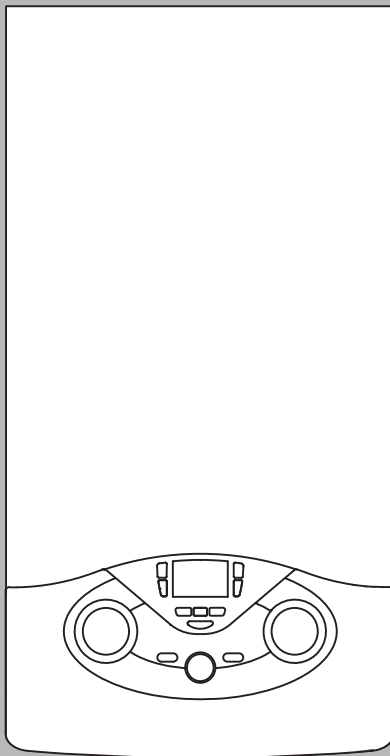


CLAS HE EVO CLAS HE EVO System

User's manual



CONDENSING WALL-HUNG
GAS BOILER

G.C.N.:47-116-65 (24 kW)
G.C.N.:47-116-66 (30 kW)
G.C.N.:47-116-67 (38 kW)
G.C.N.:41-116-36 (18 kW)
G.C.N.:41-116-37 (24 kW)
G.C.N.:41-116-38 (30 kW)

Country of Destination. GB/IE

kiwa
approved
product



UK WATER SUPPLY
REGULATIONS



Dear Customer,

Thank you for choosing an ARISTON boiler.
We guarantee that your boiler is a reliable and technically sound product.
This manual provides detailed instructions and recommendations for proper installation, use and maintenance.
Remember to keep this manual in a safe place for future reference i.e. by the gas meter.
Your local ARISTON Servicing Centre is at your complete disposal for all requirements.

GUARANTEE

The appliance is guaranteed for 5 years from the date of purchase.
Aristons only obligation under the guarantee will be to repair or replace the faulty appliance at Aristons discretion. This will be carried out where the fault arises from within defects in the appliance, caused either by material or workmanship of the manufacturer.
This guarantee does not protect malfunction or damage arising from incorrect installation, commissioning or maintenance procedures as laid out in the installation and servicing manual, inefficient flue system, poor or incorrect electricicty, wrong gas supply or pressure, tampering by inexperienced persons and any other cause not directly due to manufacture.
Ariston Thermo UK Ltd cannot accept responsibility for any cost arising from repair or maintenance carried out by any third party.
Service under the guarantee does not affect the expiry date of the guarantee. The guarantee on parts and appliances which are exchanged ends when the guarantee on the original appliance expires.
This guarantee does not affect your statutory rights.
The boiler must be registered with Ariston within 30 days from date of installation.
Registration is online at www.ariston.co.uk.

The installation and first ignition of the boiler must be performed by qualified personnel in compliance with current national regulations regarding installation, and in conformity with any requirements established by local authorities and public health organisations.

After the boiler has been installed, the installer must ensure that the end user receives the declaration of conformity and the operating manual, and should provide all necessary information as to how the boiler and the safety devices should be handled.

This appliance is designed to produce hot water for domestic use (combi version).

It should be connected to a heating system and a distribution network for domestic hot water, both of which must be compatible with its performance and power levels.

The use of the appliance for purposes other than those specified is strictly forbidden. The manufacturer cannot be held responsible for any damage caused by improper, incorrect and unreasonable use of the appliance or by the failure to comply with the instructions given in this manual.

Installation, maintenance and all other interventions must be carried out in full conformity with the governing legal regulations and the instructions provided by the manufacturer. Incorrect installation can harm persons, animals and possessions; the manufacturing company shall not be held responsible for any damage caused as a result.

In the event of any maintenance or other structural work in the immediate vicinity of the ducts or flue gas exhaust devices and their accessories, switch the appliance off by switching the external bipolar switch to the "OFF" position and shutting off the gas valve. When the work has been completed, ask a qualified technician to check the efficiency of the ducting and the devices.

