

# ***User Instructions***

## **E-Tec 28 and 33**

**Wall Mounted, Fan Assisted, Room Sealed,  
Gas Fired, High Efficiency Condensing Combination Boiler**

For Technical help or for Service call ...  
**ALPHA HELPLINE Tel: 0844 871 8764**  
website: [www.alpha-innovation.co.uk](http://www.alpha-innovation.co.uk)

***Alpha***  
HEATING INNOVATION

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Kent TN15 7RS



**Set for use with Natural Gas**

**Leave these instructions with the User**

*These instructions have been carefully prepared but we reserve the right to alter the specification at any time in the interest of product improvement.*  
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Please read these instructions carefully before operating your boiler.

## 1 INTRODUCTION

The Alpha E-Tec range of high efficiency condensing boilers incorporate the latest technology in boiler design. With improved burner efficiency and reduced electrical consumption together with high quality and reliability.

The boiler output will automatically adjust according to the requirements of the system.

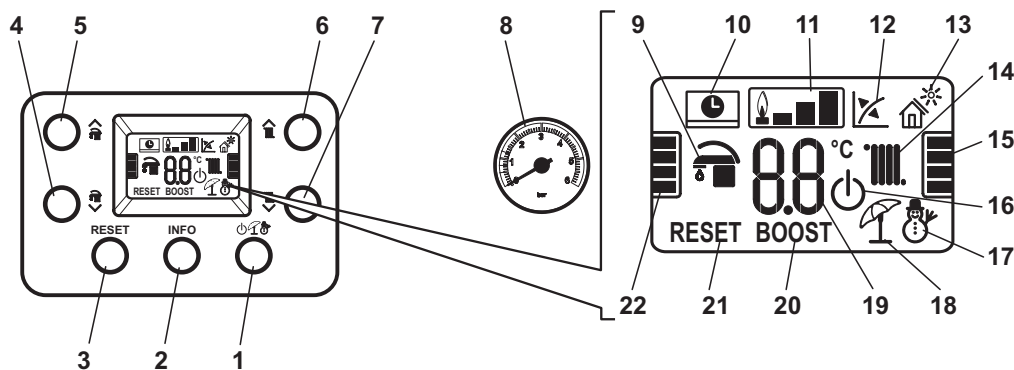
The E-Tec range are designed to work with most central heating controls however we recommend the Alpha Comfort or Easy-Stat standard controls or the enhanced Alpha Climatic boiler energy manager further improving the system efficiency by varying the system temperature depending on the room temperature and heat losses.

In addition all E-Tec models feature optional connections for an outside sensor to enable the boilers built in weather compensation feature.

The boilers will provide central heating when required during the on times as set according to the controls fitted. Hot water will always take priority over the central heating whenever a hot tap is opened.

## 2 OPERATING THE BOILER

The boiler controls are located on the control panel. Make sure the heating system is filled and the needle on the pressure gauge (item 8 in Fig. 1) is in the green band when cold. If incorrect refer to Section 4.



- |   |   |  |
|---|---|--|
| 1 - Off/Stand-by/Summer/Winter button       | 9 - Domestic hot water active               | 17 - Winter mode – heating and hot water |
| 2 - Information button                      | 10 - Remote Climatic controller fitted      | 18 - Summer mode – DHW only              |
| 3 - Reset Button                            | 11 - Boiler fired and power level           | 19 - Temperature/info/code - display     |
| 4 - Reduce DHW set temperature              | 12 - External weather probe fitted          | 20 - Not used on this model              |
| 5 - Increase DHW set temperature            | 13 - Active solar supply (pre-heated inlet) | 21 - Boiler locked - reset required      |
| 6 - Increase heating system set temperature | 14 - Central heating active                 | 22 - DHW temperature indicator           |
| 7 - Reduce heating system set temperature   | 15 - Central heating temperature indicator  |  |
| 8 - Heating system pressure gauge           | 16 - Boiler in Stand-by mode                |  |

Fig. 1

Switch the boiler on at the mains supply socket switch. The boiler will be in either 'Standby' or 'On' mode.

By pressing the Mode button (item 1 in Fig. 1) the Standby or On mode can be selected, or press and hold the Mode button for eight seconds to turn the boiler off.

**Standby** - In this mode the boiler will not provide hot water or central heating, but frost protection and pump circulation features are still active.

**Off** - In this mode there is electrical power to the boiler but the boiler will not function in any condition.

**On** - In this mode the boiler can be switched between 'Summer' or 'Winter' settings by pressing the Mode button (item 1 in Fig. 1).

**Summer setting** - The boiler will only provide hot water when a tap is turned on and the central heating will not activate even if requested by external controls (frost protection and pump cycle are still active).


**Winter setting** - The boiler will operate in both heating and hot water. The heating will activate depending on the time and temperature from any heating controls fitted. Hot water will always take priority over heating when a hot outlet tap is opened.

