

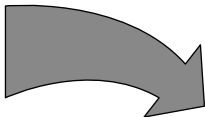


# INSTRUCTION MANUAL



# REMOTE CONTROL

**Technical features**  
**Guide to LCD symbols**  
**Guide to keys**



## Technical features

Supply	by communication bus
Number of temperature levels	2 (DAY / NIGHT)
Temperature setting range DAY	5 ÷ 30 °C
Temperature setting range NIGHT	5 ÷ 30 °C
Temperature setting range MANUAL	5 ÷ 30 °C
Differential operation temperature OFF	0.0 ÷ 1.0 °C
Differential operation temperature ON	-1.0 ÷ -0.1 °C
Correct working range room temperature probe	-40 ÷ 50 °C
Temperature resolution	0.1 °C
Room anti-frost start temperature range	0.1 ÷ 10.0 °C
Room anti-frost end temperature	start value + 0.6 °C
Timer programmer resolution	30 minutes
Maximum number of startings and shutdowns per day	48
Number of standard heating programs	1
Number of standard storage tank programs	1
Internal clock time retention in case of power loss	1 hour
Operating temperature range	0 ÷ 50 °C
Stocking ambient temperature	-10 ÷ 50 °C
Size (L×H×D)	118×85×30 mm
Maximum cable length for boiler connection	50 mt
Cable section for boiler connection	0,5 ÷ 1,5 mm <sup>2</sup>

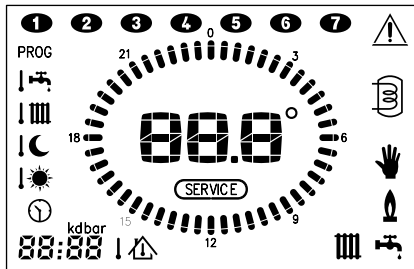
**Dear customer,**

We congratulate with you for buying our Remote Control, a device with an advanced technology, able to assure a superior comfort.


In order to get top performance and to learn how to best use features and functions of this remote control device, carefully read this manual and keep it always readily accessible in case you need to refer to it.


**CAUTION**


Before proceeding with the connection please be sure that the boiler is suitable for working with our Remote Control, check in the relative booklet





## Keys


**A**  Select operation status

**B**  Set time and temperature

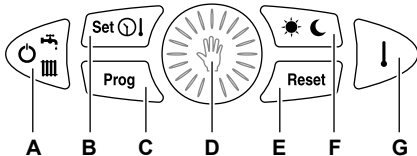
**C**  Weekly program

**D**  Change displayed value (turn)  
Select automatic / manual (press)

**E**  Alarm reset

**F**  Select temperature level (day/night)

**G**  Temperature display



## LCD symbols

ICON	STEADY	BLINKING	ICON	STEADY	BLINKING
	Current temperature	Fault code			Set time and day of the week
	Time/temperature				Set day temperature
	Current day of the week	Change day of the week			Set night temperature
	Domestic hot water enabled	Domestic hot water requested		Heating temperature	Set heating temperature
	Heating enabled	Heating requested		Domestic hot water temperature	Set domestic hot water temperature
	Manual mode		kd		kd value
	Burner on			Current temperature level = day	
PROG	Heating program	Change heating program		Current temperature level = night	
	Storage tank program	Change storage tank program		Fault, no more attempts left for restoring	Fault - restore attempts available
	Current room set point	Temporary change room set point		Fault requiring technical service	
	Outside temperature			Night level	
bar	System pressure			Day level	

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## 1 - How to use this instruction booklet



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This booklet is divided into two sections, each of which having its own addressee:

- **Installer section**, this gives instructions regarding the accurate installation and configuration of the remote control device.
- **User section**, this gives detailed instructions regarding the steps to carry out in order to personalize the

functioning of the Remote Control device.

### Some hints

- When a numeric value is blinking you can change it by turning button .
- The value as changed by turning button  will be automatically stored when the blinking stops.



The use of the symbol shows the impossibility to dispose this product as domestic waste.

The correct disposal of this product helps to prevent potential negative consequences for the environment and human health.

