

Installation and service instructions

for contractors

VISSMANN

CO limiter

for connection to oil and gas boilers

Part no.: 7499 330

Safety instructions



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

Safety instructions explained



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).

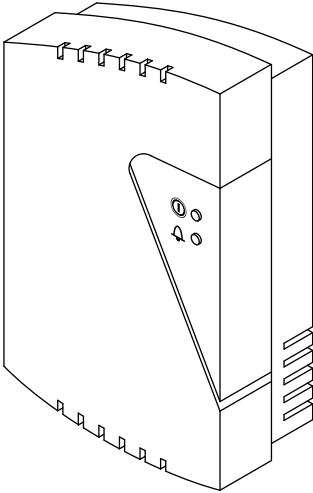
Before working on the equipment/heating system, isolate the power supply (e.g. by removing a separate mains fuse or by means of a mains isolator) and safeguard against unauthorised reconnection.

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.

Product information

Monitoring device, for safety shut down of the boiler in the event of escaping carbon monoxide.



Indicators:

- ⓘ Operation (green LED)
- 🔔 Alarm (red LED)

Function

The green indicator illuminates while the device is operational.

- If the CO concentration exceeds the specified limit, the inbuilt relay drops out. This turns off the boiler burner. The red indicator illuminates. If an internal fault occurs in the CO limiter, the relay also drops out. For systems with Vitoladens 300-C, Vitoladens 300-W and Vitoladens 333-F:
Fault message "F9" appears.



Boiler service instructions

- If the CO concentration falls back below the specified limit, the relay picks up again. The burner is re-enabled and starts up.

The function of the CO sensor is continuously monitored during operation. If the sensor is faulty, the red indicator flashes.



Please note

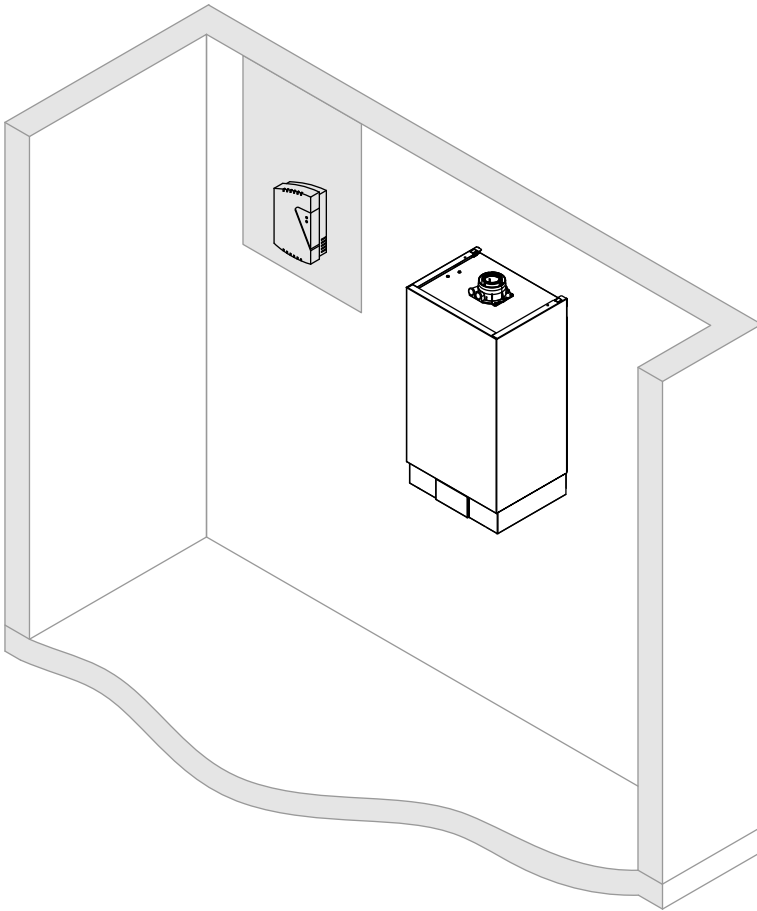
The correct function of the CO limiter can only be guaranteed if the connections are made in accordance with the following diagrams.

Service life

Replace the CO limiter after 10 years in operation.

Please refer to the label on the CO limiter and the entry in "Information on operation" for the commissioning date.

