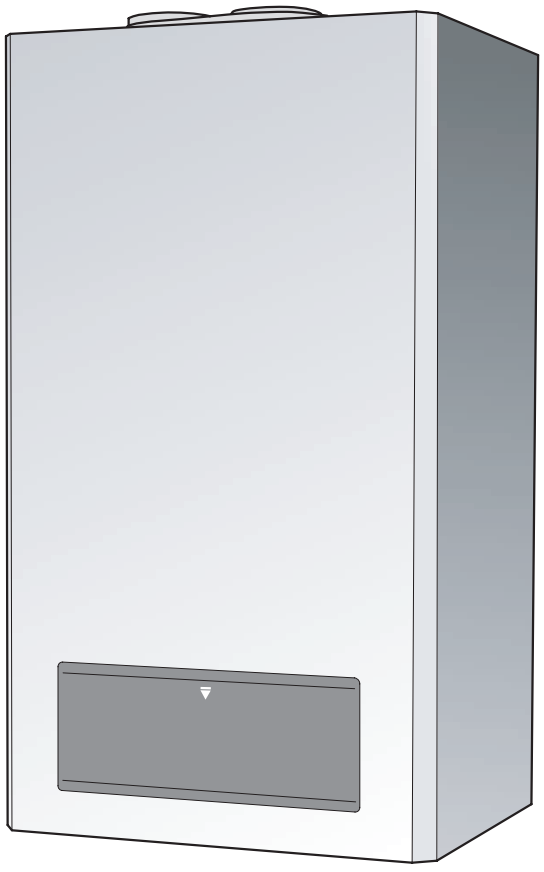
Users manual

Gas wall hung Boiler condensing
Buderus 600 - 28C



Buderus

benchmark

Preface

Introduction

Please read these instructions and follow them carefully for a safe and economical use of your boiler.

Important general instructions for use

This device should only be used for its intended purpose and in accordance with the operating instructions.
It is the law and in your own interest, and that of safety that this boiler must be installed by a CORGI registered installer, in accordance with the relevant requirements of the current Gas Safety (Installation and Use) Regulations, The Building Regulations, current I.E.E. Wiring Regulations and the relevant British Standard Codes of Practice.

The device may only be used in combination with the units, accessories and spare parts listed in the installation and servicing instructions.
Other combinations of units, accessories and consumables are only to be used if they completely fulfil the specifications involved, and if system performance and safety are not affected in any way.

Subject to technical modifications

As a result of our policy of constant development, there may be small differences with respect to illustrations, functional steps and technical data.

Cleaning

For normal cleaning simply dust with a dry cloth.

To remove stubborn marks and stains, wipe with a damp cloth and soap and finish off with a dry cloth.

DO NOT use abrasive cleaning materials.

G. C. Aplliance No. :

Buderus 600 - 28C 47-110-02

Dear Customer,

Your Buderus **600 Series** wall-mounted condensing gas boiler has been designed and built in accordance with state-of-the-art technological standards and the recognised safety rules. Special focus has been placed on operator convenience in this respect.

Carefully read the safety instructions and operating manual to ensure safe, economic and ecologically beneficial use of the unit.

Due to the high efficiency of the boiler a plume of water vapour may form at the terminal during operation. This is normal.

1 Safety precautions

DANGER!
If you smell gas:

1. **No naked flames ! Do not smoke !**
2. **Avoid sparks !**
   Do not operate electrical switches.
   Do not use the telephone, plug-in devices of any kind or the doorbell!
3. **Shut off the main gas supply!**
4. **Open windows and doors!**
5. **Warn building occupants and evacuate the building!**
6. **Call TRANSCO (under 'GAS' in the telephone directory) from outside the building!**

NOTE
In the event of any other type of incident, shut off the main gas supply and electric supply to the appliance and seek assistance from a CORGI registered engineer.

2 Installation area / boiler room

DANGER!
The air intake and outlet openings must not be reduced in size or closed.

DANGER!
Do not store or use inflammable materials or liquids near the heating boiler.

