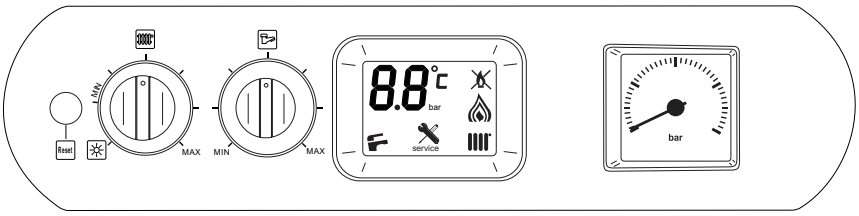
Библиотека СОК

Unical®

ENGLISH























USER'S OPERATION INSTRUCTION

SAFETY WARNINGS



CAUTION!
The appliance may only be used by adults after reading the installation and servicing manual thoroughly.
Children must be supervised to prevent them from playing or tampering with the appliance



CAUTION!
The appliance must be installed, adjusted and maintained by professionally qualified personnel, in compliance with the standards and provisions in force. Incorrect installation can cause damage to persons, animals and objects for which the manufacturer cannot be held responsible.



DANGER!
NEVER attempt performing maintenance or repairs on the appliance on your own initiative.
Any work must be done by professionally qualified personnel. We recommend stipulating a maintenance contract.
Insufficient or irregular maintenance can jeopardise the operating safety of the appliance and cause damage to persons, animals and objects for which the manufacturer cannot be held responsible.



ATTENTION!
Changes to the parts connected to the boiler (once the boiler installation is complete)
Do not modify the following parts:
- the boiler
- the gas, air, water and electricity supply lines
- the flue gas pipe, the safety valve and the exhaust pipe
- the construction parts which affect the operating safety of the appliance.



ATTENTION!
To tighten or loosen the screwed fittings, use only appropriate fixed spanners.
Non-compliant use and/or inappropriate tools can cause damage (e.g. water or gas leakage).



ATTENTION!
Indications for propane gas-fired appliances
Make sure that the gas tank has been deaerated before installing the appliance.
For state-of-the-art tank venting, contact the LPG supplier or person qualified in compliance with the law requirement.
If the tank has not been professionally deaerated, ignition problems could arise.
In that case, contact the supplier of the LPG tank.



DANGER! Smell of gas
Should a smell of gas be perceived, follow these safety guidelines:
- do not turn electric switches on or off
- do not smoke
- do not use the telephone
- close the gas shut-off valve
- air out the area where the gas leakage has occurred
- inform the gas supplier or a company specialised in installation and maintenance of heating systems.



DANGER! Explosive and easily flammable substances
Do not use or store explosive or easily flammable materials (e.g. petrol, paints, paper) in the room where the appliance is installed.



DANGER!
Do not use the appliance as a supporting base for objects.
In particular, do not place receptacles containing liquids (Bottles, Glasses, Jars or Detergents) on top of the appliance.
If the appliance is installed inside a housing, do not insert or rest other objects inside this housing.

1 - SYMBOLS USED IN THE MANUAL

Pay special attention when reading this manual to the parts marked by the symbols:



DANGER!
Serious danger for personal safety and life



ATTENTION!
Possible dangerous situation for the product and the environment



NOTE!
Tips for the user

2 - APPROPRIATE USE OF APPLIANCE



The boiler has been built according to the current level of engineering and acknowledged technical safety rules.
Nonetheless, if improperly used, dangers could arise for the safety and life of the user and other persons or damage to the equipment or other objects.
The appliance is designed to work in heating systems, with hot water circulation, for the production of domestic hot water.
Any other use is considered improper.
The manufacturer will not be held liable for any damage resulting from improper use.
Use according to the intended purposes also includes strict compliance with the instructions in this manual.

3 - WATER TREATMENT



- The hardness of the feed water conditions the frequency at which the domestic hot water exchanger must be cleaned.
- If the water has a hardness greater than 15°f, we recommend using water softeners, chosen according to the characteristics of the water.
- In order to improve scaling resistance, it is recommended to adjust the domestic hot water at a temperature very close to that actually used.
- It is recommended to verify the cleanliness of the domestic hot water exchanger at the end of the first year, and then according to the level of scaling found; the period can be extended to two years.

