

R-20, R-20F, R-20A, R-20AF,
R-20P, R-20FP, R-20AP & R-20AFP

Roca

E

Caldera mural de gas

Instrucciones de Funcionamiento,
y Mantenimiento para
el **USUARIO**

GB

Wall-mounted gas boiler

Working and Maintenance
Instructions for
the **USER**

F

Chaudière murale à gaz

Instructions de Fonctionnement
et de Maintenance pour
l'**USAGER**

D

Wandgaskessel

Betriebs-
und Wartungsanleitung
für den **BENUTZER**

I

Caldaia murale a gas

Funzionamento ed Istruzioni
per la Manutenzione.
Manuale per l'**UTENTE**

P

Caldeira mural a gás

Instruções de Funcionamento
e Manutenção para
o **UTENTE**

R-20, R-20A, R-20P, R-20AP

R-20F, R-20AF, R-20FP, R-20AFP

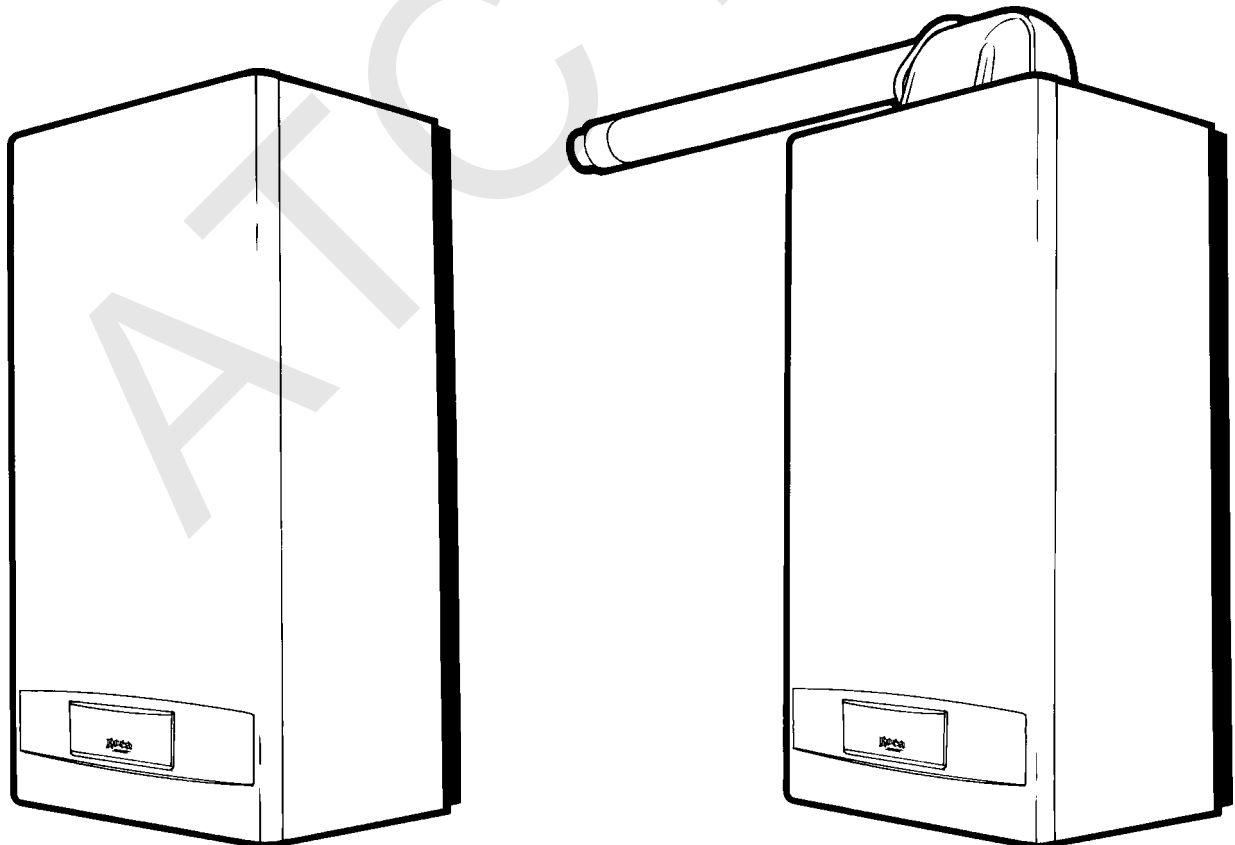


Fig. 1

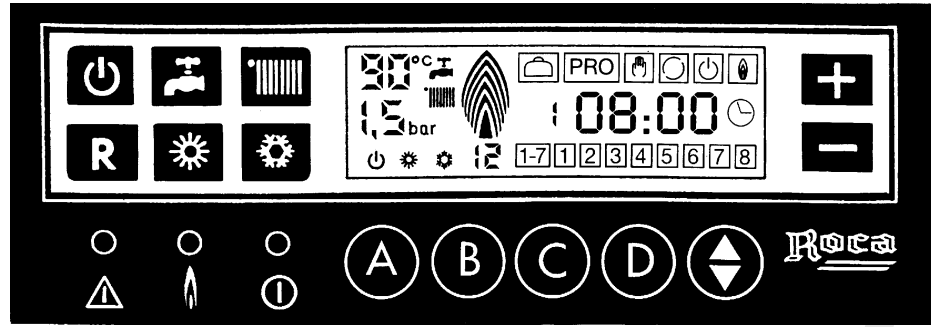
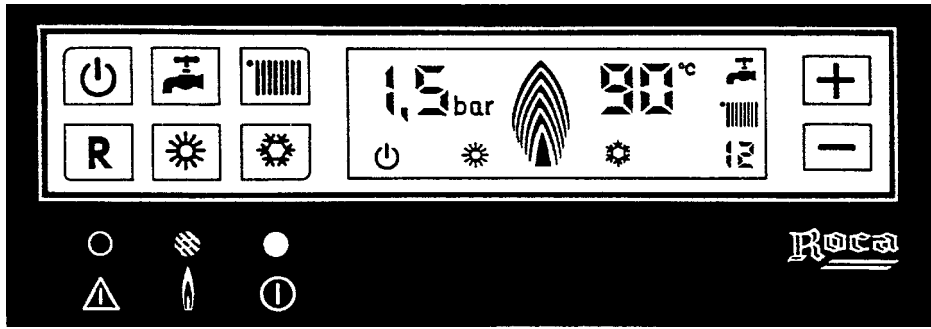