If the boiler should be out of use for a prolonged period, it is recommended that the electrical power supply be disconnected and that the external gas cock be closed. If low temperatures are expected, the boiler and system pipe work should be drained in order to prevent frost damage.

Turn the boiler off and turn the external switch "OFF" to clean the exterior parts of the appliance.

Do not allow children or inexperienced persons to use the appliance without supervision.

CE labelling

The CE mark guarantees that the appliance conforms to the following directives:

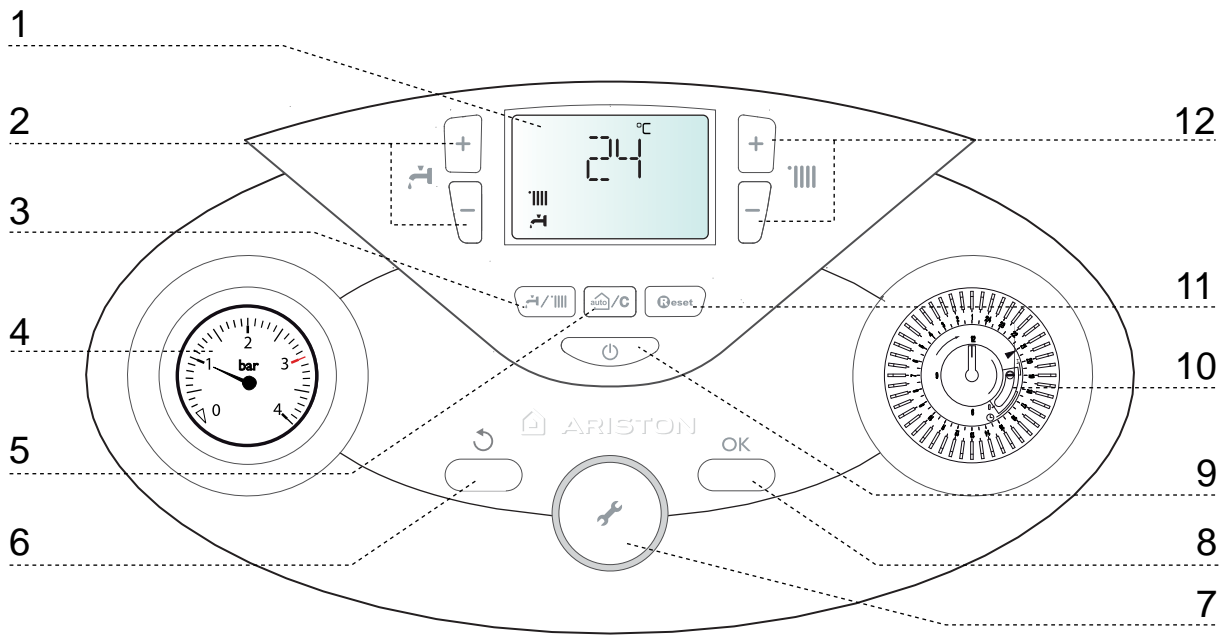
- **2009/142/CEE**
relating to gas appliances
- **2004/108/CEE**
relating to electromagnetic compatibility
- **92/42/CEE**
relating to energy efficiency
- **2006/95/CEE**
relating to electrical safety

Safety regulations

Key to symbols:

