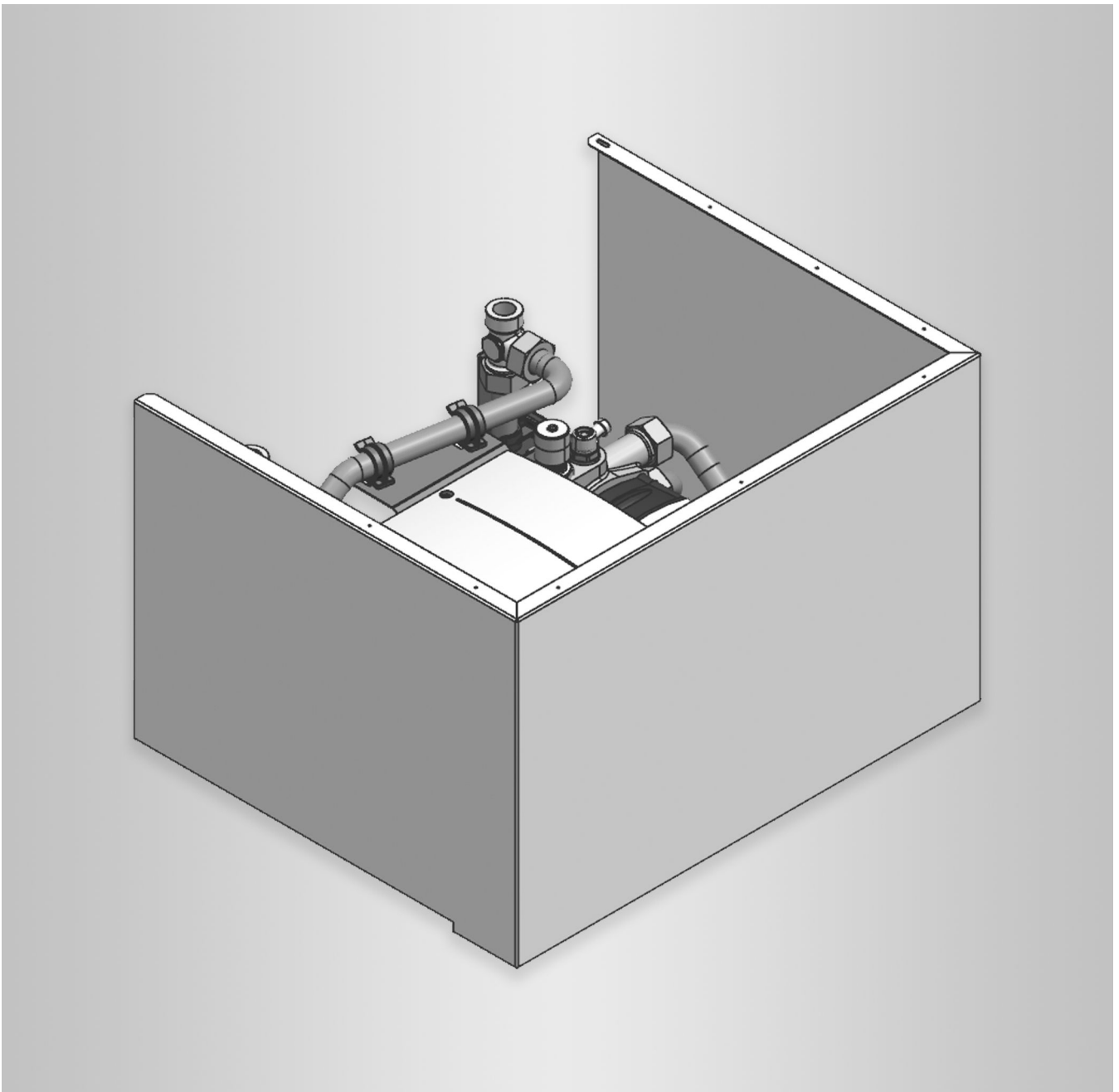


Sub-mounting kit

Heating circuit distributor for Vitodens 200-W up to 35 kW

Sub-mounting kit



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.

Note

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

Target group

These instructions are exclusively intended for authorised contractors.

- Work on gas installations must only be carried out by a registered gas fitter.
- Work on electrical equipment must only be carried out by a qualified electrician.

Regulations to be observed

- National installation regulations
- Statutory regulations for the prevention of accidents
- Statutory regulations for environmental protection
- Codes of practice of the relevant trade associations
- All current safety regulations as defined by DIN, EN, DVGW, TRGI, TRF, VDE and all locally applicable standards
 - Ⓐ ÖNORM, EN, ÖVGW-TR Gas, ÖVGW-TRF and ÖVE
 - ⒸH SEV, SUVA, SVGW, SVTI, SWKI, VKF and EKAS guideline 1942: LPG, part 2

Working on the system


- Isolate the system from the power supply (e.g. by removing the separate fuse or by means of a mains isolator) and check that it is no longer 'live'.
- Safeguard the system against reconnection.
- Where gas is used as the fuel, close the main gas shut-off valve and safeguard it against unintentional reopening.

