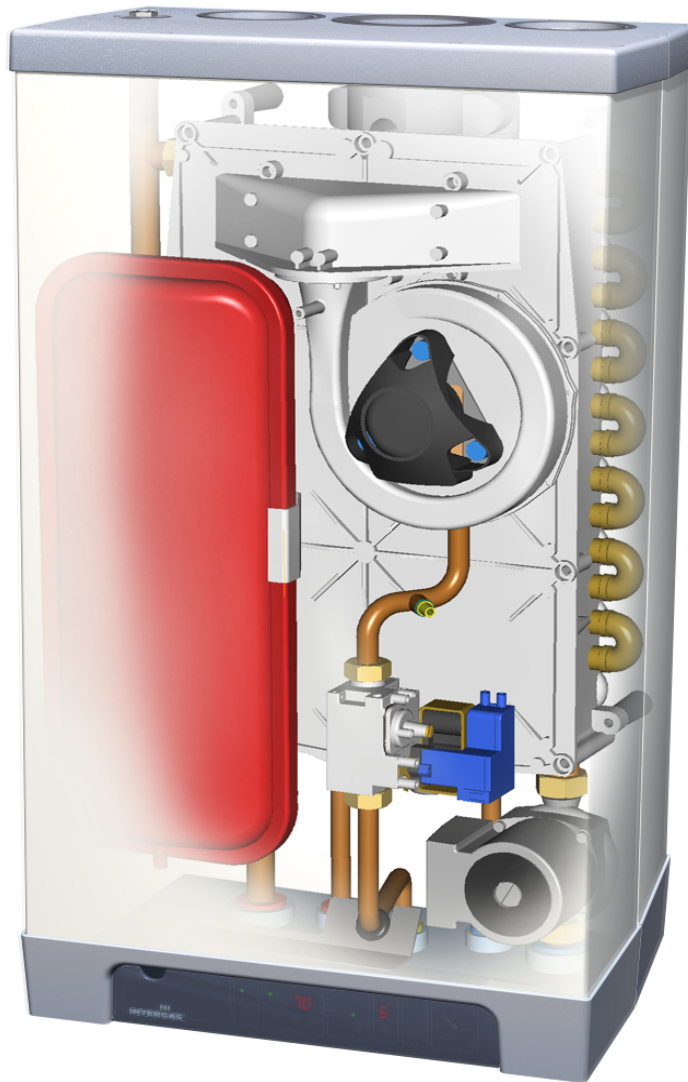


Atmos



InterCombi



User Operating Instructions for HE32

(GC 47-249-01)

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The information provided applies to the product in the standard model. Atmos Heating Systems can therefore not be held liable for any damage resulting from the product specifications that deviate from the standard model.

The information provided has been compiled with the utmost care. However, Atmos Heating Systems cannot be held liable for any faults in the information nor for the consequences thereof. Atmos Heating Systems cannot be held liable for any damage resulting from the activities carried out by third parties.

To be changed without prior notice

Building Regulations and the Benchmark Checklist

Atmos Heating Systems is a licensed member of the Benchmark Scheme which aims to improve the standards of installation and commissioning of domestic heating and hot water systems in the UK and to encourage regular servicing to optimise safety, efficiency and performance. Benchmark is managed and promoted by the Heating and Hotwater Industry Council. For more information visit www.centralheating.co.uk Please ensure that the installer has fully completed the Benchmark Checklist on the inside back pages of the installation instructions supplied with the product and that you have signed it to say that you have received a full and clear explanation of its operation. The installer is legally required to complete a commissioning checklist as a means of complying with the appropriate Building Regulations (England and Wales). All installations must be notified to Local Area Building Control either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer who should, on receipt, write the Notification Number on the Benchmark Checklist. This product should be serviced regularly to optimise its safety, efficiency and performance. The service engineer should complete the relevant Service Record on the Benchmark Checklist after each service. The Benchmark Checklist may be required in the event of any warranty work and as supporting documentation relating to home improvements in the optional documents section of the Home Information Pack.

IF YOU SMELL GAS, PLEASE CONTACT THE NATIONAL GAS EMERGENCY SERVICE ON TEL 0800 111999.