Fig. 8

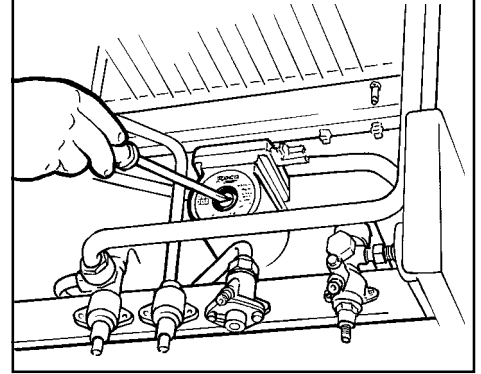


Fig. 9

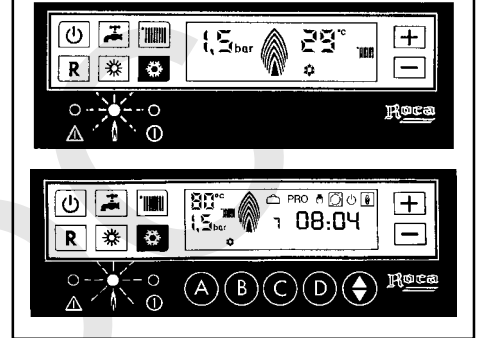


Fig. 2

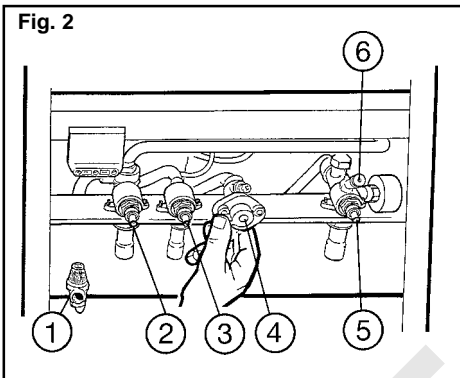


Fig. 5

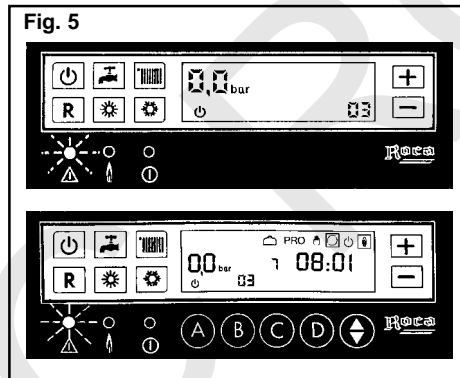


Fig. 10

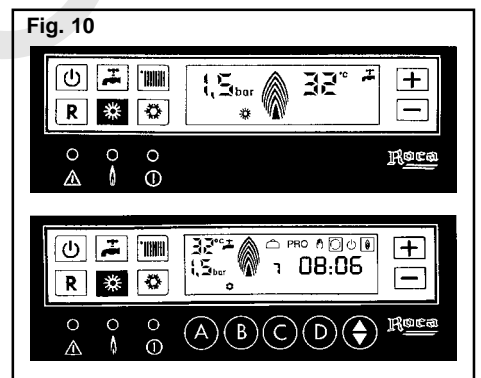


Fig. 3

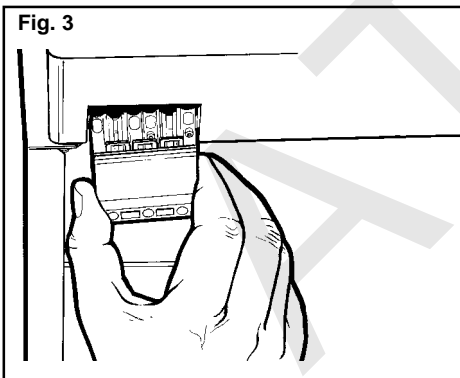


Fig. 6

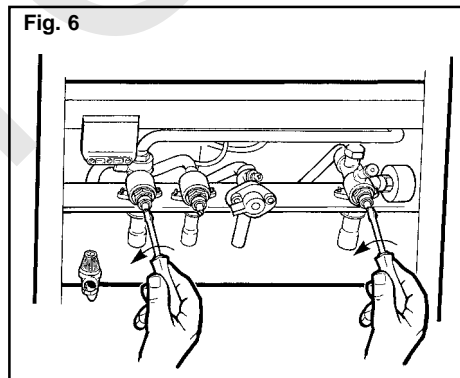


Fig. 11

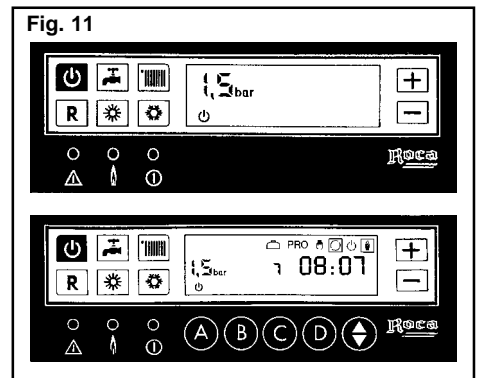


Fig. 4