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Installation requirements

A pre-plumbing jig for installation on finished walls is required for fitting the sub-mounting kit. Connection pipes and clips are supplied with the pre-plumbing jig. Provide a gas shut-off valve on site with min. DN 15 and thermally actuated gas shut-off device.

 Pre-plumbing jig installation instructions

Note

A DHW cylinder cannot be installed below the boiler when a sub-mounting kit is used.

Ambient temperature max. 35 °C

Installation preparations

Drain outlet positioning

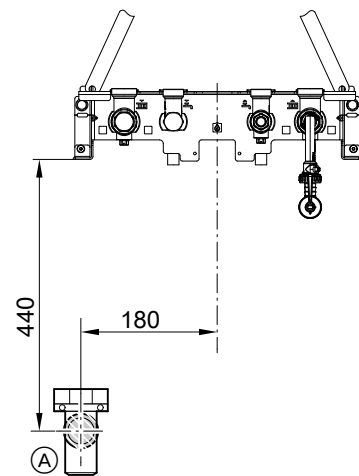


Fig. 1

Position drain outlet for condensate (A) (if available) as shown in the diagram.

Fitting the sub-mounting kit

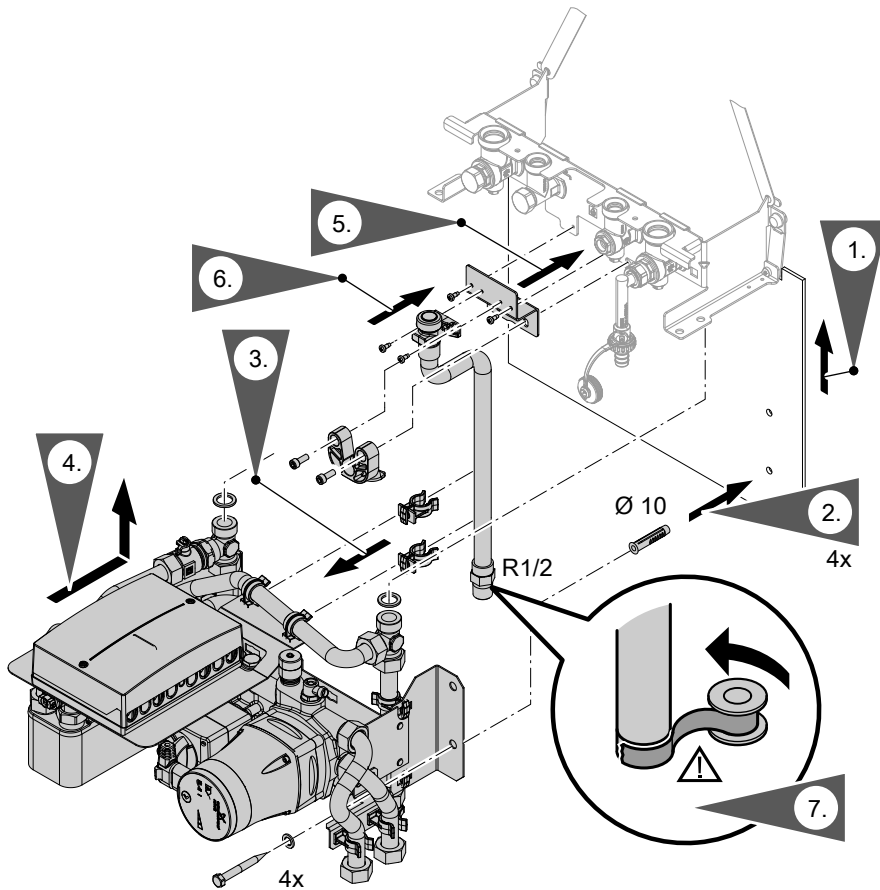


Fig. 2

1. Align the drilling template below the fitting assembly of the pre-plumbing jig.
2. Drill holes $\varnothing 10$ mm and insert rawl plugs.
3. Fit the clips to the sub-mounting kit.
4. Secure the sub-mounting kit to the wall with the screws and washers supplied.
5. Secure the mounting plate to the fitting assembly using screws M 4 x 10 (self-tapping).
6. Secure the gas pipe with clip to the mounting plate.
7. Seal the on-site gas shut-off valve to the gas pipe.