Installation site

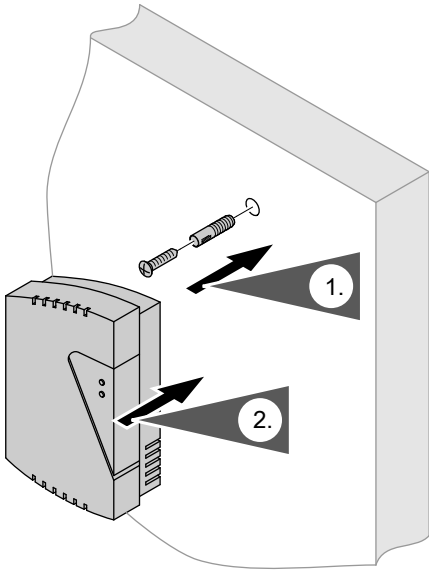


Install the CO limiter close to the ceiling; carbon monoxide is lighter than air and therefore rises.

Never install the CO limiter in areas where the following occur:

- Water splashes.
- High levels of humidity.
- Draught from open windows or vents.

Mounting the CO limiter



Connecting the CO limiter to the boiler control unit

Colour coding to DIN/IEC 60757

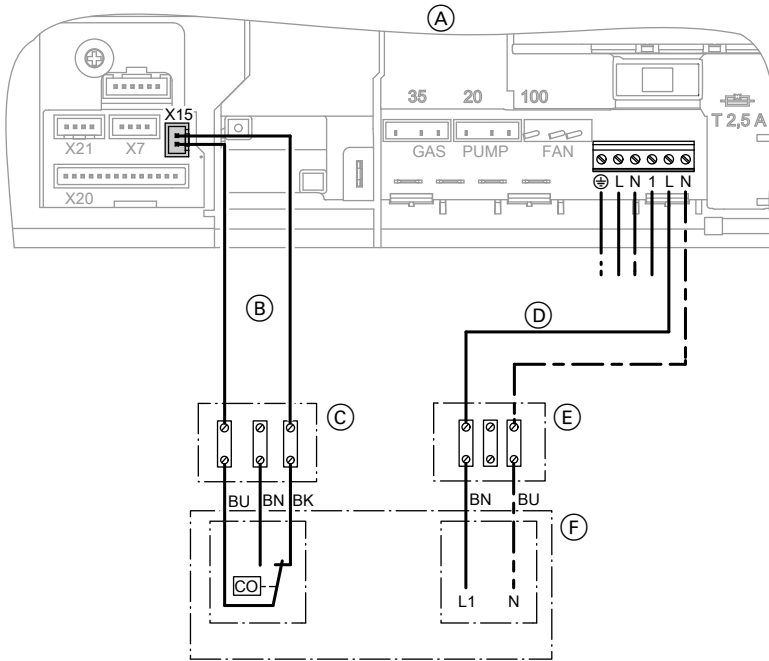
BK Black
BN Brown
BU Blue

Note

*The CO limiter must be connected using two separate cables.
In the connection diagrams the relay is depicted in a zero current state.*

Connecting the CO limiter to the boiler control... (cont.)

Vitodens 100-W and Vitodens 111-W



- (A) Control unit
- (D) On-site cable
- (B) Connecting cable with plug (part of standard delivery)
- (E) On-site junction box
- (C) On-site junction box
- (F) CO limiter

Note

If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Connecting the CO limiter to the boiler control... (cont.)

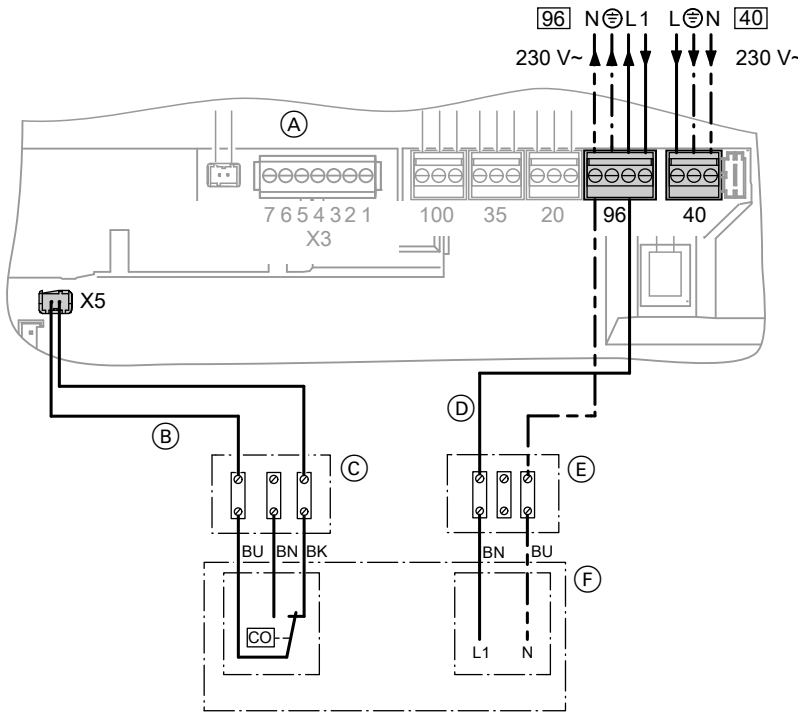
Vitocrossal 300, type CU3A, Vitodens 2 ..., Vitodens 3 ..., Vitopend 2 ... and Vitosorp 200-F