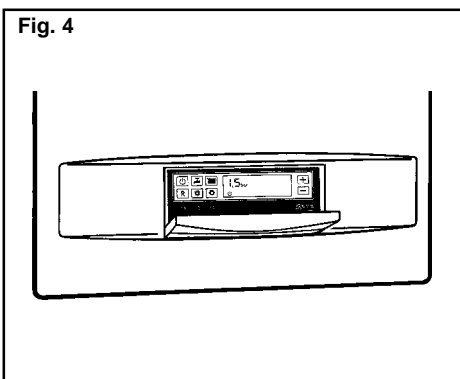


Fig. 7

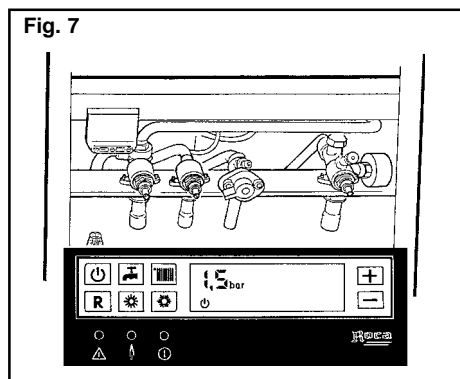
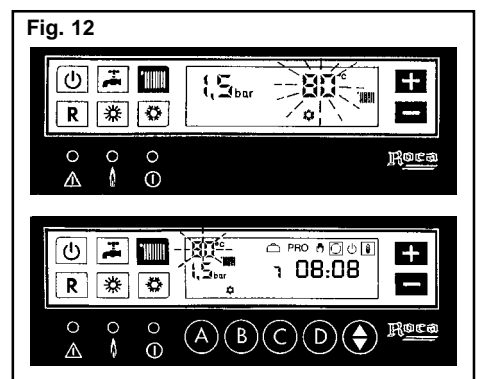
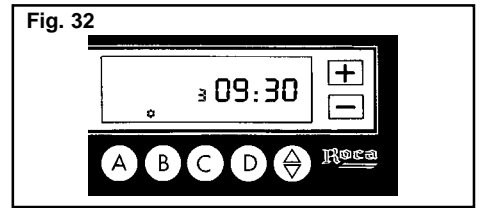
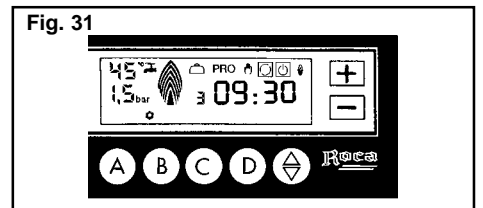
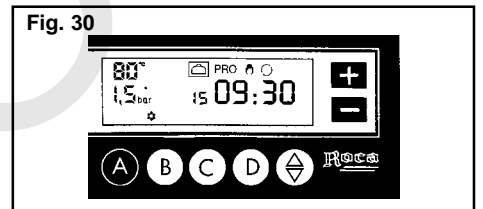
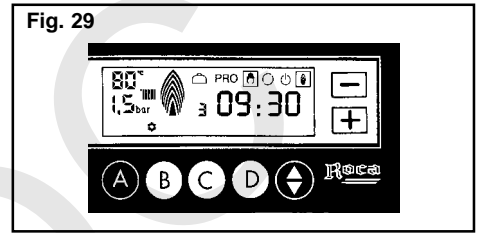
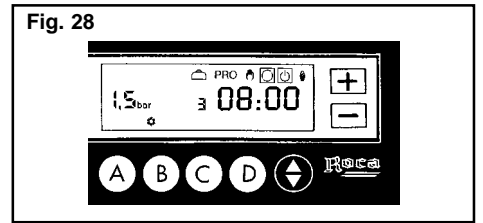
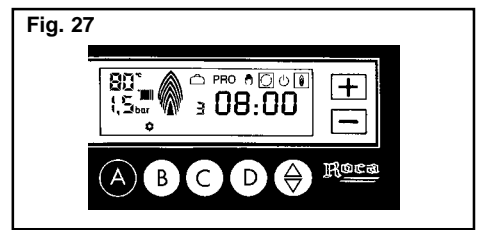
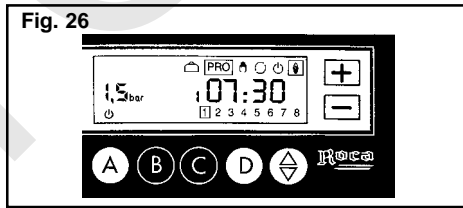
