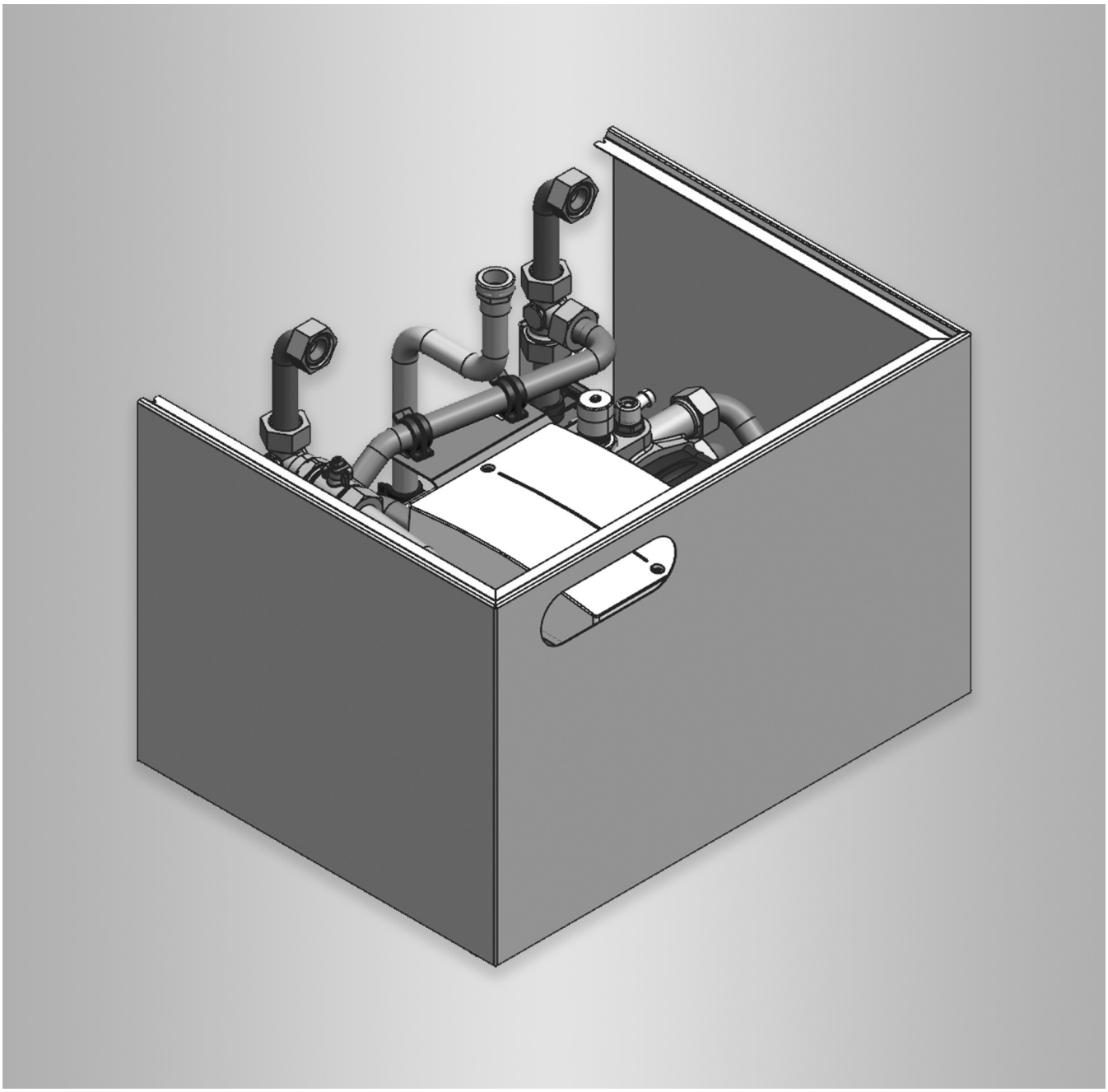
Installation and service instructions

for contractors

Sub-mounting kit

For Vitodens 200-W and 300-W

Sub-mounting kit



6131382 GB 5/2019

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 qualified contractors.
- Work on gas installations may only be carried out by a registered gas fitter.
- Work on electrical equipment may 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
  - (A) ÖNORM, EN, ÖVGW G K directives, ÖVGW-TRF and ÖVE
  - (CH) 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.

