

Betacom

High Efficiency Condensing Combination Boilers

Instructions for Use

To be left with the user



Glow-worm, Nottingham Road, Belper, Derbyshire. DE56 1JT

www.glow-worm.co.uk

WARNING

GAS LEAK OR FAULT

Turn off the gas emergency control valve immediately. Eliminate all sources of ignition, i.e. smoking, blowlamps, hot air guns etc. Do not operate electrical lights or switches either on or off.

Open all doors and windows, ventilate the area.

SHEETMETAL PARTS

This boiler contains metal parts (components) and care should be taken when handling and cleaning, with particular regard to edges.

SEALED COMPONENTS

Under no circumstances must the User interfere with or adjust sealed parts.

Glow-worm service call: 01773 828100 **Technical helpline:** 01773 828300

General and Sales enquiries Tel: 01773 824639 Fax: 01773 820569



*The code of practice for the installation,
commissioning & servicing of gas central heating*

Betacom 24

G.C. No. 47-019-04

Betacom 30

G.C. No. 47-019-05



Position of name
badge (typical shown)



Glow-worm

Betacom 30

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These instructions are an integral part of the boiler and must, to comply with the current issue of the Gas Safety (Installation and Use) Regulations, be left with the user.

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

Important Information

Gas Safety (Installation and Use) Regulations

In your own interests and that of safety, it is the Law that ALL gas appliances have been installed by a **competent person** in accordance with the current issue of the regulations.

Control of Substances Hazardous to Health

Under Section 6 of The Health and Safety at Work Act 1974, we are required to provide information on substances hazardous to health.

The adhesives and sealants used in this appliance are cured and give no known hazard in this state.

Electrical Connection

The boiler **MUST** be earthed.

The boiler **MUST** be connected to a permanent 230V ac, 50Hz supply.

Connection of the whole electrical system of the boiler, including any heating controls, to the electrical supply must be through one common isolator and must be fused to 3 Amps maximum.

The colours of three core flexible cable are, blue - neutral, brown - live, green and yellow - earth.

IMPORTANT NOTE

ALL electrical connections to the boiler must be permanently fixed to a wall or a sturdy support feature.

Gas Category

This boiler is for use only on G20 natural gas or G31 propane with the appropriate conversion kit.

Testing and Certification

This boiler is certificated to the current issue of EN 483 for performance and safety.

It is important that no alteration is made to the boiler unless approved, in writing, by Glow-worm.

Any alteration not approved by Glow-worm, could invalidate the certification, boiler warranty and may also infringe the current issue of the statutory requirements.

CE Mark

This boiler meets the requirements of Statutory Instrument, No. 3083 of the Boiler (Efficiency) Regulations, and therefore is deemed to meet the requirements of Directive 92/42/EEC on the efficiency requirements for new hot water boilers fired with liquid or gaseous fuels.

Type test for purposes of Regulation 5 certified by: Notified body 0087.

Product/production certified by: Notified body 0086.

The CE mark on this appliance shows compliance with:

1. Directive 90/396/EEC on the approximation of the laws of the Member States relating to appliances burning gaseous fuels.
2. Directive 73/23/EEC on the harmonisation of the Laws of the Member States relating to electrical equipment designed for use within certain voltage limits.
3. Directive 89/336/EEC on the approximation of the Laws of the Member States relating to electromagnetic compatibility.

Description www.heatingspares.co or call us on
0161 620 6677 For Spares at Discounted Prices

These boilers are designed for use as part of a sealed water central heating system with fully pumped circulation. The pump, expansion vessel and associated safety devices are all fitted within the boiler.

Once the controls are set the boiler operates automatically.

Compartment or Cupboard Installations

Ventilation is not required for compartment or cupboard installations.

Do not use the compartment or cupboard for storage.

The minimum clearances to fixtures are shown in diagram 1.

Plumbing from flue terminal

Like all condensing boilers it will produce a plume of condensation from the flue terminal in cool weather. This is due to the high efficiency and hence low flue gas temperature of the boiler. It is normal and not a fault indication.

Electrical Supply Failure

The boiler will not work without an electrical supply and normal operation of the boiler should resume when the electrical supply is restored.

