sustainable solutions **under one roof**

HEATING / VENTILATION / RENEWABLES

Publication No. ZZ 1431
March 2013

QUANTEC HR & COMBI

High Efficiency Combination Boilers

USER'S INSTRUCTIONS

Quantec HR28C	-	G.C. No. 47-416-11
Quantec 30C	-	G.C. No. 47-416-12
Quantec 24C	-	G.C. No. 47-416-13

These instructions are to be left with the User

Johnson & Starley

BSI UKAS QUALITY MANAGEMENT 003

CE

www.johnsonandstarley.co.uk

CONTENTS

NOTE

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

THESE INSTRUCTIONS SHOULD BE LEFT WITH THE USER AFTER INSTALLATION

The Benchmark Scheme

Johnson & Starley Ltd is a licensed member of the Benchmark Scheme which aims to improve the standards of installation and commissioning of domestic heating and hot water systems in the UK and to encourage regular servicing to optimise safety, efficiency and performance.

Benchmark is managed and promoted by the Heating and Hotwater Industry Council. For more information visit www.centralheating.co.uk

Please ensure that the installer has fully completed the Benchmark Checklist on the inside back pages of the installation instructions supplied with the product and that you have signed it to say that you have received a full and clear explanation of its operation. The installer is legally required to complete a commissioning checklist as a means of complying with the appropriate Building Regulations (England and Wales).

All installations must be notified to Local Area Building Control either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer who should, on receipt, write the Notification Number on the Benchmark Checklist.

This product should be serviced regularly to optimise its safety, efficiency and performance. The service engineer should complete the relevant Service Record on the Benchmark Checklist after each service.

The Benchmark Checklist will be required in the event of any warranty work and as supporting documentation relating to home improvements in the optional documents section of the Home Improvements.

In the interest of continuous development Johnson and Starley reserve the right to change specification without prior notice. Johnson and Starley prides itself on it's ability to supply spare parts quickly and efficiently.

