RC 06



en - Remote controller instruction

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DESCRIPTION FUNCTION BUTTON

- 1 Information/Programming button
- 2 Timing function
- 3 Central Heating temperature regulation
- 4 Confirmation button
- 5 Setting programmed operation in heating mode Manual/Automatic/Off
- 6 Economy-Comfort button
- 7 Enabling Summer-Winter-Heating only-Off
- 8 Domestic Hot Water temperature regulation

DESCRIPTION SYMBOL DISPLAY

- 9 Time switch program histogram
- 10 Comfort setpoint temperature mode
- 11 Reduced setpoint temperature mode
- 12 Communication with the gas boiler in progress
- 13 Modulating flame level (boiler power level)
- 14 Fault in progress
- 15 Burner lighted
- 16 Pcb (boiler) parameters
- 17 Battery level
- 18 Week days
- 19 Time format / displaying information
- 20 Delayed mode
- 21 Manual mode
- 22 Timing mode
- 23 Standby
- 24 CH mode
- 25 D.H.W. mode

1. COMMISSIONING OF THE BOILER

To correctly light the boiler proceed as follows:

- Provide power supply to the boiler.
 - open the gas cock;
 - press the **U** button, to set the gas boiler mode as described in sec tion 1.2.

Note: *if summertime mode is setting, the boiler will light only during a D.H.W. demand.*

• To adjust the CH and D.H.W. temperature, press the +/- respective buttons as described in section 1.4.

1.1 SYMBOL MEANING

There are <u>4 power levels</u> displayed during boiler operation, relevant to the gas boiler modulation, as shown in fig. 2:



1.2 DESCRIPTION OF BUTTON () (Summer - Winter - Heating only - Off)

Press this button to set the following boiler operation modes:

- SUMMER
- WINTER
- HEATING ONLY
- OFF

In **SUMMER** mode the symbol **f** is shown on the display. The boiler only meets DHW demands; heating mode is not enabled (frost protection function is enable).

In **WINTER** mode the symbols **IIII** are shown on the display. The boiler meets DHW and heating mode demands (frost protection function activated).

In **HEATING ONLY** mode the symbol **IIII** is shown on the display. The boiler only meets heating mode demands (frost protection function is enable).

If **OFF** is selected, neither of the two symbols (**IIII**) (**F**) is displayed. In this mode only the frost protection function is enabled and any other demands in DHW or heating mode are not met.

1.3 DESCRIPTION OF BUTTON () 4/ (AUTOMATIC-MANUAL-OFF)

By pressing this button it is possible to set one of the following Heating modes:

AUTO-MANUAL-OFF as describe below.

AUTO (Displayed symbol ())

The Heat request depends on the type of the "Time Programs" set (COM-FORT room temperature "*" or REDUCED room temperature "("). See section 1.6 to set the programming heating mode.

MANUAL (Displayed symbol *****)

This function disables the "Time Programming" in Heating mode. Press the +/- with button to set the room temperature value.

OFF (Displayed symbol υ)

This function disables the Heating mode and the display shows the υ symbol (the frost protection is enabled).

1.4 ROOM AND DOMESTIC HOT WATER (D.H.W.) TEMPERATURE ADJUSTMENT

The room ()) and D.H.W. () temperature adjustment are carried out by pressing the relative +/- buttons (figure 1).

When the burner is lighted the display shows the symbol ((()) as described in section 1.1.

CENTRAL HEATING (CH)

During a CH mode, the display shows a CH (¹¹¹) symbol and the room temperature value (°C).

During a temperature regulation, the display shows "AMB".

DOMESTIC HOT WATER (D.H.W.)

During a D.H.W. request, the display shows a D.H.W. (*) symbol and the room temperature value (°C).

During a temperature regulation, the display shows "HW SP".

NOTE: if an external water tank is connected to the gas boiler, during a domestic hot water request, the display shows a () symbol and the room temperature value (°C).

1.4.1. Remote control installed on the boiler front panel

If the remote control is installed on the boiler front panel, the +/- W buttons regulate the Central Heating flow temperature. The display shows the room temperature.

1.5 PROGRAMMING (PROGR)

SETTING THE DATE-TIME

Press the **IP** button: the display shows (briefly) the message **PROGR** and the time starts flashing.

Note: If no button is pressed the function ends automatically after approx. 1 minute.