Atmos Warranty – Short version

1. Atmos Warranty covers any material, construction or operation faults that are found to be of original manufacturing origin. A full statement of the Atmos Warranty can be found on www.atmos.co.uk.
2. Atmos boiler warranty is two years from date of invoice or 12 months from date of installation, whichever is the later. This warranty covers the cost of replacement parts and associated labour. However the ignition & ionisation probe and the glass fuse are excluded from this warranty. The warranty for the heat exchanger is 10 years in total, but this covers the cost of associated labour only for the first two years from date of invoice.
3. There is no carriage charge for the delivery of replacement parts covered by the warranty. Any alleged faulty part must be returned to Atmos carriage prepaid. Carriage will be credited if the fault is found to be a manufacturer's fault.
4. The serial number of the boiler must be supplied with any warranty claim.
5. All products must be used in an appropriate application and manner. This includes, but is not limited to, correct boiler sizing, system design, system cleansing and use of corrosion inhibitors. If the boiler installed is a combi boiler, an approved water conditioner device must be fitted in areas where the water hardness exceeds 200ppm, as required by Building Regulations.
6. The Benchmark Checklist & Service Record, found in the back of the installation Instructions, must be filled in. Failure to install and commission according to the manufacturer's instructions and complete the Benchmark Commissioning Checklist invalidates the warranty.
7. The Warranty card must be completed and the signed Atmos copy must be received within 14 days of installation together with a copy of the Benchmark Commissioning Checklist, completed by the installer. By signing the Warranty card the buyer agrees that the goods have been delivered in a satisfactory condition.

Exceptions

8. In the event of full payment for a product not being received, Atmos shall be discharged from all further contractual or warranty obligations.
9. Surface and/or transport damage are outside the scope of this warranty.
10. Any warranty provision shall not apply if Atmos determines that the fault is due to improper application, use, neglect, accidental damage or injudicious treatment, non-observance of instructions contained in Atmos Manuals or due to improper repair, adjustment, installation or maintenance or due to work carried out by unqualified engineers. The warranty also lapses if the Atmos boiler has not had a yearly service in accordance with instructions.
11. This warranty shall not apply if the fault is caused by scale, failure or abnormality of gas or water supply, or impact of any external influence that adversely affects the normal operation of the product. This shall include but not be restricted to dehydration, abnormal or high voltage, and hard water.
12. Excluded parts are the ignition & ionisation probe and the glass fuse as these are subject to wear and tear in normal use.



User Operating Instructions for Atmos InterCombi HE32 Condensing Boiler

First ask your installer to instruct you thoroughly about filling, de-aerating and general use of the appliance and the total installation.

General operation

The Atmos InterCombi wall-mounted gas boiler is designed for delivering heat to the water of a central heating system and domestic hot water.

The Atmos InterCombi wall-mounted gas appliance is a modulating high efficiency boiler. This means that the power is adjusted to the heat demand.

In the aluminium heat exchanger, two separate copper circuits have been integrated. Because of the separated circuits for central heating and hot water, the heating and the hot water supply can operate independently of each other. However, they cannot work simultaneously. The hot water supply has priority over the central heating.

The appliance has been provided with an electronic controller that controls the fan with the heat demand from the heating system or the hot water supply, opens the gas valve and ignites the burner, continuously monitors the flame and controls it dependent on the power required.

Central Heating (CH) operation

If the room temperature is below the room on/off thermostat temperature and there is no hot water demand, the boiler will switch to CH operation. The controller adjusts the fan speed, and hence the heating power, according to the set CH supply water temperature, the latter being displayed on the temperature display during CH operation. The appliance circulation pump has an overrun time of 1 minute (factory setting, but can be adjusted) to dissipate the heat. Also, the pump will automatically run once every 24 hours to prevent it from getting stuck (if there is no CH operation).