## 2 - General instructions

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- Carefully read this manual because it will give you important instructions regarding the safety of use, installation and maintenance.
- The system must be implemented in compliance with the safety regulations in force.
- After unpacking and before installing check that the product is intact.
- This device is to be used only for the use it has been designed for: any different use is improper.
- In case of repair contact only technical service centers authorized by the manufacturer.
- Non-compliance with the above may endanger the safety of the device.
- If the device is installed to control a low temperature zone, this zone must be equipped with a low temperature safety thermostat surveying it.
- The manufacturer cannot be held liable for any damages resulting from bad operation, extraordinary events, configuration errors or improper, wrong and unreasonable use of the device.
- The manufacturer reserves the right to eventually make changes to the device and whatever else appears necessary for the continual improvement thereof.

### 3 - Main features

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The Remote Control device has been designed to guarantee ideal temperature conditions at any moment of the day offering the possibility to set the boiler from remote.

The programming of the Remote Control device is extremely easy - a large LCD-display makes it possible to check and change the set values at any time.

The Remote Control device is electrically connected to the boiler by means of two nonpolarized conductors. They give it the necessary supply to operate and constitute also the communication between the two devices.

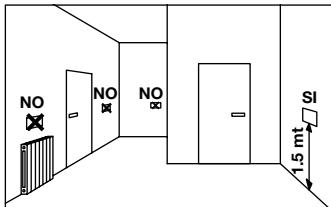
After installing it is immediately ready to run with its memorized standard program. This program can be changed according to the needs of the user.

## 4 - Installation

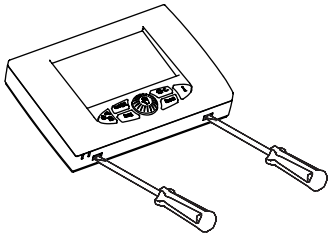
The Remote Control device must be installed only by expert personnel.

To correctly install the device and in compliance with the regulations in force about electrical appliances, use a dedicated line to connect it. In case this is impossible, any interference due to electric wires may cause poor working of the remote control device.

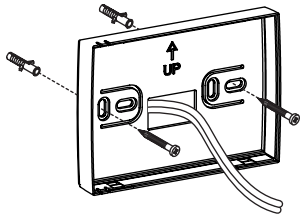
Install the Remote Control device at approx. 1.5 m over floor in a place suitable for correct sensing of the room temperature. Do not install behind doors, curtains, near heat sources nor expose to direct sunlight or water sprinkles.



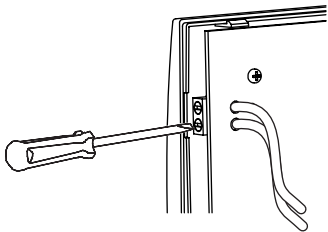
1. Cut off electricity from boiler
2. Use a screwdriver and gently press on the two lower splines to take off the device from the back of its fixing template.



3. Insert both ends of the connecting wire into their proper seat on the fixing template.  
Use the proper holes to install the Remote Control device directly onto the wall or onto a housing. The necessary screws are supplied together with the device. Pay attention to the sign "↑ UP".

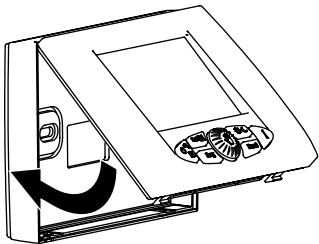


4. Connect electricity to the terminal box.



**N.B.:** *The connection is not polarized.*

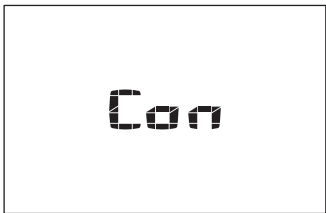
5. Fix your remote control device to its template. First insert the upper part and then press and turn until its completely closed.



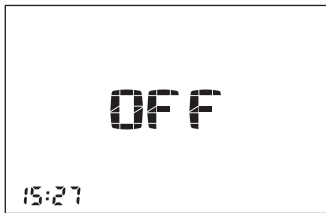
6. Check in the boiler if there is a request to eliminate the jumper on the room thermostat terminals (if installed).