- Use the buttons +/- (1) to set the hour;
- Press the OK button;
- Use the buttons +/- not to set the minutes;
- Press the OK button;
- Use the buttons +/- initial to set the day of the week "Day" (1...7 corresponding to Monday...Sunday);

Press the **IP** button to exit DATE-TIME setting.

1.6 PROGRAMMING HEATING MODE OPERATION TIMES

To enable the function, press the ${\bf \Theta} \, {\bf \bullet}$ button (the display shows the ${\bf \Theta}$ symbol)

Time period programming allows the setting of boiler automatic operation in heating mode in fixed time slots and on fixed days of the week.

Boiler operation settings can be made for *single* days or *groups* of consecutive days.

1.6.1. Single days

Four time bands (4 boiler activation and deactivation periods in heating mode even with different times from day to day) are available for every day selected, as shown in the following table:

			FACTORY SETTINGS							
			On 1	Of 1	On 2	Of 2	On 3	Of 3	On 4	Of 4
MONDY	DAY 1	(monday)								
TUEDY	DAY 2	(tuesday)								
WEDDY	DAY 3	(wednesday)								
THUDY	DAY 4	(thursday)	06:00	08:00	11:00	13:00	17:00	23:00	24:00	24:00
FRIDY	DAY 5	(friday)								
SATDY	DAY 6	(saturday)	-							
SUNDY	DAY 7	(sunday)								

To set a single time band, proceed as follows:

- Press the IP button and then the button O d;
- 2) choose a day of the week (1...7) by repeatedly pressing the buttons +/- (2007);
- 3) press the OK button;
- the display shows the message on 1 and the 4 digits of the time flashing, as shown in the figure below;



- 5) use the buttons +/- (1) to set the boiler lighting time;
- 6) press the OK button;
- 7) the display shows the message of 1 and the 4 digits of the time flashing;
- 8) use the buttons +/- (1) to set the boiler switching off time;
- 9) press the OK button;
- **10)** repeat the same operations (from point 4) to set the remaining three time bands;
- **11)** press the IP button to exit the function.



Note: By setting the lighting time **on...** equal to the switching off time **of...**, the time band is cancelled and the program goes to the next time slot. (ex. **on1**=09:00 - **of1**=09:00 the programme "skips" time band 1 and continues with **on2**...).

1.6.2. Groups of days

This function enables the programming of 4 common boiler activation and deactivation time slots for several days or the entire week (see the summary table below).

To set a single time band, proceed as follows:

1) Press the **IP** button and then the button $\Theta \phi$;

- 2) Select a GROUP of days by repeatedly pressing the buttons +/-
- 3) press the OK button
- 4) repeat the operations described in points 4-10 of paragraph 1.6.1.

Summary table of available groups of days			FACTORY SETTINGS		
Group "MO-FR"	DAY 12345	from Monday to Friday	As per table in paragraph 3.6.1.		
Group "SA-SU"	DAY 67	Saturday and Sunday	07:00 – 23:00		
Group "MO-SA"	DAY 123456	from Monday to Saturday	As per table in paragraph 3.6.1.		
Group "MO-SU"	DAY 1234567	every day of the week	As per table in paragraph 3.6.1.		

1.7 PROGRAMMING DHW MODE OPERATION TIMES

(only for boilers connected to an external heater)

This function enables the programming of four boiler DHW mode operation time slots in the span of a week (the programmed time slots are the same for every day of the week).

To set the programming of DHW mode operation times, proceed as follows:

- 1) Press the IP button and then the button **O i** to enter the programming (heating and DHW modes);
- 2) Select the DHW programme "HW PR" by repeatedly pressing the buttons +/- iii;
- 3) Press the **OK** button
- 4) Set the time slots in which you can enable DHW mode operation by repeating the operations described in points 4-10 of paragraph 1.6.1 (factory setting 06:00 - 23:00).





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2. SPECIAL FUNCTIONS

2.1 ECONOMY - COMFORT FUNCTION (****

This function enables the user to set two different room temperature setpoints:

Economy / Comfort.

For more simplicity it's better to set the COMFORT value temperature higher than the ECONOMY value temperature.

To set the required room temperature, press the C++ * button:

 the "ECONM" writing shows the operating in reduced room temperature mode;

display shows **(** symbol;

 the "COMFR" writing shows the operating in nominal room temperature mode;

display shows ***** symbol;

To temporary change the setting room temperature value, press +/-

This function could operates in automatic or in manual mode:

AUTOMATIC OPERATION (displayed symbol (\bigcirc))

The setting room temperature depends on the time slot (section 1.6). Inside the time slot the room temperature is the COMFORT value, outside the time slot the room temperature is the ECONM value.

