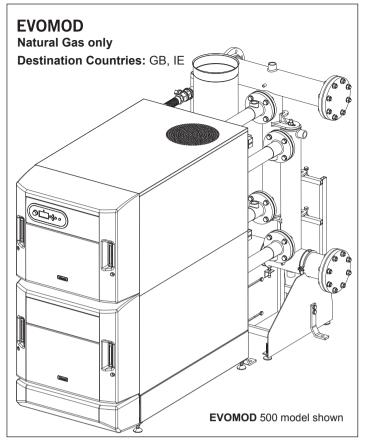


USER GUIDE

EVOMOD 250 500 750 1000

When replacing any part on this appliance, 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 Ideal.

For the very latest copy of literature for specification and maintenance practices visit our website www.idealcommercialboilers.com where you can download the relevant information in PDF format.



Introduction

The **EVOMOD** boilers are fully automatically controlled, floor standing, fanned, super efficient condensing appliances.

Due to the very high efficiency, condensate is produced from the flue gases and this is drained to a suitable disposal point through the plastic waste pipe at the bottom of the boiler. A condensate 'plume' will also often be visible at the flue terminal.

Safety

Current Gas Safety (Installation & Use) Regulations or rules in force.

In your own interest, and that of safety, it is the law that this boiler must be installed and maintained by a Gas Safe Registered Engineer or in IE a competent person, in accordance with the above regulations.

The appliance should be serviced at least once a year by a Gas Safe Registered Engineer or in IE a competent person.

It is essential that the instructions in this booklet are strictly followed, for safe and economical operation of the boiler.

Electricity Supply

The appliance must be earthed.

Supply 230 V - 50 Hz.

This appliance is intended to be connected to the supply via a double-pole switch, having a 3mm contact separation in both poles, serving only the boiler and system controls.

Important Notes

- This appliance must not be operated without the casing correctly fitted.
- Do not store objects around or on the boiler, and keep access clear at all times.
- Do not obstruct ventilation ducts, grilles or openings in the boiler room, room space or compartment that the appliance is installed in, or the passage of combustion and ventilation to the boiler.
- Do not turn off the boiler if it is to be left unattended in frosty weather.
- If it is known or suspected that a fault exists on the boiler then it MUST NOT BE USED until the fault has been corrected by a Gas Safe Registered Engineer or in IE a competent person.
- Flammable materials must not be placed in close proximity to the appliance. Materials giving off flammable vapours must not be stored in the same room as the appliance.

In cases of repeated or continuous shutdown a Gas Safe Registered Engineer or in IE a competent person should be called to investigate and rectify the condition causing this and carry out an operational test after each intervention on the device. Only the manufacturers original parts should be used for replacement.

Minimum Clearances

Rear:

750mm or adequate space from the rear of the jacket to make the flue connections, drain connection, flue and any safety or control devices.

Left Side: 400mm.

Right Side:

450mm.

Front:

600mm for normal service and replacement of components. However, it is noted that 1.2m is required in the event of heat exchanger replacement.

Top:

300mm (clearance above boiler casing).

All Gas Safe Registered Engineers carry a Gas Safe Register ID card, and have a registration number. Both should be recorded in your Log Book. You can check your installer by calling Gas Safe Register direct on 0800 4085500

CAUTION. To avoid the possibility of injury during the installation, servicing or cleaning of this appliance care should be taken when handling edges of sheet steel components.

1 BOILER CONTROLS / DISPLAY (MASTER PANEL SHOW	N)
BURNER ON SCROLL AMAGE AMAGE SELECT SELECT SELECT SELECT SELECT SELECT SELECT SELECT SELECT SELECT	INTER RESET
Mains On When the mains to the boiler is switched on a screen similar to the following will be displayed.	Initialising Please Wait U/I PCB 330.E18 Pri' PCB 332.E08
Off Mode If the boiler has been switched to Off Mode the following screens will be diusplayed. No Boiler operation will take place with this setting. See page 26 to change to On Mode. For a 250kW boiler only Module1 will be shown, for a 500kW boiler only Module1 and Module2 will be shown etc.	Off Mode For Heating select On Mode Press select for Menu Off Mode Module 1 Standby Module 3 Standby Module 4 Standby
Heat Demand Off, Switched Live Mode If there is no Heat Demand from the External Switched Live Control then screens similar to the following will be displayed. See page 28 to set the boiler for 0-10V Operation. For a 250kW boiler only Module1 will be shown, for a 500kW boiler only Module1 and Module2 will be shown etc.	Heat Demand Off No Heat Demand from Switched Live Press select for Menu
Heat Demand On, Switched Live Mode If there is an ongoing Heat Demand generated by the switched live to the boiler being on then screens similar to the following will be displayed. The Flow Setpoint will vary depending on its setting. See page 26 for adjusting Flow Setpoint. Flow Temp will vary with the actual flow temperature of the boiler. Either Standby, Fan Pre-Purge, Ignition, Burner On, Fan Post-Purge or Pump Overrun will be shown for each module dependent on its current operating state. For a 250kW boiler only Module1 will be shown, for a 500kW boiler only Module1 and Module2 will be shown etc.	Heat Demand On Switched Live On Flow Setpoint 80°C Flow Temp 80°C Press select for Menu
Boiler Frost Protection Mode If the boiler flow temperature drops below 5°C screens similar to the following will be displayed. Flow Temp will vary with the actual flow temperature of the boiler. Either Standby, Fan Pre-Purge, Ignition, Burner On, Fan Post-Purge or Pump Overrun will be shown for each module independently dependent on its current operating state. For a 250kW boiler only Module1 will be shown, for a 500kW boiler only Module1 and Module2 will be shown etc.	Heat Demand On Boiler Frost Protection Frost Setpoint Flow Temp 5°C Press select for Menu
Heat Demand Off, 0-10V Operating Mode If there is no Heat Demand from the External 0-10V Control then a screen similar to the following will be displayed. See page 28 to set the boiler to Switched Live Operation. For a 250kW boiler only Module1 will be shown, for a 500kW boiler only Module1 and Module2 will be shown etc.	Heat Demand Off No Heat Demand from 0-10V Input Press select for Menu
Heat Demand On, 0-10V Capacity Operating Mode If there is an ongoing Heat Demand generated by the 0-10V signal to the boiler, and the boiler is configured for 0-10V Capacity Operation, then screens similar to the following will be displayed. See page 28 to set the boiler to 0-10V Temperature Operation. The Target Output will vary dependent on the 0-10V signal. Actual Output will vary with actual burner outputs of the boiler. Flow Temp will vary with the actual flow temperature of the boiler. Either Standby, Fan Pre-Purge, Ignition, Burner On, Fan Post-Purge or Pump Overrun will be shown for each module dependent on its current operating state.	Heat Demand On 0-10V Input = 10V Target Output = 100% Actual Output = 100% Flow Temp 20°C
Heat Demand On, 0-10V Temperature Operating Mode If there is an ongoing Heat Demand generated by the 0-10V signal to the boiler, and the boiler is configured for 0-10V Temperature Operation, then screens similar to the following will be displayed. See page 28 to set the boiler to 0-10V Capacity Operation. The Flow Setpoint will vary dependent on the 0-10V signal. Flow Temp will vary with the actual flow temperature of the boiler Either Standby, Fan Pre-Purge, Ignition, Burner On, Fan Post-Purge or Pump Overrun will be shown for each module dependent on its current operating state.	Heat Demand On 0-10V Input = 10V Flow Setpoint 80°C Flow Temp 80°C Press select for Menu Module 3 Standby Module 4

