# Installation instructions for contractors



# Gas type conversion to G 31

for Vitodens 100-W, type WB1C

#### Safety instructions



Please follow these safety instructions closely to prevent accidents and material losses.

#### Safety instructions explained



#### **Danger**

This symbol warns against the risk of injury.

# Please note

This symbol warns against the risk of material losses and environmental pollution.

#### Note

Details identified by the word "Note" contain additional information.

Installation, initial start-up, inspection, maintenance and repairs must only be carried out by a competent person (heating engineer/installation contractor).

Before working on the equipment/heating system, isolate the power supply (e.g. by removing a separate mains fuse or by means of a mains isolator) and safeguard against unauthorised reconnection.

When using gas as fuel, also close the main gas shut-off valve and safeguard against unauthorised reopening.

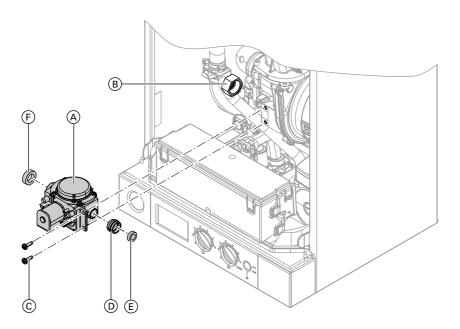
Repairing components which fulfil a safety function can compromise the safe operation of your heating system. For replacements, use only original spare parts supplied or approved by Viessmann.

## **Opening the Vitodens**



Installation and service instruc-

# Replacing the gas restrictor



- **1.** Pull cable from gas train (A).
- **2.** Undo union nut  $oxtle{\mathbb{B}}$ .
- **3.** Undo two screws © and remove gas train (A).
- **4.** Remove gasket ① from gas train ④.
- **5.** Insert the coloured gasket ① and gas restrictor ② from the conversion kit into gas train ②.
- **6.** Fit gas train (A).
  Fixing screw torque (C): 3 Nm.
  Union nut torque (B): 30 Nm.

7. Start the boiler and check for leaks.



#### Danger

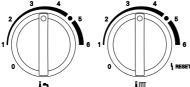
Escaping gas leads to a risk of explosion.
Check gas equipment for tightness.

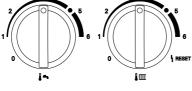
#### Please note

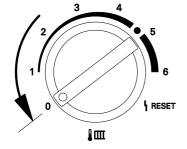
The use of leak detecting spray can result in incorrect functions.

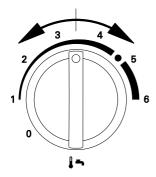
Leak detecting spray must not reach electrical contacts or seal diaphragm openings on the gas valve.

# Converting gas type at the control unit









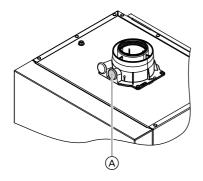
- 1. Switch ON/OFF switch ON.
- 2. Simultaneously turn rotary selectors "4" and "4" to their central positions.
  - "SERV" appears on the display.
- 3. Turn rotary selector " IIII fully anticlockwise within 2 s.
  - ">" and the set value flash in the display.

4. Adjust the control unit to natural gas or LPG by turning the rotary selector "15".

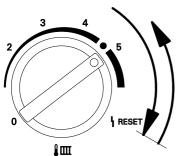
The display shows:

- "0" for operation with natural gas
- "1" for operation with LPG
- **5.** The set operating mode is saved when the value stops flashing, and the control unit returns to standard mode.

# Checking the CO<sub>2</sub> content



- 2. Start the boiler.



3. Turn rotary selector "" " " " fully clockwise for less than 2 s and then back to the control range on the right.

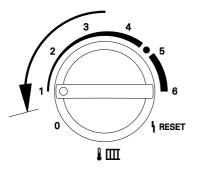
The display shows "SERV", "

and the boiler water temperature is displayed.

- 3 4 5 6 N RESET
- 4. Adjust the upper output: Turn rotary selector "↓□□" to the control range on the right until the display shows 5 bars for the upper output.
- **5.** Test the  $CO_2$  content for upper output.

The CO<sub>2</sub> content must be between 10.0 and 12.0 %.

### Checking the CO<sub>2</sub> content (cont.)



- 6. Adjust the lower output:

  Turn rotary selector "IIII" to the
  control range on the left until the display shows 1 bar for the lower output.
- Test the CO<sub>2</sub> content for lower output.
   The CO<sub>2</sub> content must be between 0.3 and 0.9 % below the value for the upper output.
- 8. If the CO<sub>2</sub> content is within the given range, continue with point 10
  - If the CO<sub>2</sub> content is outside the given range, check the flue gas/ ventilation air system for tightness; remedy any leaks. Replace gas train if required
- **9.** Test the CO<sub>2</sub> content for upper and lower output again.
- Shut the boiler down, remove flue gas analyser and close flue gas port

   A.
- **11.** Return rotary selectors "♣★" and "IIII to their original positions.
- 12. Select the appropriate label from "Gas type" labels supplied and affix it next to the type plate on top of the boiler.

#### Note

The delivered condition shown on the type plate then no longer applies.

**13.** Fit front panel and start the boiler.

Viessmann Werke GmbH&Co KG D-35107 Allendorf Telephone: +49 6452 70-0 Fax: +49 6452 70-2780 www.viessmann.com

Viessmann Limited Hortonwood 30, Telford Shropshire, TF1 7YP, GB Telephone: +44 1952 675000

Fax: +44 1952 675040

5602 973 GB E-mail: info-uk@viessmann.com