Control unit versions Vitotronic 100/200,
type:

- HC1 ...
- HO1 ...
- KW6 ...

Note

If required, replace control unit plug 96 with supplied plug 96.



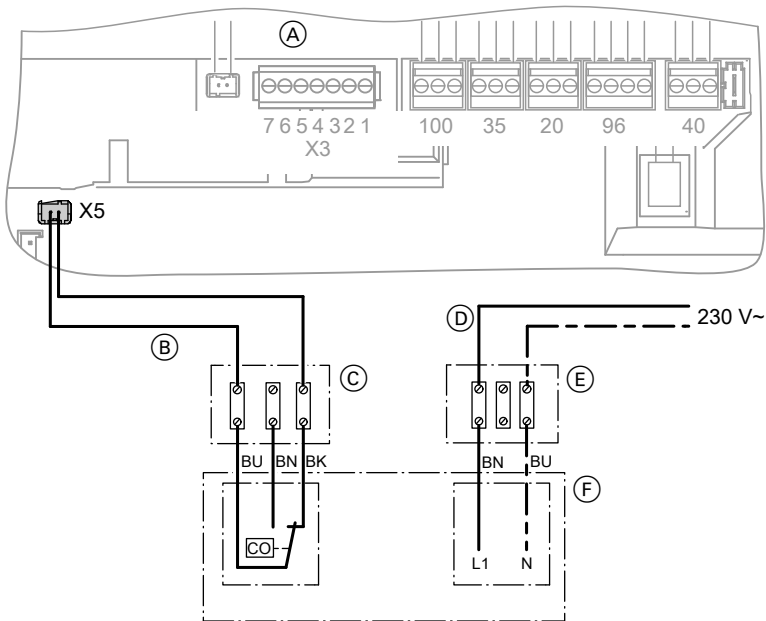
- | | |
|--|---|
| <ul style="list-style-type: none"> (A) Control unit (B) Connecting cable with plug (part of standard delivery) (C) On-site junction box | <ul style="list-style-type: none"> (D) On-site cable (E) On-site junction box (F) CO limiter |
|--|---|

Connecting the CO limiter to the boiler control... (cont.)

Note

If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Vitovvalor 300-P



- | | |
|--|--------------------------|
| (A) Control unit | (D) On-site power cable |
| (B) Connecting cable with plug (part of standard delivery) | (E) On-site junction box |
| (C) On-site junction box | (F) CO limiter |

Note

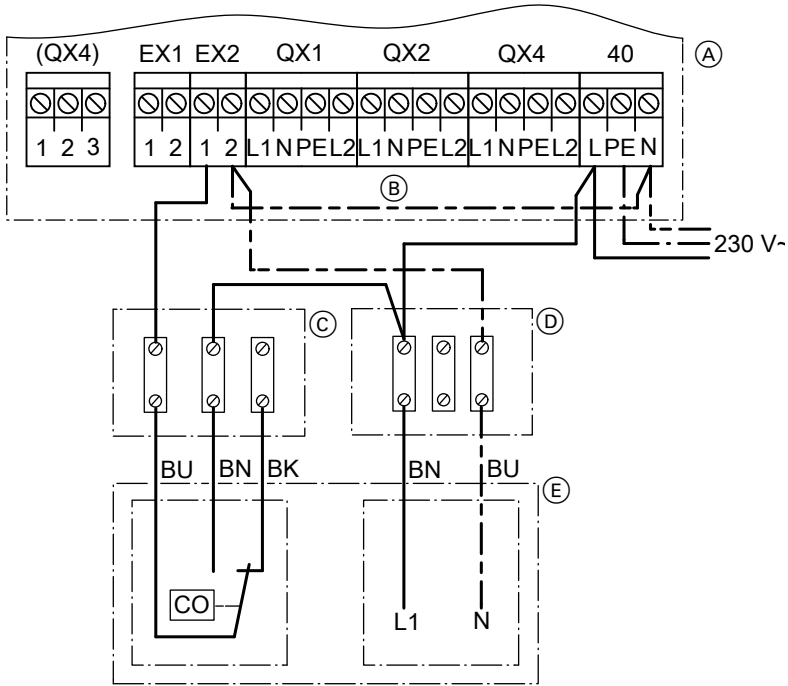
If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Connecting the CO limiter to the boiler control... (cont.)