Fitting connection pipes

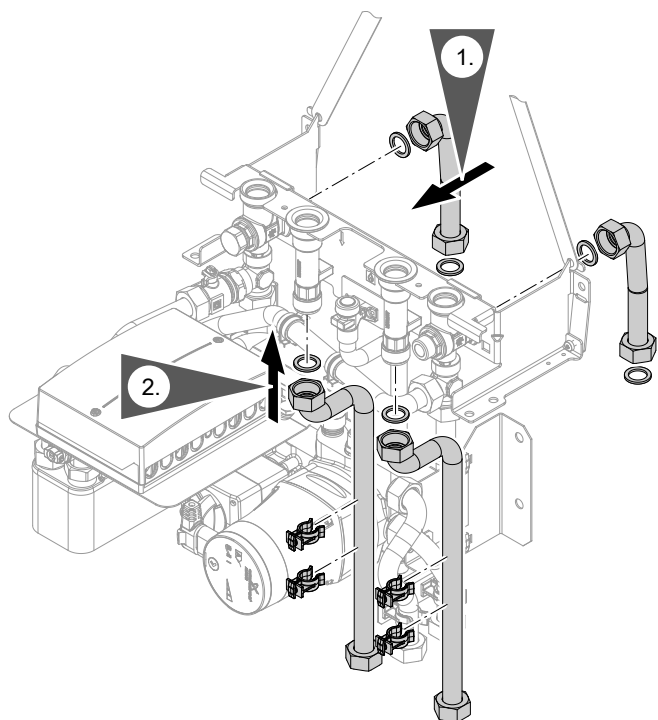


Fig. 3 Gas condensing system boiler

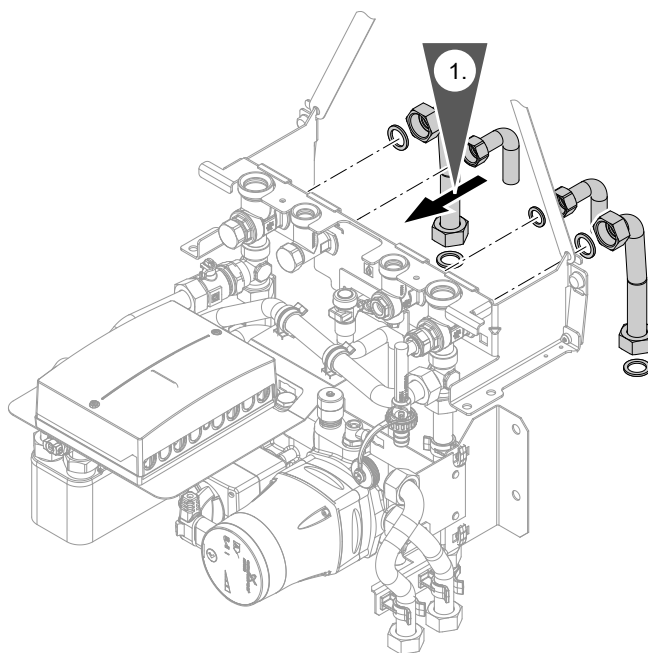
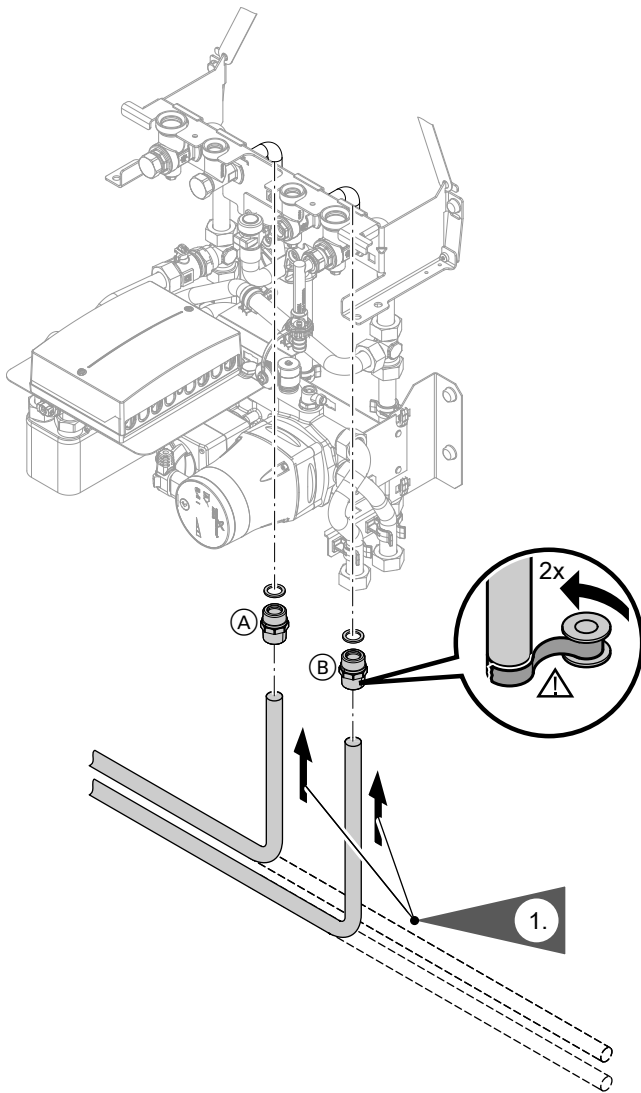


Fig. 4 Gas condensing combi boiler

Insert flat gaskets and fit the connection pipes.