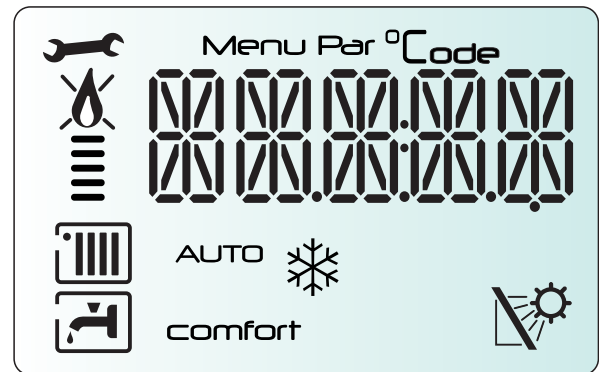
- ⚠ Failure to comply with this warning implies the risk of personal injury, in some circumstances even fatal
- ⚠ Failure to comply with this warning implies the risk of damage, in some circumstances even serious, to property, plants or animals.
Do not perform operations which involve opening the appliance.
- ⚠ Electrocutation from live components.
Personal injury caused by burns due to overheated components, or wounds caused by sharp edges or protrusions.
Do not perform operations which involve removing the appliance from its installation space .
- ⚠⚠ Electrocutation from live components.
Flooding caused by water leaking from disconnected piping.
Explosions, fires or intoxication caused by gas leaking from disconnected piping.
Do not damage the power supply cable.
- ⚠ Electrocutation from live uninsulated wires.
Do not leave anything on top of the appliance.
- ⚠ Personal injury caused by an object falling off the appliance as a result of vibrations.
Damage to the appliance or items underneath it caused by the object falling off as a result of vibrations.
Do not climb onto the appliance.
- ⚠⚠ Personal injury caused by the appliance falling.
Damage to the appliance or any objects underneath it caused by the appliance falling away from its installation space.
Do not climb onto chairs, stools, ladders or unstable supports to clean the appliance.
- ⚠ Personal injury caused by falling from a height or cuts (step ladders shutting accidentally).
Do not attempt to clean the appliance without first switching it off and turning the external switch to the OFF position.
- ⚠ Electrocutation from live components.
Do not use insecticides, solvents or aggressive detergents to clean the appliance.
- ⚠ Damage to plastic and painted parts.
Do not use the appliance for any use other than normal domestic use.
- ⚠ Damage to the appliance caused by operation overload.
Damage caused to objects treated inappropriately.
Do not allow children or inexperienced individuals to operate the appliance.
- ⚠ Damage to the appliance caused by improper use.**If you detect a smell of burning or smoke coming from the appliance, disconnect it from the electricity supply, turn off the main gas valve, open all windows and call for assistance.**
- ⚠ Personal injury caused by burns, smoke inhalation, intoxication.
If there is a strong smell of gas, turn off the main gas valve, open all windows and call for assistance.
- ⚠ Explosions, fires or intoxication.

Control panel



Legend :

- 1. Display
- 2. Domestic Hot Water adjustment button +/-
(only for Clas HE EVO models)
- 3. MODE button
(Operation mode selection (summer/winter))
- 4. Pressure gauge
- 5. Auto Function and/or Comfort Function enable/disable button
(Comfort function only for Clas HE EVO models)
- 6. Esc button - reserved for technical assistance
- 7. "encoder" programming knob
- reserved for technical assistance
- 8. Ok button - reserved for technical assistance
- 9. ON/OFF button
- 10. TIME CLOCK (option for System boilers)
- 11. RESET button
- 12. Heating temperature adjustment button +/-



	Digits indicating: - boiler status and temperature indication (°C) - error code signals (Err) - menu settings
	Technical assistance request
	Flame detected with indication of power used or indication of operation shutdown
	Heating operation set
	Heating operation active
	Hot water operation set
	Hot water operation active

comfort	Hot Water Comfort activated
OFF	Boiler off with antifreeze function active
	Antifreeze function activated
AUTO	AUTO function activated (Temperature regulation activated)
	Clip-in solar connected (optional)

Note: A radio frequency (RF) Programmable Room Thermostat is available from Ariston stockists. The Receiver unit can be fitted in the time clock position (10)

Initial operating procedures

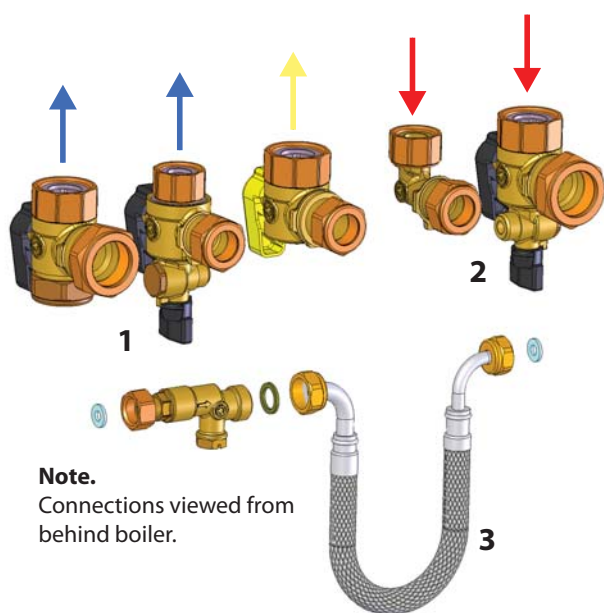
If the boiler is installed inside the apartment, make sure that all provisions relating to the air inlet and room ventilation (in compliance with current legislation) are respected.