Vitotwin 300-W

Note

A 230 V extension is required to connect the CO limiter.



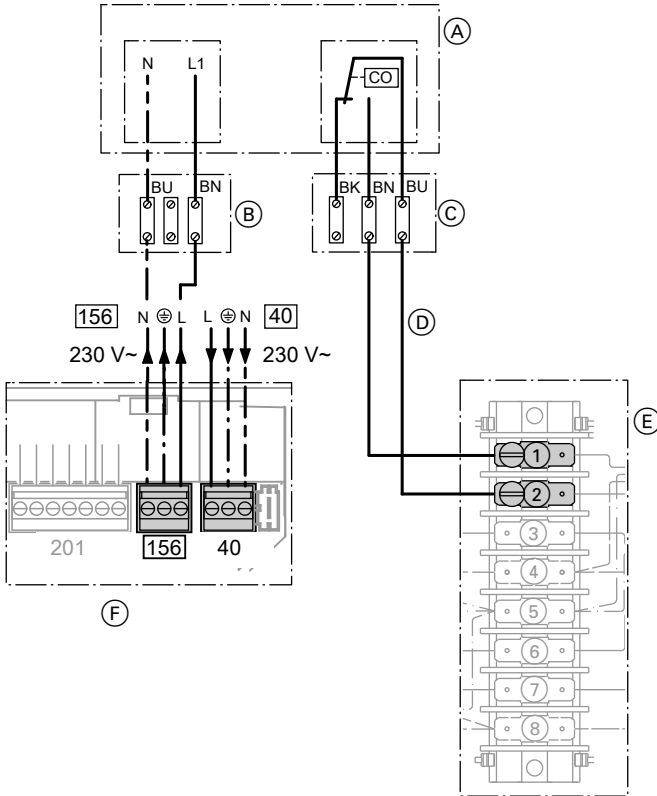
- (A) 230 V extension
- (B) Jumper (provide on-site)
- (C) On-site junction box
- (D) On-site junction box
- (E) CO limiter

Set the following codes on the Vitotwin 300-W control unit:

- "Function input EX2" to "5982: Heat generation lock"
- "Cont type input EX2" to "5983: NC"

Connecting the CO limiter to the boiler control... (cont.)

Vitoladens 300-C, Vitoladens 300-W and Vitoladens 333-F



- (A) CO limiter
- (B) On-site junction box (if required)
- (C) On-site junction box (if required)
- (D) On-site cable (if required)
- (E) Junction box on burner
- (F) Control unit

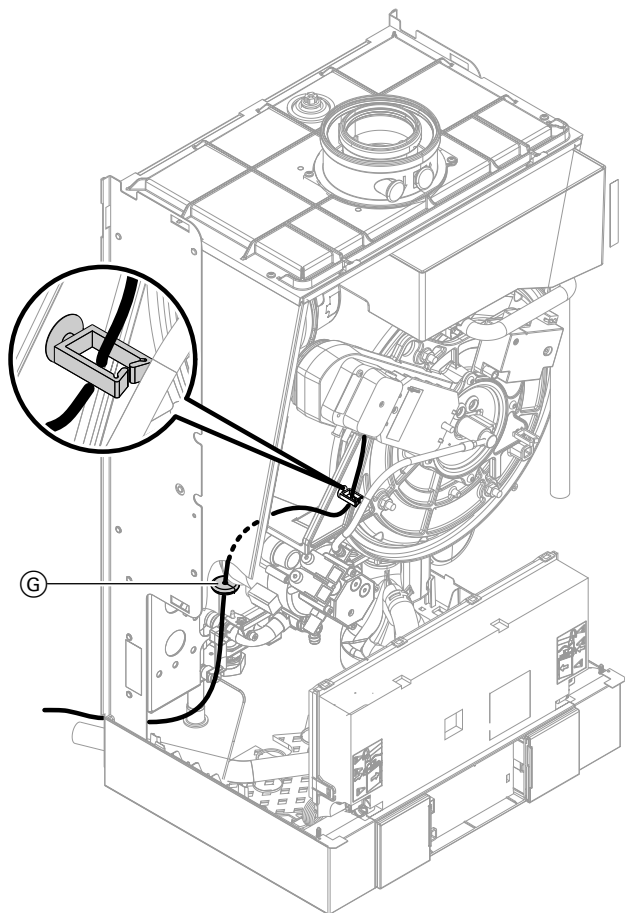
Remove jumper across terminals 1 and 2 (junction box (E)).