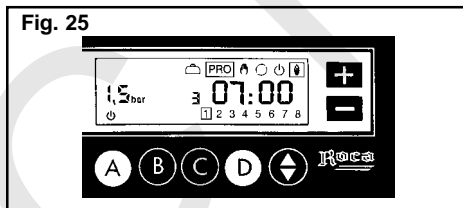
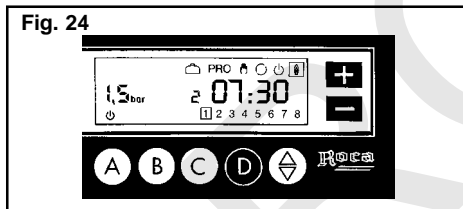
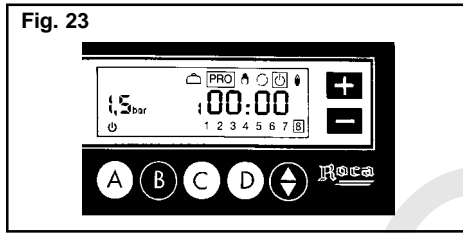
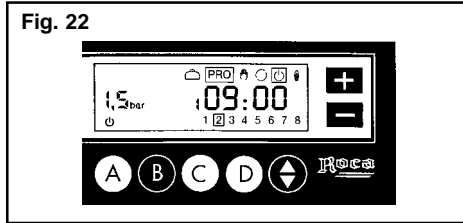
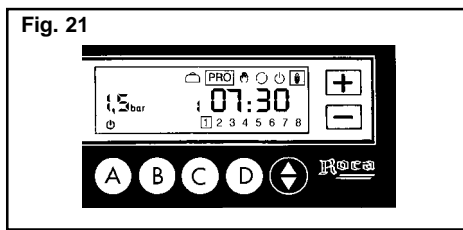
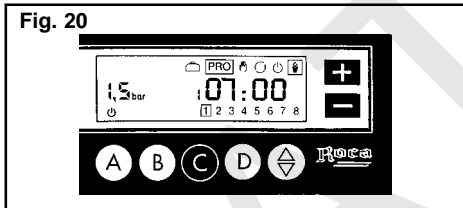
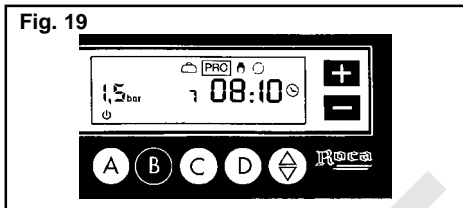
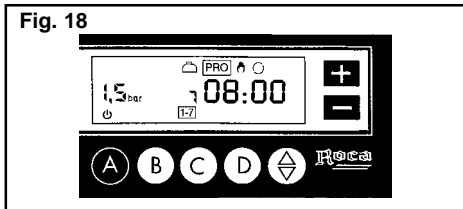
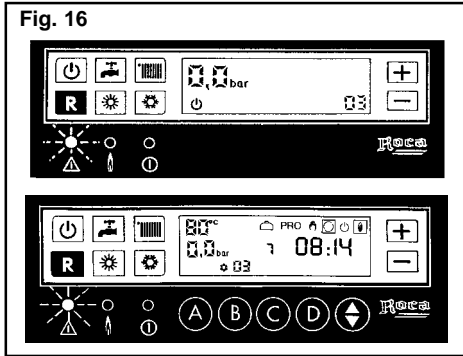
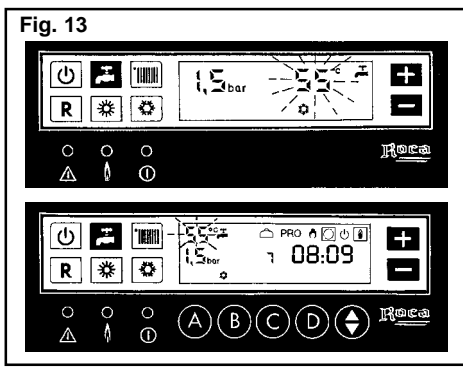


