User Guide

Condensing Combination Boiler

Promax Ultra Combi
24 - 28 - 33 - 40

Please keep these instructions in a safe place.
If you move house, please hand them over to the next occupier.
Model Range

Potterton Promax Ultra 24 Combi ErP
G.C.N. 47-393-54
Potterton Promax Ultra 28 Combi ErP
G.C.N. 47-393-55
Potterton Promax Ultra 33 Combi ErP
G.C.N. 47-393-56
Potterton Promax Ultra 40 Combi ErP
G.C.N. 47-393-57

The Benchmark Scheme

Baxi Heating UK 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

© Baxi Heating UK Ltd 2015. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature (including in any database), in each case whether electronic, mechanical, recording or otherwise, without the prior written permission of the copyright owner, except for permitted fair dealing under Copyrights, Designs and Patents Act 1988.

Applications for the copyright owner’s permission to reproduce or make other use of any part of this publication should be made, giving details of the proposed use, to the following address:

The Company Secretary, Baxi Heating UK Limited,
Brooks House, Coventry Road, Warwick, CV34 4LL

Full acknowledgement of author and source must be given.

WARNING: Any person who does any unauthorised act in relation to a copyright work may be liable to criminal prosecution and civil claims for damages.

Boiler Controls - see opposite page for Operating Quick Reference Guide (Fascia Panel removed for clarity)
1.0 Quick Reference Guide

Key to Controls

- Standby - Reset - Esc
- Boiler Information View
- Increase CH Temperature Button *
- Decrease CH Temperature Button *
- Summer - DHW only request mode
- Winter - DHW & CH request mode
- Only Heating - Only CH request mode

* Important Note: If your control system is fitted with the Optional Outdoor Sensor, these buttons will affect its operation. Please consult your installer for advice.

Display Description

- DHW and CH OFF (frost protection still enabled)
- Indicate errors that prevent burner from starting
- Error - Not resettable by user
- Water pressure too low
- Indicates a resettable error
- Indicates navigation in programming mode (parameter)
- Indicates navigation in programming mode
- Generic error
- Burner lit
- DHW request
- Heating mode
- Units for temperature
- Units for pressure
- Service due

NOTE: When altering any settings it is necessary that the buttons are FIRMLY pressed for several seconds.

Display showing all available segment.
Boiler not working

START

Make sure the gas supply is turned ON and check if other gas appliances are operating (e.g. fire, cooker).

NO
If no gas, consult your supplier.

Is there electricity to the boiler? Is the display lit?

NO
If no gas, consult your supplier.

Is the Burner Flame showing.

NO

YES

Check electrical supply to boiler is switched on.

Central Heating

Burner Flame (Indicates burner is on)

YES

Boiler operating satisfactorily.

Is the E and R symbol illuminated or flashing?

YES

Press the Reset Button

Error Code

Reset Symbol

Flame Failure

Spanner Symbol

OR

Is the Spanner symbol illuminated or flashing?

YES

CONTACT YOUR INSTALLER OR SERVICE ENGINEER.

If it does not reset

Reset Button

Boiler Temperature

If no electricity, consult your supplier.

YES

13.8°C

 Boiler operating satisfactorily.

13.8°C

133
2.0 Troubleshooting

Is the Timer ON and calling for heat?

- YES
  - Is the Room Thermostat (if fitted) set high enough?
    - NO
      - Ensure timer is set for Central Heating ON (see any instructions supplied with timer)
    - YES
      - NO
        - Is the Central Heating System Pressure between 1 and 2.5 bar?
          - NO
            - YES
              - NO
                - Turn Room Thermostat to maximum setting (typical example shown)
                - YES
                  - If the reading* falls below 1 bar repressurise the system as described in section 4.1.

If you don’t know what you need to do to get the boiler to light, or need help with the system and controls, contact your installer as soon as possible.

*To display the water pressure press 6 times. ‘05’ will alternate with the system pressure.
(NOTE: When the pump is running the gauge under the boiler may show a slightly different reading to the display)
3.0 Temperature / Care of the Boiler

3.1 To increase or decrease the boiler temperature

1. Press the (+) button to increase the CH temperature.
2. Press the (−) button to decrease the CH temperature.

**NOTE:** An NTC device is positioned in the heat exchanger which shuts down the appliance if the boiler temperature exceeds 100°C. Press the (□) button to re-establish normal operating conditions.