4 - INFORMATION PROVIDED TO THE USER BY THE INSTALLATION/MAINTENANCE TECHNICIAN



The user must be instructed concerning the use and operation of the heating system, in particular:

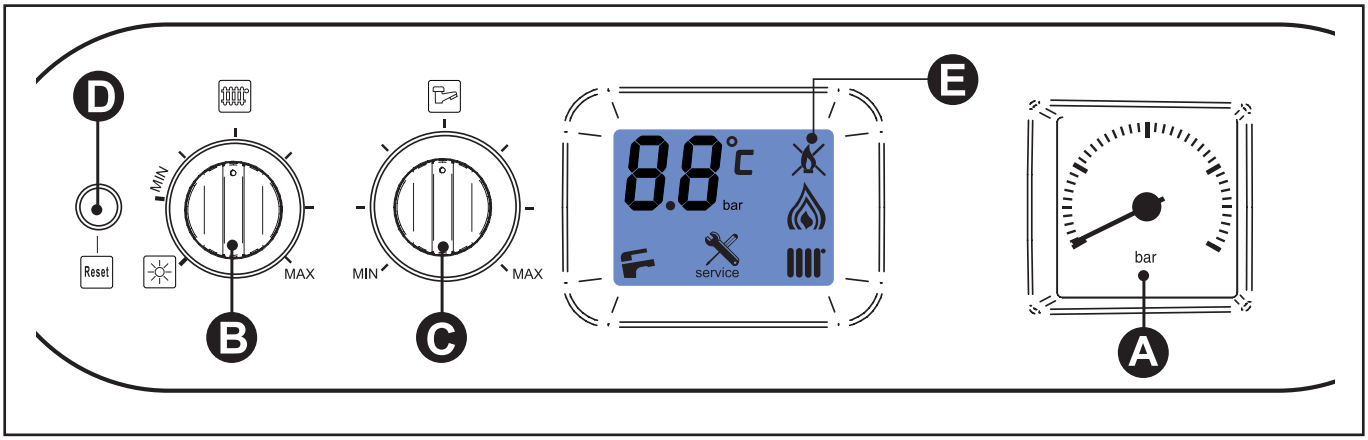
- Deliver these instructions to the user, as well as other documents concerning the appliance inserted in the envelope inside the packaging. The user must keep this documentation safe for future consultation.
- Inform the user about the importance of the air vents and the flue gas exhaust system, highlighting their essential features and the absolute prohibition of modifying them.
- Inform the user concerning controlling the system's water pressure as well as operations to restore it.
- Inform the user concerning correct temperature control, control units/thermostats and radiators for saving energy.
- Remember that the system must receive regular maintenance at least once a year and combustion analysis must be performed every two years (as per national law).

- Should the appliance be sold or transferred to a new owner or if you move and leave the appliance, always make sure that the instruction booklet accompanies it in order to be consulted by the new owner and/or installer.

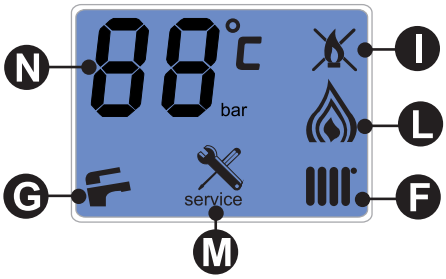
The manufacturer will not be held liable in the event of damage to persons, animals or objects resulting from failure to comply with the instructions contained in this manual.

6 - OPERATING INSTRUCTIONS

6.1 - CONTROL PANEL

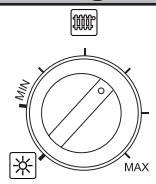
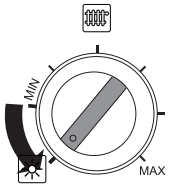
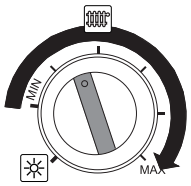


KEY	
A	Pressure gauge
B	Summer/Winter Selector + Room heating temperature regulator (request from ON-OFF thermostat)
C	Domestic hot water temperature regulator
D	Unblock/calibration/diagnosis button
E	Information display
F	Heating function active
G	Domestic hot water function active
I	Block symbol