Note

If a fire safety switch or any other safety equipment has additionally been installed in the heating system, connect this in series with the CO limiter.

Connecting the CO limiter to the boiler control... (cont.)

Sensor lead routing in the Vitoladens 300-W and Vitoladens 333-F

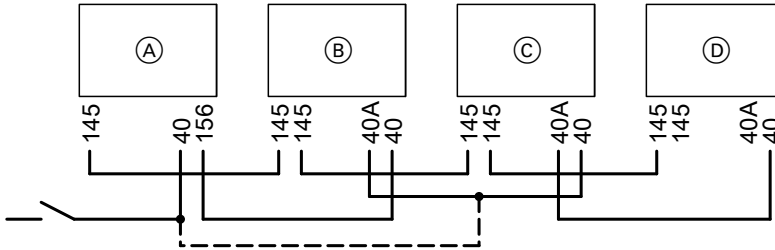


- Ⓒ Diaphragm grommet for sensor leads

Route the sensor lead of the CO limiter or on-site extension Ⓒ as shown in the diagram. On-site extension Ⓒ must be heat-resistant up to 70 °C.

Connecting the CO limiter to the boiler control... (cont.)

Connecting several accessories



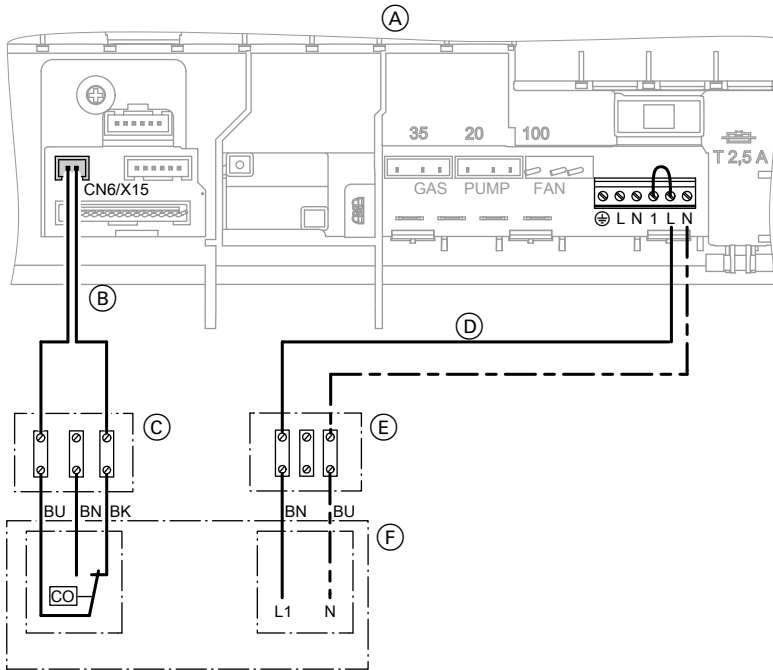
- Ⓐ Boiler control unit
- Ⓑ Extension kit for heating circuit with mixer M2
- Ⓒ Extension kit for heating circuit with mixer M3
- Ⓓ AM1, EA1 extension and/or SM1 solar control module or CO limiter

Note

If a SM1 solar control module is connected the CO limiter cannot be connected.

Connecting the CO limiter to the boiler control... (cont.)

