



6, 9, & 12kW  
Electric Boiler

**INSTALLATION AND  
USER GUIDE**



## THANK YOU FOR BUYING THE ADVANCE eGLOW ELECTRIC BOILER

Please read and understand these instructions prior to installation and commissioning. These instructions should be left with the customer once the unit is commissioned and running satisfactorily.

The boiler is available in three output versions, 6kW, 9kW and 12kW and can be specified for standard central heating circuits with an 80 degree flow or underfloor circuits with a 60 degree flow.

The unit is intended for domestic central heating systems and can be connected to single phase domestic electricity supplies, please see the Technical Specification for more information.

Advance eGlow boilers are compact and quiet in operation, require no fluing and can be located anywhere within the property. A pump is fitted in the eGlow making installation very straight forward. The pump has an over run facility and there is an automatic by pass fitted. The eGlow can be installed as a sealed system boiler or in open vented mode. A sealed system kit is available for easy installation with an 8 litre expansion vessel. This can be sited anywhere in the circuit giving the installer flexibility.

The eGlow is controlled externally with a programmer and room thermostat arrangement with voltage free switching. There is a connector in the boiler casing for this purpose. Standard central heating programmers and room thermostats can be used.

The boiler is fully modulating and soft switched on start up. This enhances the life of the heat exchangers as well as reducing the loading on domestic electricity. A single LED highlights running and fault modes.

A flow switch prevents the boiler running in dry conditions and there are two levels of overheat protection.

The Advance eGlow boiler is guaranteed for two years against faulty manufacture, subject to terms and conditions, and a technical help desk service is offered during office hours. The unit requires no maintenance in ordinary operating conditions. Stainless steel heat exchangers are fitted for long life and reliability.

## PRODUCT CODES

CODE	TYPE	SIZE	WEIGHT FULLKG
EG6	6KW CENTRAL HEATING BOILER	500h x 400w x 167d	15KG
EG6-U	6KW UNDERFLOOR HEATING BOILER	500h x 400w x 167d	15KG
EG9	9KW CENTRAL HEATING BOILER	500h x 400w x 167d	15KG
EG9-U	9KW UNDERFLOOR HEATING BOILER	500h x 400w x 167d	15KG
EG12	12KW CENTRAL HEATING BOILER	500h x 400w x 167d	15KG
EG12-U	12 KW UNDERFLOOR HEATING BOILER	500h x 400w x 167d	15KG

## OPTIONAL SEALED SYSTEM KIT AA 0400

COLD FILL HOSE WITH DOUBLE ISOLATION  
3 BAR PRESSURE RELIEF VALVE 1/2"  
EXPANSION VESSEL 8 LITRES  
PRESSURE GAUGE

## TECHNICAL SPECIFICATIONS

POWER RATING	6kW	9kW	12Kw
FLOW AND RETURN	22MM BOTTOM ENTRY	22MM BOTTOM ENTRY	22MM BOTTOM ENTRY
STATIC HEAD MIN	600MM	600MM	600MM
ELECTRICAL SUPPLY	SP 240 VAC 50hz	SP 240 VAC 50hz	SP 240 VAC 50hz
CURRENT RATING	30 AMPS	40 AMPS	50 AMPS
PROTECTION	32 AMPS	45 AMPS	63 AMPS
PUMP	15/50	15/50	15/50
PUMP SETTING	MAX	MAX	MAX
OUTPUT TEMP (MAX)	80°C	80°C	80°C
UNDERFLOOR UNITS OUTPUT TEMP (MAX)	60°C	60°C	60°C
HIGH LIMIT TEMP CONTROL 2 STAGE	90°/95°C	90°/95°C	90°/95°C
NOM HEAT OUTPUT	20,000 BTU	30,000 BTU	40,000 BTU
AUTO AIR VENT	FITTED	FITTED	FITTED
FLOW SWITCH	FITTED	FITTED	FITTED
AUTO BY PASS	FITTED	FITTED	FITTED
MIN PRESSURE COLD FILL (SEALED SYSTEM)	0.6 BAR	0.6 BAR	0.6 BAR
MAX PRESSURE HOT (SEALED SYSTEM)	3 BAR	3 BAR	3 BAR
HEAT EXCHANGERS	STAINLESS STEEL 3Kw PODS	STAINLESS STEEL 3Kw PODS	STAINLESS STEEL 3Kw PODS
IPX RATING	1	1	1

## MOUNTING THE BOILER

Please ensure that all current local by laws and national building regulations are consulted prior to installation along with current codes of practice.

