Installation instructions

for contractors

VIESMANN

Converting the gas type from natural gas to LPG

for Vitodens 050-W

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.

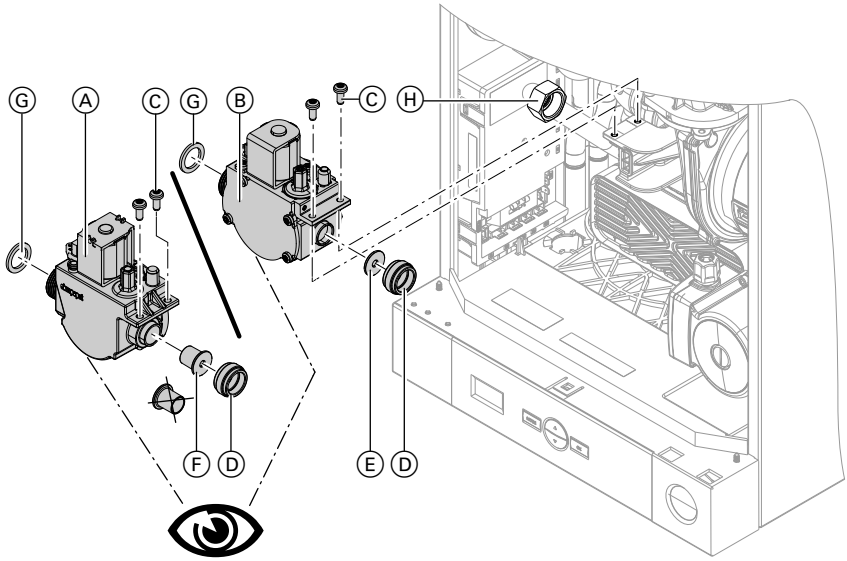
Opening the Vitodens

Installation and service instructions

Replacing the gas train

Dispose after installation.

Converting the gas type to LPG P (G31)



Note

The Vitodens may be equipped with different gas train versions.

- *Pressure die cast casing* Ⓐ
- *Bolted casing* Ⓑ

1. Pull cable from gas train.

2. Undo union nut Ⓗ and remove old gas gasket.

3. Undo 2 screws Ⓒ and remove gas train.

4. For boilers equipped with gas train Ⓐ, insert new gasket Ⓓ **with** correct new gas restrictor Ⓕ for the relevant gas type from the conversion kit.

Please note

Ensure the gas restrictor is fitted correctly.

If equipped with gas train Ⓑ (bolted casing), insert new gasket Ⓓ **with** gas restrictor Ⓔ from the conversion kit for the relevant gas type.

Converting the gas type to LPG P (G31) (cont.)

5. Mount gas train with new gas gasket Ⓖ.
   Torque for fixing screws Ⓒ: 6 Nm
   Torque for union nut Ⓑ: 30 Nm

6. Start the boiler.

7. Check all gas connections for tightness.

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

Please note
The use of leak detection spray can result in faulty operation.
Leak detection spray must not come into contact with electrical contacts or seal the diaphragm opening on the gas valve.

Changing the gas type at the control unit

1. Turn on the ON/OFF switch.

2. Press MODE and ▲ simultaneously and hold for 3 s.
   "SERV" appears on the display and **"I"** flashes.

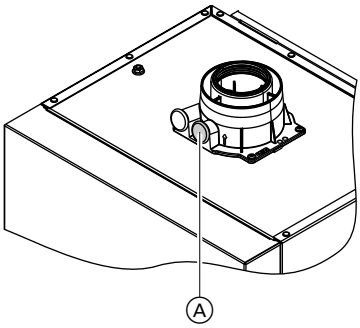
3. Use ▲/▼ to select **"5"** and confirm with OK.
   "0" flashes on the display.

4. Use ▲/▼ to select **"1"** and confirm with OK.
   The burner has been converted to operation with LPG.

5. Press MODE and ▲ simultaneously and hold for 3 s.
   Service mode is terminated. Service mode also terminates automatically after 30 min.

6. Turn the ON/OFF switch off and on again.
   The selected gas type is now enabled.

Checking the CO_2 content



1. Connect a flue gas analyser at flue gas port Ⓐ on the boiler flue connection.

2. Start the boiler.

3. To check the CO_2 content the burner output can be adjusted manually.

   Set the burner output at the boiler control unit:
   1. Press MODE.
   2. ▲/▼ repeatedly until **"SERV"** appears.
   3. Press OK to confirm.
      "OFF" appears on the display.
   4. Use ▲/▼ to adjust the burner output:

Display shows		Burner output
_	**20**	20 %
_ _	**40**	40 %
_ _ _	**60**	60 %
_ _ _ _	**80**	80 %
_ _ _ _ _	**100**	100 %

   5. Confirm your settings with OK.

Checking the CO_2 content (cont.)

4. Set the higher heating output (100 %) and check the CO_2 content.
The CO_2 content must be within the following range for the respective gas type. See table.

Gas type	CO_2 content in %
E (G20)	7.5 – 10.5
P (G31)	10.0 – 12.0

5. Set the lower heating output (20 %) and check the CO_2 content.
The CO_2 content must be between 0.3 and 0.9 % below the value of the upper heating output (100 %).

6.
- If the CO_2 content is within the range indicated, continue with step 6.
- If the CO_2 content lies **outside** the given range, check the balanced flue system for tightness. Remedy any leaks.
  Replace gas train if required.

7. Re-check the CO_2 content for the higher and lower heating output.

8. Use ▲/▼ to set the burner output to **"OFF"**.

9. Press MODE, **"SERV"** is no longer shown.

Note
The function also terminates automatically after 30 min.

Starting the boiler

1. Shut down the boiler, remove the flue gas analyser and close flue gas test port Ⓐ.

2. Select the appropriate label from the "Gas type" labels supplied and affix it next to the type plate on the top of the boiler.

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

3. Mount the 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
E-mail: info-uk@viessmann.com

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