Quantum DB

Users Guidance Manual

Introduction

The information given in this User's Guidance Manual should be read and carefully followed to ensure the boilers safe and economical operation.

The Quantum DB is a fully automatic, fan assisted gas condensing boiler that varies its heat output and its flow temperature according to the continuously changing heat demands made on it, caused by thermostatic radiator valves closing, hot water cylinders reaching temperature and also changes in outside temperature. It is designed for use on a fully pumped sealed or open vented system for central heating and to generate domestic hot water via a fully indirect cylinder.

Gas Safety (Installation and Use) Regulations (Current Issue)

It is law that all gas appliances are installed by a registered person, in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution. It is in your own interest, and that of safety, to ensure that the law is complied with.

In addition to the above regulations, this appliance must be installed in accordance with current IEE Wiring Regulations for electrical installation, (BS 7671), local building regulations, the Building Standards (Scotland) (Consolidation) Regulations, bye laws of the local water undertaking and Health and Safety Document number 635 The Electricity at Work Regulations 11989.

Gas Leak or Fault

If a gas leak exists, or if you suspect a gas leak or fault, we recommend that the boiler gas supply be turned off. Open windows and doors to clear the escaped gas, DO NOT SMOKE, extinguish all naked lights and DO NOT operate any electrical switches or telephones.

The boiler MUST NOT be used until the fault has been put right. Help should be sought from your installer, service engineer or local gas undertaking.

Maintenance

To ensure the continued efficient and safe operation of your Quantum DB boiler, it is recommended that it is serviced and checked over at regular intervals. We advise that you enter into an annual service contract arrangement with a local service engineer. It is law that ALL gas appliances are serviced by a registered person. It is in your own interest, and that of safety, to ensure that the law is complied with.

Boilers Installed in Compartments or Cupboards

If the boiler is installed in a compartment or cupboard do not obstruct any ventilation openings and do not use the compartment for storage.

Boiler Clearances

If fixtures are to be placed near the boiler, the following spaces must be left around the boiler to allow for service and maintenance.

| | System boiler | Standard boiler |
|---------------------------|----------------|-----------------|
| Right hand side | 5 mm (1/4in) | 5 mm (1/4in) |
| Left hand side | 5 mm (1/4in) | 5 mm (1/4in) |
| Top (above the casing) | 150 mm (6 in) | 150 mm (6 in) |
| Bottom (below the casing) | 400 mm (16 in) | 200 mm (8 in) |
| In front of the boiler | 500 mm (20 in) | 500 mm (20 in) |

Cleaning

Caution. The boiler contains metal parts. Care should be taken when handling or cleaning with particular regard to the edges.

The outer casing should be wiped occasionally with a damp cloth, polish is not necessary. Do not use an abrasive cleaner on any of the parts.

Turning the boiler 'ON'

Warning:

If the boiler is installed on a sealed system, the system MUST only be filled and pressurised by a competent person. Only light the boiler when you are sure that the system has been filled and pressurised. The pressure gauge located just above the boiler should be reading at least 0.7 bar, anything less than this figure could mean

that there is a leak. If this is the case, DO NOT attempt to light the boiler, contact your installer or service company to rectify the situation.

All systems:

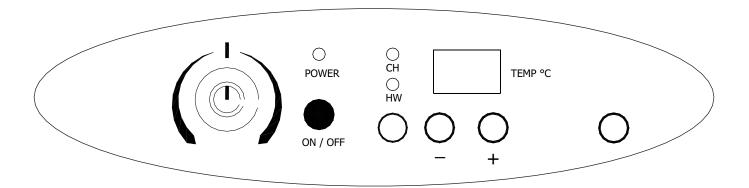
Switch on the electricity supply to the boiler, check that any controls are set to your requirements and are in an 'ON' position (refer to the manufacturers instructions for these items).

Flip the 'Quantum' name cover open and this will expose the easy to operate 'User' controls (see picture).

When the electricity supply to the boiler is switched on, the small green light above the word 'POWER' is lit.

The boiler is switched 'ON' and 'OFF' by the touch button to the right of the rotary knob.

(For system boiler version only) If the boiler is switched off and the electricity supply to the boiler remains 'ON' all heat demands on the boiler are disabled except frost protection.



The temperature of the water leaving the boiler will change automatically, depending on what the temperature is outside. For example, on cold days it will have a higher temperature and on warmer days it will have a lower temperature.