The unit must be mounted in a vertical position accessible for servicing. Effectively this means allowing front facing access to remove the outer door casing to access the eGlow.

Please check load bearing and ensure correct fixing is used. There are four holes in the casing for this purpose.

The 22mm flow and return pipes are at the bottom of the boiler, and should be connected using compression or push fit fittings. Do not solder connections within 600mm of the boiler. Flow is marked red, return is marked blue.

## SAFETY

No special precautions are required, however due care should be taken in installing, commissioning and servicing to prevent electric shock or water leakage.

## INSTALLATION

Only persons competent to do so may fit this appliance.

Calculate space heating requirements and allow an extra 3kW for hot water provision if an indirect cylinder is to be installed. Advance recommend an Advance Appliances stainless steel unvented cylinder and would always advise customers to consider renewable energy such as solar to contribute toward the generation of domestic hot water. Using a direct (electric) Advance Appliances unvented cylinder will reduce installation cost.

Controls such as room thermostats and programmers or timers must be installed to comply with current Part L requirements.

Ensure that the correct appliance is fitted, for example by sizing to meet demand and by choosing underfloor or central heating models.

The system must be properly flushed and have inhibitor added according to manufacturer's specifications. Always choose a recognised brand and inhibit to the correct dilution. Always flush out completely as any chlorine based chemicals can attack stainless steel components. After drain down, even a partial one, inhibitor levels must be topped up.

Y, W or S plan systems may be used with the eGlow.

Primary pipe work in enclosed spaces such as boiler cupboards should be insulated.

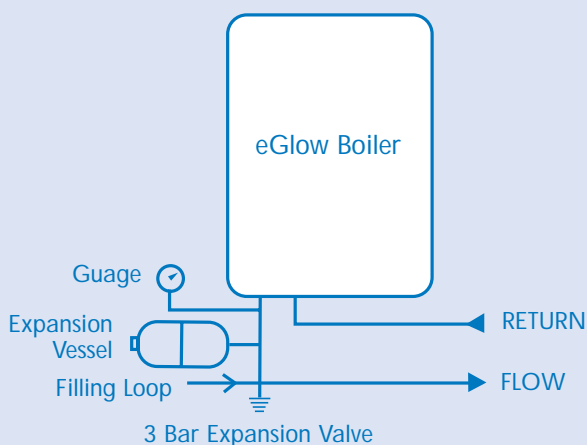
It is advisable to have a locked open radiator or towel rail in the system. The radiator where the room thermostat is located must be kept on.

Thermostatic radiator valves are recommended

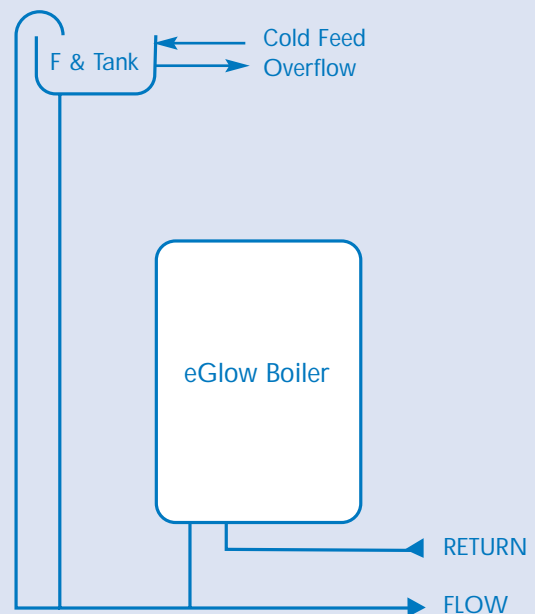
## INSTALLATION SCHEMATICS

### SEALED SYSTEM

Sealed System Kits are available from Advance Appliances and can be sited anywhere in the open pipework of the system



### OPEN VENT SYSTEM



The eGlow boiler can be configured in sealed system or open vented mode. Where sealed systems are installed a kit can be purchased from Advance Appliances to make the job simple. An 8 litre expansion vessel is supplied with each kit but it should be noted that systems with high water content may require larger vessels. All heating systems must be isolated from the mains water supply after the system is filled. Open vented systems should have feed and expansion tanks situated 600mm above the highest point of the circuit and installed using best practice. Top up inhibitor in open systems annually to allow for water loss and dilution through evaporation.