7. Supply power to the boiler.

Now the installation is completed. If it was done correctly the remote control device is now powered and the LCD display will show the following message for a few seconds:





As soon as the connection is established the normal operating condition will be displayed:



## 5 - Configuring operating parameters

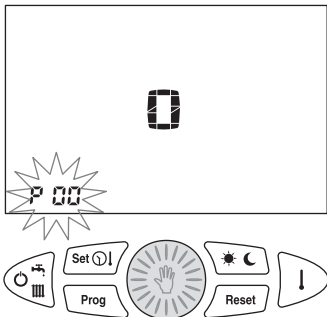
This operation must be done by technical service personnel only. Errors in the configuration of your Remote Control device may lead to malfunctioning.

This operation configures the remote control device to be compatible with the boiler and the system to which it is connected.






1. Move the remote control device to **OFF** position.
2. Press the keys  and  and keep them pressed until the display will show **PAr**.
3. To confirm the function press button

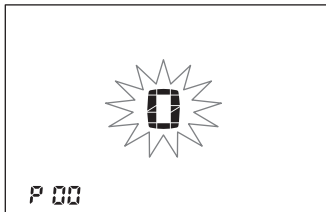


Instead of the time the display will show the parameter number, and instead of the temperature the parameter value. The parameter number will be blinking.





4. Turn button  to select the parameter number to be displayed. The temperature display will show the corresponding parameter value.
5. Press button : to change this value. The corresponding parameter value will start blinking.
6. Turn button  to change the displayed value.
7. If within 30 sec. no key is pressed, normal operation will be restored and the last change made will not be saved.
8. Press button  to store the value.
9. To change the parameter repeat from point 4.
10. To exit the configuration context press key .



Hereafter you can find the definition of parameters you can change:

- **P00 - Room temperature sensor compensation**

It is the value (-5.0°C ÷ +5.0°C) to be added to/detracted from the dis-

played room temperature in order to compensate any possible error.

- **P01 - Room anti-frost Start temperature Range**

It defines the start temperature for the room anti frost function ( $0.1^{\circ}\text{C} \div 10^{\circ}\text{C}$ ).

N.B.: 0.0 = value 0.0 disables the room anti frost function.

- **P02 - Differential operation temperature OFF**

It is the value to be added to the room setpoint in order to define the end of the Central Heating Demand.

Example:

$$T_{\text{set point}} = 20.0^{\circ}\text{C}$$

$$P02 = 0.5^{\circ}\text{C}$$

$$T_{\text{set point}} + P02 = 20.0 + 0.5 = 20.5^{\circ}\text{C}$$

The central heating demand ends whenever the room temperature is higher then  $20.5^{\circ}\text{C}$ .

- **P03 - Differential operation temperature ON**

It is the value to be subtracted from the room setpoint in order to define the start of the Central Heating Demand.

Example:

$$T_{\text{set point}} = 20.0^{\circ}\text{C}$$

$$P03 = 0.5^{\circ}\text{C}$$

$$T_{\text{set point}} - P03 = 20.0 - 0.5 = 19.5^{\circ}\text{C}$$

The central heating demand starts whenever the room temperature is lower then  $19.5^{\circ}\text{C}$ .

- **P04 - Thermo-regulation type**

0 = ON/OFF

1 = Modulating on Room Temperature sensor

2 = Modulating on External Temperature Sensor (Outside Temperature Compensation)

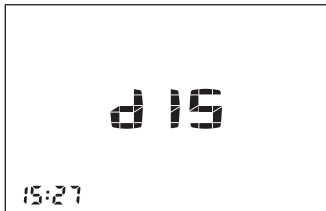
3 = Modulating on Room and External Temperature sensors

4 = Disabled

## 6 - Disabling thermo-regulation


In case the remote controller is installed inside a generic environment and you do not need to control its temperature (i.e.garage, boiler room...), you can disable the Central Heating demand request through proper configuration of parameter P04 = 4 (see chapter 5 - Configuring operating parameters).