3.2 To increase or decrease the domestic hot water (DHW) temperature

1. Press the (+) button to increase the DHW temperature.
2. Press the (−) button to decrease the DHW temperature.

3.3 Summer - Winter - Only Heating Mode

1. Press the (□) button until the required mode appears:
   - Summer - DHW only request mode
   - Winter - DHW & CH request mode
   - Only Heating - Only CH request mode
2. See 3.1 or 3.2 to set the required temperature.

3.4 Cleaning the Outercase

The painted panels should be wiped with a damp cloth and then dried completely. **DO NOT USE ABRASIVE CLEANING AGENTS.**

3.5 Boiler Frost Protection

1. The boiler incorporates an integral frost protection feature that will operate in both CH & DHW modes, and also when in standby (•••• displayed).
2. If the boiler temperature falls below 5°C, then the boiler will operate until the water temperature has been raised.
3. Further protection may be required for the system. Consult your installer for details.

3.6 Information Display

1. The table opposite shows information that can be displayed by pressing the (□) button.
2. Press (□) to return to the normal display.
4.0 Repressurising System & ‘Service Due’

4.1 Central Heating System Pressure

1. The normal operating water pressure is between 1 and 2.5 bar (Fig. 1). If the pressure exceeds 3 bar the safety pressure valve will operate and a fault is indicated (E117 displayed). Contact your installer.

2. It may be necessary to repressurise the system occasionally (as Fig. 2 or E118 displayed). A filling device (the filling loop) will be fitted on the system. This will be on the boiler itself, or on pipework near to the boiler.

3. If you are unsure of its position, or cannot identify it, consult the installer who fitted the boiler.

4. The filling loop consists of two taps and a separate copper pipe with connection fittings.

5. Only when repressurising should the copper pipe be connected between the two taps. Ensure that the nuts on the pipe ends are tightened onto the taps.

6. Fully open one of the taps first, and then while watching the pressure gauge, carefully open the second tap.

7. The system pressure is shown at all times on the gauge under the boiler and can be viewed on the display when there is power to the boiler.

8. To display the water pressure press ‘P’ 6 times. ‘05’ will alternate with the system pressure. (NOTE: When the pump is running the gauge under the boiler may show a slightly different reading to the display)

9. When the needle on the gauge or figures on the display indicate 1 or more turn both taps off.

10. Disconnect the copper pipe from the taps (a small amount of water may be present) and remove it. Keep the pipe in a safe place for future use.

4.2 ‘Service Due’ Message

1. After 11 months operation the ‘Service Due’ message will be shown on the boiler display.

2. Please contact your Installer, Annual Service Provider or Baxi Customer Support on 0344 871 1525 to arrange your Annual Service.
5.0 Clearances

5.1 For your Safety

1. This appliance must have been installed in accordance with the manufacturer’s instructions and the regulations in force.

2. Any modification that may interfere with the normal operation of the appliance without express written permission from the manufacturer or his agent could invalidate the appliance warranty. In GB this could also infringe the Gas Safety (Installation and Use) Regulations.

3. Your boiler must not be operated without the casing correctly fitted.

4. Do not interfere with any sealed components on this boiler.

5. Take note of any warning labels on your boiler.

6. Your boiler should have the following minimum clearances for Safety and Maintenance (Figs. 3 & 4):

   - Top - 175mm
   - Bottom - 150mm*
   - Left side - 5mm
   - Right Side - 5mm
   - Front - 5mm (In Operation)
   - 450mm (For Servicing)

*This is MINIMUM recommended dimension. Greater clearance will aid installation and maintenance.

7. If your boiler is installed in a compartment, do not use it for storage purposes. Do not obstruct any purpose provided ventilation openings.

8. Flammable materials must not be stored in close proximity to your boiler.

9. Avoid skin contact when your boiler is in operation, as some surfaces may get hot e.g. pipework.

10. Ensure that the flue terminal, outside the house, does not become damaged or obstructed, particularly by foliage.

11. It is important that the condensate drain system is not blocked, modified or damaged in any way as this would affect the operation of your boiler. Your installer should have insulated any exposed pipework.
6.0 Error Codes

6.1 List of Error Codes

1. The display shows two types of signals:  and  . In both cases the display shows symbol and the numeric value of the error (see the "error table" below).

2.  The spanner cannot be reset by the user. Please contact your Installer, Annual Service Provider or Baxi Customer Support on 0344 871 1525.