Fig. 12





Programación personal
Personal programming
Programmation personnelle
Persönliches programm
Programmazione personale
Programação pessoal

Martes/Tuesday/Mardi/Dienstag/Martedì/Terça-feira

1	2	3	4	5	6	7	8

Viernes/Friday/Vendredi/Freitag/Venerdì/Sexta-feira

1	2	3	4	5	6	7	8

Miércoles/Wednesday/Mercredi/Mittwoch/Mercoledì/Quarta-feira

1	2	3	4	5	6	7	8

Sábado/Saturday/Samedi/Samstag/Sabato/Sábado

1	2	3	4	5	6	7	8

Lunes/Monday/Lundi/Montag/Lunedì/Segunda-feira

1	2	3	4	5	6	7	8

Jueves/Thursday/Jeudi/Donnerstag/Giovedì/Quinta-feira

1	2	3	4	5	6	7	8

Domingo/Sunday/Dimanche/Sonntag/Domenica/Domingo

1	2	3	4	5	6	7	8

Main characteristics

R-20, R-20F, R-20P and R-20FP: Boilers with Heating service only.

Can supply Hot Water by accumulation if suitably adapted. Consult your installer.

R-20A, R-20AF, R-20AP and R-20AFP: Boilers with Heating service and Hot Water by accumulation.

In the R-20F, R-20FP, R-20AF and R-20AFP, combustion is separate from the air in the premises (airtight chamber). The air required is taken directly from out- side, and the gases produced are evacuated by an extractor at the same time.

Heating service

Output: Adjustable from 6,000 kcal/h (7 kW) to 20,000 kcal/h (23,25 kW).

Maximum pressure in circuit: 3 bar.

Maximum temperature: 90°C.

Filling pressure: 1.5 bar.

Hot Water service (HWS) (*)

Output: Adjustable from 6,000 kcal/h (7 kW) to 20,000 kcal/h (23,25 kW).

Maximum pressure in circuit: 7 bar.

Maximum temperature 60°C









HWS priority in service

(1 kW = 860 kcal/h).












Regulation and control panel

See [Figure 1](#).




Buttons

-  Wait / Stop
-  HWS Temperature selector. (*)
-  Heating circuit temperature selector.
-  Reset after blockage.
-  Summer (HWS selection). (*)
-  Winter (Heating and DHW selection). (*)
-  To increase the temperature
-  To reduce the temperature

Screen symbols

-  Programming mode: HWS. (*)
-  Programming mode: Heating and HWS. (*)
-  Stoppage, anti-freeze protection.
-  HWS operating. (*)
-  Heating operating.
-  Pressure in Heating circuit.
-  Temperature of Heating or HWS. (*)
-  Error codes.
-  Burners operating. Maximum output.
-  Burners operating. Medium output.
-  Burners operating. Minimum output.

Pilot lights

-  Green. Supply voltage.
-  Orange. Burners operating.
-  Red. Blockage.

Identification of the valves

See [Figure 2](#).

1. Safety valve.
2. Heating out.
3. R-20A, R-20AF, R-20AP and R-20AFP: HWS tank back.
4. Gas in.
5. Heating back.
6. Heating circuit purge cock.

Start-up

Check that the electrical connector is in the correct position; it must be pressed firmly inwards. If you need to leave the boiler without electrical supply, it must be unplugged from the connector. See [Figure 3](#).

Open the front cover for access to the regulation and control panel. The green pilot should be on. If the green pilot does not light up, there is no electrical supply to the boiler. Check to see if some safety element at your mains entry is disconnected.

Check the pressure in the heating circuit: it should be at 1.5 bar. See [Figure 4](#).

If error code 03 appears on the screen, it means that there is not sufficient pressure in the Heating circuit. The red pilot lights up. See [Figure 5](#).

Check that the out and back cocks of the Heating circuit are in the correct position; they should be fully open. See [Figure 6](#).

To increase pressure in the circuit, turn the flywheel of the filler cock on the unit until it reaches 1.5 bar. See [Figure 7](#).

Once the correct pressure has been reached, the flywheel must be closed. Error code 03 disappears and the red pilot goes out.


Check that the circulator turns. Use a screwdriver to remove the hub cap from the shaft and press on the groove to make it turn. See [Figure 8](#).

Ensure that the gas inlet cock (4) to the boilers is open. See [Figure 2](#).

The boiler will not star operating unless the ambient thermostat (optional) is on demand for Heating.

Service selection

Winter: Heating and HWS (*)


 Press this symbol for a moment to programme the boiler to operate with Heating and HWS service, giving preference to the latter. The temperatures programmed in the boiler memory are the following:

60°C for Hot Water.


90°C for Heating.