Connecting the DHW cylinder (gas condensing system boiler) or DHW lines (gas condensing combi boiler)



1. Route the connection lines to the DHW cylinder or cold water line and DHW line below the sub-mounting kit.
2. Connect on-site connection lines to the fitting assembly of the pre-plumbing jig.


 Pre-plumbing jig installation instructions

Fig. 5

- Ⓐ Heating water flow, DHW cylinder/DHW
- Ⓑ Heating water return, DHW cylinder/cold water

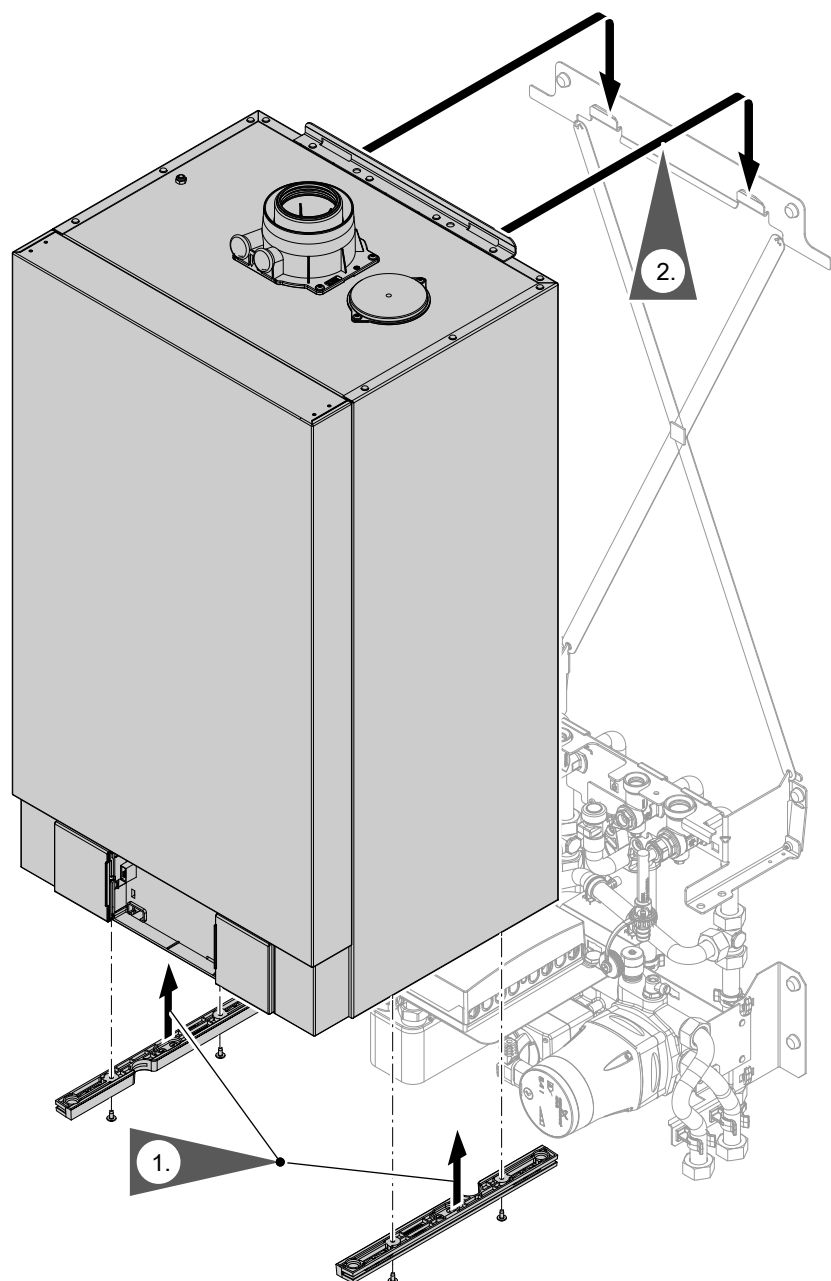


Fig. 6

1. Fit the retaining rails for the casing.

2. Hook the boiler onto the pre-plumbing jig.



Boiler and pre-plumbing jig installation instructions

Connecting the heating circuits

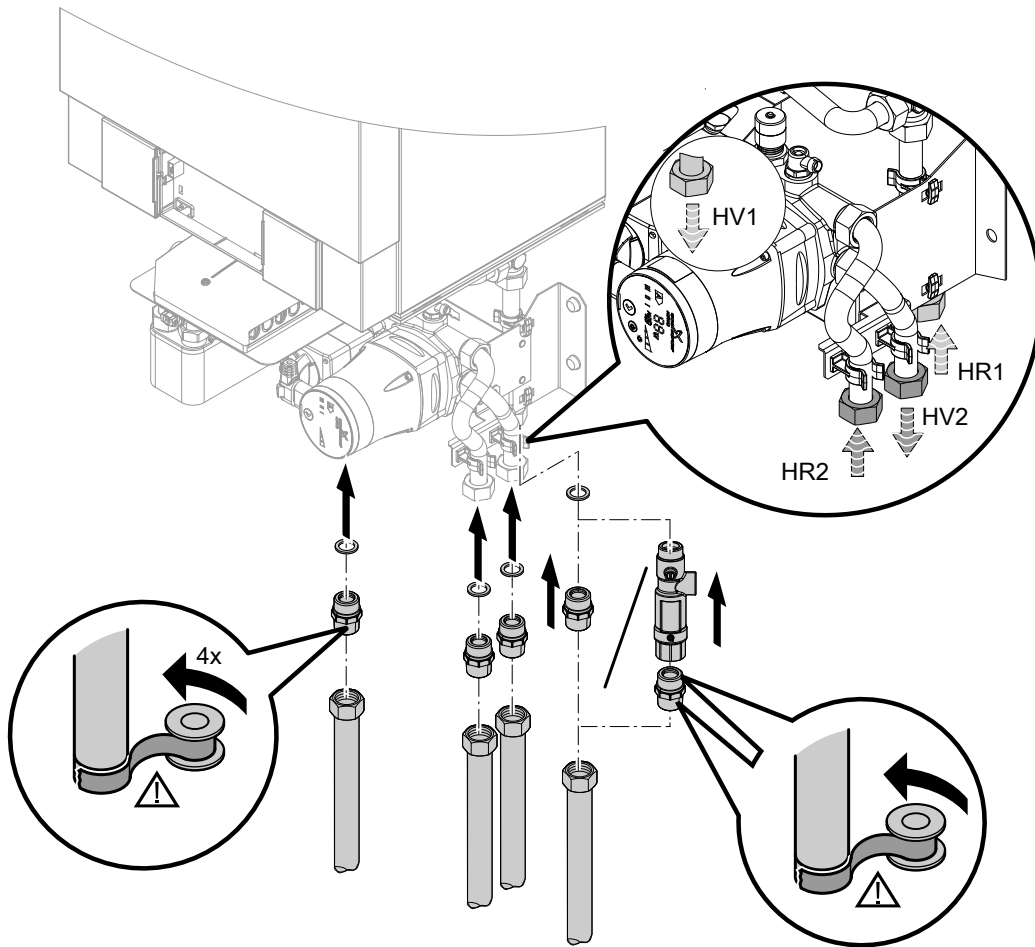


Fig. 7

HR1 Heating water return, heating circuit without mixer G $\frac{3}{4}$

HR2 Heating water return, heating circuit with mixer G $\frac{3}{4}$

HV1 Heating water flow, heating circuit without mixer G $\frac{3}{4}$

HV2 Heating water flow, heating circuit with mixer G $\frac{3}{4}$

1. Secure the twin connectors with flat gaskets to the connections of the sub-mounting kit.
