

3 Product description

3.1 CE label



The CE label shows that the products comply with the basic requirements of the applicable directives as stated on the identification plate.

The declaration of conformity can be viewed at the manufacturer's site.

3.7 Benchmark

Glow-wrom is a licensed member of the Benchmark Scheme.

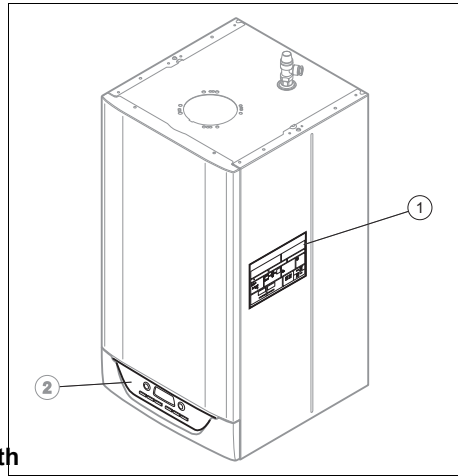
Benchmark places responsibilities on both manufacturers and installers. The purpose is to ensure that customers are provided with the correct equipment for their needs, that it is installed, commissioned and serviced in accordance with the manufacturer's instructions by a competent person approved at the time by the Health and Safety Executive and that it meets the requirements of the appropriate Building Regulations. The Benchmark Checklist can be used to demonstrate compliance with Building Regulations and should be provided to the customer for future reference.

Installers are required to carry out installation, commissioning and servicing work in accordance with the Benchmark Code of Practice which is available from the Heating and Hotwater Industry Council who manage and promote the Scheme. Benchmark is managed and promoted by the Heating and Hotwater Industry Council.



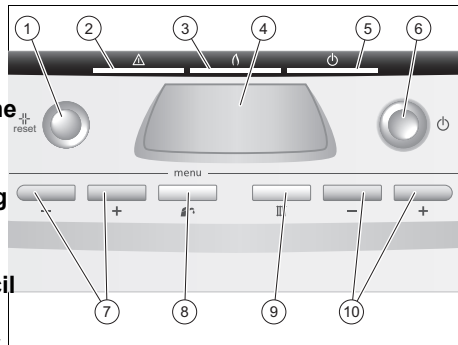
For more information visit www.centralheating.co.uk

3.2 Design of the product




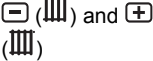

- 1 Magnetic brief operating instructions with type designation and serial number
- 2 Control elements

3.3 Overview of the operator control elements

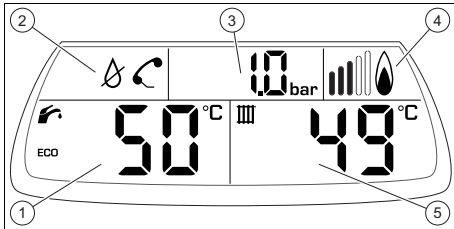


- 1 Fault clearance key
- 2 Red LED fault lamp
- 3 Orange LED lamp for burner operation
- 4 Display
- 5 Green LED lamp for product operation
- 6 On/off button
- 7 Hot water temperature setting buttons (minus and plus icons)

4 Operation






- 8 DHW mode  10 Heating flow temperature buttons 
- 9 Heating mode 

3.4 Description of the display



- 1 Hot water temperature
2 Fault symbols
3 System pressure/fault message
4 Burner operation display
5 Heating flow temperature

3.5 Description of button functions

Button	Meaning
	- Selecting hot water handling mode
	- Selecting heating mode
 or 	- Setting the hot water temperature Setting the heating flow temperature
	- Reset the product
On/off	- Switching the product on/off

Adjustable values flash in the display.

4 Operation

4.1 Starting up the product

4.1.1 Opening the isolator devices

Conditions: The competent person who installed the product will explain where the isolator devices are and how to handle them.

- ▶ Ensure that the valves are open.

4.1.2 Switching on the product

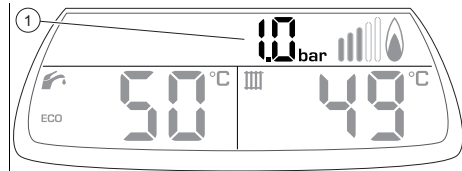
- ▶ Press the on/off button.
 - ◁ As soon as the product is supplied with power, the display switches on. After a few seconds, the product is ready for operation.

4.2 Checking the pressure in the heating installation



Note

When checking the pressure, there must be no heating demand and/or no hot water request.



