

Buderus 800 - 24/29/43/60 and Buderus 800 - 24T25/29T25 H/V

For the user

Please read thoroughly
before operating the unit

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 Gas Safe 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.

Dear Customer,

Your Buderus **800 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 instructions



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 Gas Safe 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 Gas Safe 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 ie:

a Gas Safe Registered Engineer.
All Gas Safe Registered Installers carry a Gas Safe 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 0800 408 5500 or by writing to:

Gas Safe Register
PO BOX 6804
Basingstoke
RG24 4NB



NOTE
It is mandatory to clean and service the system once a year ! This includes an inspection of the entire system to see if it is in full working order. Any faults and defects found in the course of inspection must be rectified immediately.

It is recommended to enter into a service contract with a specialist company.

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

The appliance should be serviced at least once a year by a Gas Safe registered installer.

6 Commissioning

6.1 Preparing the boiler for operation

Note the operating instructions of the control unit.

- Open the control panel cover.
- Check the water pressure (fig. 1, item 3).
If the pressure is below 1.0 bar, top up water and purge air from the system.
Max. water pressure 2.0 bar.
If water is lost frequently, have a specialist company look for and eliminate the cause.
- Adjust the flow temperature on the controller (fig. 1, item 1) using table 1.
- Adjust the hot water temperature on the controller (fig. 1, item 2) using table 2.
- Use the control unit or remote control unit to set the room temperature to maximum.
- Open the gas service valve: push in and turn to the left in vertical position (fig. 1, item 4).
- Turn the mains switch (fig. 1, item 5) into position "I".
The boiler runs through the start-up program and the burner is ignited after approx. 30 seconds.
- Close the control panel cover.
- Use the control unit or remote control unit to adjust the room temperature to the desired value.

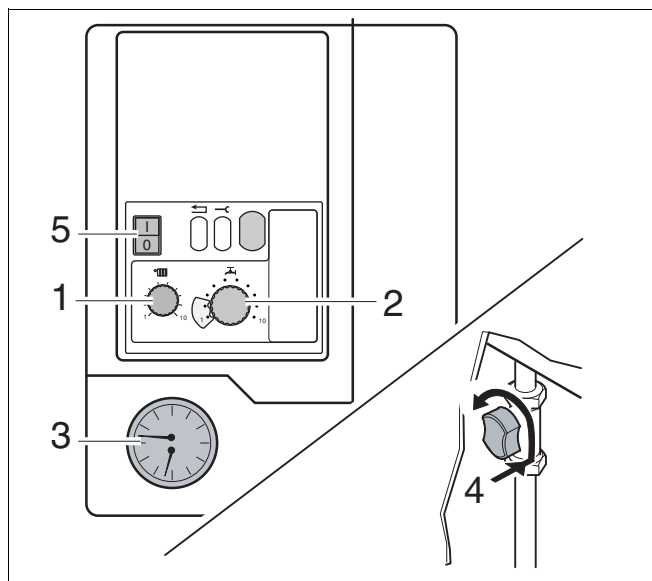


fig. 1 Control panel, pressure display, gas service valve

Control unit	Application	Controller position / flow temperature
Digital Room Controller iRT HW4201, RC	Floor heating	1 (40 °C)*
	Radiator heating	8 (80 °C, factory setting)*
ON/OFF temperature controller, 24 V	Floor heating	1 (40 °C)
	Radiator heating	6 (40 °C, new building) up to
		8 (80 °C, old building)

Tab. 1 Flow water temperature

- * Basic setting: the actual flow water temperature is determined by the digital control system.
Have specific system settings adjusted on the digital control system by the specialist heating system company.

Application	Controller position	Hot water temperature of external reservoirs
Minor convenience, small heat losses	1	27 °C
Average convenience, medium heat losses	5	40 °C
Optimum convenience, normal heat losses	10	60 °C

Tab. 2 Hot water temperature

6.2 Topping up the heating system



WARNING

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

When using oxygen-permeable pipes (e.g. for floor heating), heat exchangers must be used to separate the system.

- Move the mechanical switch on the three-way valve to centre position (fig. 2) (applicable for 24T25 and 29T25 only and systems with an external storage-type water heater).