Domestic hot water (HW) operation

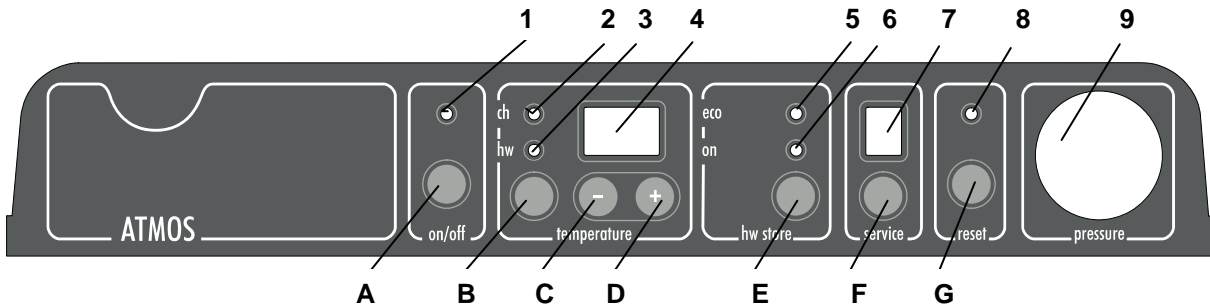
Domestic hot water operation will automatically start as soon as more than 2 l/min hot water is demanded. During hot water operation, CH operation is interrupted. The appliance pump does not run for HW operation.

During hot water operation, the hot water set temperature is displayed on the temperature display. For a quick supply of domestic hot water, a Keep hot function has been provided in the controller. This function keeps the heat exchanger at the correct temperature. This function can be set using the *hw store* button (E) and has the following settings:-

- **Off:** (Both LED's 5 & 6 off.) The heat exchanger is not kept warm, delaying the supply of domestic hot water, except when CH operation has recently occurred.
- **On:** (LED 6 on) The Keep hot function of the appliance is continuously activated. The appliance always supplies domestic hot water immediately.
- **Eco:** (LED 5 on) The Keep hot function is self-learning and is inactivated during the night or after a long absence. The appliance adjusts to the user pattern of the domestic hot water requirements. The Eco mode is the most efficient hot water method and should normally be used.

Note: The initial 'slug' of hot water may be in excess of 60°C irrespective of the settings (unless a thermostatic mixing valve has been installed).

The boiler delivers 9 litre per minute at 60°C (this corresponds to 15 litre per minute at 40°C). This means that a 120 litre bath can be filled with hot water at 40°C within 8 minutes.



Displays

- | | |
|------------------------|-----------------------------|
| 1. On/Off LED | 6. Keep hot On (contin) LED |
| 2. CH LED | 7. Service display |
| 3. Hot water LED | 8. Fault LED |
| 4. Temperature display | 9. CH pressure gauge |
| 5. Eco mode LED | |

Controls

- | | |
|-----------------------------|--------------------|
| A. On/Off button | E. Keep hot button |
| B. CH/HW Temperature button | F. Service button |
| C. - button | G. Reset button |
| D. + button | |

Operating conditions on the service display (7):

- | | | |
|---|--|---|
| <input type="checkbox"/> Off (frost protection active) | <input type="checkbox"/> 2 Self-test | <input type="checkbox"/> 5 CH operation |
| <input type="checkbox"/> Stand-by | <input type="checkbox"/> 3 Fan | <input type="checkbox"/> 6 Domestic hot water operation |
| <input type="checkbox"/> Pump overrun CH | <input type="checkbox"/> 4 Ignite burner | <input type="checkbox"/> 7 Heating the appliance (heat exchanger) |
| <input type="checkbox"/> ? Required temperature reached | | |

When the red fault LED (above the Reset button) flashes on, the controller has detected a fault. In the Temperature display (4), a fault code appears.

Adjustment of CH supply temperature & Domestic hot water temperature

Press the *Temperature* button (B) for approx 2 secs until the LED CH and the display start to flash (the display shows the set temperature). Change the temperature using the "+" and "-" buttons, adjustable between 30°C and 90°C.

Press the *Temperature* button (B) again to select domestic HW (the LED HW and display flash; the display shows the set temperature). Change the temperature using the "+" and "-" buttons, adjustable between 40°C and 65°C.

Press the *Reset* button to store the changes (or press the *On/Off* button to close the menu without storing the changes).

Note: After 30 seconds of no action, the changes will automatically be stored and the controller will return to normal.

Note: If an OpenTherm thermostat is used, or if weather dependent control is used, the CH setting must not be adjusted manually.

Commissioning

The appliance should be installed and commissioned by an authorised installer. Check the following:-

Never connect the appliance to the mains voltage without filling and de-aerating the appliance, CH system and hot water system.