With this kind of configuration the word **diS** is displayed on the remote controller LCD screen in place of the room temperature.



## 7 - Selecting operating mode

**Subject to the type of boiler connected, some of the following modes may not be available.**

Select the operating mode of the boiler by pressing key  several times. The operating modes you can set are:

SELECTED STATUS	ID ICONS
OFF	OFF
SUMMER	
WINTER	
ONLY HEATING	

1. **OFF:** all requests for boiler are disabled.



2. **SUMMER:** the boiler is enabled to only produce domestic hot water.

3. **WINTER:** the boiler is enabled to produce domestic hot water and to heat the room.




4. **ONLY HEATING:** the only operation mode enabled is heating.





No matter which function has been selected, the room anti-freeze function is always operative (cfr. respective section).



## 8 - Setting up clock and temperature

Subject to the type of boiler connected, some of the following modes may not be available.

To set the clock and the temperature set points of this remote control device and of the boiler press key  several times. The menu is as follows:

SELECTED STATUS	ID ICONS
CLOCK	
TEMPERATURE DAY	
TEMPERATURE NIGHT	
HEATING TEMPERATURE	

SELECTED STATUS


DOMESTIC HOT WATER TEMPERATURE

KD OUTSIDE PROBE


ID ICONS

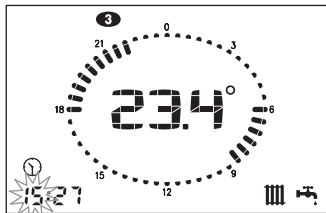




kd

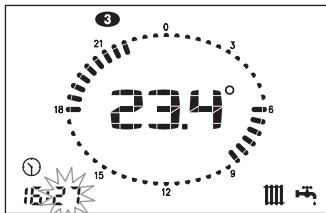
In place of the time, the quantity value is displayed in the lower left corner. Its identifying icon will be blinking. In order to conclude the setting phase press key  several times until all identifying icons are off.

## 8.1 - Setting up clock






1. Press key : the hour will blink.

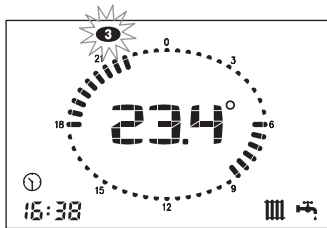


2. Turn button  to set the required value.
3. Press button  to confirm the input value. The hour will stop blinking and the minutes will start blinking.






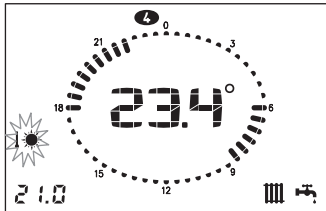


4. Turn button  to set the value you want.
5. Press button  to confirm value. The minutes stop blinking and the day of the week will start blinking.
6. Turn button  to set the value you want.
7. Press button  to confirm value. The day of the week stops blinking and icon  goes off.






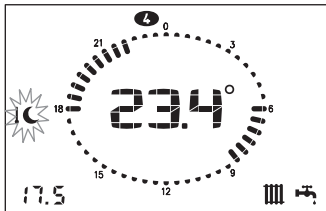
## 8.2 - Setting up room DAY temperature

1. Press key  until icon  starts blinking.
2. Turn button  to set the value you want.






### 8.3 - Setting up room NIGHT temperature

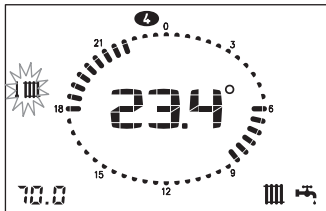
1. Press key  and release when icon  starts blinking.
2. Turn button  to set the temperature you want.






## 8.4 - Setting up HEATING temperature

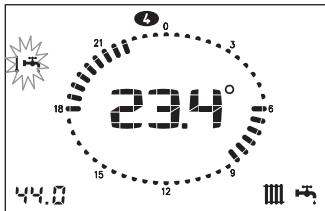
If the remote control device has been configured as modulating, this parameter determines the max. temperature value as computed by the modulation algorithm.