Disposal of packaging

Please dispose of packaging waste in line with statutory regulations.

Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	▪ Component must audibly click into place. or ▪ Acoustic signal
	▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do **not** dispose of component in domestic waste.

Spare parts lists

Information about spare parts can be found on the Viessmann spare parts app.

Download on the App Store

GET IT ON Google Play

Installation requirements

A pre-plumbing jig for surface mounting is required for fitting the sub-mounting kit.

 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

Preparing for installation

Drain outlet positioning

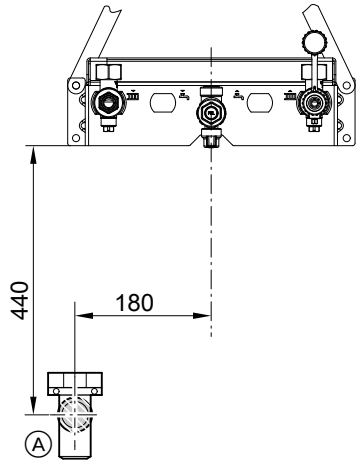


Fig. 1

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

Preparing the pre-plumbing jig

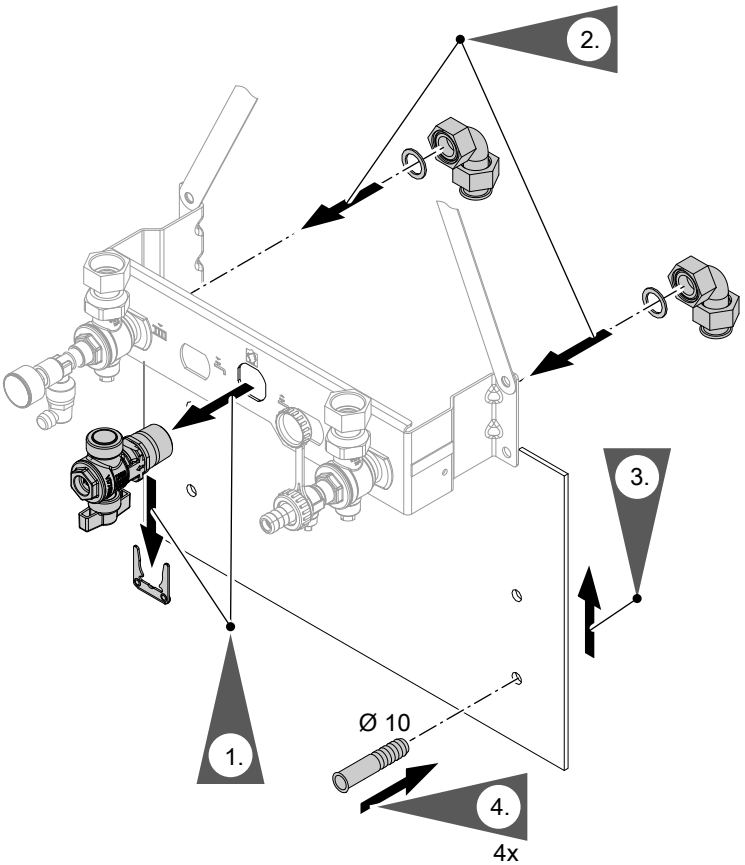


Fig. 2 "Align the drilling template below the fitting assembly of the pre-plumbing jig."

1. Remove the gas shut-off valve.

2. Mount the pipe bends with gaskets.

Note
The pipe bends supplied with the pre-plumbing jig are not required.