3.  Fault errors can be reset by pressing the button.

WARNING: If an error code (if different from the ones described below) appears on the display or a certain fault appears frequently, contact your Installer, Annual Service Provider or Baxi Customer Support on 0344 871 1525.

Table Of Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>09</td>
<td>Gas Valve Connection Cable</td>
</tr>
<tr>
<td>15</td>
<td>Gas Valve Fault</td>
</tr>
<tr>
<td>20</td>
<td>Central Heating NTC Fault</td>
</tr>
<tr>
<td>28</td>
<td>Flue NTC Fault</td>
</tr>
<tr>
<td>30</td>
<td>Central Heating Return NTC Fault</td>
</tr>
<tr>
<td>35</td>
<td>Calibration Required</td>
</tr>
<tr>
<td>09</td>
<td>Pre-circulation Fault</td>
</tr>
<tr>
<td>10</td>
<td>Safety Thermostat Operated</td>
</tr>
<tr>
<td>17</td>
<td>Primary System Water Pressure Too High</td>
</tr>
<tr>
<td>18</td>
<td>Primary System Water Pressure Too Low</td>
</tr>
<tr>
<td>25</td>
<td>Circulation Fault (Primary)</td>
</tr>
<tr>
<td>28</td>
<td>Flame Failure</td>
</tr>
<tr>
<td>30</td>
<td>Flue NTC Operated</td>
</tr>
<tr>
<td>33</td>
<td>Interruption Of Gas Supply or Flame Failure</td>
</tr>
<tr>
<td>34</td>
<td>Elapsed Time - Gas Valve Open Without Gas</td>
</tr>
<tr>
<td>35</td>
<td>Interruption Of Gas Supply (Internal Error)</td>
</tr>
<tr>
<td>54</td>
<td>Flow/Return Sensor Temperature Test</td>
</tr>
<tr>
<td>60</td>
<td>Fan or Fan Wiring Fault</td>
</tr>
<tr>
<td>70</td>
<td>Circulation Fault (Dry Fire)</td>
</tr>
<tr>
<td>321</td>
<td>Hot Water NTC Fault</td>
</tr>
<tr>
<td>384</td>
<td>False Flame</td>
</tr>
</tbody>
</table>
7.0 Legislation

7.1 Installation, Commissioning, Service & Repair

1. This appliance must be installed in accordance with the manufacturer’s instructions and the regulations in force. Read the instructions fully before installing or using the appliance.

2. In GB, this must be carried out by a competent person as stated in the Gas Safety (Installation & Use) Regulations.

3. Definition of competence: A person who works for a Gas Safe registered company and holding current certificates in the relevant ACS modules, is deemed competent.

4. In IE (Eire), this must be carried out by a competent person as stated in I.S. 813 “Domestic Gas Installations”.

Lifting - This product should be lifted and handled by two people. Stooping should be avoided and protective equipment worn where necessary. Carrying & lifting equipment should be used as required, e.g. when installing in a loft space.

All Gas Safe registered engineers carry an ID card with their licence number and a photograph. You can check your engineer is registered by telephoning 0800-408-5500 or online at www.gassaferegister.co.uk

The boiler meets the requirements of Statutory Instrument “The Boiler (Efficiency) Regulations 1993 No 3083” and is deemed to meet the requirements of Directive 92/42/EEC on the energy efficiency requirements for new hot water boilers fired with liquid or gaseous fuels:

Type test for purpose of Regulation 5 certified by:
Notified Body 0085.

Product/Production certified by:
Notified Body 0086.
Ref: 86-BL-647

For GB/IE only.

7.2 Benchmark Commissioning Checklist

1. 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).

2. 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.

3. 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.

4. The completed Benchmark Checklist may be required in the event of any warranty work.
8.0 Warranty & Service

8.1 General

To make sure your boiler warranty is activated and maintained, it is essential that the:

1. Benchmark checklist is completed by your installer
2. Warranty is registered with Baxi
3. Boiler has an annual service

Please note that failure to adhere to terms and conditions will make your warranty invalid.

8.2 Standard Warranty Terms and Conditions

Warranty Registration, Service & Repair

For full terms and conditions, visit www.baxi.co.uk/terms.

Benchmark Checklist

The Benchmark Checklist will be completed by your installer and records that the boiler has been installed and commissioned correctly. It can be found at the back of the installation and service manual and should be kept in a safe place for the life of the boiler. We will check that the Benchmark Checklist has been completed on an in-warranty visit.