1. Press key  until icon  starts blinking.
2. Turn button  to set the value you want.



## 8.5 - Setting up DOMESTIC HOT WATER temperature



1. Press key  until icon  starts blinking.
2. Turn button  to set the value you want.

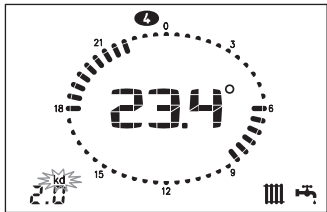


## 8.6 - Setting up outside probe KD value

This setting option is available only if the outside probe is connected, the remote control device is set as modulating and the use of the outside probe for modulation (P04 = 2 or 3) is enabled.

This parameter allows to select a curve to determine the outside temperature – computed heating temperature ratio. The setting range is 0.0 to 3.0. The higher the set value, the greater the influence of the outside temperature on the determination of the set heating temperature. For best comfort, select for low temperature systems a value in a range from 0.0 to 1.0; for standard systems select a value from 1.0 to 3.0.

1. Press key  until icon kd starts blinking.
2. Turn button  to set the value you want.








## 9 - Setting up clock and temperatures

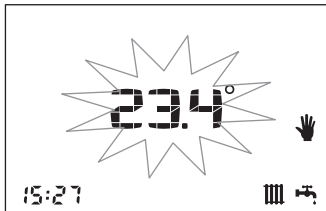
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If the operation mode selected is WINTER or HEATING ONLY, the Remote Control device allows you to manipulate the room temperature either MANUALLY or AUTOMATICALLY.

- In MANUAL mode the user selects the room temperature he wants, and this temperature will be maintained until a change is made.
- In AUTOMATIC mode the room temperature set point is determined by the correspondence between time-day and the set weekly program.




## 9.1 - MANUAL operation

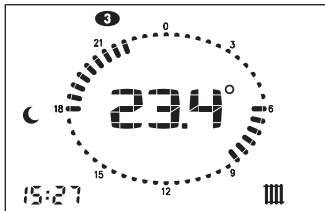
1. Press key  until icon  appears. The central digits on the display will show the set temperature blinking.
2. Turn button  to set the temperature you want.
3. After 30 secs the central display will go back to showing the current temperature.
4. The set temperature can be changed again at any moment by turning button .
5. The set temperature can be displayed by pressing key .





## 9.2 - AUTOMATIC operation

1. Press button  until the heating clock corona will be displayed.
2. Icon  or  will light up to show which is the currently set temperature level.




## 10 - Weekly heating program


When operation mode WINTER or HEATING ONLY is selected, the remote control device allows operation in AUTOMATIC mode in which a priorly set program manages the room temperature during the various times of the day.

The room temperature can be set to two independent levels: DAY (☀) and NIGHT (☾); the weekly heating program distributes these levels over the day.








Inside the remote control device there is a standard program to control the room temperature; the user can display and change it as he likes

The display / change mode of the heating program will be actuated by pressing key ; the lighting of icon PROG shows that it is on.

FUNCTION	ID ICON
DISPLAY HEATING PROGRAM	PROG steady
CHANGE HEATING PROGRAM	PROG blinking














After making the changes press key  again to exit the programming area.

## 10.1 - Display heating program

1. Press key . Icons PROG and  will appear on the display and show the first day of the week. Icons  /  and the jumper are ON  or OFF  matching the DAY / NIGHT level of the displayed time.
2. Turn button  in order to scroll the times of the day and to move from one day to another.



## 10.2 - Change heating program

1. Press key . Icons PROG and  will appear on the display and show the first day of the week. Icons  /  and the jumper are ON  or OFF  matching the DAY/NIGHT level of the displayed time.
2. Press button  to go to the program change zone: icon PROG and the day of the week will blink.
3. Turn button  to select the day you want.
4. Press button  to confirm the day you selected and to move to the time. The day of the week will stop blinking and the time will start blinking.
5. Turn button  to select the time you want.
6. Press key  to change the temperature level DAY / NIGHT assigned to the current time.
7. Turn button  until it shows the time period during which you want to keep the current level.
8. Press key  to change the level and so on.
9. Repeat operations from point 2 on in order to change the day.