NOTE
To prevent the boiler from being damaged, care must be taken not to contaminate the combustion air with halogenated hydrocarbons (e. g. contained in aerosol sprays, solvents, detergents, paints, and adhesives), or with high quantities of dust. The room in which the boiler is installed must be frost-proof and be well ventilated.

3 Working in the heating system

DANGER !
Only a CORGI registered Engineer is to be entrusted with the installation of this boiler, the gas supply and the flue connection. Commissioning, Servicing and any Repairs must be carried out by a competent person i.e.: a CORGI Registered Engineer.
All CORGI Registered Installers carry a CORGI identification card and have a registration number. Both should be recorded in your boiler logbook. You can check your installer/Engineer is registered by telephoning 01256 372300 or by writing to:
CORGI, 1 Elmwood, Chineham Business Park, Crockford Lane, Basingstoke. RG24 8WG

4 Functions of the system and operating instructions

The installer should familiarize the user with the functions and operation of the heating system and ensure that a complete set of technical documentation is supplied.

5 Maintenance intervals

For optimum, long-term reliable functioning of the heating boiler, and in order to be able to claim under the terms of the manufacturer's warranty, the heating boiler must be inspected and maintained at least once a year (under normal operating conditions) by an officially recognized installation and service engineer. The term "normal operating conditions" means that the heating boiler is used to provide central heating and/or hot water to no more than one single-family dwelling.

In all other cases, the heating boiler must be inspected and maintained by an officially recognised installation service engineer every 2,500 burner operating hours.

6 Initial start-up

6.1 Preparing for operation

Please note also the operating instructions supplied with the control unit.

6.1.1 Check water pressure

- Open the control panel cover (fig. 1).
- Press the service button until the system pressure "P1.1" appears in the display.
  Optimum filling pressure is 1.5 bar.

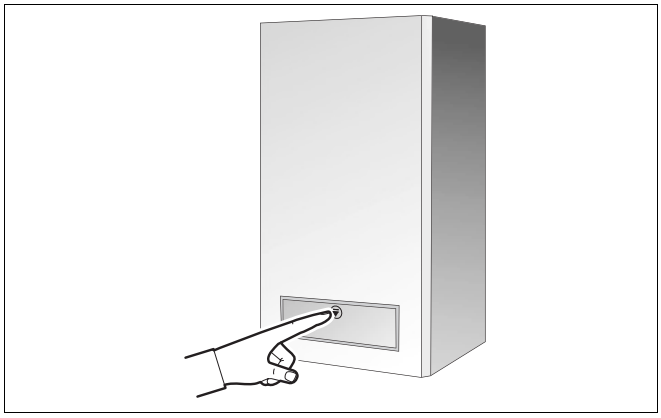


Fig. 1 Control panel

6.1.2 Topping up the heating system

WARNING!
The wall-mounted condensing gas boiler must not be activated at this stage.

The system should be filled with untreated mains water.

- Press the service button (fig. 2, item 1) until the system pressure "P1.1" appears in the display (fig. 2, item 2).

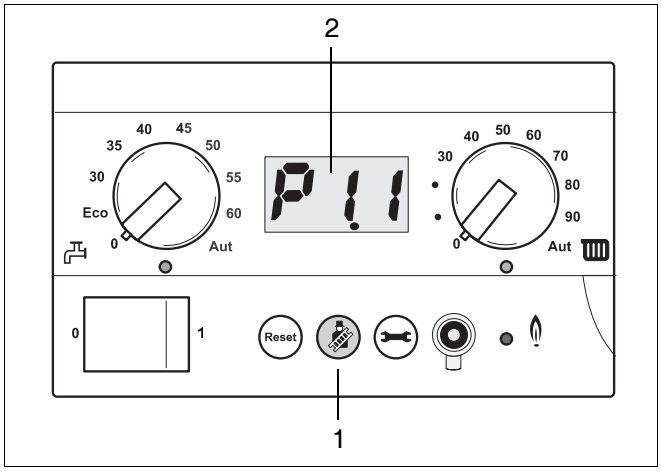


Fig. 2 BC 10

- If necessary open the CH flow and CH return maintenance valves (fig. 3, item 1 and 2).