Ways to register your warranty

If your boiler is eligible for an extended warranty, your installer may register the product on your behalf and provide you with the relevant documentation. Please check with your installer.

Should this not be the case, you can register your warranty online at www.baxi.co.uk/registration
8.0 Warranty & Service

Annual Service
A service must be completed every 12 months from the date of installation to maintain your warranty.

This service must be completed by one of the following:

- A Gas Safe registered installer/engineer
- Baxi Customer Support; call us 0344 871 1525

Please make sure that your engineer has logged the service information at the back of the installation and service manual. You will be asked for your service history on any in-warranty repair visit.

If you experience a problem with your boiler
For any in or out of warranty repair, Baxi Customer Support is on hand to help you. Call our award-winning team to arrange for one of our nationwide team of Gas Safe registered engineers to visit.

If your product is in warranty, everything is free of charge, subject to our warranty terms and conditions. If it is out of warranty, we can still help and offer a range of options you can choose from to suit your needs.

Contact Baxi Customer Support 0344 871 1525

Opening hours
Monday - Friday, 8.00am - 6.00pm
Weekends and Bank Holidays, 8.30am - 2.00pm
Please note calls may be recorded for training and monitoring purposes.

When contacting Baxi Customer Support, please have the following information to hand:

- Boiler serial number. This can be found on the appliance.
- Proof of purchase if you do not have the boiler serial number.

Please note that for in-warranty repairs, our engineers will ask to see your service history record, completed Benchmark Checklist and details of your installer. These can all be found in the installation and user manual.
### 9.1 Product Fiche - Combination Boilers

#### 9.0 ErP Information

**Product fiche for combination boilers**

<table>
<thead>
<tr>
<th>Product</th>
<th>24</th>
<th>28</th>
<th>33</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potterson Promax Ultra Combi ErP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space heating - Temperature application</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Water heating - Declared load profile</td>
<td>XL</td>
<td>XL</td>
<td>XXL</td>
<td>XXL</td>
</tr>
<tr>
<td>Seasonal space heating energy efficiency class</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Water heating energy efficiency class</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Rated heat output <em>(Prated or Psup)</em></td>
<td>kW</td>
<td>20</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>Space heating - Annual energy consumption</td>
<td>kWh</td>
<td>17204</td>
<td>20645</td>
<td>24086</td>
</tr>
<tr>
<td>Water heating - Annual energy consumption</td>
<td>kWh</td>
<td>62</td>
<td>74</td>
<td>87</td>
</tr>
<tr>
<td>Seasonal space heating energy efficiency</td>
<td>%</td>
<td>93</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Water heating energy efficiency</td>
<td>%</td>
<td>88</td>
<td>86</td>
<td>87</td>
</tr>
<tr>
<td>Sound power level LWA indoors</td>
<td>dB</td>
<td>49</td>
<td>50</td>
<td>53</td>
</tr>
</tbody>
</table>

**See**  
For specific precautions about assembling, installing and maintaining, consult the relevant section as detailed on the Contents page.
**Seasonal space heating energy efficiency of boiler**

<table>
<thead>
<tr>
<th>Temperature control</th>
<th>Class I = 1%, Class II = 2%, Class III = 1.5%, Class IV = 2%, Class V = 3%, Class VI = 4%, Class VII = 3.5%, Class VIII = 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementary boiler</td>
<td>Seasonal space heating energy efficiency (in %)</td>
</tr>
<tr>
<td>Solar contribution</td>
<td>Tank rating</td>
</tr>
<tr>
<td>Solar contribution AND Supplementary heat pump</td>
<td>Select smaller value</td>
</tr>
<tr>
<td>Seasonal space heating energy efficiency of package</td>
<td></td>
</tr>
<tr>
<td>Seasonal space heating energy efficiency class of package</td>
<td></td>
</tr>
</tbody>
</table>

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as this efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.
9.0 ErP Information

9.2 Package Fiche - Boilers (cont)

III The value of the mathematical expression: $294/(11 \cdot \text{Prated})$, whereby 'Prated' is related to the preferential space heater.

IV The value of the mathematical expression $115/(11 \cdot \text{Prated})$, whereby 'Prated' is related to the preferential space heater.