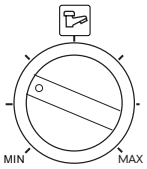
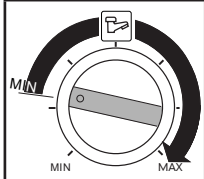
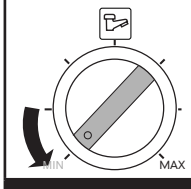
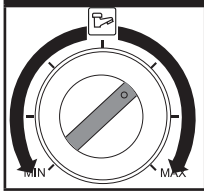


L	Burner in operation symbol
M	Fault symbol
N	Temperature of fault code indication

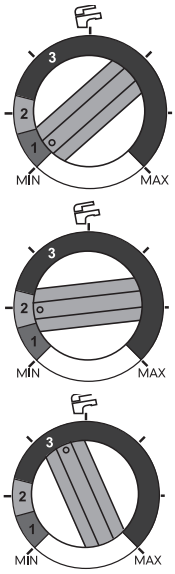
B - Summer / Winter Selector + Heating temperature regulator

	Via this knob it is possible to select the operating mode:
	**Summer** (domestic hot water production only) The knob in position ☼ (Summer) indicates that heating is excluded and that the antifreeze function stays active.
	**Winter** (domestic hot water production and heating temperature adjustment). Positioning the knob in the field shown to the side, indicates that the boiler is in "Winter" mode, and adjusts the temperature of the heating circuit water. The adjustment is between min. 30°C and max 85°C.

C - Domestic hot water temperature regulator

	Via this knob it is possible to adjust the domestic hot water inlet temperature:
EXTERNAL STORAGE TANK for R models	
	Positioning the knob in the field shown, adjusts the temperature of domestic hot water The adjustment is between min. **25°C** and max **60°C**.
	With the knob positioned in the first part, the preparation of the storage tank is disabled, the storage frost protection remains active.
ISTANTANEUS for C models	
	Positioning the knob in the field shown to the side, rdjusts the temperature of domestic hot water The adjustment is between min. **38°C** and max **60°C**.

Example of temperature regulation domestic hot water

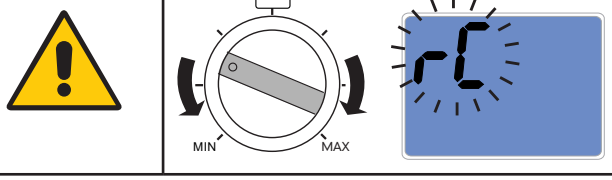


Via this knob it is possible to adjust the domestic hot water inlet temperature:

Pos. 1: ECO
Water delivery at 38°C / HOLIDAY position

Pos. 2: ECO-CONFORT
Water delivery at 38°C
(with preheating active, best service cost effectiveness)

Pos. 3: CONFORT
Water delivery between minimum 38°C and maximum 60°C.



Se muovendo la manopola **C** compare per alcuni secondi **rC**, significa che la caldaia è collegata ad un RCh. L'impostazione della temperatura sanitaria **puo' solo essere effettuata** da RCh (**Menù UTENTE > T-AC)**

EXTERNAL STORAGE TANK for R models	
	In the case of R model, not connected to an external storage tank, put the knob on Pos 1.
ROOM THERMOSTAT	
	The adjustment refers to the request from the ON-OFF thermostat. The temperature requested through the OT input (Open therm) must be set on the Regola Facile (maximum heating temperature) and it is independent from the position of the knob, except for "Winter" mode enabling.

L - Burner in operation signal

This symbol indicates that the burner is in operation / it also indicates the burner modulation via the flame level.
The symbol lights up when the boiler receives a request for heating or domestic hot water production.

F - Operation in heating mode

The symbol lights up when the boiler receives a request in heating mode. If a request for domestic hot water production is received at the same time, the light switches off.

G - Operation in hot water production mode

This symbol lights up when there is a request for domestic hot water.

I - Block signal

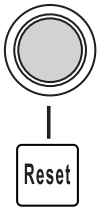
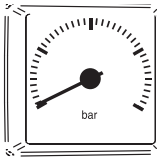
The symbol lights up when the burner safety device has intervened, due to:
- No gas
- Failed ignition

In the first case, in which the burner will not light, one must check if the gas valve is open.