### 3 HEATING AND HOT WATER TEMPERATURE

The temperature of the hot water to the taps can be adjusted by using the hot water temperature control buttons (items 4 and 5 in Fig. 1) to the required value shown on the display in °C.

When a tap is opened the display will indicate the temperature of water in the boiler heating the tap water and not the actual water temperature to the tap.

The temperature of the central heating water can be adjusted by using the heating temperature control buttons (items 6 and 7 in Fig. 1). When the heating is on the temperature of the water leaving the boiler to the radiators will be displayed.

If an external weather compensation probe is fitted, indicated by the  symbol (item 12 in Fig. 1) in the display, it will automatically vary the temperature of the water in the radiators and on a mild day the radiators will not feel as hot as on a cold day, this is normal and not a fault with the boiler or heating circuit. The room temperature will still be maintained as set by the room thermostat.

When an external weather sensor is fitted, the central heating temperature control buttons (items 6 and 7 in Fig. 1) will no longer adjust the flow temperature in °C, instead the display will show a scale of 1 to 9. Each number corresponds to a line on the graph in Fig 2 i.e. line 6 will give a flow temperature of 60°C when the external temperature is 10°C.

**Note:** This is the temperature of the water supplied to the radiators and not the desired room temperature. The time and temperature will still be maintained according to the setting of the room thermostat.

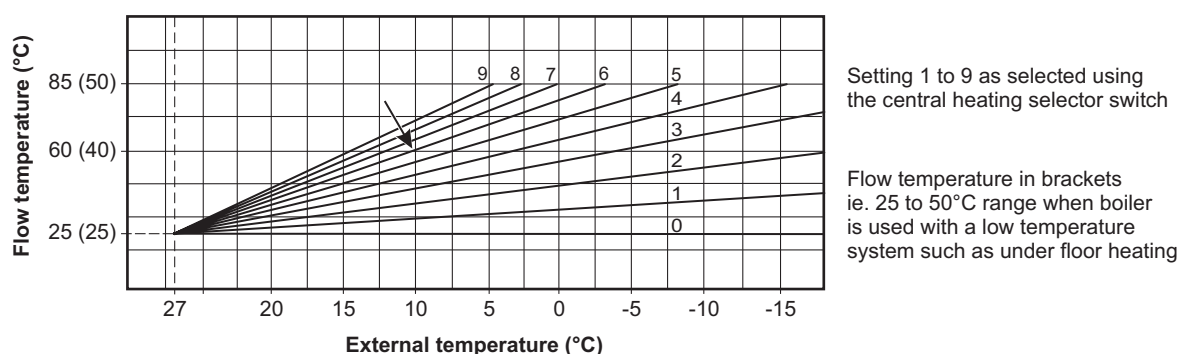


Fig. 2 - External weather compensation probe fitted

### 4 FILL AND PRESSURISE THE SYSTEM

E-Tec models should have a filling loop fitted by the installer located in the pipework below the boiler.

**Do not attempt to fill or pressurise the system while the system is hot - wait for it to cool.**

The filling loop will have a tap connection at either end. These taps should normally be in the closed position 90° to the tap housing.

To fill or pressurise the system open one tap fully by turning it 90° anticlockwise in line with the tap housing. The second tap should be opened a quarter of a turn and the water will start to refill the system (water should be heard filling the system). You should see the pressure gauge (item 8 in Fig. 1) rise back up into the green area on the pressure gauge between 1 bar and 1.5 bar pressure.

Once the pressure gauge is in the green area turn the taps back to the off position and the water will stop filling the system.

If you happen to fill the system too much and the pressure gauge needle is over the green area, just bleed water from a radiator until the pressure on the gauge goes down into the green area.

It is normal for the pressure to be in the black area of the gauge when the boiler is operating

## 5 FROST PROTECTION

The boiler has a built in frost protection function to protect the boiler (only) from freezing. If water within the boiler falls below 4°C the boiler will fire in heating mode and raise the temperature of the heating water (in the boiler only) to 30°C.

For this function to be active the gas and electricity supplies to the boiler must be turned on and the boiler be in either 'Standby' or 'On' mode.

Further protection for the mains water supply and heating circuit must be provided separately.

If Alpha external controls are fitted, a frost protection setting is incorporated into the room thermostat activating the central heating when the temperature falls below 5°C.

## 6 CONDENSATE DRAINAGE

High efficiency (condensing) boilers remove more useful heat from the combustion gases, resulting in additional water vapour which is collected within the boiler (as condensate) and run to a suitable drainage point via the condensate drainage pipe.

Where possible the condensate drain should be connected internally to a waste pipe within the property to prevent the risk of freezing.

If the condensate drain pipe runs outside it should be fitted with increased diameter pipe and be suitably lagged to reduce the risk from freezing.