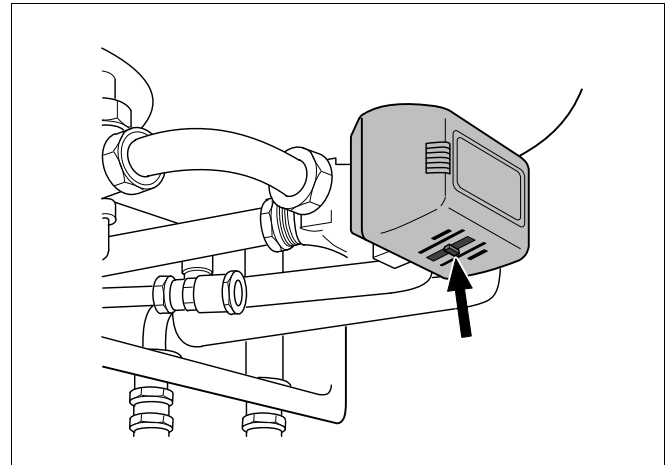


fig. 2 Mechanical switch on the three-way valve

- Connect temporary hose of the filling loop.
- Open both stop valves.

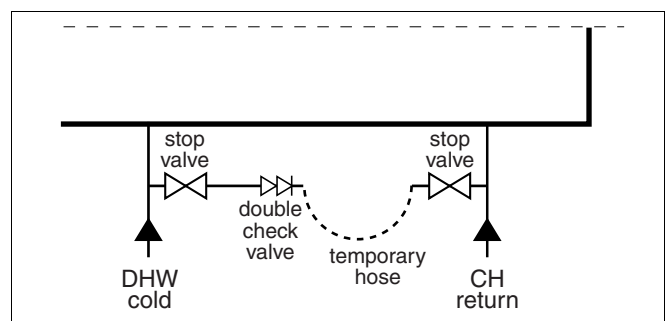


fig. 3 Connecting temporary hose

- Fill the system to a pressure of 1.0 to 1.2 bar (fig. 4). Max. water pressure is 2.0 bar.
- Shut both stop valves and disconnect the filling loop.

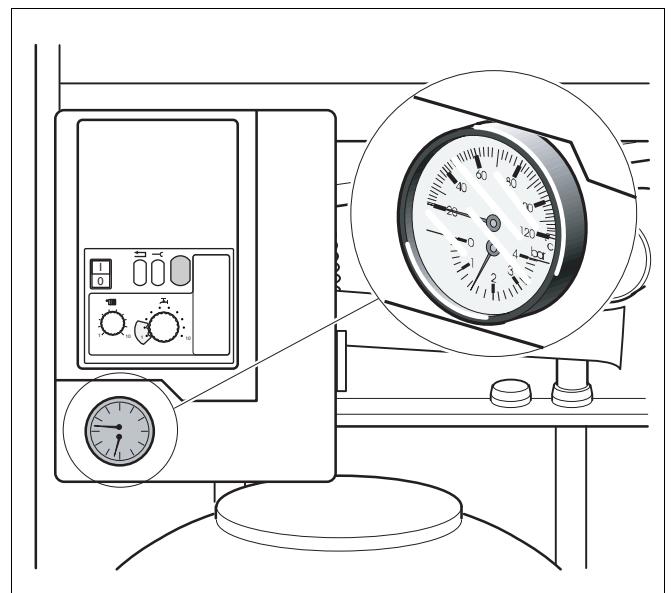



fig. 4 Pressure display

6.3 Combustion fuels

Natural gas, propane.

6.4 Frost hazards for the heating system

Where there is a risk of frost damage to the heating system:

- Open the control panel cover.
- Open the cover of control level 2 (fig. 5, item 1).
- Turn the "pump" switch  into position "2" (24-hour pump over-run time) (fig. 5, item 5).
- Close the covers of control level 2 and of the control panel.

6.5 Operational and fault messages (table 3)

Operating conditions or possible faults are shown on the display (fig. 5, item 4). The message is displayed in form of two characters. The second character is displayed after pressing the service button (fig. 5, item 3).

All messages not contained in table 3 should be recorded as these refer to malfunctions and faults that should be rectified or eliminated by a specialist technician.