Vitopend 100-E and Vitopend 100-W, type WH1B, WH1C, WHKB



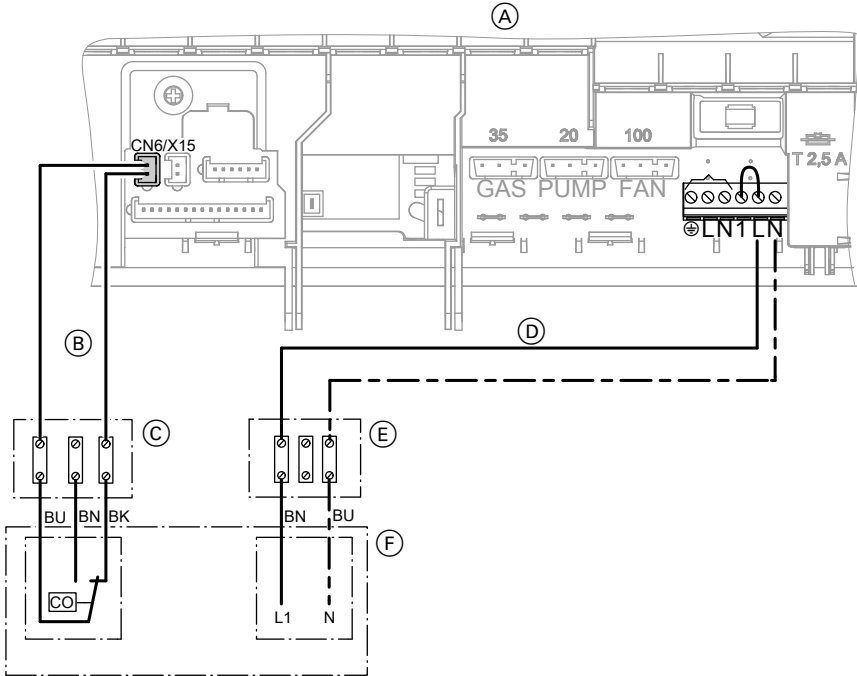
- (A) Control unit
- (B) Connecting cable with plug (part of standard delivery)
- (C) On-site junction box
- (D) On-site cable
- (E) On-site junction box
- (F) CO limiter

Note

If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Connecting the CO limiter to the boiler control... (cont.)

Vitopend 100-W, type WH1D



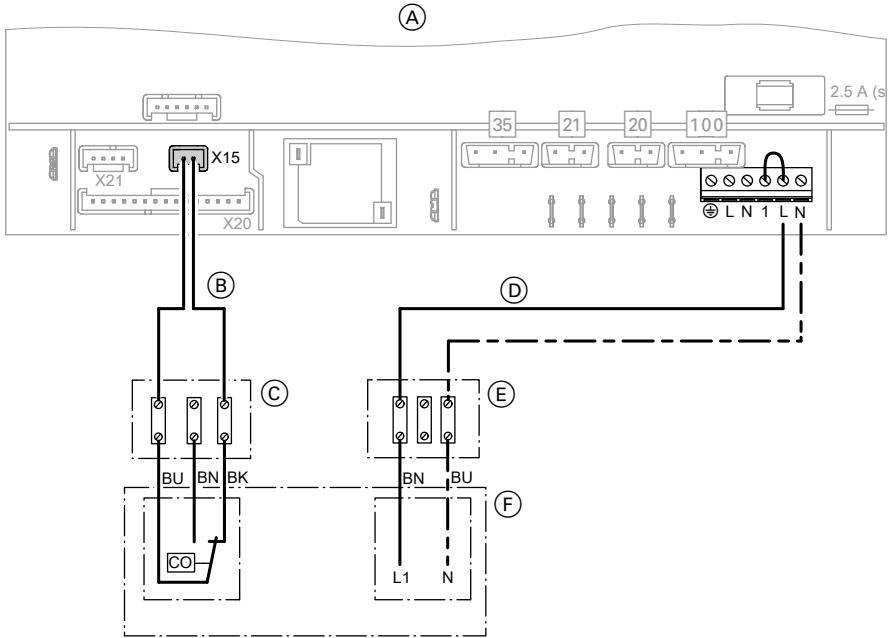
- (A) Control unit
- (B) Connecting cable with plug (part of standard delivery)
- (C) On-site junction box
- (D) On-site cable
- (E) On-site junction box
- (F) CO limiter

Note

If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Connecting the CO limiter to the boiler control... (cont.)

Vitopend 111-W



- (A) Control unit
- (B) Connecting cable with plug (part of standard delivery)
- (C) On-site junction box
- (D) On-site cable
- (E) On-site junction box
- (F) CO limiter

Note

If a gas pressure switch is additionally installed in the heating system, connect this in parallel with the CO limiter.

