED L2 flashes once for 1 second: when a parameter is changed.

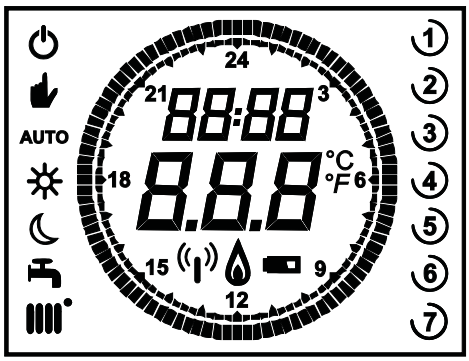
5) LED L1 flashes continuously for 1 second: "association" phase of room unit to boiler.



4. DESCRIPTION OF ACCESSORIES

4.1 MODULATING THERMOSTAT TIMER

Key to SYMBOLS	
⏻	Off: heating and DHW disabled (only the antifreeze protection is active)
✋	Operating mode: MANUAL
AUTO	Operating mode: AUTOMATIC (time bands)
☼	Operating mode: comfort room temperature
☾	Operating mode: reduced room temperature
🚰	Operating mode: DHW enabled
▥	Operating mode: CH enabled
(( ))	Data transmission (only if the WIRELESS device is connected)
🔥	Burner lit



🪫	Battery flat (only for Wireless version)
°C / °F	Unit of measurement
1..7	Days of the week. These are always displayed and the current day is circled (only for units with weekly programming).

ℹ ***Before using the accessory, set the date and time as described in section 4.1.1 "Setting the date and time".***

4.1.1 USER FUNCTIONS

MODE button

Press this button to change the boiler operating mode: **STANDBY** - **CH** - **DHW** (if enabled).

STAND BY

- **MODE** the symbol starts flashing on the display.
- the knob then to set "**On**" or "**Off**" (On= all enabled - Off=all disabled).
- the knob to confirm.
- **MENU** to exit the function.

STANDBY OPERATING MODES	
OFF	Everything DISABLED. Frost protection function ENABLED.
On	Room Unit active depending on the set operating modes

The anti-freeze function (ICE chapter 4.1.2) is active if enabled.

HEATING

- **MODE** the symbol starts flashing on the display.
- by one position: the symbol starts flashing on the display.
- the knob then to scroll through the heating operating modes as described in the following table.
- **the knob to confirm.**
- **MENU to exit the function.**

CH OPERATING MODES	
AUTO	The room temperature depends on the set time band
	The room temperature is REDUCED
	The room temperature is COMFORT
OFF	Heating disabled

During a Heating request the symbol flashing.

DHW (if enabled)

- **MODE** then the knob by two positions: the symbol starts to flash.
- the knob then to enable (**ON**) or disable (**OFF**) the production of domestic hot water.
- **MENU** to exit the function.

DHW OPERATING MODES	
On	DHW enabled
OFF	DHW disabled
ECO	DHW enabled in time band mode (this function is operative only on boilers provided with storage)

During a DHW request the symbol flascing.

MENU button

Press this button to change the temperature values in the CH and DHW modes and set hourly programming (TIME and DAY).

- **MENU** then the knob to scroll through the parameters to be modified (see following table).
- the knob to select the parameter to edit. This starts flashing.
- the knob to change the value and then it to confirm.
- **MENU** to exit the function.

SETTINGS MENU		
	COMFORT room temperature setting	**SCON**
	REDUCED room temperature setting	**SrEd**
	DHW temperature setting	**SdHU**
Time band	Hourly programming of heating circuit	**PCH**
Time band	Hourly programming of DHW circuit	**PdHU**
TIME– DAY	Setting	

DATE AND TIME SETTING PROCEDURE

To set the day and time of the accessory, proceed as follows:

- **MENU**
- to select the hour then , the hour starts flashing.
- to change the hour and to confirm. The minutes start flashing. Carry out the above procedure again.
- to select the day then repeat the procedure described in the previous point.
- **MENU** to exit the function.

