# User's Instructions

# Alpha SY24

# Wall Mounted, Fan Assisted, Room Sealed, Gas Fired System Boiler



British Gas Service Listed

**CE** 0694

Alpha SY24 G.C. No. 41 532 01

benchmark)

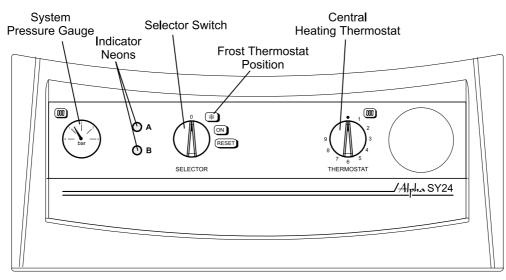
For use with Natural Gas only

Leave these instructions with the User

# **1 DESCRIPTION**

The Alpha SY24 boiler is a wall mounted, fan assisted room-sealed boiler, providing central heating. The Alpha SY24 boiler is suitable for central heating loads of between 9.3 and 23.3 kW (31 700 and 79 500 Btu/h). The boiler will provide central heating (as required) during the 'on' times set on your external clock (if fitted). The burner is lit electronically.

# 2 USER CONTROLS





# **3 BOILER CONTROLS**

## 1. CENTRAL HEATING THERMOSTAT

This thermostat controls the temperature of the water leaving the boiler for the heating system. For maximum output from the radiators the thermostat should be left at maximum i.e. fully clockwise. If lower heating temperatures are required, turn the thermostat anti-clockwise.

## 2. SELECTOR SWITCH

This control is used to turn the boiler on and off or to 'reset' the ignition sequence or to set to the frost thermostat only.

See section 4 Indicator Neons.

Note: The frost thermostat will not operate when the switch is in the vertical position, i.e. 'Off' position (0).

## 3. PRESSURE GAUGE

This indicates the central heating system pressure. It should always be within the green band when cold, increasing slightly when hot.

If the pressure falls below the green band, ie lower red area, the system needs re-pressurising. Contact your Installer to have the system checked and pressurised.

## 4. INDICATOR NEONS

When neon A (red) and neon B (yellow) are illuminated, the following conditions apply:-

Neon

- **B** Flashing very slowly (every 5 seconds) Electricity supply to the boiler is on.
- **B** Illuminated continuously Burner is alight.
- B Flashing on and off Temperature sensor fault, contact your Service Engineer.
- A Flashing on and off Overheat thermostat has operated. Rotate selector switch to the reset position (3) to reset. If this continues to happen, contact yor Service Engineer.
- A Illuminated continuously Burner has failed to light. Rotate selector switch to the reset position (3) and the ignition sequence will restart after a delay of about 30 seconds.
- A and B Flashing on and off at the same time Blocked flue or fan fault, contact your Service Engineer.

A and B Flashing on and off alternatively - System pressure is very low and re-pressurisation is required.

## 5. OVERHEAT THERMOSTAT

This thermostat automatically switches the boiler off in the unlikely event of the boiler overheating. When the thermostat operates, the red neon (A) flashes on and off. Rotate the selector switch to the reset position and the ignition sequence will start. If this continually happens, contact your Service Engineer.

#### 6. PRESSURE RELIEF VALVE

If the central heating system overheats and steam or water is discharged from the pipe connected to this valve, turn the boiler off and contact your Service Engineer. Your Installer should have told you where this pipe terminates somewhere outside your dwelling.

#### 7. FROST THERMOSTAT

The boiler has a built-in frost thermostat, which automatically operates the boiler if the water temperature falls below 8°C, providing the electrical supply is on and the selector switch is set to  $\frac{1}{3}$ , see Fig. 1.

## 4 LIGHTING INSTRUCTIONS

#### Refer to Fig. 1 for boiler controls.

- 1. Ensure the following:
  - a. Electrical supply to the boiler is off.
  - b. All heating controls and thermostats are set to OFF or minimum position.
  - c. All isolation valves at the bottom of the boiler are in the open position (slots on the spindle in line with the valves i.e. [m]).
  - d. The gas and water supplies are on at the mains.
  - e. The heating system pressure is within the green band as shown by the pressure gauge.
- 2. Turn the heating thermostat fully anticlockwise to **0**.
- 3. Switch on the electrical supply to the boiler.
- 4. Set any room thermostats to maximum and ensure that any clock is in an 'on' position.
- 5. Set the selector switch to **ON** and turn the heating thermostat fully clockwise. The main burner will light and the boiler will provide central heating.
- 6. Set the boiler heating thermostat, clock, external controls i.e. room thermostat to your chosen settings and the boiler is ready to operate.

#### To turn the boiler off for short periods:- Set the selector switch to 3

**Note:** In this position the pump will automatically operate for 5 minutes in every 24 hours. If the water temperature falls below 8°C the builtin frost thermostat will operate the boiler automatically until the temperature of the water in the heating system has been raised.

To turn the boiler off for longer periods:- Switch off the electrical supply to the boiler. If required, all supplies i.e. gas, water and electricity may be turned off at the mains. If there is any possibility of the boiler being left during frost conditions, then the boiler and system should be drained and a label attached to the boiler drawing attention that the system has been drained. If this is required, contact your Service Engineer.

## **5 IMPORTANT NOTES**

#### 1. BOILER LOCATION

Always ensure the following clearances are available around the casing of the boiler (not including the bottom tray):-

Top: 220 mm, Bottom: 250 mm, Each side: 5 mm, Front: 450 mm

Do not store any other articles in the 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. In cold weather, vapour may be emitted from the terminal. This is 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 the clock when the supply is restored.

#### 4. CLEANING

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

#### 5. SERVICING

To maintain efficient and safe operation of your boiler, routine annual servicing is essential. For advice on servicing contact:- The Alpha Helpline: 01322 669443.

#### 6. 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 your local Gas Region immediately.

## 7. ELECTRICAL SUPPLY

The boiler requires a 230/240 V ~ 50 Hz supply, fused at 3 A if a 13 A 3-pin plug is used or a 5 A fuse if any other type of plug is used.

#### 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  $\pm$ , 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.

# 6 GAS SAFETY REGULATIONS

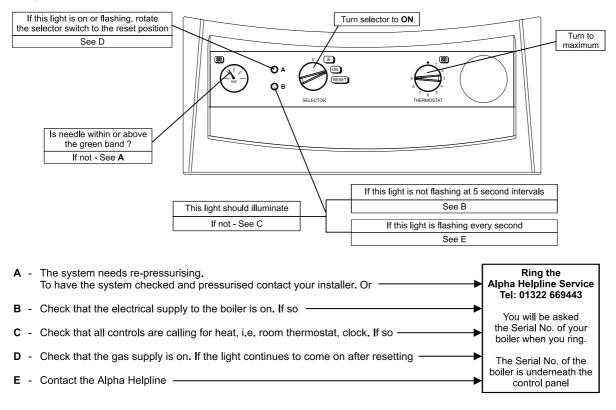
Current Gas Safety (Installation and Use) Regulations:-

It is the law that all gas appliances are installed and serviced by a competent person, ie CORGI 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 Log Book must be fully completed by the installer on installation of the boiler. All CORGI registered installers carry a CORGI ID card and have a registration number. Both should be recorded in your central heating Log Book. You can check your installer is CORGI registered by calling CORGI on 01256 372300.

# 7 FAULT FINDING FOR THE USER

If you experience a problem of no heating, try to solve the problem by following the simple checks below before calling out a service engineer.





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