If the boiler does not resume normal operation, check the external controls, it may be necessary, to "reset" the boiler, refer to the following section, "Boiler Safety Devices".

- * A removable compartment door can be placed a minimum of 15mm in front of the appliance but there must be a clearance of 600mm minimum from a fixed surface.

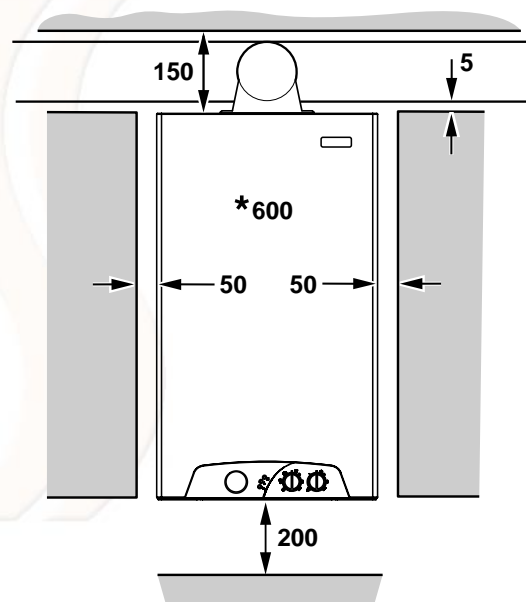




Diagram 1

Boiler Safety Devices

Overheat Reset

The boiler is designed to lockout when an overheat happens. When the boiler is locked out, the indicator  lights steadily. To restart the boiler, turn the left knob on  position, wait one minute to cool down the boiler, and then turn it on previous operating position (see diagram 2).

If the boiler fails to resume normal operation and all external controls are calling for heat, or if the boiler locks out again, then call your Installation/Service company or Glow-worm service.

Frost Protection

With the gas and electric supplies ON and irrespective of any setting of boiler's control or room thermostat, the integral frost protection device will ignite the burner and operate the pump when the temperature of the boiler water falls below 5°C.

The burner will switch off when the temperature reaches 30°C.

NOTE: Any other exposed areas of the system should be protected by a separate frost thermostat.

Condensate Drain Blockage

As a safety feature the boiler will stop working if the condensate drain becomes blocked. During freezing conditions this may be due to the forming of ice in the condensate drain external to the house. Release an ice blockage by the use of warm cloths on the pipe. The boiler should then restart. Contact your Installation/Service company or Glow-worm service if the fault persists.

Safety Discharge Valve

A safety discharge valve and discharge pipe is fitted to the boiler. This valve **MUST** not be touched. If there is any discharge from the pipe, switch off the boiler electrical supply, then call your Installation/Service company or Glow-worm service.

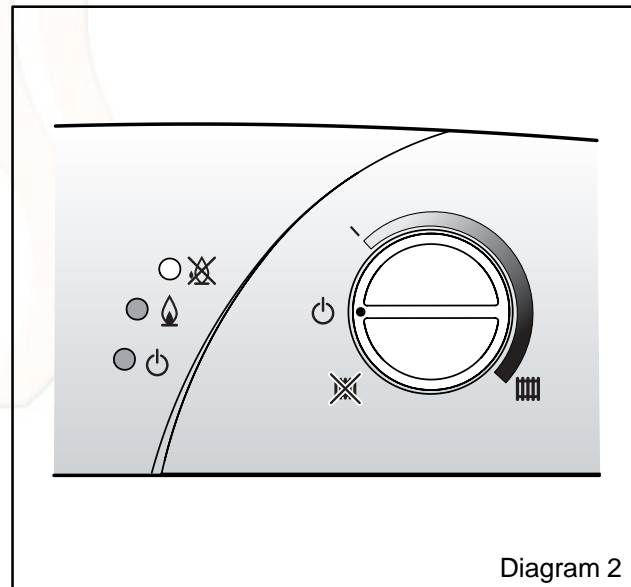


Diagram 2

Servicing www.heatingspares.co or call us on
0161 620 6677 For Spares at Discounted Prices

To ensure the continued efficient and safe operation of the boiler it is recommended that it is checked and serviced at regular intervals. The frequency of servicing will depend upon the site conditions and usage, but in general, once a year should be enough.