TIME BAND PROGRAMMING PROCEDURE

There are two different versions of room unit, one with daily and weekly time band programming and one with just daily time band programming. For both versions, there are three time bands **Pr1, Pr2, Pr3** for programming boiler operation in CH and DHW. Proceed as follows for the two versions:

WEEKLY

- **MENU**
- the knob until **PCH** is displayed then the same one and wait until the numbers of the week (on the right of the display) start flashing.
- the knob to set the day (or the groups of days) of the week then press it to confirm (the day or days selected are circled).
- The message **Pr** flashes, then to set the number (from **Pr1** to **Pr3**) of the required time band.
- The message **On1** appears on the display, the knob to set the time the boiler has to be switched on in the time band 1**.**
- the knob and repeat the procedure described in the previous point to set the switching off of the boiler in the time band 1 (**OFF**)**.**
- the knob and repeat the procedure described in *point 3*.
- **MENU** to return to the previous menu and continue.

DAILY

- **MENU**
- the knob to select **Pr** then the knob and to set the number (from 1 to 3) of the desired time band, the knob to confirm.
- The message **On1** appears on the display, **OK** to set the time the boiler has to be switched on in the time band 1.
- to set the knob clockwise by one position and repeat the procedure in *point 3* to set the switching off of the boiler in the time band 1 (**OFF**).
- to set and repeat the procedure described in ***points 3 and 4***.
- **MENU** to return to the previous menu and continue.

4.1.2 INSTALLER FUNCTIONS

To access the MODULATING THERMOSTAT TIMER **INSTALLER'S MENU**, and hold down the knob for about 6 seconds. the knob to display the parameters in the following table.

Parameter	Factory setting	Description
RtE	**ON**	Enables the USER to adjust the reduced room temperature setting (ON/OFF).
Dh	**ON**	Enables the USER to adjust the DHW temperature and time-band programming (ON/OFF).
rEL	**dhP**	Sets the DHW mode: **24h**: DHW always active. **CHP**: DHW is enabled according to the CH time-band programme. **dhP**: DHW is enabled according to the DHW time-band programme.
oFS	**0.0(°C)**	Sets the offset of the room temperature sensor. Used to correct the temperature value read by the room probe if this differs from the effective temperature (-3.0…+3.0).
Un	**°C**	Selects the temperature unit of measurement (°C/°F).
SoFt	**-**	Displays the software release.
Ot-S	**0(Auto)**	Open Therm (OT) protocol setting . **0** = factory setting (Plug&Play)
oSt	**OFF**	Enable external temperature display in °C/°F (with external probe connected) . **0** = factory setting **22** = enabled
ICE	**OFF**	Enables / Disables room antifreeze function (from +4.00 °C / 39.20 °F to reduced room temperature). **OFF** = disabled **4°C** = settable
OtC	**1.5**	Sets the kt curve of external probe (0.1 – 9.0).
rtS	**ON**	Enables (ON) / Disables (OFF) the room probe.
MOd	**ON**	Enables (ON) / Disables (OFF) room temperature modulation.
ULt	**MaxCH**	Sets the maximum heating flow temperature (MaxCH).
tSP	**1**	Accesses the "**Pxx**" board parameters menu.
SnC	**OFF**	Synchronisation of the room unit with the boiler (only for the WIRELESS version). To synchronise the room unit with the wireless accessory (transmitter), proceed as follows: • Press the button on the transmitter unit until the left-hand LED shines. • Select ON to enable the **Snc** function of the room unit, then the knob and then the "MENU" button to exit.
tSt	**OFF**	Radio transmission test (only WIRELESS version). The function lasts 8 minutes or when the knob is pressed (OK button). The display shows the numbers 1 to 4 (**1**=25% - **4**=100%).
End	**-**	To return to the main screen.

OPEN THERM (OT) COMMUNICATION PROTOCOL SETTINGS

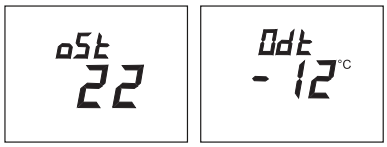
Parameter **Ot-S** (shown in the table) is used to set the type of OT protocol used in the system. It can be configured in three ways:
Ot-s = 0 (Plug&Play): the accessory automatically recognises any type of communication protocol that is connected to it. If both devices use the Plug&Play protocol, the system will automatically use the B&P protocol.
Ot-S = 1 (B&P): in this configuration, the accessory must be connected to a system with the same B&P protocol or with the Plug&Play protocol.
Ot-S = 2 (Ot STANDARD): in this configuration, the accessory must be connected to a system with the same Ot STANDARD protocol or with the Plug&Play protocol.
***NOTE**: if there is no Open Therm (OT) communication, the message **"Und"** flashes on the display (see the faults table in the boiler manual).*

4.1.3 EXTERNAL TEMPERATURE DISPLAY

Connect the External Probe to the boiler in order to visualise the external temperature, expressed in °C (or °F), on the Thermostat timer display. To visualise the External Temperature, modify the **oSt** parameter as described below:

- access the **FITTER MENU** as described in paragraph 4.1.2 and select the **oSt** parameter.
- the knob until "**22**" is displayed and then to confirm.