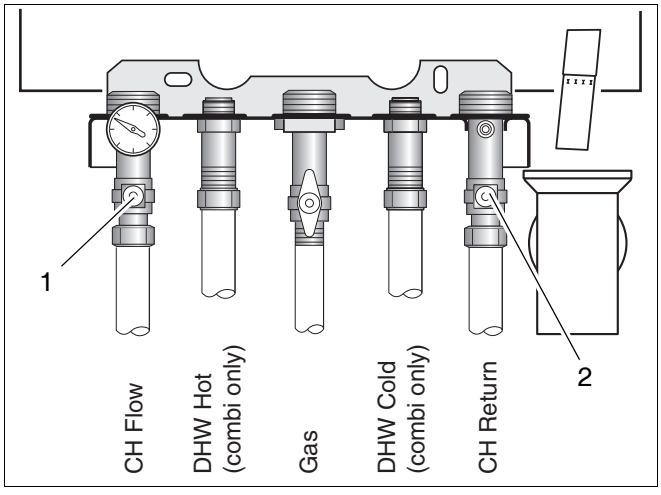


Fig. 3 Maintenance valves

- Connect temporary hose (fig. 4).
- Open both stop valves.

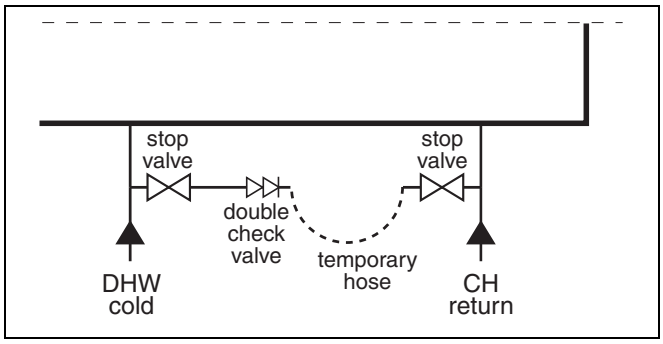


Fig. 4 Temporary hose

- Fill the system to a pressure of approx. 1.5 bar (fig. 5, item 2).
- Shut both stop valves and disconnect the filling loop.
- Purge all radiators from air starting downstairs and working your way up.
- Check the pressure after purging. If the pressure has dropped under 1.0 bar then top up the system as described previously.

NOTE
If there are frequent water losses, have the system examined and repaired by a CORGI registered installer.
Have the inhibitor concentration checked every year.

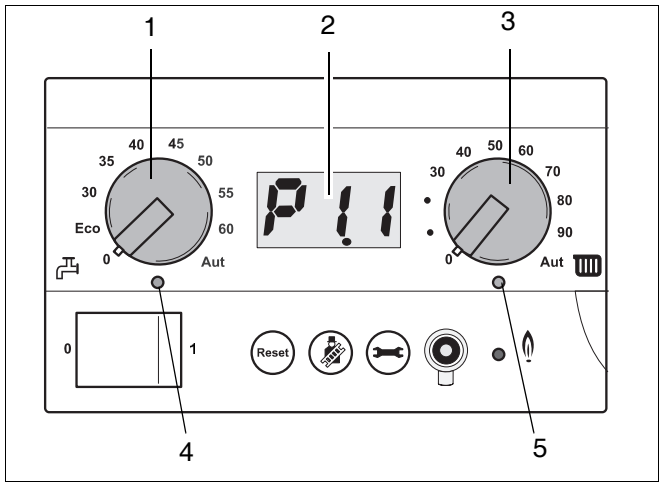


Fig. 5 BC10; adjustments

6.1.3 Temperature-setting adjustments

Setting the flow temperature (fig. 5, item 3)

The knob with the radiator symbol (fig. 5, item 3) allows the installer to set the maximum flow temperature (see table 1). When the boiler is in operation for central heating then the LED "CH operation" (fig. 5, item 5) is lit.

Setting	Function	Description
0	off	Central heating function is switched off.
30 - 90	Flow temperature in °C. However the boiler is capped off at 80 °C. This means that position 80 is 80 °C, but also position 90 is 80 °C.	
Aut.	Do not use this setting	

Table 1 Flow temperature

Setting the domestic hot water temperature (fig. 5, item 2)

Turn the knob with the tap symbol (fig. 5, item 1) to the desired temperature for your domestic hot water (see table 2).