In situations where there are likely to be extremes of temperature or wind-chill the use of a proprietary trace-heating system for external condensate drainage pipework, incorporating an external frost thermostat, should be considered.

## 7 GAS SAFETY REGULATIONS

Current Gas Safety (Installation and Use) Regulations:-

It is the law that all gas appliances are installed and serviced by a competent person, i.e. Gas Safe registered personnel. Failure to install or service appliances correctly could lead to prosecution. It is in your interest and that of safety to ensure compliance with the law. The manufacturer's instructions must not be taken in any way as over-riding statutory obligations.

The Benchmark Checklist must be fully completed by the installer on installation of the boiler. The Benchmark Checklist is shown in back of the Installation and Servicing instructions. All Gas Safe registered installers carry a Gas Safe ID card and have a registration number. Both should be recorded in the Checklist. You can check your installer is Gas Safe registered by calling Gas Safe on 0800 408 5500.

## 8 BENCHMARK COMMISSIONING and SERVICING

It is a requirement that the boiler is installed and commissioned to the manufacturers instructions and the data fields on the commissioning checklist completed in full.

To instigate the boiler guarantee the boiler needs to be registered with the manufacturer within one month of the installation.

To maintain the boiler guarantee it is essential that the boiler is serviced annually by a Gas Safe registered engineer who has been trained on the boiler installed. The service details should be recorded on the Benchmark Service Interval Record and left with the householder.

## 9 IMPORTANT NOTES

### 1. BOILER LOCATION

Always ensure the following clearances are available around the casing of the boiler:-

**Top:** (horizontal flue) 235 mm, **Top:** (vertical flue) 150 mm, **Bottom:** 150 mm, **Each side:** 5 mm, **Front:** 450 mm

Do not store any other articles in a cupboard containing the boiler and never place any clothing or combustible material on or near the boiler or flue pipe.

### 2. FLUE TERMINAL

The terminal on the outside wall must not be allowed to be obstructed. If it is damaged, in any way, turn the boiler off and contact your Service Engineer.

**Note:** The Alpha E-Tec boiler is a high efficiency condensing boiler and when operating vapour will be emitted from the terminal. This is safe and quite normal.

### 3. MAINS FAILURE

In the event of an electrical supply failure the boiler will not operate. When the supply is restored, the boiler will return to normal operation. Remember to reset any controls, if fitted, when the supply is restored.

If the mains water supply fails, there will be no hot water from the taps. The boiler will continue to provide central heating.

### 4. ADDITIONAL BATHROOM FITTINGS

Any equipment such as mixing valves, showers, bidets etc. must be designed to operate at mains water pressure. Contact your plumbing merchant or installer for advice when considering purchasing such items.

### 5. CLEANING

Use only a damp cloth and mild detergent to clean the boiler outer casing. Do not use abrasive cleaners.

### 6. SERVICING

To maintain efficient and safe operation of your boiler, routine annual servicing is essential.

For advice on servicing contact:- The Alpha Helpline: 0844 871 8764.

### 7. GAS LEAK


If a fault or gas leak is suspected, turn off the gas supply. Do not touch any electrical switches, do not smoke and extinguish all naked flames. Contact the National Gas Emergency Service immediately on 0800 111 999.

### 8. ELECTRICAL SUPPLY

The boiler requires a 230/240 V ~ 50 Hz supply, fused at 3 A.

**To connect a plug:-**

The colour of the wires in the mains lead of the boiler may not correspond with the coloured markings identifying the terminals in your plug. In this case proceed as follows:-

The wire coloured green and yellow must be connected to the terminal in the plug that is marked with the letter **E**, or by the earth symbol , or coloured green or green and yellow.

The blue wire must be connected to the terminal which is marked with either the letter **N** or coloured black.

The brown wire must be connected to the terminal which is marked with the letter **L** or coloured red.

**THE APPLIANCE MUST BE EARTHED.**

## 10 OPTIONAL BOILER CONTROLS (if fitted)

There is a range of controls available from Alpha to operate your boiler. In addition to the items listed below the Alpha E-Tec boilers are compatible with most controls available on the market. However to get the most comfort and efficiency from your boiler we recommend the Alpha Climatic controls with enhanced remote boiler functions and efficiency control.

Please refer to the instructions provided with the controls for further information on their setting and use.

Available Alpha controls:

Alpha Easy-Stat wireless programmable room thermostat .....	Part No. 7.2000050
24hr mechanical heating clock (boiler mounted) .....	Part No. 6.1000201
Alpha Climatic wired programmable boiler energy manager .....	Part No. 3.022144
Alpha Climatic wireless programmable boiler energy manager (boiler mounted receiver) .....	Part No. 3.022143
External weather compensation probe .....	Part No. 3.022383