Weighting of boilers

<table>
<thead>
<tr>
<th>( \frac{P_{\text{sup}}}{(P_{\text{sup}} + \text{Prated})} )</th>
<th>II, package without hot water storage tank</th>
<th>II, package with hot water storage tank</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0.1</td>
<td>0.3</td>
<td>0.37</td>
</tr>
<tr>
<td>0.2</td>
<td>0.55</td>
<td>0.70</td>
</tr>
<tr>
<td>0.3</td>
<td>0.75</td>
<td>0.85</td>
</tr>
<tr>
<td>0.4</td>
<td>0.85</td>
<td>0.94</td>
</tr>
<tr>
<td>0.5</td>
<td>0.95</td>
<td>0.98</td>
</tr>
<tr>
<td>0.6</td>
<td>0.98</td>
<td>1.00</td>
</tr>
<tr>
<td>≥ 0.7</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

(1) The intermediate values are calculated by linear interpolation between the two adjacent values.

(2) \( \text{Prated} \) is related to the preferential space heater or combination heater.

Package efficiency

<table>
<thead>
<tr>
<th>Potterton Ultra ErP</th>
<th>24</th>
<th>28</th>
<th>33</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature control X</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature control Y</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9.0 ErP Information

9.3 Package Fiche - Combination Heaters (Boilers or Heat Pumps)

Package fiche for combination heaters (boilers or heat pumps) indicating the water heating energy efficiency of the package

Water heating energy efficiency of combination heater

Declared load profile:  

Solar contribution
from fiche of solar device

Auxiliary electricity

Water heating energy efficiency of package under average climate

Water heating energy efficiency class of package under average climate

Water heating energy efficiency under colder and warmer climate conditions

Colder:  

Warmer:  

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as this efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

I  The value of the water heating energy efficiency of the combination heater, expressed in %.

II  The value of the mathematical expression $(220 \cdot Q_{\text{ref}})/Q_{\text{nomad}}$, where $Q_{\text{ref}}$ is taken from Regulation EU 811/2013, Annex VII Table 15 and $Q_{\text{nomad}}$ from the product fiche of the solar device for the declared load profile M, L, XL or XXL of the combination heater.

III  The value of the mathematical expression $(Q_{\text{aux}} \cdot 2.5)/(220 \cdot Q_{\text{ref}})$, expressed in %, where $Q_{\text{aux}}$ is taken from the product fiche of the solar device and $Q_{\text{ref}}$ from Regulation EU 811/2013, Annex VII Table 15 for the declared load profile M, L, XL or XXL.
10.0 Emergency

Warning!

If you smell gas

Do not operate light switches
Do not operate any electrical equipment
Do not use a telephone in the hazardous area
Extinguish any naked flame and do not smoke
Open windows and doors in the hazardous area
Turn off the gas supply at the meter
Warn any other occupants and vacate the premises
Telephone the National Gas Emergency Service on:- 0800 111 999

Faulty boiler

If it is known or suspected that a fault exists on the boiler, it must not be used until the fault has been corrected by a competent person.

In an Emergency

If a water or gas leak occurs or is suspected, the boiler can be isolated at the inlet valves as follows;

1. If a water or gas leak occurs or is suspected, the boiler can be isolated at the inlet valves by turning their taps through 90° (1/4 turn) (Fig. 7).

3. Call your Installer or Service Engineer as soon as possible.

11.0 Disposal

11.1 Disposal and Recycling

NOTE: Removal and disposal of the boiler must be carried out by a qualified person in accordance with local and national regulations.
Baxi Customer Support

0344 871 1525

Opening hours
Monday - Friday, 8.00am-6.00pm
Weekends and Bank Holidays, 8.30am-2.00pm

Please note calls may be recorded for training and monitoring purposes

baxi.co.uk

Register now to activate your warranty:
www.baxi.co.uk/registration

For the warranty to be maintained, please make sure...
1. Benchmark checklist is completed
2. Warranty is registered with Baxi
3. The boiler has an annual service

For full terms and conditions, visit www.baxi.co.uk/terms. Failure to adhere to terms and conditions will void your manufacturer's warranty.

Baxi
Brooks House,
Coventry Road,
Warwick, CV34 4LL

Please ensure the boiler is installed in accordance with these installation instructions and that you adhere to the Building Regulations.

e&oe
All descriptions and illustrations provided in this document have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this leaflet. All goods are sold subject to our standard Conditions of Sale which are available on request.