Check the water pressure on the display regularly and make sure that the figure is between 0.6 and 1.5 bar when the system is cold. If the pressure is just under the minimum value the display will request a filling procedure.

Re-establish the correct pressure by filling loop.

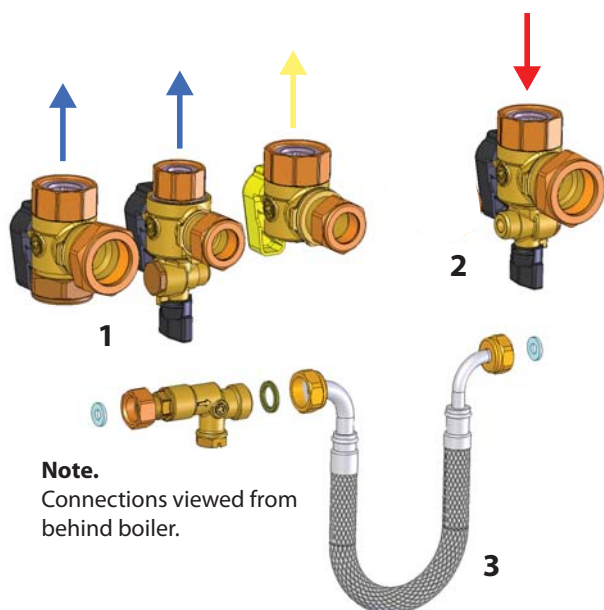
If the pressure drops very frequently, there may be a water leak at some point in the system. If this is the case a plumber should be contacted.

CLAS HE EVO



Note.
Connections viewed from behind boiler.

CLAS HE EVO SYSTEM

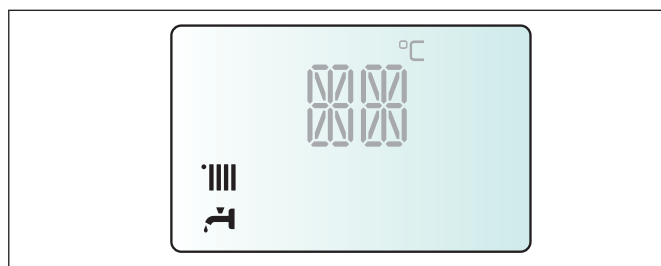


Note.
Connections viewed from behind boiler.

1. To repressurise the system ensure flexible hose 3 is connected
2. Slowly open taps 1 & 2 (see diagrams above)
3. Water will be heard entering the system
4. When the pressure gauge reads 1.5 bar close taps 1 & 2

Ignition procedure

Press the ON/OFF button **9** on the control panel to switch on the boiler. The display shows:



- the operating mode:

- Winter
- Summer
- Only Heating (**CLAS HE EVO System**)

- The figures indicates:

- the flow temperature when no heating requests have been made
- the flow temperature in central heating mode
- the temperature of the hot water in domestic hot water

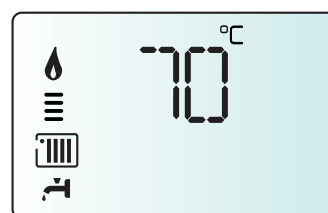
Operating mode selection

Use the MODE button **3** to select the desired operating mode.

Operating mode	Display
heating + hot water production for domestic use - winter	
hot water production for domestic use only - summer	
Only heating (only for System models)	

The ignition of the burner is indicated on the display by the symbol

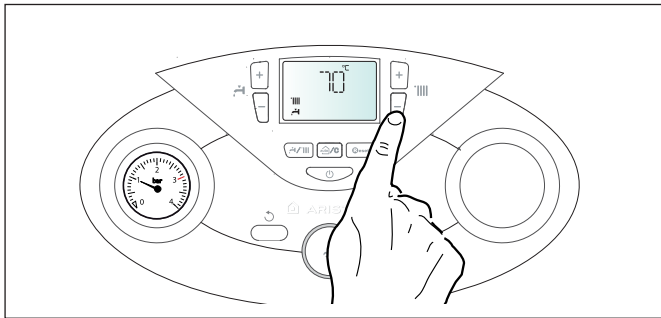
the dashes underneath indicate the power utilised. .