2 EVOMOD BASIC OPERATING INSTRUCTIONS

SETTING FLOW TEMPERATURE

Press SELECT and a screen similar to the following will be displayed The kW output number in the 1st line will vary depending on the maximum output of the boiler

Ideal 750kW

Normal Operation Set Flow Temp' Set Off/On

Rotate the KNOB clockwise until a screen similar to the following is displayed

Ideal 750kW Normal Operation Set Flow Temp' Set Off/On State of Inputs

Press SELECT and a screen similar to the following will be displayed

Set Flow Temp'

80°C

Press + and - to change to the required setting and then press ENTER to store

Rotate the KNOB anti-clockwise until Normal Operation is highlighted again and press SELECT to return to normal operation

SETTING OFF/ON MODE

Note that Off Mode will disable the Boiler

Press SELECT and a screen similar to the following will be displayed The kW output number in the 1st line will vary depending on the maximum output of the boiler

Ideal 750kW

Normal Operation Set Flow Temp' Set Off/On

Rotate the KNOB clockwise until a screen similar to the following is displayed

Ideal 750kW Set Flow Temp' SetOff/On Mode State of Inputs State of Outputs

Press SELECT and a screen similar to the following will be displayed

Set Off/On Off Mode
On Mode
Minimum
Maximum

Press + and - to change to the required setting and then press ENTER to store

Rotate the KNOB anti-clockwise until Normal Operation is highlighted again and press SELECT to return to normal operation

To shut Down the Boiler

1. For short periods

Set the external controls to OFF. Wait 2 minutes and then isolate the mains supply to the boiler.

2. For longer periods

Set the external controls to OFF. Wait 2 minutes and then isolate the mains supply to the boiler. For longer periods the entire system should be drained, including the domestic hot water supply.

To Relight the Boiler

Refill the system if it has been drained, taking care to ensure no air is in the boiler or system.

Repeat the procedure detailed in 'To light the boiler'.

Frost Protection

The **EVOMOD** boiler has built into its control system the facility to protect the boiler only against freezing.

Note

This may not protect remote parts of the system, in which case a separate frost protection should be fitted.

Boiler Overheat

Boiler overheating is detected by electrical sensors connected to the boiler control module. If the boiler overheats it will shut down and the display will show Overheat Lockout. Press the 'reset' button then turn the knob so that the Module is highlighted and press reset again and the boiler will relight. If the fault recurs turn off the boiler and consult a Gas Safe Registered Engineer or in IE a competent person.

Condensate Drain

The condensate drain must not be modified or blocked.

Blockage of the condensate drain, caused by debris or freezing, can cause automatic shutdown of the boiler or leakage from the condensate trap mounted on the bottom of the boiler.

If freezing is suspected and the pipe run is accessible an attempt may be made to free the obstruction by pouring hot water over the exposed pipe and clearing any blockage from the end of the pipe. If this fails to remedy the problem the assistance of a Gas Safe Registered Engineer or in IE a competent person should be sought.

Escape of Gas

Should a gas leak or fault be suspected contact your local gas supplier without delay.

Do NOT search for gas leaks with a naked flame.

Cleaning

For normal cleaning simply dust with a dry cloth.

To remove stubborn marks and stains use a damp cloth and mild detergent.

DO NOT use abrasive cleaning materials.



Ideal Boilers Ltd. pursues a policy of continuing improvement in the design and performance of its products. The right is therefore reserved to vary specification without notice.

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