To temporary change the room temperature value (from COMFORT to ECONOMY or vice versa) press the C button. This changes has effect until the next time change over.

MANUAL OPERATION (displayed symbol *****)

Press 🕑 🏕 button to set the gas boiler in manual operation mode

To temporary change the room temperature value (from COMFORT to ECONOMY or vice versa) press the ******* button. This change has effect until the next button pressure.

2.2 SHOWER FUNCTION

The shower function ensures better hot water comfort, e.g. during a shower. This function enables domestic hot water to be drawn at a lower temperature than the nominal temperature value.

To set or modify the max. shower function temperature value, refer to section 2.3.

This function can be manually activated in the following way:

- Press one of the two buttons +/- **Solution** and then the button **O** to activate the function; (the message **SHOWR** briefly appears on the display, followed by the message **HW SS**);
- press the **OK** button while the flow temperature and the symbol **%** flash on the display;
- the duration of the function is **60 minutes** (during this time the symbol **7** flashes).

At the end of this time the domestic hot water temperature returns to the value of the previously set operating mode (the symbol 두 is no longer intermittent on the display).

Note: To disable the function before the end of the 60 minutes, proceed as follows:

- press one of the two buttons +/- 🐔 and then the button 🕐;
- press the OK button, the display shows the message "HW S^ "...

2.3 TEMPERATURE VALUES MODIFICATION BY PRESSING THE

To modify the room temperature values, proceed as follows:

- press the **IP** button to enable the **PROGR** function;
- press the < ** ** button to select the required function as described in the following table:

Function	Display	Description of function
COMFR	The set temperature value flashes (factory setting = 20°C)	Boiler operation in heating mode at nominal temperature.
ECONM	The set temperature value flashes (factory setting = 18°C)	Boiler operation in heating mode at reduced temperature.
NOFRS	The set temperature value flashes (factory setting = 5 ° C)	Boiler operation in heating mode at room frost protection temperature.
SHOWR	The set temperature value flashes (factory setting = 40°C)	Boiler operation in DHW mode at DHW temperature set.

- Press the +/- W button to modify the value of the selected function.
- Press the IP button to exit the function.

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2.4 PROGRAMMABLE SWITCHING TIME FUNCTION (BUTTON ⁽¹⁾)

2.4.1 HOLIDAY PROGRAM function

It is possible to temporary shut off the timing program (section 1.6) for a certain period of time. During this period of time a minimum room temperature value is guaranteed (default value 5° C). To modify this temperature value see section 2.3 under the entry "**NOFRS**".

To enable the function proceed as follows:

- press the 🕑 🍁 button to set the function to "AUTO" (symbol 🕑);
- press the $^{\odot}$ button, the display shows the writing **MM 60** and the $^{\odot}$ $^{\odot}$ $^{\odot}$ symbols flashing.



In this example the function has a period of 60 minutes.

Press the +/- $\widehat{}$ buttons to set the period of the timing program with 10 minutes step. The period of time is settable from a minimum of 10 minutes to a maximum of 45 days.

By pressing the **+** $\underbrace{100}$ button after **90 minutes**, the display shows "**HH 02**":. in this case the period of time is carries out in hours from a minimum of 2 hours to a maximum of 47 hours, with 1 hour step.

By pressing the **+** we button after **47 hours**, the display shows "**DD 02**": in this case the period of time is carried out in days from a minimum of 2 days to a maximum of 45 days, with 1 day step.

WARNING: do not press any button after having enabled this function. By pressing some of the remote control buttons, it is possible that the manual function is enabled by mistake (in this case the display shows the vsymbol) and that causes the "Holiday Program" function shut off . In this case it is necessary to repeat the instructions described at the beginning of this section to enable again the function.

2.4.2 PARTY function

This function allows the user to set a temporary room temperature value. It is possible to change this temperature value also during the function operation. The operating mode returns to a previews setting at the end of this period of time.

To enable the function, proceed as follows:

- press the O is button to set the function to "MANUAL" (symbol is);
- press the O button, the display shows the writing MM 60 and the O definition of the flashing;
- to set the period of the timing program see the section 2.4.1.
- to modify the room temperature value, press the "OK" button (the display shows "AMB") then press the +/- buttons.