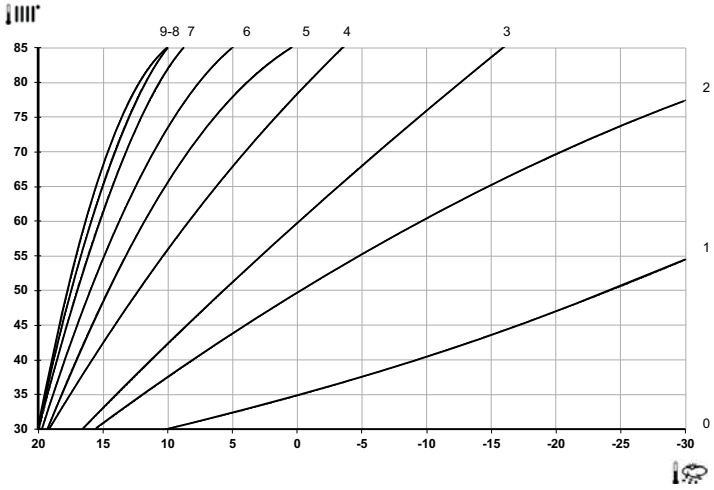
The procedure has finished. To visualise the external temperature "**Odt**" the knob (the temperature is displayed for 5 seconds).



4.1.4 SETTING THE Otc CLIMATE CURVES (kt)

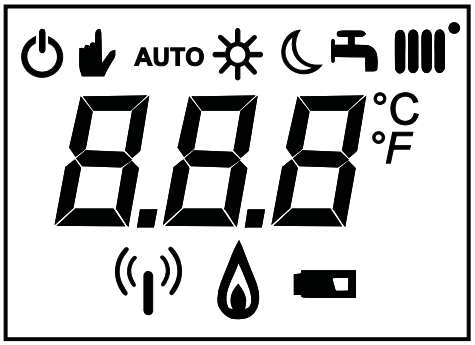
To set the climate temperature, modify the **Otc** parameter as described below:

- access the **INSTALLER MENU** as described in paragraph 4.1.2 and select the **Otc** parameter.
- the knob to select the curve and then to confirm.



4.2 MODULATING THERMOSTAT

Key to symbols	
	Off: heating and DHW disabled (only boiler antifreeze protection is active)
	Operating mode: MANUAL
AUTO	Not available for this accessory
	Operating mode: DHW enabled
	Operating mode: CH enabled
	Data transmission (only if the WIRELESS device is connected)
	Burner lit



	Battery flat (only for Wireless version)
°C / °F	Unit of measurement

4.2.1 USER FUNCTIONS

SETTING THE OPERATING MODES

To set the boiler operating mode proceed as follows:

- for a second, the symbol starts flashing on the display.
- to select the heating circuit or DHW , then to confirm.
- For the DHW circuit set "**On**" to enable and "**Off**" to disable.
- For the heating circuit to set the required mode.

The AUTO operating mode can be seen but is unavailable on this room unit.

CHANGING THE TEMPERATURE SET POINTS

To change the maximum boiler operation temperature values (set points) in CH and DHW (if enabled), proceed as follows:

- for three seconds: the display shows the **COMFORT** temperature setpoint (SCH).
- the value starts flashing
- to change the temperature value and then to confirm.
- To exit the function, until the "**End**" appears and then .

The following table shows the set points that can be changed:

SETTINGS MENU	
	COMFORT room temperature setting (SCH)
	DHW temperature setting (dHU)
End	Exit the function

4.2.2 INSTALLER FUNCTIONS

The functions are described in the table in section 4.1.2 (the following versions are not supported: rtE - rEL - oSt - oSp - tLr). To access the **INSTALLER** menu, proceed as follows:

- for six seconds: the display shows **HC** (first value of the table in section 4.1.2).
- the value starts flashing
- to change the value and then to confirm.
- to scroll the list of parameters indicated in the table in section 4.1.2.
- To exit the function, until the "**End**" appears and then .

5. PRODUCT SHEET

BAXI – Room Unit		
Class		V
Contribution to energy efficiency of room heating	%	3

Product sheet table for temperature control devices