If available:
Fit a flow indicator (accessories) with flat gasket in place of the twin connector to the heating water return of the heating circuit without mixer.
2. Connect the heating circuits to the connection pipes of the sub-mounting kit.
Do not alter the position of the heating circuit connections, so the casing can be fitted later.

Connecting the heating circuits (cont.)

System scheme with sub-mounting kit

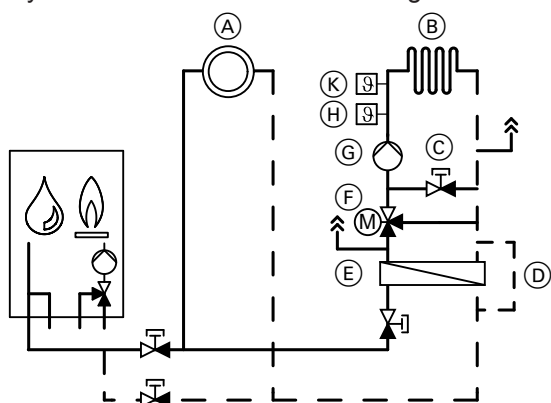


Fig. 8

- (A) Heating circuit without mixer
- (B) Heating circuit with mixer (underfloor heating circuit)
- (C) Bypass
- (D) Volume balancing line
- (E) Plate heat exchanger for system separation
- (F) 3-way mixer
- (G) Heating circuit pump
- (H) Flow temperature sensor
- (K) Temperature limiter to restrict the maximum temperature of underfloor heating systems

Information regarding the heating circuit with mixer

Install a drain & fill valve on site, in the flow of the heating circuit with mixer. This is required during commissioning for filling and venting the heating circuit.