3. ERROR MESSAGES AND TABLE OF FAULTS

There are two type of fault carried out by the temperature control: *FAULT* and *BLOCK*.

FAULT

If a fault occurs, the display shows the symbols flashing together with the **ERROR>** writing.



The fault is identified by an error code followed by **E** letter and is not resettable. Call an authorized Service Centre.

<u>BLOCK</u>

If a block occurs, the display shows the **f** symbols flashing together with the **<ERROR>** writing alternated, with 2 seconds step, with the **<>>OK>** flashing writing.

The block fault is identified by an error code (see the table below) followed by **E** letter.



Press the **OK** button (figure 1) to reset the gas boiler. The display shows the **<RESET>** writing and then the **>>>OK** writing



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ERROR CODE	Description of FAULTS	CORRECTIVE ACTION		
01E	Gas supply fault	Press the OK button (figure 1) for at least 2 seconds. If this fault persist, call an authorised Service centre.		
02E	Safety thermostat sensor tripped	Press the OK button (figure 1) for at least 2 seconds. If this fault persist, call an authorised Service centre.		
	Flue pressure switch tripped	Call an authorised Service centre.		
03	Flue thermostat sensor tripped	Press the OK button (figure 1) for at least 2 seconds. If this fault persist, call an authorised Service centre.		
04E	Safety error for frequently loss of flame	Call an authorised Service centre.		
05E	Central heating NTC sensor fault	Call an authorised Service centre.		
06E	Domestic Hot Water NTC sensor fault	Call an authorised Service centre.		
10E	Water pressure LOW	Check that the pressure in the system is as specified. See Section 5. If this fault persist, call an authorised Service centre.		
11E	Safety thermostat has cuts out (for low temperature system)	Call an authorized Service centre.		
18E	System water filling function enable (only for predisposed appliances)	Waiting until the system filling is finished		
19E	System filling anomaly (only for predisposed appliances)	Call an authorized Service centre.		
25E	Boiler max temperature exceeded (probable pump jammed or air in the circuit)	Call an authorized Service centre.		
31E	No communication between the main board and the remote temperature control	Press the OK button (figure 1) for at least 2 seconds. If this fault persists, call an authorized Service centre		
35E	Fault flame (parasitic flame)	Press the OK button (figure 1) for at least 2 seconds. If this fault persists, call an authorized Service centre		
80E-96E	Internal remote control error	Call an authorized Service centre.		
97E	Wrong power supply electrical frequency (Hz)	Set the correctly electrical frequency (Hz)		
98E-99E	Electrical main board internal error	Call an authorized Service centre.		

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4. PARAMETERS DISPLAY

4.1 INFORMATION AND ADVANCED SETTING MODE

<u>To access</u> the Information and Advanced Setting mode, it is necessary to press, for at least 3 seconds, the **IP** button; in INFO mode the display shows **"INFO"**.

<u>To escape</u> the INFO mode briefly press the **IP** button. In this mode press the **OK** button to scroll the windows; to set parameters press the **+/-** button.

WARNING

Communications between the main board and the remote control is not immediately. In some case it may happen that the command given through the remote control takes some time depending on the type of the transferred information.

CENTRAL HEATING (CH)

- "CH SL" Max. heating circuit setpoint, value settable with the buttons +/- (W).
 WARNING: to change the unit of measure from °C to °F and vice versa, press the (--- * button.
- **"EXT°c"** Outside temperature (with external sensor connected).
- "CH O>" Maximum Heating flow temperature.
- "CH R<" Return heating temperature (unplanned).
- "CH S^" CH temperature setpoint.
- "CH MX" Maximum CH temperature setpoint (max. settable value).
- "CH MN" Minimum CH temperature setpoint (min. settable value).

- "**HW O>**" D.H.W. flow temperature.
- "HW S^ " Maximum setpoint temperature value setting. Press the +/ buttons to set the value.
- "HW MX" Maximum D.H.W. temperature setpoint (max. settable value).
- "HW MN" Minimum D.H.W. temperature setpoint (min. settable value).

ADVANCED INFORMATION

- **"PWR %"** Power level/modulating flame (%).
- **"P BAR"** Water pressure heating circuit (bar).
- "F L/M" Water flow rate (l/min).