- 1 Current filling pressure
 - ▶ Check the filling pressure for the product once a month.
 - Recommended filling pressure: 1 ... 1.5 bar (100,000 ... 150,000 Pa)
 - ◁ If the filling pressure is correct, no action needs to be taken.
 - ▽ If the filling pressure is too low, add more water to the heating installation.

4.3 Filling the heating installation

Caution.

Risk of material damage due to heating water that is extremely calciferous or corrosive or contaminated by chemicals.



Unsuitable tap water damages the seals and diaphragms, blocks components in the product and heating installation through which the water flows and causes noise.

- ▶ Only fill the heating installation with suitable heating water.
- ▶ In case of doubt, ask a competent person for details.



Note

The competent person is responsible for filling the heating installation the first time, any subsequent top-ups and the water quality.

Of these duties, only the task of adding water to the heating installation may be undertaken by the operator.

1. Open all radiator valves (thermostatic radiator valves) of the heating installation.
2. Slowly open the filling cock on the underside of the product in the way you were shown by the competent person.
3. Fill with water until the required filling pressure is reached.
 - Recommended filling pressure: 1 ... 1.5 bar (100,000 ... 150,000 Pa)
4. Check the filling pressure in the display.
5. Close the filling cock after filling.



4.4 Selecting the operating mode






Note

After every ignition, the product runs in "Heating + hot water" mode.





The button lights up when the operating mode is activated.

1. Press the  button to activate/deactivate hot water operating mode.
2. Press the  button to activate/deactivate heating mode.

Symbol	Operating mode
	Heating + hot water
	Heating only
	Hot water and frost protection only
–	Absence/frost protection

4.5 Setting the hot water temperature

Conditions: The temperature is controlled by the boiler






- ▶ Press the   or   buttons to set the hot water temperature.

Conditions: The temperature is controlled by the room thermostat

- ▶ Set the hot water temperature on the room thermostat.



Note


If you press the   or   button, the display shows .

4.5.1 Switching ECO mode on and off


- ▶ Set the hot water temperature.

4 Operation

Conditions: Hot water temperature: < 50 °C



-  mode is shown on the display.

Conditions: Hot water temperature: ≥ 50 °C

-  mode is not shown on the display.

4.6 Setting the heating flow temperature

Applicability: Without the outside temperature sensor, Without the room thermostat


- ▶ Use  (III) or  (III) to set the heating flow temperature.





Note

The competent person may have adjusted the minimum and maximum possible temperature.

Applicability: Room thermostat

- ▶ Use  (III) to set the heating flow temperature to the maximum value.
- ▶ Set the required heating temperature at the room thermostat.
 - ◁ The actual heating flow temperature is automatically regulated by the room thermostat.

Applicability: Outside temperature sensor

- ▶ It is not possible to set the heating flow temperature, even if you press the  (III) or  (III) button.
 - ◁ The display shows the heating flow temperature calculated by the boiler.
 - ◁ The actual heating flow temperature is automatically regulated by the boiler.

4.7 Frost protection

4.7.1 The product's frost protection function

The frost protection function switches on the boiler and the pump as soon as the safety temperature in the heating circuit is reached.

- Protection temperature: 12 °C

The pump stops once the minimum water temperature in the heating circuit is reached.

- Minimum water temperature: 15 °C

Once the burner ignition temperature in the heating circuit is reached, the burner ignites until the switch-off temperature is reached.

- Burner ignition temperature: 7 °C
- Burner switch-off temperature: 35 °C

The hot water circuit (cold and hot water) is not protected by the boiler.

Frost protection for the system can only be guaranteed by the boiler.

A controller is required to control the temperature of the system.

4.7.2 Frost protection for the system



Note

Make sure that the product's power supply and the gas supply are working correctly.

Conditions: If you are away from home for several days, Without controller

- ▶ Select the Away from home/frost protection (→ Page 9) mode.
 - ◁ Only the water pressure is visible in the heating circuit.

Conditions: If you are away from home for several days, With controller

- ▶ Program the number of days you will be away in the controller to activate the frost protection devices.

Conditions: If you are away from home for a prolonged period

- ▶ Contact a qualified competent person, who can completely drain the system or protect the heating circuit by adding a special frost protection agent for heating installations.

5 Troubleshooting

5.1 Detecting and rectifying faults

- ▶ If problems occur whilst operating the product, you can carry out certain self-checks with the aid of the table in the appendix.
Troubleshooting (→ Page 13)
- ▶ If the product still does not work without any problems after the checks have been carried out using the table, contact Customer Service to rectify the problem.