We recommend that the twist knob on the controls be set to the CENTRE position mid way between the red and blue arrows. Leave it at this setting for a few days to find out if this setting suits your comfort level expectancy.

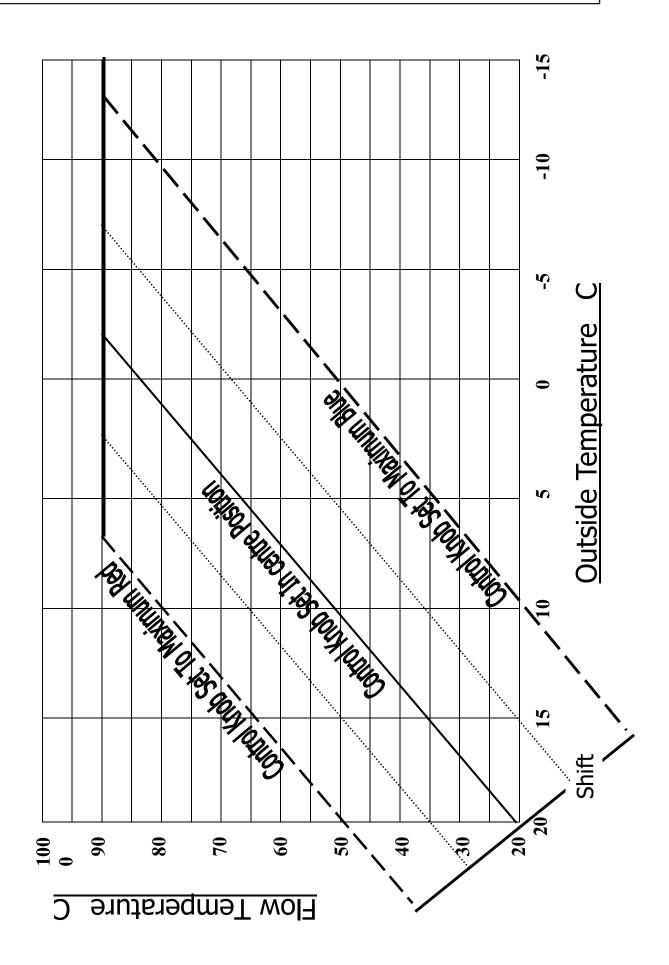
If you find that overall the room temperatures have been 'too warm', the twist knob should be turned in the

direction of the blue arrow a little, repeat the 'comfort trial' again. Continue to do this until your optimum level of comfort is reached.

If you find that overall the room temperatures have been 'too cold', the twist knob should be turned in the direction of the red arrow a little, repeat the 'comfort trial' again. Continue to do this until your optimum level of comfort is reached.

Once you have determined your optimum level of comfort, it should not be necessary to alter this control again.

Heating Curve for Weather Compensation



Turning the boiler 'OFF'

For short periods switch the boiler off using the ON/OFF touch button on the boiler control panel.

(For system boilers only) This will still leave the frost protection feature, functional.

If the boiler is not to be used for long periods we recommend that the boiler be isolated from the mains electricity supply and the system drained to prevent any possible damage from freezing. Consult your installer or service engineer.

Removing the front panel

Undo the 2 fixing screws located on the bottom face of the boiler. Before removing the boiler front panel, isolate the boiler from the mains electricity supply first. Take hold of the front panel at the bottom and pull towards you. This will disengage the 2 location tongues (one at each side).

Lift the front panel gently to disengage the two location lugs at the top of the panel, (one at either side) see illustration.

The front panel can now be removed and placed to one side.

Refit the front panel in reverse order.

Resetting the manual reset buttons

If at anytime the boiler fails to operate, it may have 'locked out' or one of the over heat cutouts may have tripped. With the front panel removed it is possible to check whether one of these is causing the boiler malfunction before calling in your installer or service engineer.

Lockout reset. To reset the boiler in a 'lockout' condition, press the touch button on the right hand side of the control facia marked 'RESET' see illustration on back page.

Flow temperature overheat cutout. To reset the flow temperature overheat cutout, press the brown button located on the flow pipe where it leaves the heat exchanger, see illustration on back page.

Flue temperature overheat cutout. To reset the flue temperature overheat cutout, press the reset button located to the right of the control panel, see illustration on back page.

IMPORTANT: If any of the above problems persist, leave the boiler switched off and contact your installer or service engineer.