Vitola, Vitoladens 300-T, Vitorond, Vitorondens and Vitogas

Control unit versions Vitotronic 100/200, type:

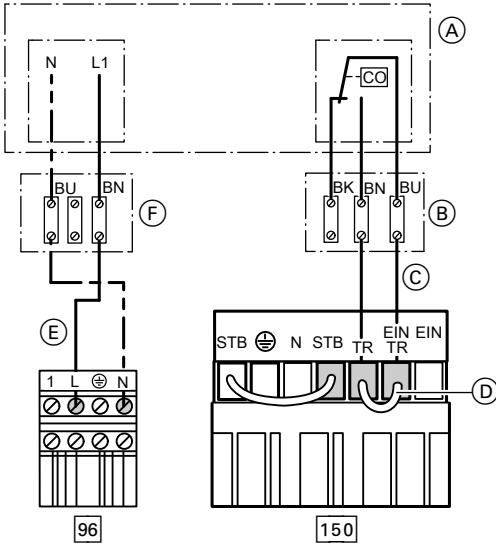
- KC ...
- KO ...

Connection to external extension H5 (accessories).

Connecting the CO limiter to the boiler control... (cont.)

Note

If required, replace control unit plug **96** with supplied plug **96**.



- (A) CO limiter
- (B) On-site junction box
- (C) On-site cable
- (D) Remove jumper
- (E) On-site cable
- (F) On-site junction box

- 96** Accessories power supply at the control unit
- 150** Plug to extension H5 (accessories)

Note

If a fire safety switch or any other safety equipment has additionally been installed in the heating system, connect this in series with the CO limiter.

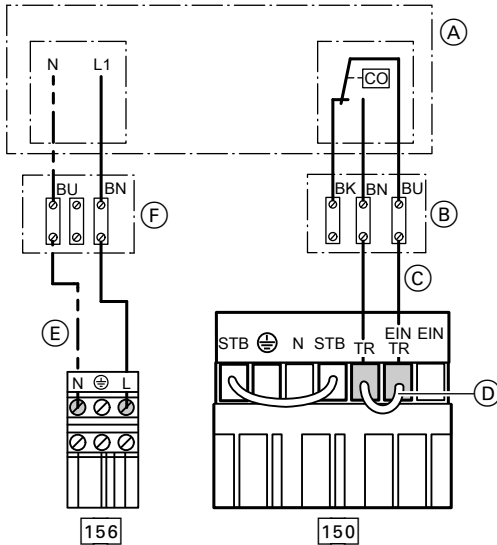
Connecting the CO limiter to the boiler control... (cont.)

Vitocrossal 300, type CM3

Control unit versions Vitotronic 100/200,
type:

- GC1 ...
- GW1 ...
- GW2 ...

Connection to plug **150** in the control unit.



- | | |
|--------------------------|--------------------------|
| (A) CO limiter | (D) Remove jumper |
| (B) On-site junction box | (E) On-site cable |
| (C) On-site cable | (F) On-site junction box |

- 156** Accessories power supply at the control unit
- 150** Safety equipment connection

Note

If any other safety equipment has been additionally installed in the heating system, connect this in series with the CO limiter.

Commissioning the CO limiter

Switch on the power supply via the control unit.

The green indicator illuminates; the red indicator flashes for approx. 30 s. After this the device is ready for operation.

Enter the commissioning date in the supplied "Information on operation" and on the supplied label.

Affix the label to the front of the CO limiter.

Maintenance and function check

The CO limiter is maintenance-free. A contractor should check the device annually for correct function. Its function can only be checked with CO gas.

Information on test gas canisters with an adaptor can be obtained from the following address:

S + G Messtechnik GmbH
Rheinhorststrasse 14
D-67071 Ludwigshafen, Germany
Telephone: +49 (0)621 67153-0
Fax: +49 (0)621 67153-40

Heating system maintenance

Regardless of whether a CO limiter is fitted, service the heating system components in accordance with the installation and service instructions and check them for correct function.

Specification

Rated voltage	230 V~
Rated frequency	50 Hz
Power consumption	3 W
Rated breaking capacity of the relay output	8 A 230 V~/10 mA 24 V~
Alarm threshold	40 ppm CO
Safety category	II
IP rating	IP 20 to EN 60529; ensure through design/installation
Permissible ambient temperature	70 °C



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