Supplementary LPG Boiler Instructions

Alpha CD25C/28C/35C

Wall Mounted, Fan Assisted, Room Sealed, Gas Fired High Efficiency Condensing Boilers

For Technical help or for Service call ... ALPHA HELPLINE Tel: 0870 3001964



HEATING INNOVATION

Nepicar House, London Road, Wrotham Heath, Sevenoaks, Kent TN15 7RS

> British Gas Service Listed



Alpha CD25C Alpha CD28C Alpha CD35C

British Gas G.C. No. 47 532 32 British Gas G.C. No. 47 532 34 British Gas G.C. No. 47 532 36



benchmark

For use with LPG (Propane) only

Leave these instructions with the User

1 INTRODUCTION

This supplement is for the LPG model of the boiler; it **must be** read in conjunction with the 'Installation and Servicing Instructions' supplied with the boiler and provides the extra information which is particular to LPG.

The Alpha CD25C, CD28C and CD35C are combination boilers providing both central heating and domestic hot water at mains pressure.

The boilers are designed for use with a fully pumped, sealed and pressurised heating system using only PROPANE gas.

2 TECHNICAL DATA

PERFORMANCE - PROPANE GAS (CAT I3P 3P - G31 - 37 mbar)

Alpah CD25C

| Central Heating | | | MAX. | MIN. |
|---|------------------------------|-------|--------|--------|
| Heat Input (H) | | kW | 20.4 | 6.4 |
| (Gross) | | Btu/h | 69 600 | 21 800 |
| Heat Input (H _i) | | kW | 18.4 | 5.8 |
| (Net) | | Btu/h | 62 780 | 19 780 |
| Heat Output (H _s condensing) | | kW | 19.5 | 6.1 |
| (50°C/30°C) | | Btu/h | 66 550 | 20 820 |
| Heat Output (H, non-condensing) | |) kW | 18.0 | 5.5 |
| (80°C/60°C) | | Btu/h | 61 420 | 18 780 |
| Differential Burner | Room sealed chamber panel | mbar | 3.49 | 0.4 |
| Pressure | fitted | in wg | 1.4 | 0.16 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 0.78 | 0.24 |
| | | ft³/h | 27.6 | 8.5 |

Alpha CD25C

| Domestic Hot Water | | | MAX. | MIN. |
|-------------------------------------|-------------------------|---------|--------|--------|
| Heat Input (H _s) | | kW | 26.7 | 6.4 |
| (Gross) | | Btu/h | 91 100 | 21 960 |
| Heat Input (H _i) | | kW | 24.1 | 5.8 |
| (Net) | | Btu/h | 82 200 | 19 780 |
| Output to Water (H _s) | | kW | 24.3 | 5.5 |
| (modulating) | | Btu/h | 84 800 | 18 780 |
| Differential Burner | Room sealed | mbar | 6.78 | 0.40 |
| Pressure | chamber panel fitted | in wg | 2.71 | 0.16 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 1.02 | 0.24 |
| | | ft³/h | 36 | 8.5 |
| Flow Rate at 35°C Rise | | L/min | 9.6 | |
| | | gal/min | 2.2 | |
| Specific Flow Rate (D) at 30°C Rise | | L/min | 11.2 | |
| (Flow rate @ 30K to EN625) | | gal/min | 2.5 | |

Alpha CD28C

| Central Heating | | | MAX. | MIN. |
|---|------------------------------|-------|--------|--------|
| Heat Input (Hू) | | kW | 27.1 | 7.3 |
| (Gross) | | Btu/h | 92 400 | 24 900 |
| Heat Input (H _i) | | kW | 24.4 | 6.6 |
| (Net) | | Btu/h | 83 250 | 22 500 |
| Heat Output (H _s condensing) | | kW | 25.9 | 6.9 |
| (50°C/30°C) | | Btu/h | 88 400 | 23 500 |
| Heat Output (H, non-condensing) | |) kW | 24.0 | 6.3 |
| (80°C/60°C) | | Btu/h | 81 900 | 21 500 |
| Differential Burner | Room sealed chamber panel | mbar | 6.77 | 0.64 |
| Pressure | fitted | in wg | 2.7 | 0.26 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 1.04 | 0.28 |
| | | ft³/h | 36.7 | 9.8 |

Alpha CD28C

| Domestic Hot Water | | | MAX. | MIN. |
|-------------------------------------|-------------------------|---------|---------|--------|
| Heat Input (Hू) | | kW | 31.6 | 7.3 |
| (Gross) | | Btu/h | 107 900 | 24 900 |
| Heat Input (H _i) | | kW | 28.5 | 6.6 |
| (Net) | | Btu/h | 97 200 | 22 500 |
| Output to Water (H ₂) | | kW | 28.7 | 6.3 |
| (modulating) | | Btu/h | 97 900 | 21 500 |
| Differential Burner | Room sealed | mbar | 9.1 | 0.64 |
| Pressure | chamber panel fitted | in wg | 3.64 | 0.26 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 1.21 | 0.28 |
| | | ft³/h | 42.7 | 9.8 |
| Flow Rate at 35°C Rise | | L/min | 11.4 | |
| | | gal/min | 2.5 | |
| Specific Flow Rate (D) at 30°C Rise | | L/min | 13.3 | |
| (Flow rate @ 30K to EN625) | | gal/min | 2. | .9 |