M - Fault signal

service

The symbol lights up on the display monitor when the boiler detects an operation anomaly or it is blocked due to a permanent fault. The code that identifies the cause is displayed in place of the degrees centigrade by pressing the unblock button (D).

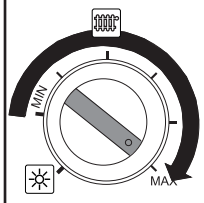
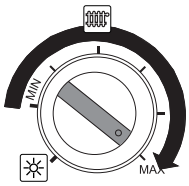
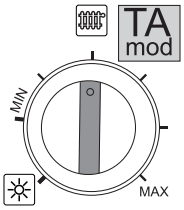
D - Unblock button	
	By acting on this button one can:
	- restart the boiler after the burner safety device has intervened, activating the symbol on the display
	- display the error code when the boiler operation is block due to a permanent fault, activating the symbol on the display
Thermometer	
	If, on the display, the symbol ( ) is lit up, the temperature indicated is that relating to the water for the heating circuit
	If, on the display, the symbol ( ) is lit up, the temperature indicated is that relating to the water for the domestic hot water circuit.
A - Pressure gauge	
	Displays the water pressure inside the heating circuit; this pressure value must not be below 0.8/1 bar (when cold). If the pressure drops below 0.8/1 bar, one must restore the correct value by acting on the system filling valve. This operation must be carried out when the boiler is cold.

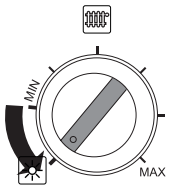
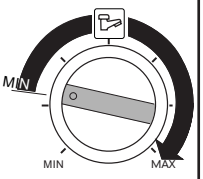
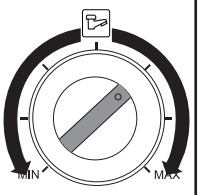
6.2 - CHECKS BEFORE COMMISSIONING

1	Make sure the gas shut-off valve upstream of the boiler is open.
2	Check that any shut-off valves for maintenance, on the flow and return are open.
3	Check that the shut-off valve, for maintenance, on the domestic cold water inlet is open.
4	Check that the safety valves outlet has been connected to the drains.

5	Check that the boiler is powered electrically; the display **(E)** on the control panel must be lit up.
6	Check the water pressure on the boiler pressure gauge **(A)**; for optimum operation, the pressure should be between 0.8 and 1 bar (with pump stopped). Should the pressure be lower than 0.7 bar with the system cold, restore pressure by opening the system filling tap (see par. 6.4).

6.3 - OPERATION

Heating mode	
	For operation in heating mode the knob **(B)** must be positioned in the field shown in the figure, - In correspondence of MIN the temperature is minimum = **30°C**.
	- completely to the right = **85°C**
	If the heating system is equipped with a modulating room thermostat (Open Therm), the boiler temperature will be automatically adjusted by the thermostat. The knob (B) only regulates the maximum temperature of the request from the ON-OFF thermostat and enables heating if it exceeds the “min” position.
	During the heating stage, the display shows the water temperature and the symbol ( ) stays lit up

Domestic hot water production (Summer Mode)	
	Make sure that the selector **(B)** is positioned on ( )
(WATER TANK)	
	Position the domestic hot water temperature knob **(C)** on the desired temperature. - At MIN the temperature is minimal = **25°C** - completely to the right = **60°C**
(DHW)	
	Position the domestic hot water temperature knob **(C)** on the desired temperature. - At MIN the temperature is minimal = **38°C** - completely to the right = **60°C**
By adjusting the temperature of the domestic hot water at a temperature very close to that actually used, you will avoid mixing hot water with cold water, with management savings and significantly reducing the formation of limescale.	
	By opening a hot water tap, the appliance is automatically activated and delivers water at the set temperature.
	During the sampling stage, the display shows the temperature of the domestic hot water and the symbol ( ) stays lit up.