Adjusting the heating

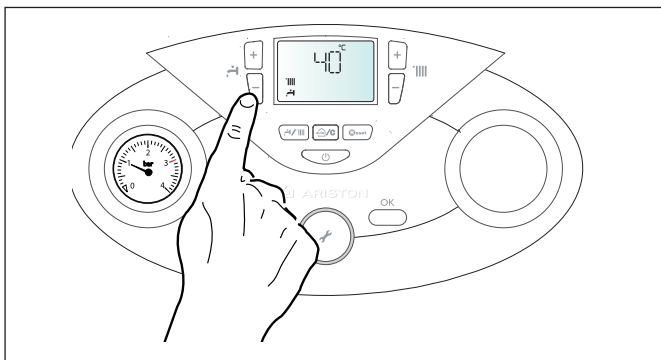
It is possible to set the temperature of the heating water by pressing the buttons **12**.

The temperature that may be obtained which varies from:
 - 20°C to 45°C (low temperature)
 - 35°C to 82°C (high temperature).



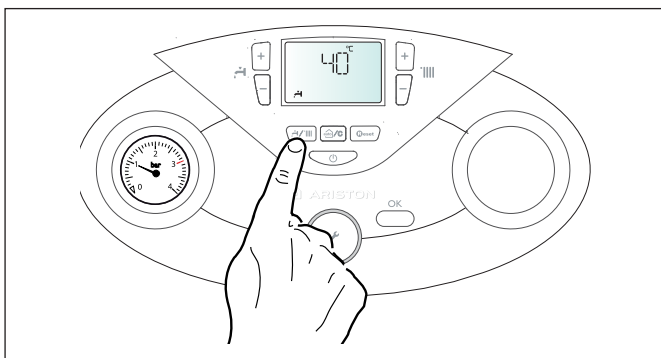
Domestic hot water temperature adjustment only for CLAS HE EVO MODELS

It is possible to set the temperature of the domestic hot water by adjusting the button **2** a temperature may be obtained which varies from about 36°C to about 60°C.
 The value set previously will flash on the display.



Switching off the heating

To switch off the heating, press the MODE button **3**; the heating operation symbol will disappear from the display. The Mode button can be used to keep the domestic hot water production process active or to place it in standby (modes deactivated).
 In the figure below the boiler remains active only for the production of domestic hot water, indicating the set temperature.



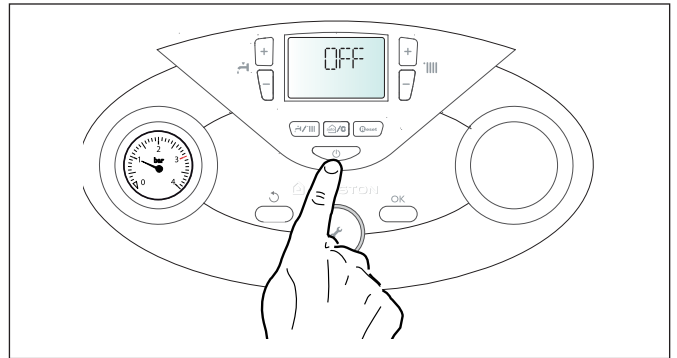
Switching off the boiler

To switch off the boiler press the ON/OFF button, the display will switch off.

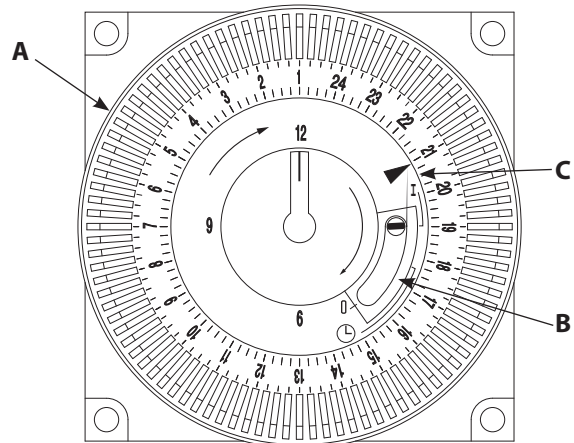
The Anti-frost Function is already active.