If the orange pilot lights up, the boiler is operating. In this service, the data of [Figure 9](#) will be displayed. The temperature will rise until it reaches the maximum temperature programmed

Summer: HWS (*)

 Press this symbol for a moment to programme the boiler to operate with the HWS service only. In this position, the data in [Figure 10](#) will be displayed. The temperature will rise until it reaches the maximum temperature programmed.

Stoppage


 Press this symbol for a moment to cancel the service programmed. See [Figure 11](#).



In this position, a permanent system for protection against freezing and blockage of the circulator is activated (see section on "Permanent protection"). In order to resume the service, press  or  as required.

Service temperature

The boiler allows you to adjust the initial factory temperature settings. Proceed as follows:

Heating service


Press  for a moment. See [Figure 12](#). Immediately, the temperature digits blink for 10 seconds.



During the interval, press  if you wish to increase the temperature, or  you wish to reduce it.

Once you have selected the new temperature, it will be automatically recorded. The regulation margin is from 30°C to 90°C.


(*) The Hot Water by accumulation service is available as a standard feature only in R-20A, R-20AP, R-20AF and R-20AFP boilers.

Hot Water service (*)

Press  for a moment. See [Figure 13](#). Immediately, the temperature digits blink for 10 seconds.

During the interval, press  if you wish to increase the temperature, or  you wish to reduce it.

Once you have selected the new temperature, it will be automatically recorded. The regulation margin is from 40°C to 60°C.


Press  for 10 seconds to reset the original temperatures.

Maintenance

Must be performed once a year by specialized personnel.

Error codes

If the red pilot lights up, it means that the boiler is blocked.



 Press this button for 3-5 seconds and the boiler will attempt to re-ignite. See [Figure 16](#). If the boiler blocks again, note the error code and inform your installer or nearest after-sales service.


If the codes are 03, 06, 07, 12, 14, 15 or 17, check the following points first:

03: Indicates a lack of pressure in the heating circuit. Check the pressure and increase it by opening the filler cock until it reaches 1.5 bar. The boiler will start up automatically.

06 or 14: There may be pockets of air in the heating circuit. Check that the cap of the purge trap at the top of the boiler is open.

07: If this code appears, the boiler will start up again automatically once it has recovered.

15: Means that the fume evacuation control device has been activated, due to a momentary inversion of the fumes or defective evacuation. Press , and if this error is repeated, inform your nearest after-sales service. When you press , code 07 may appear. If so, the boiler will start up again automatically once the recovery time has elapsed.

12 or 17: Means that the burners will not ignite. Check that the gas supply cocks are open. Remember that once they are open, you must press .

Should any other code appear, inform your nearest after-sales service.

Permanent protection

When the boiler is left at the position shown in [Figure 11](#), and independently of any conventional protection systems, a permanent protection system will operate on the circulator and burners, giving the following services:

Antiblock

Activates the circulator for 15 seconds every 6 hours.

Anti-inertia

Following every Heating and/or DHW cycle, the pump continues to run for a short period of time.

Antifreeze

If the temperature of the Heating circuit falls to 7°C, the circulator is activated until it rises to 9°C.

Super antifreeze

If the temperature of the Heating circuit falls to 5°C in extreme conditions, the programme activates not only the circulator, but also the ignition system, at the minimum output. The burners will go out after 30 minutes or when the temperature rises to 35°C.

Recommendations

The peel-off film 2 which protects the control fascia should be removed.

It is recommended that professional services be

hired for the following operations:

Start-up of the boiler.

Adjustments.

Verification that the air inlets and ventilation of the premises where the boiler is installed comply with regulations.

If the boiler receives no electrical supply, the permanent protection system will not be activated. In this case, it will have to be emptied to avoid the risk of freezing.

Fume evacuation safety

B11BS boilers (only R-20, R-20P, R-20A and R-20AP) are equipped with a device for evacuation control of the products of combustion. In the case that the boiler observes any disturbance in the evacuation of the said products, the gas supply will be interrupted and the corresponding error code will be displayed. See section on "Error codes".

CE Marking






Roca wall-mounted gas boilers comply with the European Directive 89/336/EEC on Electromagnetic Compatibility, European Directive 90/396/EEC on Gas Appliances, European Directive 73/23/EEC on Low Voltage, and European Directive 92/42/CEE on Performance.