PARAMETERS SETTING

- "K REG" Central Heating setting constant (0,5...9,0 factory setting 3 -Refer to section 5 - Graph 1).
 Press +/- in buttons to set the value. An high value setting involves a high flow temperature. To set a correct value of the Central Heating constant K REG, involves the room temperature to match the CH setpoint
- **"BUILD"** A parameter that takes into account the degree of building insulation (1..10 factory setting 5). When the outside temperature varies, the room temperature changes at different rates, depending on the building thermal storage capacity. An high value setting involves a heavy building structures (the room temperature will respond slower to outside temperature variations; buildings with thick walls or with external insulation). A low value setting involves a light building structures (the room temperature to outside temperature will respond quicker to outside temperature variations; buildings with a light envelope).

Press +/- m buttons to set the value.

with external temperature changes over.

• **"YSELF**" CH flow temperature auto setting function Enabled/Disabled (1/0). Factory setting 1. With function enable, the constant "**K REG**" is modified to match the room temperature comfort. This function operates with the external sensor connected.

Press +/- m buttons to set the value.

• **"AMBON"** Room temperature influence Enabled/Disabled (1/0). Factory setting 1. In this case, the rooms temperature regulation it depends on the flow temperature set ("CH SL").

Press +/- W buttons to set the value. Note: Refer to the summary table of possible AMBON and MODUL combinations.

• **"T ADJ"** Reading correction of the remote control Room Sensor (factory setting 0.0°C). It allows correction of the Room Sensor reading by a value ranging from -3.0°C to 3.0°C, with a resolution of 0.1°C. The value

may be set using the buttons +/- . The function is enabled only if the unit of measurement is °C

• **"MODUL"** Enable/disable Modulation of flow temperature depending on the room temperature and external temperature value (with external sensor connected). (with Room Sensor enabled). A value equal to 1 indicates enabling of delivery setpoint modulation; a value equal to 0 indicates disabling.

The above value can be modified with the buttons +/- **WD**. Note: Refer to the summary table of possible AMBON and MODUL combinations.

AMBON	MODUL	BUTTONS FUNCTION +/-	
1	1	Room temperature adjustment (modulating flow temperature)	
0	1	with external sensor: KREG curve adjustmentwithout external sensor: Calculated flow temperatu- re adjustment. (It is advisa- ble to set MODUL = 0).	
0	0	Flow temperature adjustment	
1	0	Room temperature adjustment (fixed flow tempe- rature)	

Combination table between **AMBON** and **MODUL** functions:

- **"HW PR"** Enabling the DHW programmer (only for boilers connected to an external hot water tank). Factory setting 1.
 - 0: Disabled
 - 1: Always enabled
 - 2: Enabled with DHW weekly program ("HW PR" refer to section 1.7)
- "**NOFR***" Frost protection Enabled/Disabled (1/0). Factory setting 1.

WARNING: this value must be always enable (1).

"COOL" Summer temperature control Enable/Disable (factory set = 0). By setting this parameter = 1 the function is enabled and a new boiler operation mode "SUMMER+COOL" is available. This function is added to the ones described on section 1.2 of the "instructions for the user" manual: SUMMER - WINTER - SUMMER+COOL - HEATING ONLY - OFF.
To enable the function, presss the ⁽¹⁾/₍₂₎ button until the display shows the symbol on the right side of the hour. The aim of this function is to enable the remote control to adjust the room temperature in summertime by controlling one or more external cooling devices such as a condition machine. In this way, the boiler relay card enables the external condition system when the room temperature is higher than the remote control temperature set value.

When the function operates, the display shows the χ symbol flashing. See the following figure and refers to the SERVICE instruction manual.

5. Kreg CLIMATIC CURVES

With the climate controller the Central Heating (CH) flow temperature depend on the Kreg curves (graph 1) which can be set by pressing the +/- buttons. The adjusting CH flow temperature is automatic. The correct curve, depends on the outside temperature and the room temperature value, is automatic set by the electronic control.

K REG constant curves



Tm = flow temperature (°C) **Te** = external temperature (°C)

6. PARAMETERS SETTING

To <u>access</u> the Parameters setting mode proceed as follows:

- press, for at least 3 seconds, the **IP** button;
- press first the 🕑 button then press together the 🕒 🍁 button.

When the function is activated, the display shows "**F01**" with the value of the selected parameter.

Parameters setting

- Press +/- buttons for scrolling parameters;
- Press +/- we buttons to change the single parameter value;

Nota: the value is automatic saved after about 3 seconds. (Do not press any button until the value is beginning to flash again).



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