ATTENTION!!

Switch off the boiler completely by switching the external electrical switch to the OFF position. Shut off the gas valve..



Clock Instructions



1. General layout

The mechanical clock covers a 24 hour period. Each tappet represents 15 minutes **A**. An override switch is located on the clock **B**.

2. To set the time

To set the time of day, grasp the outer edge of the dial and turn slowly clockwise until the correct time is lined up with the arrow **C**.

3. To Set the "On" and "Off" times

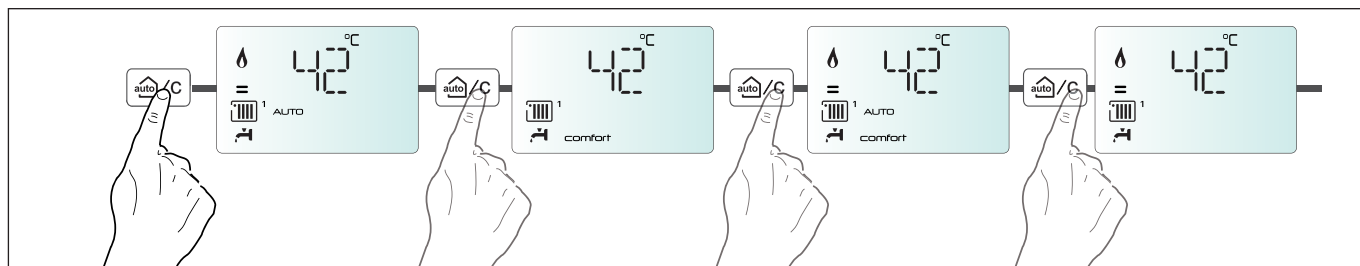
The clock uses a 24hours system. e.g. 8 = 8.00 am and 18 = 6.00 pm "ON" periods are set by sliding all tappets between the "ON" time and the "OFF" time to the outer edge of the dial. The tappets remaining at the centre of the dial are the "OFF" periods.

4. For operation

Put the selector switch **B** to the ⌚ symbol to control the central heating by the clock. Put the switch **B** to "I" to select permanent operation or to "0" to turn the central heating off permanently.

COMFORT / AUTO Function

To activate the Comfort function or AUTO function it is necessary to press the button **5**

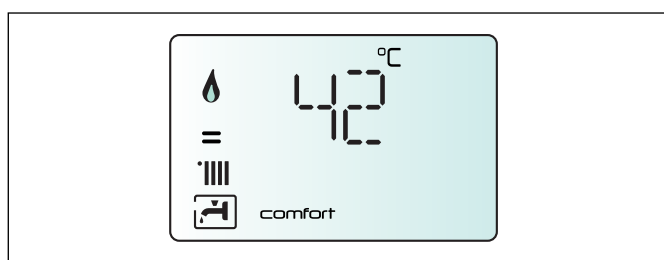


COMFORT function (CLAS HE EVO models)

The comfort mode has priority over any other heating request. There are two settings for the comfort mode (they can be adjusted in the parameters menu):

1. As soon as DHW is drawn, the secondary heat exchanger is kept warm for 30 mins.
2. As soon as DHW is drawn, the secondary heat exchanger is kept warm permanently.

This function may be enabled by pressing the COMFORT button.



Auto button - Temperature adjustment activation

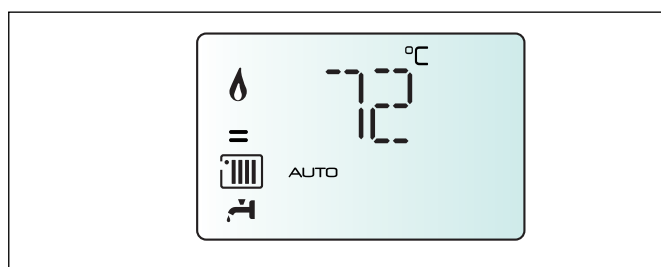
The AUTO function enables boiler operation to be adapted to environmental conditions and to the type of system it is installed on.