## ELECTRICAL CONNECTIONS

### THIS APPLIANCE MUST BE EARTHED

The appropriate current regulations and best practices must always be followed. Installation must be carried out by a competent and qualified tradesman. Use off peak supplies where possible to reduce running costs

Check the incoming supply meets the minimum requirements of the appliance and utilise a double pole RCD capable of breaking the full current load. Remember that the full house loading must be taken into consideration when calculating mains demand. Refer to IEE regulations for wiring size to the appliance. The mains feed goes directly to the terminal block identified on the schematic (inside back cover) and the boiler itself. The earth must be connected to the marked point.

Standard switching is maintained through the controls, zero voltage switching is used and a separate power supply for programmer and room thermostat (if digital) should be used. In some cases this may be a battery or a mains charger with rechargeable cells in the programmer. This control circuit is identified on the schematic (inside back cover) and will switch the boiler internally.

In the case of a combined hot water and heating system a Y plan or similar can be used with a three port motorised valve, in which case a separate mains supply will be required to operate the valve which will be switched via a suitable programmer NOT the boiler PCB. Use a relay if any voltage is present.

Always consult manufacturer's requirements and recommendations for controls, the above advice is of a general nature only.

#### Check after installation

- Polarity
- Short circuit
- Earth continuity
- Resistance to earth
- Visual check for stray wiring strands etc
- Mechanical check for integrity of connections

Do not switch on until the unit is full of water and air has been purged from the system.

### **IMPORTANT**

The switching in the boiler is zero voltage and cannot be used for mains switching e.g. three port valves.

We recommend hot water is provided by an independent electric/solar cylinder for optimum efficiency.

## COMMISSIONING

Fill the system by opening isolating valves to the feed and expansion tank or to the filling loop of a sealed system. Charge sealed systems from 0.75 bar to 1 bar.

When the system is full, and has been thoroughly checked for leaks it should be flushed out to remove any debris.

Refill, add system cleanser and switch on the boiler.

The boiler controls are fully automatic. The LED will turn green showing that the boiler is powered up and awaiting demand. When heating demand is on (set the programmer and room thermostat to call for demand) the pump will be energised for 5 seconds in order for the flow switch to sense flow in the boiler. If it does not sense flow the boiler will switch off, the LED will show red (continuously) indicating that the circuit contains air (no flow). Check that all air is purged and try again. The boiler can be switched back on again by turning the programmer/room thermostat off and on. It is usual for this process to take a little time in all heating circuits.

NEVER link the flow switch out – it is dangerous and will damage the heater pods. This action will void guarantees.

Allow the boiler to run for 30 minutes to ensure that it is operating correctly and flush again.

Refill the system adding inhibitor following manufacturer's instructions and switch on.

## USER INSTRUCTIONS

Set the programmer to match your own preferences for heating periods. The room thermostat should be set at a comfort level, usually 20°C. The room thermostat should be in a room where the radiator is locked on e.g. a hallway, study etc rather than a living room or bedroom. The boiler is automatic and should give a trouble free life.

The green LED means that there is power to the boiler; it doesn't mean that the boiler is actually heating the system. It does this when there is demand for heating through the programmer and room thermostat.

If there is insufficient water in the system the red LED will be on continuously. Switch the room thermostat off and on (making sure that the programmer is on) to start the boiler up again, air may be present in the system. If the fault persists the system may need recharging – consult your installer.

The case can be kept clean with a damp cloth.