Alpha CD35C

| Central Heating | | | MAX. | MIN. |
|---|---------------------------|-------|---------|--------|
| Heat Input (H) | | kW | 31.6 | 8.9 |
| (Gross) | | Btu/h | 107 800 | 30 600 |
| Heat Input (H _i) | | kW | 28.5 | 8.1 |
| (Net) | | Btu/h | 97 200 | 27 600 |
| Heat Output (H _s condensing) | | kW | 30.3 | 8.5 |
| (50°C/30°C) | | Btu/h | 103 400 | 29 000 |
| Heat Output (H, non-condensing) | |) kW | 28.0 | 7.8 |
| (80°C/60°C) | | Btu/h | 95 550 | 26 600 |
| Differential Burner | Room sealed chamber panel | mbar | 2.70 | 0.3 |
| Pressure | fitted | in wg | 1.08 | 0.12 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 1.21 | 0.34 |
| | | ft³/h | 42.7 | 12.0 |

Alpha CD35C

| Domestic Hot Water | | | MAX. | MIN. |
|-------------------------------------|---------------------|---------|---------|--------|
| Heat Input (H _s) | | kW | 38.0 | 8.9 |
| (Gross) | | Btu/h | 129 600 | 30 600 |
| Heat Input (H _i) | | kW | 34.3 | 8.1 |
| (Net) | | Btu/h | 117 000 | 27 600 |
| Output to Water (H _s) | | kW | 34.6 | 8.0 |
| (modulating) | | Btu/h | 118 100 | 27 300 |
| Differential Burner | Room sealed chamber | mbar | 3.88 | 0.30 |
| Pressure | panel fitted | in wg | 1.55 | 0.12 |
| Gas Supply Pressure (LPG) | | mbar | 37.0 | |
| | | in wg | 14.8 | |
| Gas Rate (LPG) | | m³/h | 1.46 | 0.34 |
| | | ft³/h | 51.5 | 12.0 |
| Flow Rate at 35°C Rise | | L/min | 14.2 | |
| | | gal/min | 3.13 | |
| Specific Flow Rate (D) at 30°C Rise | | L/min | 15.6 | |
| (Flow rate @ 30K to EN625) | | gal/min | 3.44 | |

2.3 GAS SUPPLY

The Alpha CD25C boiler requires a gas rate of 1.87 kg/h (4.0 lb/h) or 3.6 litres/h of liquid gas.

The Alpha CD28C boiler requires a gas rate of 2.22 kg/h (4.8 lb/h) or 4.2 litres/h of liquid gas.

The Alpha CD35C boiler requires a gas rate of 2.67 kg/h (5.7 lb/h) or 5.0 litres/h of liquid gas.

The supply pipes must be capable of delivering this quantity of gas in addition to the demand from any other appliances in the house. The boilers require at least a 22 mm gas supply pipe.

The complete installation must be tested for gas soundness against leakage.

The local Propane gas supplier should be consulted, at the installation planning stage, in order to establish the availability of an adequate supply of gas.

3 BOILER LOCATION

Installation pipes, cylinders and pressure regulators should be fitted in accordance with BS 5482:1. Bulk tank installation must comply with the requirements of the Home Office code of practice for the storage of liquefied petroleum gas at fixed installations. The boiler **must not** be installed in a room or internal space below ground level, e.g. in a basement or cellar, except where at least one side is open to ground level.

4 INSTALLATION

In addition to the regulations and requirements stated in the Installation and Servicing instructions, the boiler **must be** installed in accordance with BS 5482:1 - The Installation of Propane Burning Appliances in Permanent Dwellings.

5 COMMISSIONING

The boiler has been tested and factory set for use with Propane gas and it should only be necessary to ensure the correct gas supply pressure of 37 mbar is available.

6 PARTS LIST

Only the main burner injectors are special to Propane boilers. For other 'Short List Spare Parts', refer to the Installation and Servicing instructions supplied with the boiler.

| Propane components | Qty. | Туре | Alpha Part No. |
|--------------------------------------|------|--------|----------------|
| Main burner injector - CD25C and 28C | 1 | 4.0 mm | 1.022509 |
| Main burner injector - CD35C | 1 | 5.4 mm | 1.024388 |

7 SERVICING

When servicing or replacing boiler components follow the procedures as described in the main Installation and Servicing instructions supplied with the boiler.

Remembering the parts special for Propane boilers and the burner pressures special to Propane boilers given in this leaflet.

DETAILS OF BOILER INSTALLATION

| Date of Installation: |
|-----------------------------|
| Name of Installer: |
| Address: |
| |
| |
| |
| Postcode: |
| Telephone No: |
| Boiler Serial Number: (LPG) |



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