The expansion vessel integrated into the boiler can also be used for the heating circuit with mixer.

Check whether the size of the integral expansion vessel is adequate for the connected heating circuits.

Information on the underfloor heating circuit

Fit maximum temperature limiter (K) to the heating flow line at least 1 m downstream of the circulation pump.

Connecting heating circuits with permeable pipework

When connecting heating systems with permeable pipework (DIN 4726), seal off the volume balancing line between the two heating circuits.

Note

If the volume balancing line has been removed, install a separate expansion vessel in the regulated heating circuit.

Removing the volume balancing line

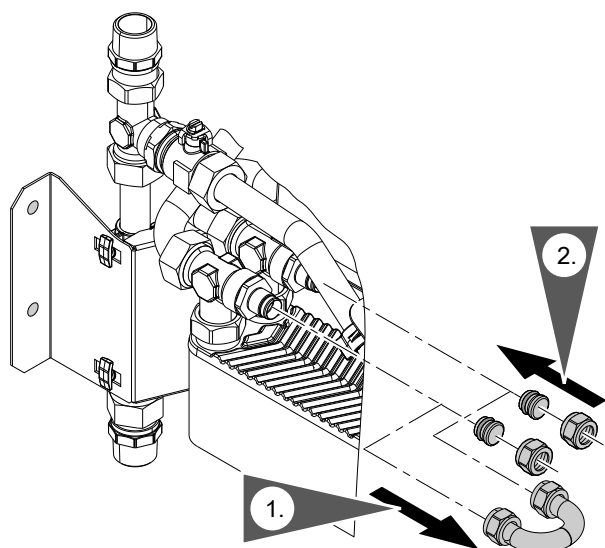



Fig. 9

1. Undo the union nuts and remove the balancing line and locking rings.
2. Seal the connections with the plugs and union nuts supplied.
Lubricate the O-rings with the valve grease supplied.

Electrical connections

Connecting the mixer control to the boiler control unit

 **Connection to the boiler control unit:**
Boiler installation instructions

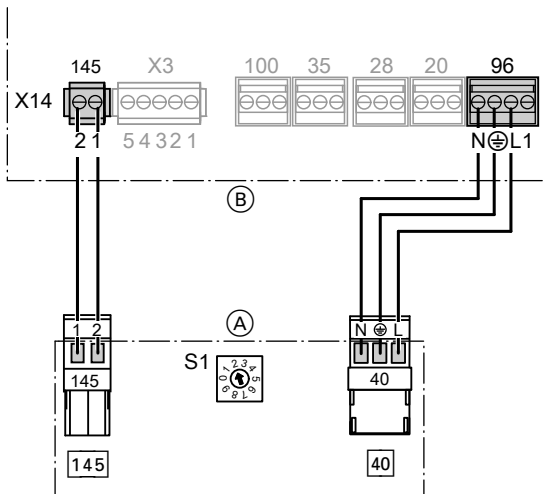



Fig. 10

- (A) Mixer control, sub-mounting kit
- (B) Control unit, wall mounted gas boiler


1. Connect the cable with plug 145 to plug 145 of the control unit or to the KM-BUS distributor.
2. Connect the power cable with plug 40 to plug 96 of the control unit.
3. Route the power cable and KM-BUS cable individually. Secure the cables so they cannot come into contact with the circulation pump.


Connecting the maximum temperature limiter or controller to the mixer control

 Separate installation instructions

Commissioning and adjustment

Filling and commissioning the heating system

 Boiler service instructions

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

Venting the heating circuit with mixer

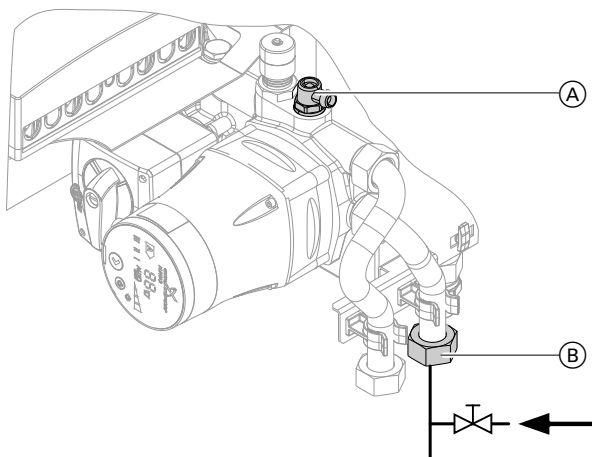


Fig. 11

1. Connect a hose to air vent valve (A) and route it into a drain connection.
2. Connect the fill hose to on-site drain & fill valve (B).
3. Flush the heating circuit under mains pressure until sound of escaping air is no longer heard.