## 11 - Weekly storage tank program

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This function is available only if the boiler connected to the remote control device has been designed to control it.

The Remote Control device can run (same as for heating program) a weekly program to enable (☀) or disable (☾) the storage tank by time ranges.

Inside the remote control device there is a standard program to control the storage tank; the user can display and change it as he likes.


















The storage tank program display / change mode is the same as the one used for the heating program: it is actuated by pressing key  and the lighting up of icons PROG and  shows that it is on.

## 11.1 - Display storage tank program

1. Press key . Icons PROG and **1** will appear on the display and show the first day of the week.
2. Press key . Icon  will light up on the display and show the storage tank program. Icon  (storage tank enabled) or  (storage tank disabled) and the jumper are ON  or OFF  matching the level of the displayed time.
3. Turn button  to scroll the times of the day and to move from one day to another.







## 11.2 - Change storage tank program

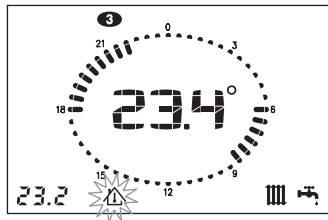
1. Press key . Icons PROG and  will appear on the display and show the first day of the week.
2. Press key . Icon  will light up on the display and show the storage tank program. Icons  (storage tank enabled) or  (storage tank disabled) and the jumper are ON  or OFF  matching the level of the displayed time.
3. Press button  to move to the program change zone: icon PROG and the day of the week will blink.
4. Turn button  to select the day you want.
5. Press button  to confirm the day you selected and to move to the time. The day of the week will stop blinking and the time will start blinking.
6. Turn button  to select the time you want.
7. Press key  to change boiler status ENABLED () / DISABLED () assigned to current time.
8. Turn button  until it shows the time period for which you want to keep the current level.
9. Press key  to change level and so on.
10. Repeat operations from point 3 on to change the day.

## 12 - Temporary change room temperature set point

When operating in AUTOMATIC mode the room set point DAY (☀) / NIGHT (☾) can be increased or reduced. The change will be valid until the next level change (DAY-NIGHT) takes place. Thereafter it will be void.

1. Press key  to display the set room temperature.
2. Turn button  to select the value. Icon  will blink for the time of the change and shows that the change of the set point has been made.

If you want to disable the function before it has expired, disable the heating function by pressing key .







## 13 - Fault signalling


The remote control device will display any faults with code **Exx** blinking in place of the temperature display.

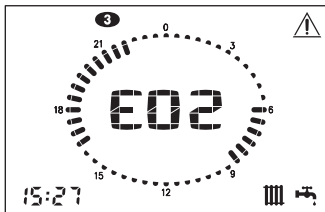
To learn about the type of fault refer to the boiler instruction booklet.

There can be two kinds of faults: those which can be restored by the user and those which cannot be restored.

### 13.1 - Restorable faults

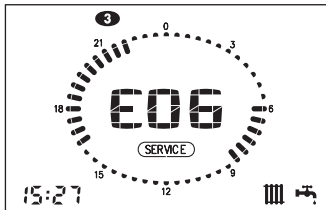
You recognize these faults because icon  will light up and blink; they can be reset by pressing key .

If there are no more restoring attempts available icon  will stay on. In such a case, follow the steps of the boiler instruction and maintenance booklet. In case the fault remains on, contact the technical service center.




## 13.2 - Not restorable faults





You recognize these faults because icon **SERVICE** will light up; these faults cannot be reset by the user but require technical service. Also code **E66** falls under this error class (room temperature probe of remote control device in fault).



## 14 - Display values

Subject to the type of boiler connected some of the below described functions may not be available.