1. GENERAL INFORMATION

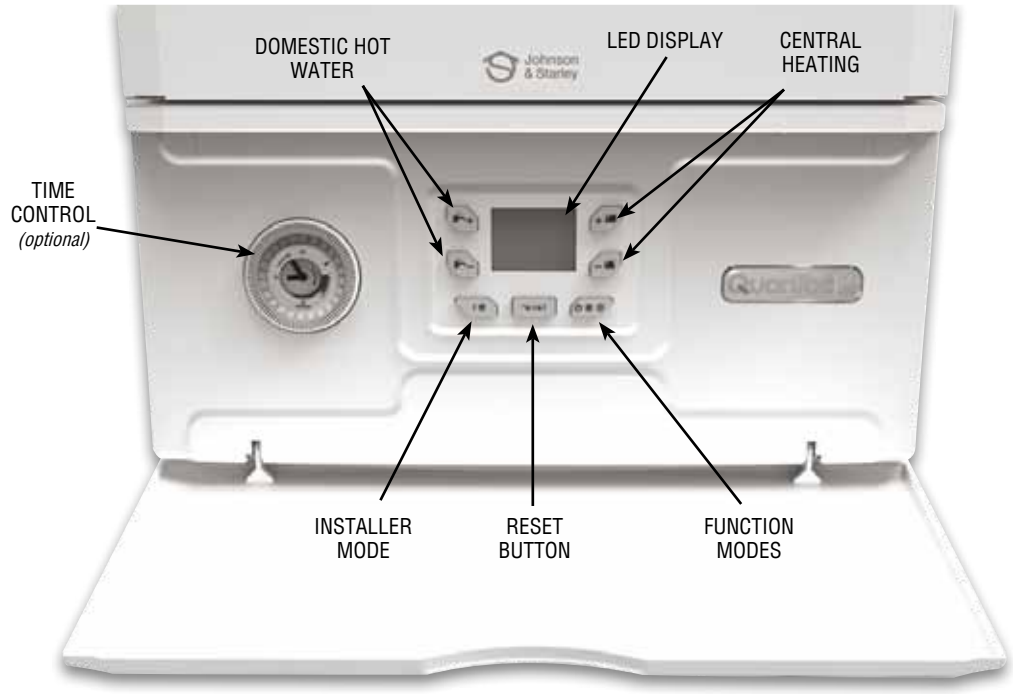
WARNING: THIS APPLIANCE MUST BE EARTHED

IMPORTANT: IT IS A STATUTORY REQUIREMENT THAT ALL GAS APPLIANCES BE INSTALLED BY COMPETENT PERSONS, (i.e. GAS SAFE REGISTERED INSTALLERS. GAS SAFE MEMBERSHIP ENQUIRIES - TEL: 0800 408 5500) IN ACCORDANCE WITH THE GAS SAFETY (INSTALLATION AND USE) REGULATIONS (CURRENT EDITION). FAILURE TO COMPLY WITH THESE REGULATIONS MAY RESULT IN PROSECUTION.

Part of the installation and commissioning of this appliance is related to instructions for use by the heating engineer to the user where specific requirements may occur.

The QuanTec is a wall mounted, room sealed, condensing combination boiler, featuring full sequence automatic spark ignition and fan assisted combustion. On the QuanTec HR a recuperator is fitted within the boiler and preheats the incoming cold DHW for additional energy savings. Due to the high efficiency of the boiler, condensate is produced from the flue gases and this is drained to a suitable disposal point through a plastic waste pipe at the base of the boiler. A condensate 'plume' will also be visible at the flue terminal. The QuanTec HR are combination boilers providing both central heating and instantaneous domestic hot water.

2. THE BOILER CONTROL PANEL



Item	Description
K1	CH - Central Heating +
K2	CH - Central Heating -
K3	Installer information
K4	Reset
K5	Summer/Winter mode
K6	DHW - Domestic Hot Water +
K7	DHW - Domestic Hot Water -

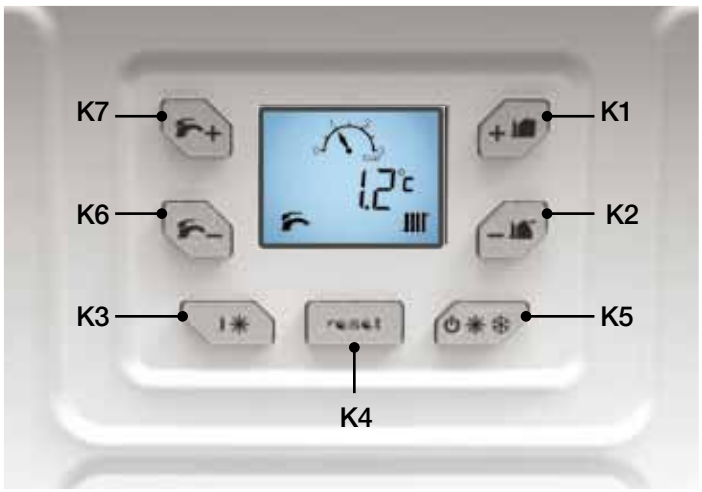


FIGURE 1. QUANTEC USER CONTROL PANEL

3. TO LIGHT THE BOILER

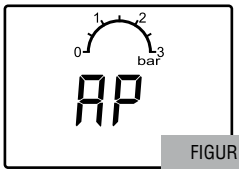


FIGURE 2

3.1 Switch the mains power ON and the boiler LED display will show “AP”. This puts the boiler into the Air Purge Mode. See Figure 2.

3.2 Press the reset button “K4”. The boiler will go onto standby. This is the winter mode.

SETTING THE DHW WATER TEMPERATURE

3.3 To set the hot water temperature press and hold “K7”, this will flash until the °C temperature shows. By pressing the + and - buttons to set the desired temperature. The temperature flashes 5 times to set the temperature and then goes back onto standby.