If this boiler is installed in a rented property in the UK there is a duty of care imposed on the owner of the property by the current issue of the Gas Safety (Installation and Use) Regulations, Section 35.

Servicing/maintenance should be carried out by a **competent person** in accordance with the rules in force in the countries of destination.

To obtain service, please call your installer or Glow-worm's own service organisation using the telephone number on the inside front cover of this booklet.

Cleaning

The boiler casing can be cleaned using a mild liquid detergent with a damp cloth, then a dry cloth to polish.

Do not use any form of abrasive or solvent cleaner as you may damage the paintwork.

Frost Protection

If the mains electricity and gas services are to be turned off for any long periods during severe weather, it is recommended that the whole system, including the boiler, should be drained to avoid the risk of freezing.

Sealed Water Systems

The draining, refilling and pressurising **MUST** be carried out by a **competent person**, contact your Installation/Servicing company or Glow-worm Service.

Spare Parts

REMEMBER, When replacing a part on this boiler, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Glow-worm.

If replacement parts are required contact Glow-worm's own service organisation using the telephone number on the inside front cover of this booklet.

Please quote the name of the boiler, this information will be on the name badge on the front case.

If in doubt seek advice from the local gas company or Glow-worm's own service organisation using the telephone number on the inside front cover of this booklet.

Isolating Valves

1. Check that all isolating valves and the Gas cock, on the boiler are open and that water flows from the hot water tap.
2. If you are in any doubt about the boiler being filled with water contact your installer or Glow-worm's own service organisation using the telephone number on the inside front cover of this booklet. **The boiler does not operate without water.**
3. Check that the electrical supply to the boiler is ON and that all taps are closed and there is no demand from any external controls.
4. The gauge, see diagram 3, will indicate the system pressure, which should read at least 0.5bar (recommended 1.0bar, max 1.5bar), if the pressure is less, then call your Installation/ Servicing company or Glow-worm service.
5. To operate or switch off the boiler follow the instructions as described on the following pages.
6. Set any external controls as required.

Filling the Central heating system (filling loop)

Open the Central Heating (flow and return) isolation valves as indicated on Diagram 3 and install the filling loop on its connection. Gently open the filling loop taps until the correct pressure is indicated by the gauge (recommended 1.0bar; min. 0.5bar; max. 1.5bar).

If the loss of pressure problem persists, you **MUST** contact your Installation / Servicing company or Glow-worm Service.

Isolating Valves

- A Central heating - Return (open)
- B Central heating - Flow (open)
- C Cold water - Inlet (open)
- D Gas cock - (open)
- E Gauge (system pressure)

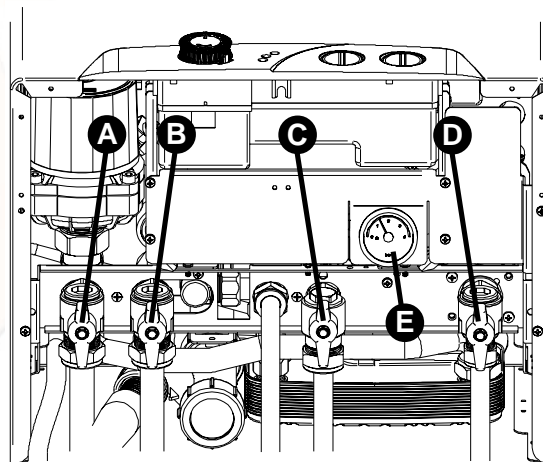


Diagram 3

Boiler Operation - User Controls

Central Heating knob (left one):

position - "Winter" to activate the boiler for heating and hot water production; the scale determines the central heating temperature (35 - 78°C);

position - "Summer" for hot water production only;

position - "Stand-by - Reset" to stand-by the boiler (frost protection still active) and to reset eventual safety lock-out.

Hot Water knob (right one):

scale determines the hot water temperature (30 - 55°C).

Positions and are reserved to the Technician, so don't turn the knob on these position to avoid unpredictable behaviour or malfunctions.

Indicators

Boiler lockout indicator

OFF: no problems occurred.