1. Confirm that the appliance and system have been filled and de-aerated. The water pressure in the CH system should be minimum 1 bar and maximum 2 bar for a cold system (by reading the CH pressure gauge on the display; see 9 in the diagram).
2. Check that the electrical supply is switched on and the gas supply is on.
3. Set the room thermostat lower than the room temperature. Assuming that the appliance is switched off (horizontal mark on the *service* display and remaining functions are off), switch on the appliance with the *on/off* button on the display. If the domestic hot water Keep hot function is switched to "on" or "eco", the appliance will heat up the heat exchanger automatically (3, 4, 7 on the *service* display).
4. Set the room thermostat higher than the room temperature. The appliance will start CH operation (5 on the *service* display), heating the CH supply water to the set temperature (see CH operation).

Solar Hot Water System

The InterCombi can be used with an Atmos solar hot water system to provide pre-heated water to the appliance. The temperature of the domestic hot water should not be set below 60°C.

Frost protection

In order to avoid freezing of the condensate discharge pipe, the appliance should be installed in a frost-free room. In order to avoid freezing of the appliance (heat exchanger), it has an appliance frost protection. When the temperature of the heat exchanger drops to 5°C, the burner will be activated and the pump will start running until the temperature of the heat exchanger reaches 10°C. When the system (or a part of it) can freeze, a frost thermostat should be installed in the area to be protected. Connect this according to the wiring diagram (see also the Installation instructions).

Note!

The external frost thermostat is not active when the appliance has been switched off at the operating panel or when the mains voltage has been interrupted.

Faults

If one of the following simple faults occur, they may be remedied as follows. In case of recurrence, or other faults, please contact your installer.

The CH System does not reach the correct temperature:-

- Increase the temperature on the room thermostat.
- Open the radiator valves.
- Increase the CH water temperature by means of the *Temperature* button (B) and the + and – button on the display (see Adjustment).
- De-aerate the appliance and the radiators and check the pressure gauge on the display is between 1 and 2 bar (for a cold system).

The hot water does not heat up:-

- Open up the hot water tap further.
- Increase the hot water temperature by means of the *Temperature* button (B) and the + and – button on the display (see Adjustment).

The fault LED above the *Reset* button flashes on and the *Temperature* display shows fault code 1:-

The boiler is getting too hot, due to insufficient circulation.

- Open the radiators, de-aerate the appliance and installation and check the CH water pressure. Fill up if necessary.

After remedying the cause, press the *Reset* button for 5 secs and the appliance will start-up again.

Filling and de-aerating the appliance and installation

Note: Switch off the electrical supply to the appliance until this has been completed.

CH-system:

In order to obtain a proper functioning CH system, the pressure should be between 1 and 2 bar for a cold system. If the pressure is too low, the installation has to be filled. Proceed as follows:-

Connect the filler loop (between the cold water inlet pipe and the CH return pipe) and open the taps.

Fill the appliance and CH system with clean tap water.

De-aerate the appliance using the manual air vent (needs a vent key to open) situated on the left hand on top of the appliance (or, alternatively, if an automatic air vent has been fitted, check that the cap on top of the valve is loosened).

De-aerate the installation using the manual air vents on the radiators and/or a de-aerate valve in the pipes. Fill the appliance and CH system up to a pressure between 1 and 2 bar for a cold system, and then close the filler loop taps and disconnect the loop at one end. Check for any leaks.

If filling is necessary more than a few times a year, please contact your installer **Note: The corrosion inhibitor will become diluted.**

Note: The CH system is fitted with a 3 bar safety valve. If water is seen in the smaller diameter pipe below the appliance, check that the CH pressure is between 1 and 2 bar. If it is within the range and the safety discharge still occurs, contact your installer.

Hot water supply:

De-aerate the system by opening a hot water tap. Keep the tap open until all air has left the system. Check the pipes / connections for leaks.

System Shutdown

Drain the appliance and the system when the mains voltage has been disconnected and there is a chance of freezing.

1. Drain the appliance using the drain tap.
2. Drain the system at the lowest point.
3. Close the main valve for the cold water supply to the boiler.
4. Drain the appliance by disconnecting the domestic hot water connections underneath the appliance or opening hot water taps.

Servicing the appliance

The appliance, the installation, the flue discharge and air supply should be serviced every year by a qualified Service Engineer. The appliance can be cleaned with a damp cloth. Do not use an aggressive or abrasive cleaner.