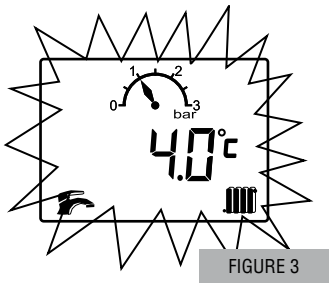


FIGURE 3

SETTING THE CH WATER TEMPERATURE

3.4 To set the central heating temperature press and hold “K1”, this will flash until the °C temperature shows. By pressing the + or - buttons to set the desired temperature. The temperature flashes 5 time to set the temperature and the display will go back to standby.

4. OPERATING FUNCTIONS

4.1 OPERATING THE DOMESTIC HOT WATER

When the call for hot water is needed the boiler will fire. The display will show the full flame, tap and the set water temperature. This will flash until the need for hot water is satisfied. See Figure 4.

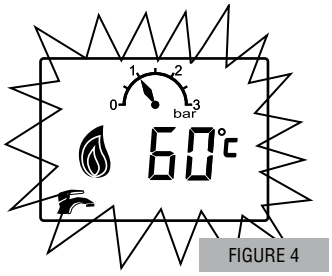


FIGURE 4

4.2 OPERATING THE CENTRAL HEATING

When the boiler fires in CH mode it fires for 1 minute, modulating the boiler. The display will flash showing the radiator, the small flame and temperature. The flame symbol increases with the demand for heat. Once temperature is reached the display will go back to standby. See Figure 5.

Approximate flow temperatures for the boiler thermostat settings are:

TABLE. 2	
Button Setting	CH Flow Temperature
Minimum	40°C
Maximum	60°C

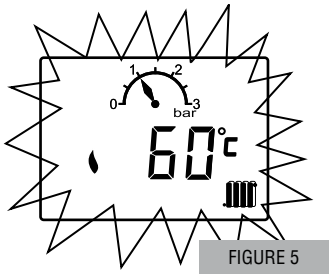


FIGURE 5

4.3 DISPLAY CODES

In normal operation the boiler LED display will show codes:

1. Standby - no demand for heat.
2. CH being supplied.
3. DHW being supplied.
4. Boiler frost protection - boiler will fire if temperature is below 5°C.
5. During normal operation the burner on indicator will remain illuminated when the burner is lit.

Note: If the boiler fails to light after five attempts the fault code will be displayed.

4.4 TO SHUT DOWN THE BOILER

Set the mode to OFF by pressing K4.

To relight the boiler repeat the procedure detailed in ‘To light the boiler’.

4.5 FROST PROTECTION

If no system frost protection is provided and frost is likely during a short absence from home, leave the heating controls (if fitted) at a reduced temperature setting. For longer periods, the entire system should be drained.

If the system includes a frost thermostat then, during cold weather, the boiler should be turned OFF at the time switch (if fitted) ONLY. The mains supply should be left switched ON, with the boiler thermostat left in the normal running position.

4.6 LOSS OF SYSTEM WATER PRESSURE

The pressure gauge indicates the central heating system pressure. If the pressure is seen to fall below the original installation pressure of 1-2 bar over a period of time then a water leak may be indicated. In this event conduct the re-pressurising procedure. If unable to do so or if the pressure continues to drop a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII) should be consulted.

The boiler will not operate if the pressure has reduced to less than 0.3 Bar under this condition.

1. Ensure filling loop isolation valves are closed.
2. Remove the two caps
3. Attach on the filling loop.
4. Turn the filling loop isolation valves to the open position. The system will now fill.
5. Wait for pressure gauge dial to reach 1 to 1.5 bar.
6. Close the filling loop isolation valves.
7. Disconnect the filling loop at left hand side and angle upwards.
8. Attach the two blanking caps.

4.7 CONDENSATE DRAIN

The condensate drain must not be modified or blocked.

Blockage of the condensate drain, caused by debris or freezing, can cause automatic shutdown of the boiler.