Pressing key  repeatedly your Remote Control device is able to display the following quantity values:

SELECTED QUANTITY	ID ICON
SET ROOM TEMPERATURE	
DOMESTIC HOT WATER PROBE TEMPERATURE	
DELIVERY PROBE TEMPERATURE	
OUTSIDE PROBE TEMPERATURE	

### SELECTED QUANTITY

SYSTEM WATER PRESSURE

S01 TEMPERATURE

S02 TEMPERATURE

S03 TEMPERATURE

S04 TEMPERATURE

### ID ICON

bar

50 1

502

503

504

The quantity value is displayed in the lower left corner, in place of the time, and is identified by its icon.

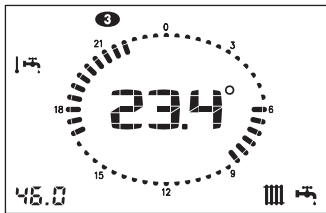
## 14.1 - Display set room temperature

This is the temperature set for the activated temperature level (DAY - NIGHT - MANUAL).



## 14.2 - Display temperature domestic hot water probe

This is the temperature read by the domestic hot water probe fitted in the boiler.



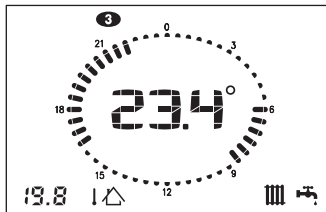
### 14.3 - Display temperature delivery probe

This is the temperature read by the delivery probe fitted in the boiler.



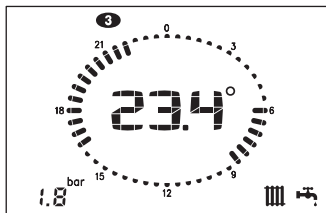
### 14.4 - Display temperature outside probe

This is the temperature read by the outside probe connected to the boiler.



## 14.5 - Display system water pressure

This is the system water pressure.



## 15 - Reset of default values

If necessary the original values of the remote control device as set by the manufacturer can be restored.

The restored values are as follows:



- Temperature DAY: 20°C
- Temperature NIGHT: 16°C
- Temperature MANUAL: 20°C

### Weekly heating program

Days	NIGHT	DAY
Monday - Friday	00.00 ÷ 06.00 08.00 ÷ 16.30 22.00 ÷ 00.00	06.00 ÷ 08.00 16.30 ÷ 22.00
Saturday - Sunday	00.00 ÷ 07.00 23.00 ÷ 00.00	07.00 ÷ 23.00

### Weekly storage tank program

Days	DISABLED	ENABLED
Monday - Friday	00.00 ÷ 06.00 08.00 ÷ 17.00 22.00 ÷ 00.00	06.00 ÷ 08.00 17.00 ÷ 22.00
Saturday - Sunday	00.00 ÷ 07.30 22.00 ÷ 00.00	07.30 ÷ 22.00

1. Move the remote control device to OFF position.
2. Press keys  and  and keep them pressed for longer than 5 secs.
3. The operation is confirmed when **dEF** appears on the display.

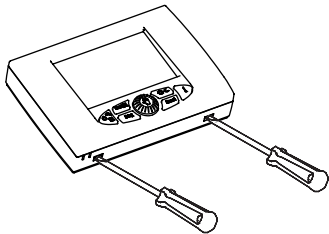




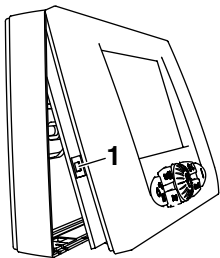
## 16 - Complete resetting

Faults or other technical reasons may require 'complete resetting' of the remote control device.

For this operation the remote control device must be taken off its fixing template - do this by gently pressing with a screwdriver on the lower splines.



Thereafter press key (1).



After doing a "complete reset" the time and day of the week must be set again.

## 17 - Room anti-freeze function

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The Remote Control device is able to support the room-antifrost function. In all the operating modes the central heating demand is generated whenever the measured room temperature is lower than the activation threshold (parameter P01). This grants protection of the central heating installation from the freezing risk. The function can be eventually disabled through proper setting of parameter P01 (P01 = 0.0).



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