Comfortable temperature is reached inside the room in the quickest way possible, without wasting money, energy or efficiency, while substantially reducing the amount of wear experienced by the components.

Your installer will advise you on the devices connectable to the boiler and will program it according to the system.

In normal boilers the water temperature inside the heating elements is usually set to a high value (70-80°C), thereby ensuring effective heating during the few really cold winter days. It then becomes excessive on less cold days (of which there are many) more typical of the autumn and winter seasons. This leads to excessive room heating after the thermostat has been switched off, resulting in energy waste and uncomfortable conditions inside the room.

The AUTO function "takes control" of the boiler and selects the best operating regime based on environmental conditions, external devices connected to the boiler and the performance required. It constantly decides at which power level to operate based on the environmental conditions and the room temperature required.



Note

Esc, Ok and Encoder

The Esc, Ok and Encoder are reserved for use by the service technician.

If one of these buttons/knobs are activated by accident by the end user 'SERV' is displayed

This will deactivate after a few seconds.

All other button are reserved for use by the end user

Appliance shut-off conditions

The boiler is protected from malfunctions by means of internal checks performed by the electronic P.C.B., which stops the boiler from operating if necessary. In the event of the boiler being shut off in this manner, a code appears on the control panel display which refers to the type of shut-off and the reason behind it.

Two types of shut-off may occur:

Safety shut-off

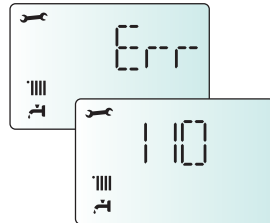
This type of error is "volatile", which means that the boiler starts up again automatically as soon as the problem which caused the shut-off is removed.

The display will flash "Err" and the error code.

In fact, as soon as the cause of the shut-off disappears, the boiler starts up again and continues to operate normally.

While the boiler is shut off for safety reasons, it is possible to attempt to restore normal operation by switching the appliance off and on again using the ON/OFF button on the control panel.

If the boiler still indicates a safety shut-off, switch it off. Make sure the external electric switch is in the OFF position, close the gas tap and contact a qualified technician.

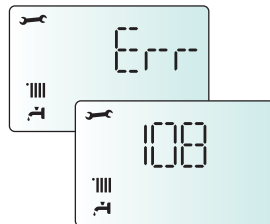


Safety shut-off due to insufficient water pressure

If the water pressure inside the heating circuit is insufficient, the boiler will perform a safety shut-off. (See table).

To re-pressurise the boiler, it will be necessary to connect the silver flexible hose supplied to the two isolating points underneath the boiler, once the hose is connected, open up both of the black quarter (see p.5) turn handles, once the pressure reads 1.5 bar on the display, close both handles and disconnect the hose.

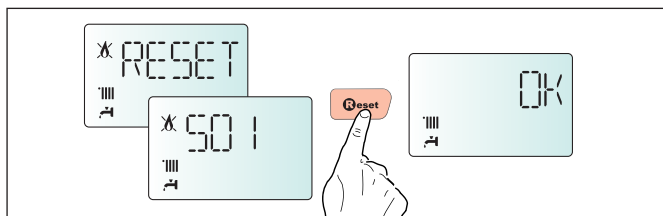
If the pressure drops very frequently, there may be a water leak at some point in the system. If this is the case please contact your installer and ask them to check it.



Operation shutdown

This type of error is "non volatile", which means that it is not removed automatically. The display will flash ERR and the error code.

In this case the boiler does not restart automatically, but it may be reset by pressing the **Reset** button. If the problem manifests itself again after several attempts to reset the appliance, contact a qualified technician.