Set the knob to "**Eco**" when the boiler is situated in an area with hard water to prevent scaling as much as possible.

When the boiler is in operation for domestic hot water, the LED "DHW operation is on (fig. 5, item 4).

Setting	Function	Description
0	off	DHW is turned off
Eco	Energy saving setting The heat retaining temperature of the hot water tank is 26 °C and the outlet temperature of the hot water tank is 60 °C.	minimal comfort, minimal energy consumption, minimal calcification.
30 - 60	Desired temperature of the heat retaining temperature of the hot water tank and the outlet temperature of the hot water tank.	Maximum comfort when set at 60° C
Aut.	Do not use this setting	

Table 2 Domestic hot water temperature

6.2 Combustion fuels

Natural gas, propane.

6.3 Frost hazard for the heating system

NOTE
Normally set by commisioning Engineer.

- Press the chimney sweep button and the service button (see fig. 6, item 2 and 3) simultaneously until "L−−" appears in the display.
- Press the service button repeatedly until for example "F 5" appears in the display. "F 5" means that the pump run over time is currently set at 5 minutes. This is the factory setting.
- Adjust the pump run over time by pressing the chimney sweep button to reduce the run over time of the pump and the reset button to increase the pump run over time. The range is 0 min to 60 min. (F 0..F60) and 24 hours (Fld).
- Set the pump run over time to "Fld" (fig. 6, item 4) when there is a frost hazard.
- Confirm the selection by pressing the service button (fig. 6, item 3).

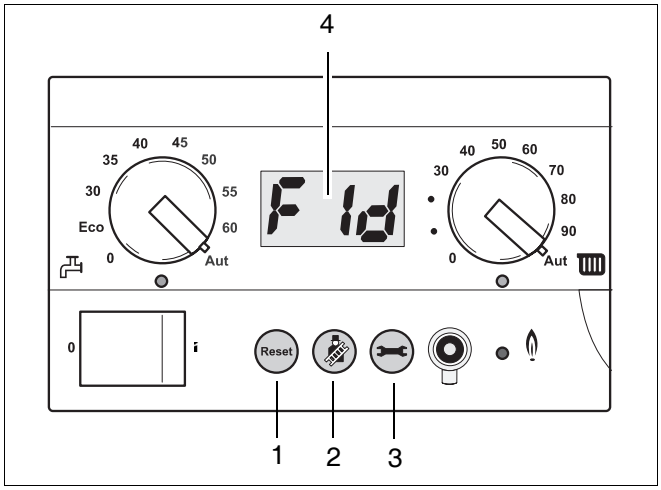


Fig. 6 BC10; frost hazard

6.4 Operational and fault codes

Operating conditions and possible faults are shown on the display (fig. 6, item 4). The codes consists of two characters.

All codes not contained in table 3 should be noted down separately. These are malfunctions that require the presence of a specialist technician.

Display after pressing service button	Meaning	Rectification
0A, 0C, 0H, 0L, 0U, 0Y	Boiler is ready for operation	
6A	Burner not ignited	Press reset button (fig. 6, item 1). If the burner fails to ignite after several unblocking operations, consult a specialist company.
−H	Normal heating mode	Maximum comfort when set at 60° C
=H	Normal hot water mode	

Table 3 Operational and fault codes

7 Taking the system out of service

- Open the control panel cover (see fig. 1).
- Push the mains power switch (fig. 7, item 1) to "**0**".
- Close the gas service valve by turning it clockwise (fig. 8, item 1).
- Close the control panel cover (fig. 1).

Frost hazard for the heating system

- Turn the mains switch to "**I**" (fig. 7, item 1) and leave the gas service valve open (fig. 8, item 2).
- Adjust room temperature to minimum (or frost-protection) setting at regulating device or on remote control unit.

NOTE
If you intend to shut down the system fully under frost hazard conditions, note that the system must be drained entirely of water.