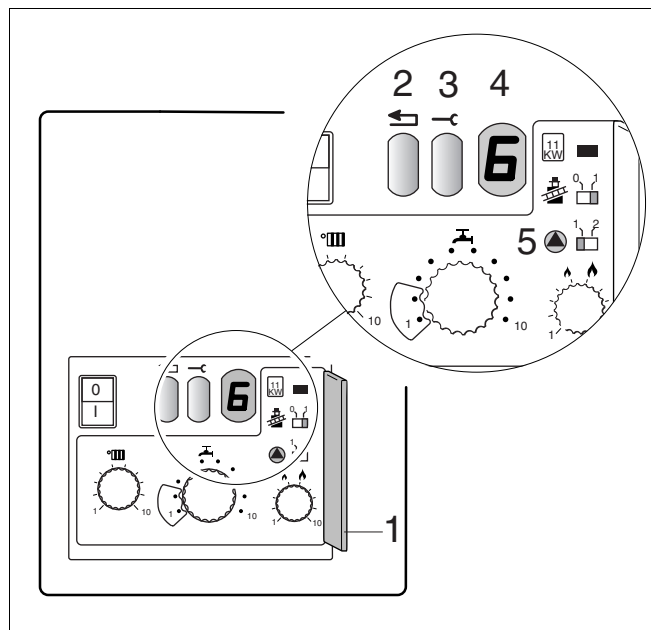


fig. 5 Operational and fault messages

Display	Display after pressing the service button	Meaning	Rectification
□	R, H, L, P, U, Y	Boiler is ready for operation	
E*	R	Burner not ignited	Press reset button (fig. 5, item 2) and keep it pressed for about 5 seconds. If the burner is not ignited after several unlocking operations, consult a specialist company.
-.	H	Normal heating operation	
=.	H	Normal hot water operation	

Tab. 3 Operational and fault messages

* flashing after three start-up trials

7 Shutting down the boiler

- Open the control panel cover.
- Turn the mains switch (fig. 6, item 1) into position "0".
- Close the gas service valve by turning it to the right (fig. 6, item 2).
- Close the control panel cover.
- Long shutdown periods also require the water feed pipe to be closed.

Frost hazard for the heating system

- Turn the mains switch into position "I" and leave the gas service valve open.
- Use the control unit or remote control unit to set the room temperature to minimum or to frost-proof.



NOTE!

If you intend to fully shut down the system under frost hazard conditions, the water has to be drained from the entire system.

The use of antifreezing compounds is prohibited.

To drain the system take the following steps:

- Close the CH flow and the CH return service valve.
- Place hose on the draining tulle.
- Turn to drain the system.

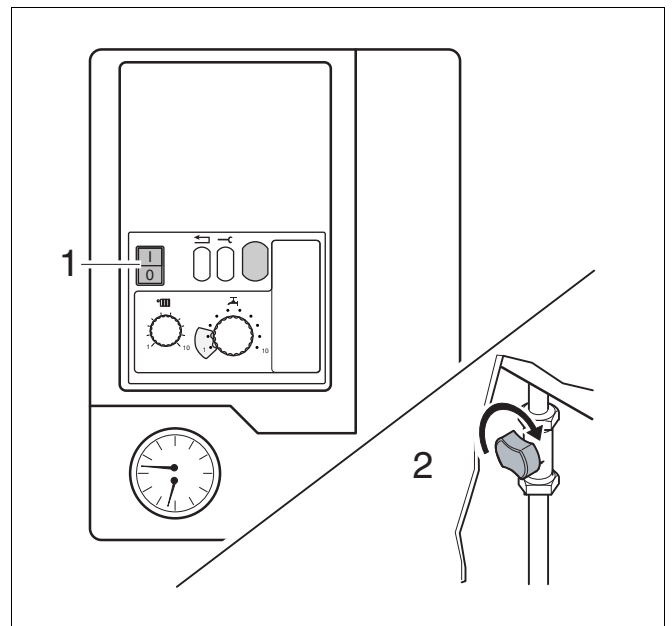


fig. 6 Mains switch, gas service valve

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In the UK and IE, Buderus is a brand name of
Bosch Thermotechnology Ltd.

Buderus