IMPORTANT

IF THIS SHUTDOWN OCCURS FREQUENTLY, CONTACT AN AUTHORISED SERVICE CENTRE FOR ASSISTANCE. FOR SAFETY REASONS, THE BOILER WILL ALLOW A MAXIMUM OF 5 RESET OPERATIONS TO TAKE PLACE IN 15 MINUTES (INDIVIDUAL PRESSES OF THE **Reset BUTTON).**

Operation shutdown error table

Display	Description
1 01	Overheating
5 01	No flame detection
1 03	Insufficient circulation
1 04	
1 05	
1 06	
1 07	
1 08	Insufficient water (request filling)
3 05	P.C.B error
3 06	P.C.B error
3 07	P.C.B error

Anti-frost Device.

The anti-frost function acts on the central heating flow temperature probe, independently from other settings, when the electrical supply is turned on.

If the primary circuit temperature falls below 8°C the pump will run for 2 minutes.

After the two minutes of circulation (fixed) the boiler will check the following:

- a) if the central heating flow temperature is > 8°C, the pump stops;
- b) if the central heating flow temperature is between 4 and 8°C, the pump will run for another two minutes;
- c) if the central heating flow temperature is < 4°C, the burner will fire (heating position) at minimum power until the temperature reaches 33°C, the burner will go off and the pump will continue to run for two minutes.

The anti-frost device activates only when (with the boiler operating correctly):

- the system pressure is correct,
- the boiler is electrically powered,
- there is a supply of gas.

Change of gas type

Our boilers are designed to function either with Natural Gas (methane) or L.P.G. gas. If you need to change from one gas to the other, one of our Authorised Service Centres must be contacted to convert the appliance.

Maintenance

Schedule an annual maintenance check-up for the boiler with a competent person.

Correct maintenance always results in savings in the cost of running the system.

Failure to arrange an annual service for the appliance will invalidate the second year and subsequent years of the manufacturers guarantee.

5 Year Guarantee

Terms & Conditions

WHAT ARISTON REQUIRES

- The boiler must be registered with Ariston within 30 days from date of installation. Registration is on line at www.ariston.co.uk
- The boiler must be installed in accordance with the manufacturers instructions
- The boiler must be installed by a Gas Safe Registered engineer.
- The installer must arrange for a Building Regulations Compliance Certificate to be issued to the boiler owner.
- The Building Regulations Compliance Certificate is to be made available upon request by any attending Ariston service representative.
- The Benchmark commissioning checklist, which can be found at the back of the Installation instructions, must be completed in full by the installer.
- The completed Benchmark checklist must be left with the boiler or be made available upon request by any attending Ariston representative.
- The boiler must be serviced by the 12 month anniversary of the installation. This must be carried out by a Gas Safe Registered engineer.
- Proof of annual service must be made available upon request by any attending Ariston representative.
- The boiler must be installed on a clean system and corrosion inhibitors added.

**All of the above are standard procedures which a competent installer will be aware of.
Failure to comply with any of the above will result in any guarantee being withdrawn.**

CONDITIONS OF THE 5 YEAR GUARANTEE

- If an Ariston engineer is required to attend to the appliance and the failure is caused by either an installation error, user error or any other external cause, then a "waste call" charge will be made. If the waste call charge is not paid, then any extended warranty will cease.
- The 5 Year Guarantee is only applicable to appliances installed in the United Kingdom.
- The following is not covered under the guarantee:
- Any external boiler controls (other than those supplied by Ariston), pipework and radiators
- Loss or damage caused by using the boiler in a non-domestic or commercial environment.
- Loss or damage caused by accident, theft, attempted theft, malicious damage or damage caused by fire or explosion.
- Damage caused by any disaster affecting the equipment including neglect without limitation.
- Clearing airlocks and partially or fully blocked pipes or work caused by equipment, which has not installed correctly.
- Claims arising from any problem with the supply of electricity, gas or water.
- Consequential loss or damage arising directly or indirectly caused by the boiler not working.
- Cosmetic damage.
- Costs arising from difficulties in getting to the boiler. This includes: pipe work under floor boards or pipe work contained in the fabric of the building. Ariston requires the warranty holder to carry out whatever works are necessary to enable Ariston staff or nominated representatives to gain access the boiler prior to arrival.
- Any water pressure adjustments on sealed systems, Claims arising from scale damage.
- Any modification, alteration to the boiler carried out without permission or authority from Ariston.

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