For version P boilers only
(Programmable)












Control panel

See Figure 1.

Additional buttons

-  Cursor transfer to an operation mode.
-  Time or function change adjustment.
-  Programming adjustment.
-  Daily programme copy.
-  Stop/start selector.

Additional screen symbols

-  Holiday operation mode.
-  Weekly programming.
-  Manual operation mode.
-  Automatic operating mode.
-  Stop Heating service.
-  Star Heating service.
-  Weekday or holiday.
-  Actual time or time of function change.
-  Time adjustment.
-  Weekday adjustment.
-  Changes of function

Programming the Heating

The boiler offers multiple programming options, ensuring the right level of comfort at all times and permitting considerable energy savings. In order to programme the Heating service, proceed in the following order:

Adjusting the day and time



Day of the week

Press **A** until **PRO** is highlighted. See Figure 18. Press **+** or **-** until the right day is highlighted (1 is Monday, 2 is Tuesday, etc.).

Time of day

With the cursor at **PRO**, press **B**. See Figure 19. Press **+** or **-** until the right time is displayed. Holding one of the buttons down will enable you to change the time faster.

Weekly programming

Up to 8 different changes of function can be programmed each day. Each change must be assigned a time and a stop order () or start order (). During the course of the day, the boiler will execute the order programmed at the time given.



A normal programme might be to start the day with a start order and precede it with a stop order, as in the standard programme. However, if necessary, a series of stop and start orders may be assigned, and the day may be started with a stop order.

The boiler will not change its operation in the programming until it encounters an order which cancels the previous one.


Programming a day

With the cursor at **PRO**, press **C**. See Figure 20. The digit corresponding to the day appears on the screen, with the first change ready to be programmed.

a - Press **+** or **-** until the time required for the change of function is displayed.

b - Press **+** to assign an order ( or ). See Figure 21.

Having selected the first change of the day, press **B** to programme the second change (see Figure 22). Assign the time and order required, as described above. (Steps a. and b.). Continue to press the change function key (**B**), repeating steps a. and b. to programme the remaining 6 changes of the day.

Note: The remaining time changes must be left at 00:00, with a stop order (). See Figure 23.

Programming the next day

There are two options:

- Repeat the programming of the previous day. With the cursor at **PRO**, press **C** until you get to the day you wish to copy. Press **D**. See Figure 24. The digit corresponding to The next day appears, along with its first change of function: the full programme of the previous day has been copied.

Press **D** again as many times as required to repeat the programme of the previous day.

- Set a programme different from that of the previous day. Press **C**. See Figure 25. The following day appears, with the standard programme. Proceed to programme it as desired, following the steps described in the previous section, "Programming a day".

Programme check

With the cursor at **PRO**, press **C**. See Figure 26. The day and its first time change are displayed. Press **B** to confirm that the programming is correct, or else make the corrections required. Press **C** to view the programming for the rest of the week.


We recommend that you write your programme on page 3.


Operating modes

There are 3 operating modes for the boiler in the heating service:


Automatic mode

This is the normal operating mode. See Figure 27. When in this position, the boiler operates according to the programmes established.


Press **A** until  is highlighted: the day, time and order assigned are displayed. The programme will be carried out automatically.

Important: If, due to some change in your timetable, you wish to invert the current programmed order, press . See Figure 28. The boiler will resume the established programme at the next change of function. You may use this option as often as you need to, without affecting the weekly programme.


Manual mode

Press **A** until  is highlighted. See Figure 29. The day, time and continual operation order are displayed. In this mode, the boiler will operate continually without taking the programming into account. It will only stop if triggered by an ambient thermostat or, if there are none, when the selected Heating temperature is reached. Continual stop or start orders may be entered by pressing **+**.

Holiday mode

Press **A** until  is highlighted: The time and days of holidays are displayed. See Figure 30. Press **+** or **-** to indicate the days of absence. The boiler will remain inactive for that period, and will start up again automatically on the day of your return.

Remarks

The stop order () does not interrupt the DHW service. See Figure 31.

If no electricity is reaching the boiler, the screen will display the symbol of the service that was being offered and the time. See Figure 32. In this case, the programmes will remain in memory for approximately 30 daies.