7.1 Draining the system

- Close the DHW cold and the CH return valve.
- Connect temporary hose (fig. 9).
- Open the CH return stop valve to drain the system.

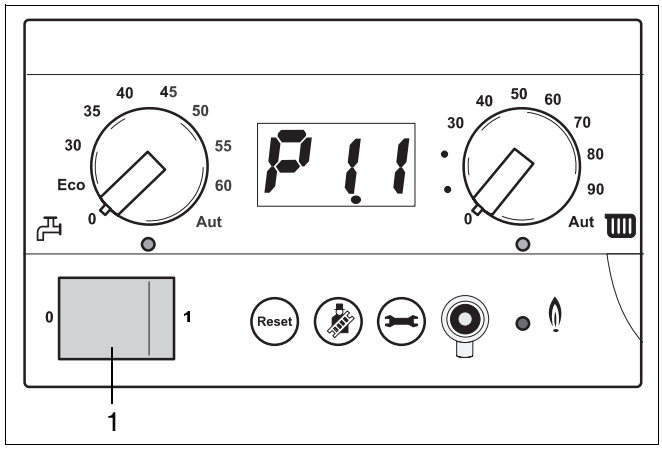


Fig. 7 BC10; Mains power switch

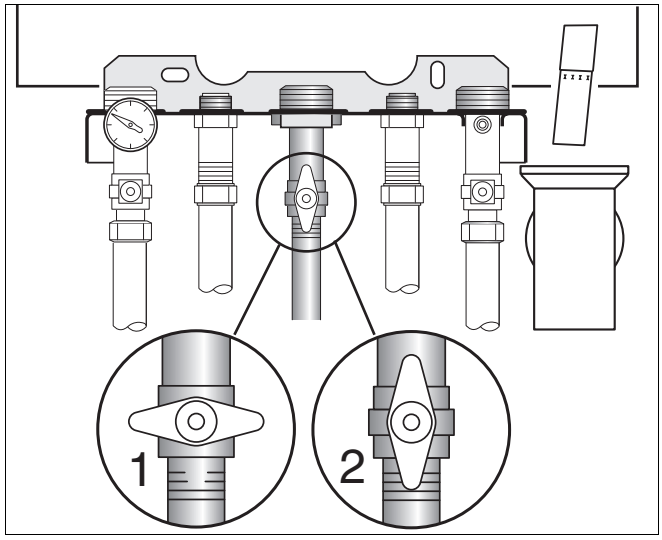


Fig. 8 Gas service valve
Pos. 1: Gas valve closed
Pos. 2: Gas valve open

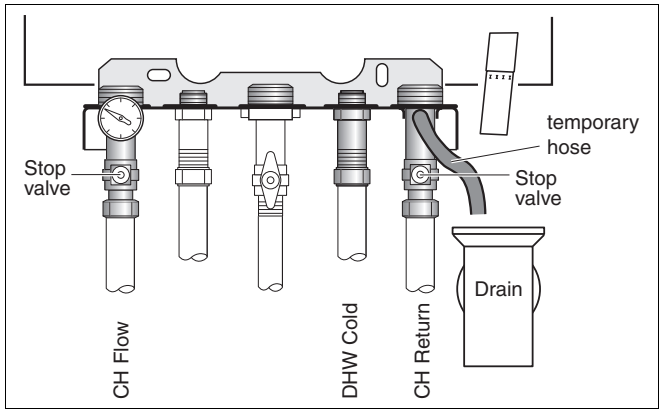


Fig. 9 Draining the system

Buderus

Heating system specialist:

Buderus
Cotswold Way
Warndon
Worcester
WR4 9SW
Telephone: 01905 - 752 936
Fax: 01905 - 753 130

Customer Services:	Tel: 0870 - 421 5933	
Technical Product Support:	Tel: 0870 - 421 5944	
Sales:	Tel: 01905 - 752 640	Fax: 01905 - 456 445 / 455 394
Returns:	Tel: 01905 - 752 531	Fax: 01905 - 455 392
Spares:	Tel: 01905 - 752 576	Fax: 01905 - 754 620

http://www.buderus-domestic.co.uk

Buderus is a trading name of BBT Thermotechnology UK Ltd.

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