Complete decommissioning

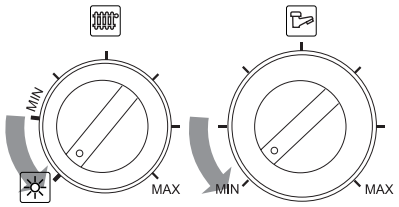
To decommission the system, disconnect the boiler from the power supply by acting on the main switch.

In the event of complete decommissioning, the heating and hot water production modes as well as the antifreeze protection are completely disabled.
If idle for long periods, close the gas shut-off valve and cold water cock, if present.

Antifreeze protection only

The boiler is equipped with an antifreeze protection system.

To activate the antifreeze function only, position the two knobs as shown in the figure.



The antifreeze protection intervenes only if the boiler is powered electrically and if the gas valve is open.
If for some reason there is a power or gas failure, the antifreeze protection described above is not active.

6.4 - ELIMINATING FAULTS

When the boiler detects an operation anomaly or it is blocked due to a permanent fault, the control panel display lights up, and the symbol (service) starts to flash.

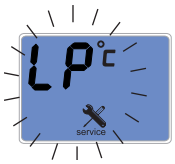
If the fault is permanent, the error code is displayed in place of the degrees centigrade.



For the codes listed on this page, it is not necessary to press button **"D"** *to display the error code.*



by pressing the unblock button "**D**"



the code that identifies the cause is displayed, flashing, in place of the degrees centigrade,
(for the "error codes" list see par. 4.6 installation and maintenance instruction manual).

The user can intervene to restore proper operation only in the following cases:



System pressure too low

How to eliminate the fault:



Restore the correct pressure value by acting on the boiler filling valve (for optimum operation, the pressure value should be within 0.8 and 1 bar).
When the minimum pressure value is reached (0.6 bar), boiler operation is resumed.



If water pressure must be continually restored, contact an Authorised Assistance Centre.



Burner ignition block
Burner blocking device triggered due to:
- no gas
- air in pipe (when system is new or after long idle period).

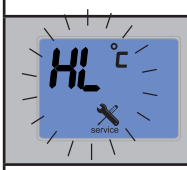
How to eliminate the fault:



Check that the gas valve is open and press the unblock button to resume the proper operation of the boiler.



After 3 interventions of the boiler blocking device, do not try to resume operation of the boiler by yourself. Contact an Authorised Assistance Centre.



Safety thermostat intervention (due to air)

How to eliminate the fault:

Bleed the air from the radiators and restore system pressure.

For all the other error codes, the user is NOT authorised to resume boiler operation by himself. Contact an Authorised Assistance Centre.





The manufacturer disclaims any liability for damage caused as a result of improper installation, use, appliance conversion or for non-compliance with the instructions supplied by the manufacturer or installation regulations in force concerning the material in question.

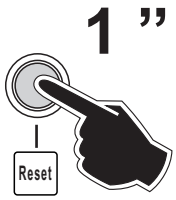
After a blackout
the function is activated:

AIR BLEED FUNCTION OF BOILER / SYSTEM (AP)

The air bleed function is activated every time the boiler is powered electrically
(Power ON).

The procedure has a duration of 10 minutes and for the entire time of the procedure the display shows **AP** flashing.





Note.
The procedure can be forced to interrupt by pressing the release button for 1 s.

- In case of DHW request, the procedure is interrupted and at the end of the request is restarted.



Provisions for proper disposal of the product.

At the end of its life cycle the product must not be disposed of as urban waste. It can be taken to a special recycling centre managed by the local authorities, or to a dealer who offers this service. Separate disposal of a domestic appliance avoids possible negative consequences for the environment and human health deriving from inappropriate waste handling and allows the recovery of the materials of which it is made, in order to obtain significant energy and resource savings.

Unical®

www.unical.eu

ORIGINAL INSTRUCTION - 00338401EN - 2ª ed. 03/2024

Unical AG S.p.A. 46033 casteldario - mantova - italia - tel. +39 0376 57001 - fax +39 0376 660556
info@unical-ag.com - export@unical-ag.com - www.unical.eu

Unical declines every responsibility for the possible inaccuracies if owed to errors of transcript or press.
Also reserves the right to bring those changes that it will hold necessary to it own products or profits, without jeopardizing its essential characteristics.