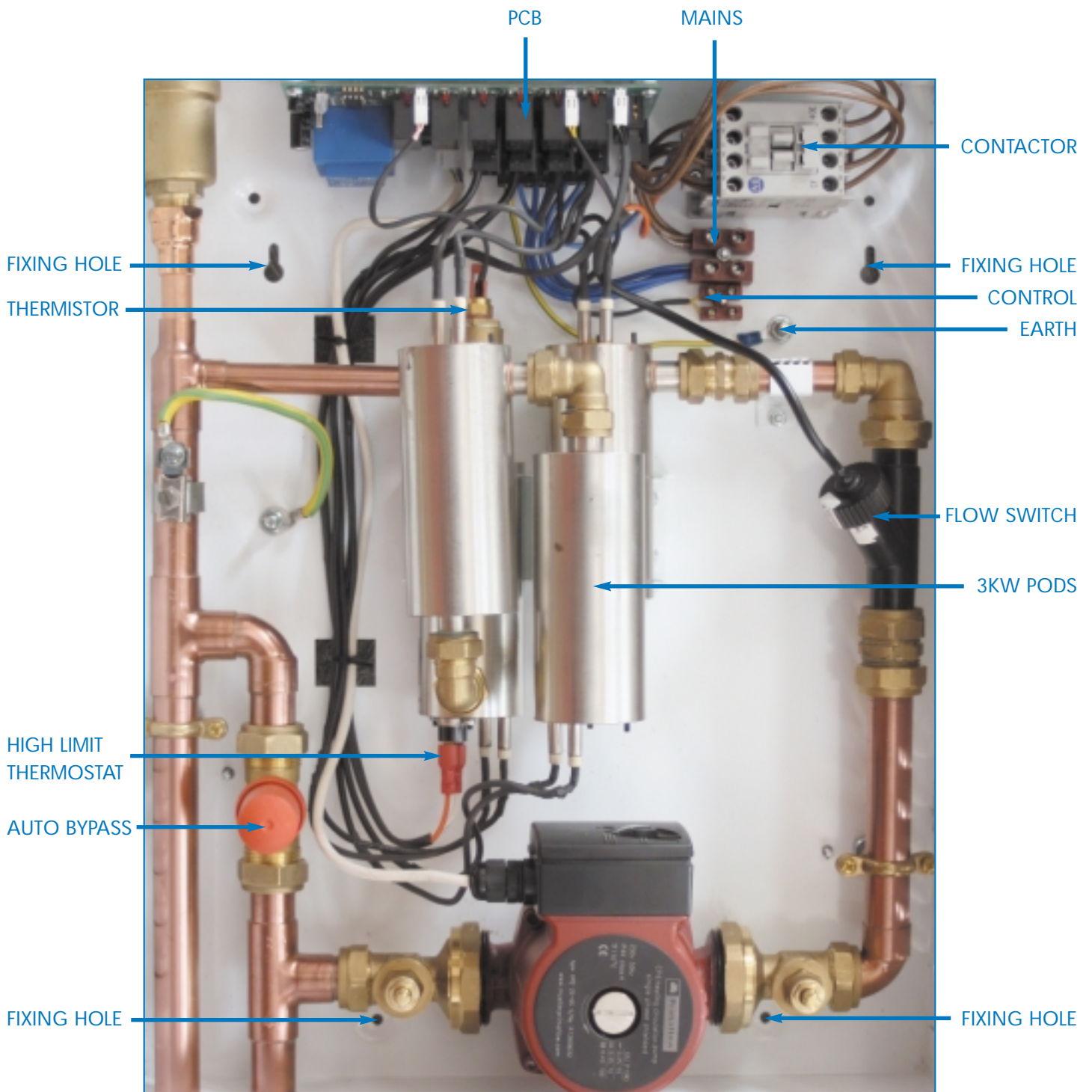
## FAILURE

The LED may flash red, indicating overheat. The unit is protected by the PCB controller in addition to a thermo-mechanical device. The appliance will reset itself when it cools. If the overheat recurs please ensure that the connection from the thermistor (see schematic inside back cover) to the PCB is soundly made. A continuous red LED relates to a no flow condition and air must be purged from the heating circuit.

## PROTECTION

In situations where this appliance may be subject to temperatures below 5°C (e.g. holiday lets not occupied in winter etc) a frost thermostat can be linked to the control circuit. The unit should always be installed in the main envelope of the property, never outside.

The eGlow can be safely installed in most situations, however, excessive moisture or temperature extremes should be avoided.



## PART NUMBERS

3Kw HEATER PODS	AA0401
PCB ASSEMBLY	AA0402
FLOW SWITCH	AA0403
AUTO AIR VENT	AA0404
AUTO BY PASS	AA0405
THERMISTOR	AA0406
PUMP	AA0407
CONTACTOR	AA0408
HIGH LIMIT THERMOSTAT	AA0409

## ADVANCE APPLIANCES GUARANTEE

The eGlow has been manufactured and tested to a high specification and should give years of trouble free life. If it should go wrong you will be covered for a period of two years from the date of installation provided that

- You keep proof of purchase/installation date
- It is installed correctly and the benchmark paperwork is completed
- It is used for its intended purpose
- It is operated properly
- It has not been tampered with or altered in any other way (for example removing the caps on flow switches)

The foregoing does not affect your statutory rights.

Please contact Advance Appliances in the first instance.

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