ON: safety lockout. To reset the boiler, turn the left knob on (reset) position, wait one minute to cool down the boiler, and then turn it on previous operating position.

Flashing: 1) Hot Water knob on a position reserved to the Technician; **2)** Fault inside the boiler. Call your Installation/ Servicing company or Glow-worm service.

Burner indicator

ON: the flame is present on the burner.

Flashing: Error. Check the Hot Water knob for correct position and reset the boiler by turning the left knob on (reset) position for a few seconds.

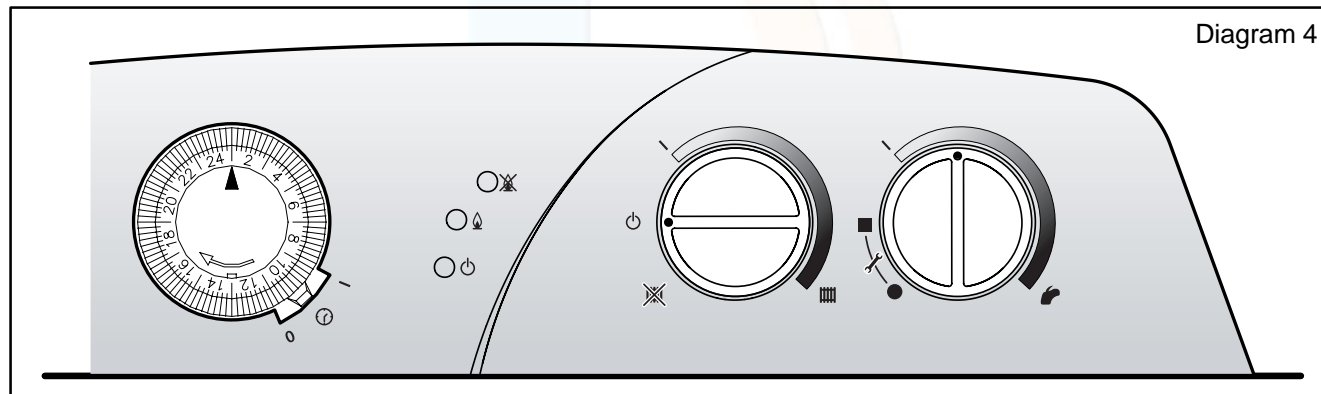


Diagram 4

Boiler Operation - User Controls

Power indicator

OFF: no electrical power supply to the boiler.

Flashing: boiler electrically fed, but in stand-by (⏻).

ON: boiler ready for operation upon demand.

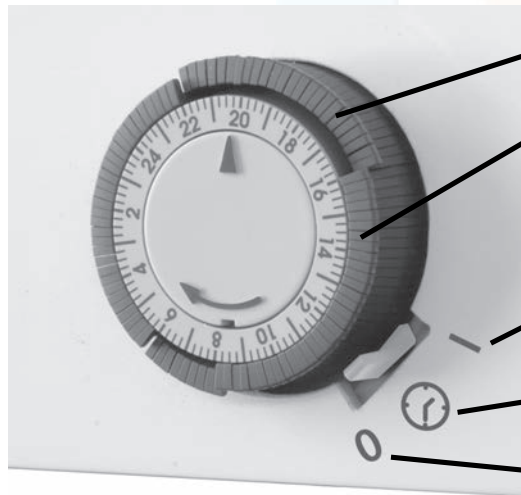
Timeclock

Turn the timeclock clockwise on the current time. Note: the timeclock stops when power supply fails: if so, check the time again.

Set the heating time by pushing in the toggles corresponding to the hours of the day that you want to heat. Note: heating will be managed also by external controls (e.g. room thermostat) if any.

Set the timeclock's lever on ⌚ to enable timed heating.

See Diagram 5 for details.



Toggles IN - Heating enabled

Toggles OUT - Heating disabled

Lever on "I" - Heating always on
regardless toggles setting

Lever on ⌚ - Heating follows toggles setting

Lever on "0" - Heating always off
regardless toggles setting

Diagram 5

Because of our constant endeavour for improvement, details may vary slightly from those shown in these instructions.