If freezing is suspected and the pipe run is accessible an attempt may be made to free the obstruction by pouring hot water over the exposed pipe and clearing any blockage from the end of the pipe. If this fails to remedy the problem the assistance of a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII) should be sought.

5. RESET THE BOILER

Press the reset button.

6. SERVICING & MAINTENANCE

It is recommended that a full maintenance check be carried out annually on the appliance. It is also recommended to take out a further service agreement on the expiry of the guarantee period.

You can obtain further information on this from your gas supplier.

The appliance should be checked /serviced by a GAS SAFE registered installer.

If you require service on your appliance please contact your local installer or gas supplier.

On completion of the service the installer should fill in the service section at the rear of the BENCHMARK log book. All installers registered with GAS SAFE carry an identification card. This card will have an ID number which should be recorded in your logbook.

If you have any queries regarding your installer you can contact GAS SAFE by telephone on 0800 408 5500.

The appliance should be serviced at least once a year by a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII).

benchmark
COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

7. ESCAPE OF GAS

Should a gas leak or fault be suspected contact the National Gas Emergency Service without delay. Telephone 0800 111 999

Do NOT search for gas leaks with a naked flame.

8. CLEANING

For normal cleaning simply dust with a dry cloth.

To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth.

DO NOT use abrasive cleaning materials.

9. TROUBLE SHOOTING

ERROR CODES		
E01	Ignition lockout	Check other gas appliances work
		Reset boiler
		Contact installer
E02	False flame lockout	Contact installer
E03	Overheat lockout	Fill system to 1.0bar
		Bleed radiators
		Check radiator valves are open
		Reset boiler
		Contact installer
E05	Fan fault	Contact installer
E08	Flame circuit failure	Contact installer
E09	Valve feed back ERROR	Contact installer
E12	EEPROM lockout	Contact installer
E15	Sensor drift lockout	Fill system to 1.0bar
		Bleed radiators
		Check valves are open
		Reset boiler
		Contact installer
E16 **E17** **E18**	Sensor stuck lockout	Fill system to 1.0bar
		Bleed radiators
		Check valves are open
		Reset Boiler
		Contact installer
E21	ADC lockout	Contact installer
E33	Return thermistor fault	Contact Installer
E34	Low power supply lockout	Contact installer or Electrician
E35	Flow thermistor fault	Contact Installer

FAULT CODES		
F07	Exhaust sensor fault	Fill system to 1.0bar
		Bleed radiators
		Check radiator valves are open
		Reset boiler
		Contact installer
F13	Remote reset lockout	Turn power on and off
		Press Reset
		Contact installer
F37	Low water pressure	Fill system to 1.0bar
		Bleed radiators
		Check radiator valves are open
		Reset boiler
		Contact installer
F40	Water pressure too high	Check to see if the gauge is over 2.8bar
		Bleed radiators
		Reset boiler
		Contact installer
F47	Water pressure sensor not connected	Contact installer
F52	DHW sensor fault	Contact installer
F53	Flue temperature sensor lockout	Contact installer

GAS LEAKS

DO NOT OPERATE ANY ELECTRICAL SWITCHES, OR USE A NAKED FLAME
TURN OFF GAS SUPPLY
VENTILATE THE AREA BY OPENING THE DOORS AND WINDOWS
CALL THE NATIONAL GAS EMERGENCY SERVICES ON
TEL: 0800 111999

sustainable solutions
under one roof

www.johnsonandstarley.co.uk

Johnson & Starley Ltd
Rhosili Road, Brackmills,
Northampton NN4 7LZ

sales@johnsonandstarley.co.uk
marketing@johnsonandstarley.co.uk

Reception
01604 762881

Sales/Spares
01604 707012

Service/Warm air upgrade
01604 762881

Warm air upgrade
01604 707011

Johnson & Starley Dravo Division Industrial H&V

Sales
01604 707022

dravo@johnsonandstarley.co.uk

www.dravo.co.uk

Anniversary 1922 - 2012