5.2 Fault codes in the display

Fault codes have priority over all other displays. If several faults occur at the same time, the corresponding codes are displayed alternately for two seconds each.

- ▶ If your product displays $\langle F \square xx \rangle$, contact Customer Service.

6 Care and maintenance

6.1 Maintenance

An annual inspection and biennial maintenance of the product carried out by a competent person is a prerequisite for ensuring that the product is permanently ready and safe for operation, reliable, and has a long working life.

After servicing, complete the relevant service interval record section of the benchmark checklist, located at the rear of the installation manual.

6.2 Caring for the product



Caution.

Risk of material damage caused by unsuitable cleaning agents.

- ▶ Do not use sprays, scouring agents, detergents, solvents or cleaning agents that contain chlorine.
-
- ▶ Clean the casing with a damp cloth and a little solvent-free soap.

6.3 Checking the condensate drain pipework and tundish

- ▶ Regularly check the condensate drain pipework and tundish for faults and, particularly, for blockages.

You must not be able to see or feel any obstructions in the condensate drain pipework and tundish.

- ▶ If you notice a fault, have it rectified by Customer Service.

7 Decommissioning

7 Decommissioning

7.1 Temporarily decommissioning the product

- ▶ Temporarily decommission the product only if no frost is expected.
- ▶ Switch off the product via the main switch installed on-site.
 - ◀ The display goes out.
- ▶ When decommissioning the product for an extended period (e.g. holiday), you should also close the gas isolator cock and the cold water stop cock.

7.2 Permanently decommissioning the product

- ▶ Have the product permanently decommissioned by Customer Service.

8 Recycling and disposal

- ▶ The competent person who installed your product is responsible for the disposal of the packaging.



If the product is identified with this symbol:

- ▶ In this case, do not dispose of the product with household waste.
- ▶ Instead, hand in the product to a collection centre for old electrical or electronic appliances.



If the product contains batteries that are marked with this symbol, these batteries may contain substances that are hazardous to human health and the environment.

- ▶ In this case, dispose of the batteries at a collection point for batteries.

9 Guarantee and customer service

9.1 Guarantee

For information on the manufacturer's guarantee, you can write to the contact address that is provided on the back page.

9.2 Customer service





For contact details for our customer service department, you can write to the address that is provided on the back page, or you can visit www.glow-worm.co.uk.

Appendix

A Troubleshooting

Fault	Cause	Remedy
No hot water, heating stays cold; product does not start	Building gas isolator cock closed	Open the building-side gas isolator cock
	Building power supply switched off	Switch on building power supply
	On/off button on product switched off	Switch on the on/off button on the product
	The heating flow temperature is set too low, the heating water or hot water handling mode is switched off and/or the hot water temperature is set too low.	Select the required operating mode Set the heating flow temperature and/or hot water temperature to the required temperature
	Filling pressure of the heating installation insufficient	Add more water to the heating installation
	Air in the heating installation	Purging the radiators If the problem occurs again: Inform the competent person
	Ignition malfunction	Press the fault clearance key If the problem occurs again: Inform the competent person
Hot water handling mode without any problems; heating does not start	No heat requirement via the controller	Check the timer programme on the controller and correct if necessary Check the room temperature and, if required, correct the target room temperature ("Controller operating instructions")
	The heating flow temperature is set too low or heating mode is switched on	Switch on heating mode Set the heating flow temperature to the required temperature
	Air in the heating installation	Purging the radiators If the problem occurs again: Inform the competent person
No hot water, heating mode working correctly	The hot water temperature set is too low or hot water handling mode is switched off	Switch on hot water handling mode Set the hot water temperature to the required temperature
Traces of water under the product	Condensate drain pipework blocked	Check and, if required, clean the condensate drain pipework
	Leak in the system or the product	Close the cold water supply to the product, inform a competent person

Appendix

Fault	Cause	Remedy
The display shows  r E 5 E t	Fault	Press the fault clearance key (Reset)  r E 5 E t and wait for five seconds. If the fault persists, inform a competent person.
The display shows  and the pressure display flashes < 0.5 bar (< 50,000 Pa)	Low water pressure in the system	Add treated water If the problem occurs again: Inform the competent person
The pressure display flashes ≥ 2.5 bar (≥ 250,000 Pa)	The system pressure is too high	Purge a radiator If the problem occurs again: Inform the competent person
The display shows  r F O x x and the pressure display flashes	Fault message	Inform a competent person

Publisher/manufacturer

Glow-worm

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The energy you need