Position of switch on the mixer motor

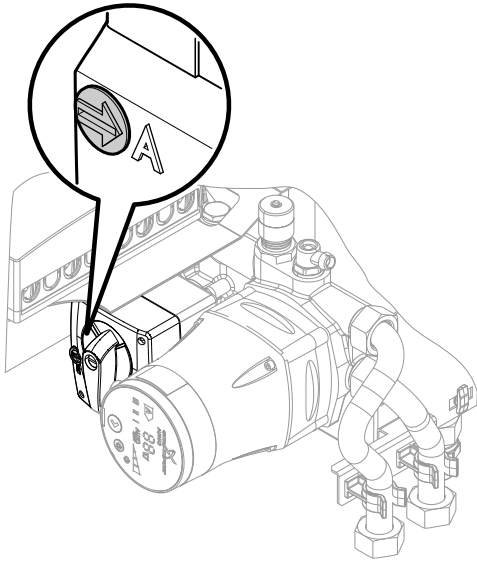


Fig. 12

The rotary selector on the mixer servomotor must be set to automatic (arrow towards "A"). In the event of mixer control faults, turn the rotary selector to "manual" and adjust the mixer manually (emergency mode).

Adjusting the flow rate

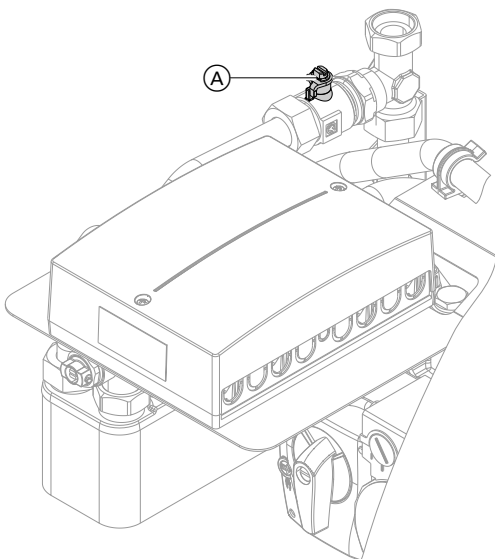
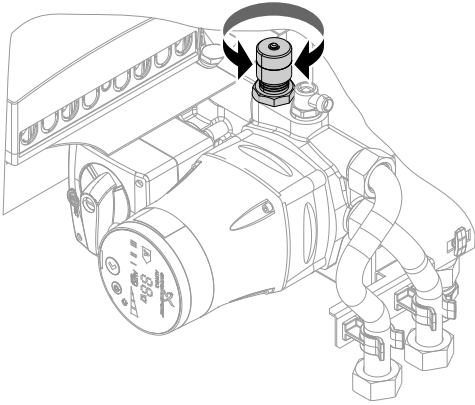


Fig. 13

1. Adjust the flow rate at ball valve (A).
2. Check the flow rate on the flow indicator (accessories, if installed).

Adjusting the bypass



A bypass is integrated into the heating circuit with mixer. In the delivered condition, the bypass is closed. If required, open the bypass to minimise temperature peaks (turn anti-clockwise).

Fig. 14

Fitting the casing

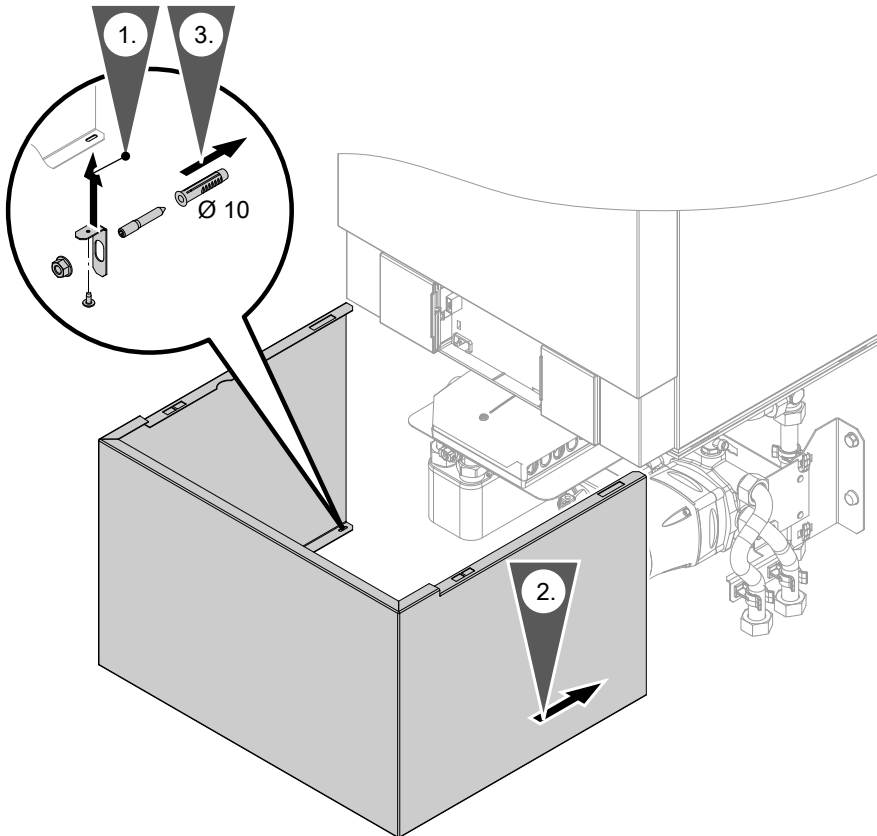


Fig. 15

1. Secure retaining bracket with B 3.9 x 13 self-tapping screw to the casing.
2. Slide the casing into the fixing rails from the front.
3. Secure retaining bracket with screw and rawl plug to the wall.

Connection and wiring diagram

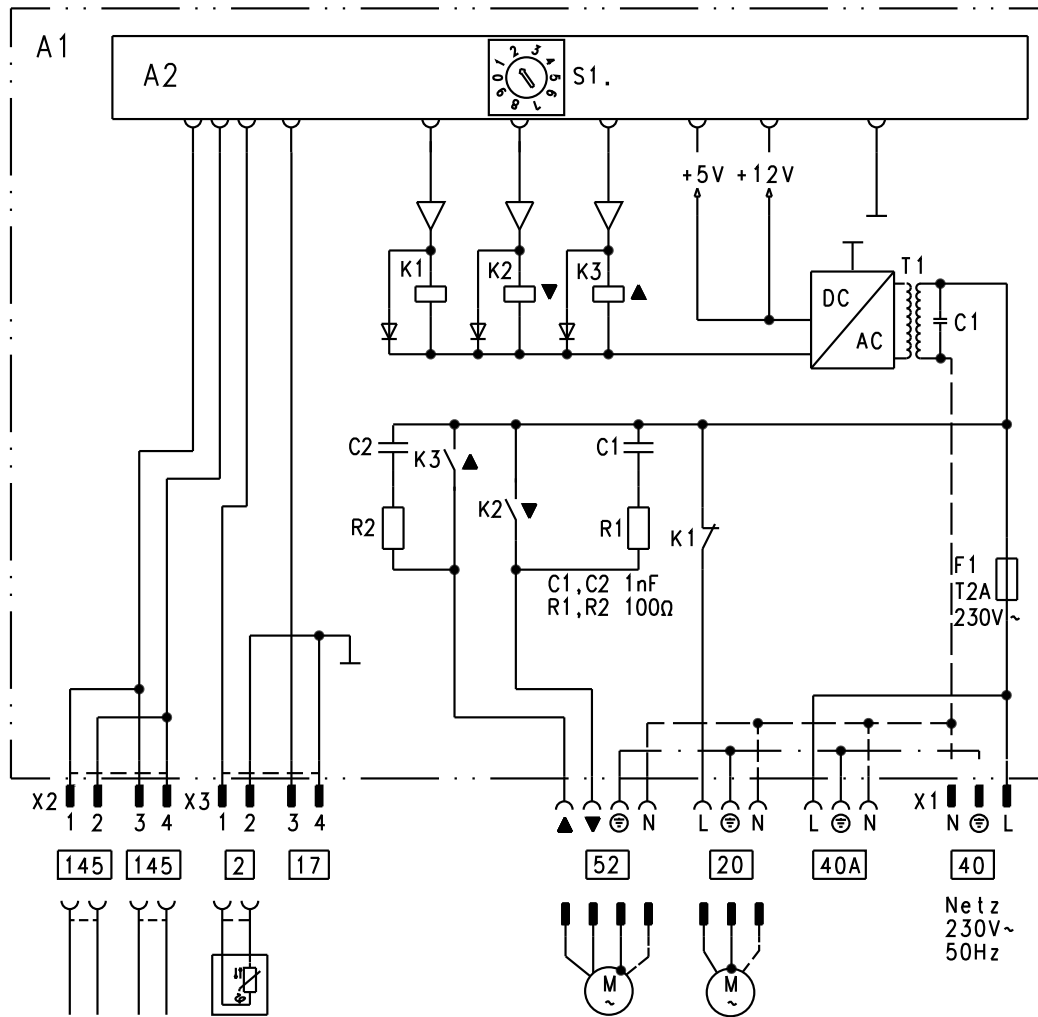


Fig. 16

- | | | | |
|-----|-------------------------|-------|---------------------------------------|
| 2 | Flow temperature sensor | 145 | KM-BUS |
| 17 | No function | A1 | Main PCB |
| 20 | Heating circuit pump | A2 | PCB |
| 40 | Power supply | S1 | DIP switch (shown in factory setting) |
| 40A | Power outlet | X ... | Electrical interfaces |
| 52 | Mixer motor | | |





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