3. Drill a ∅ 10 mm hole.

4. Insert a rawl plug.

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Fitting the sub-mounting kit

Torque settings for the fittings:
- G ½: 24 Nm
- G ¾: 30 Nm

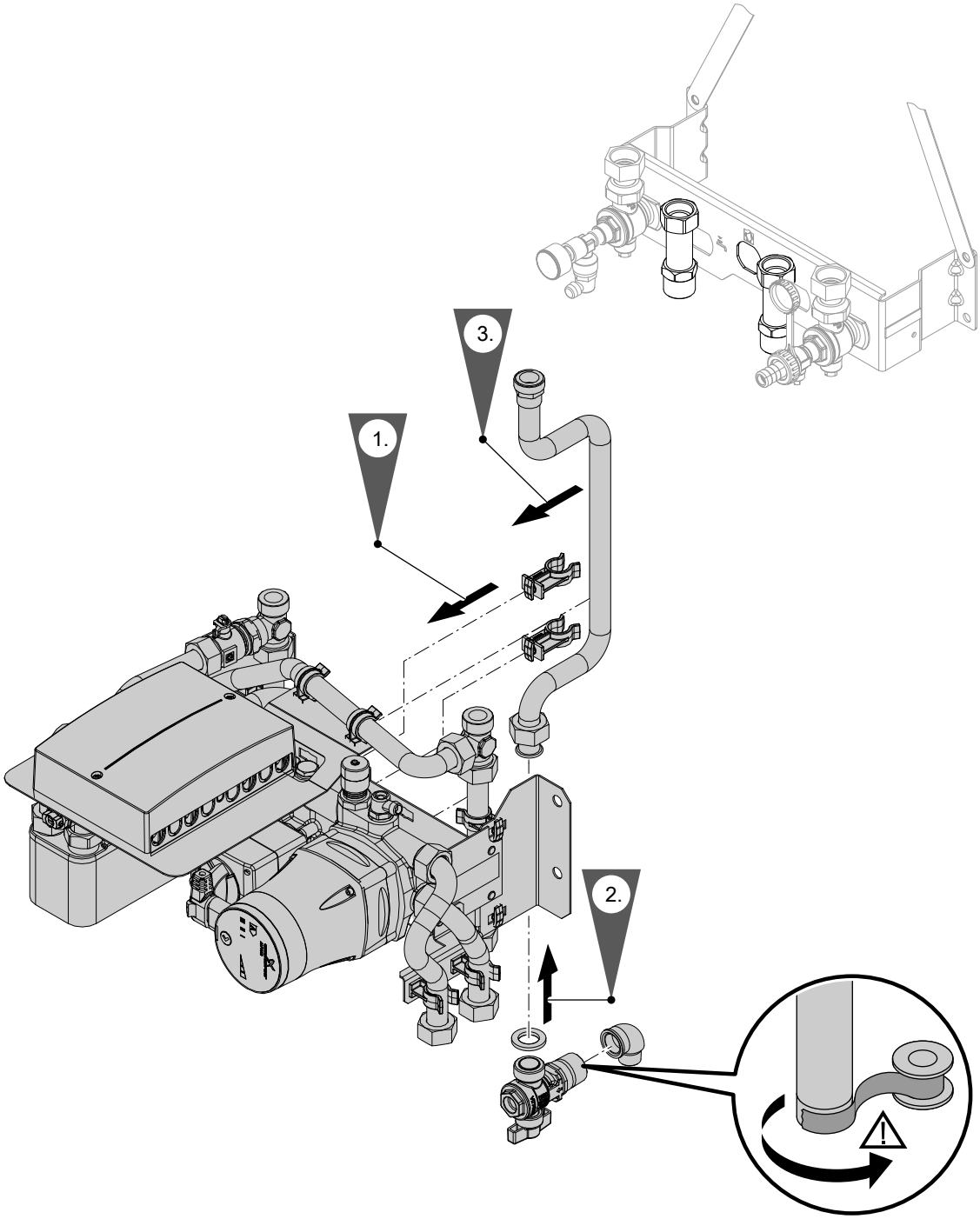

Fig. 3

1. Fit the clips to the sub-mounting kit.

2. Mount the gas shut-off valve with gasket to the gas pipe.

Danger

Only use the gasket from the bag for the gas shut-off valve.

3. Insert the gas pipe into the retaining clips.

Fitting the sub-mounting kit (cont.)

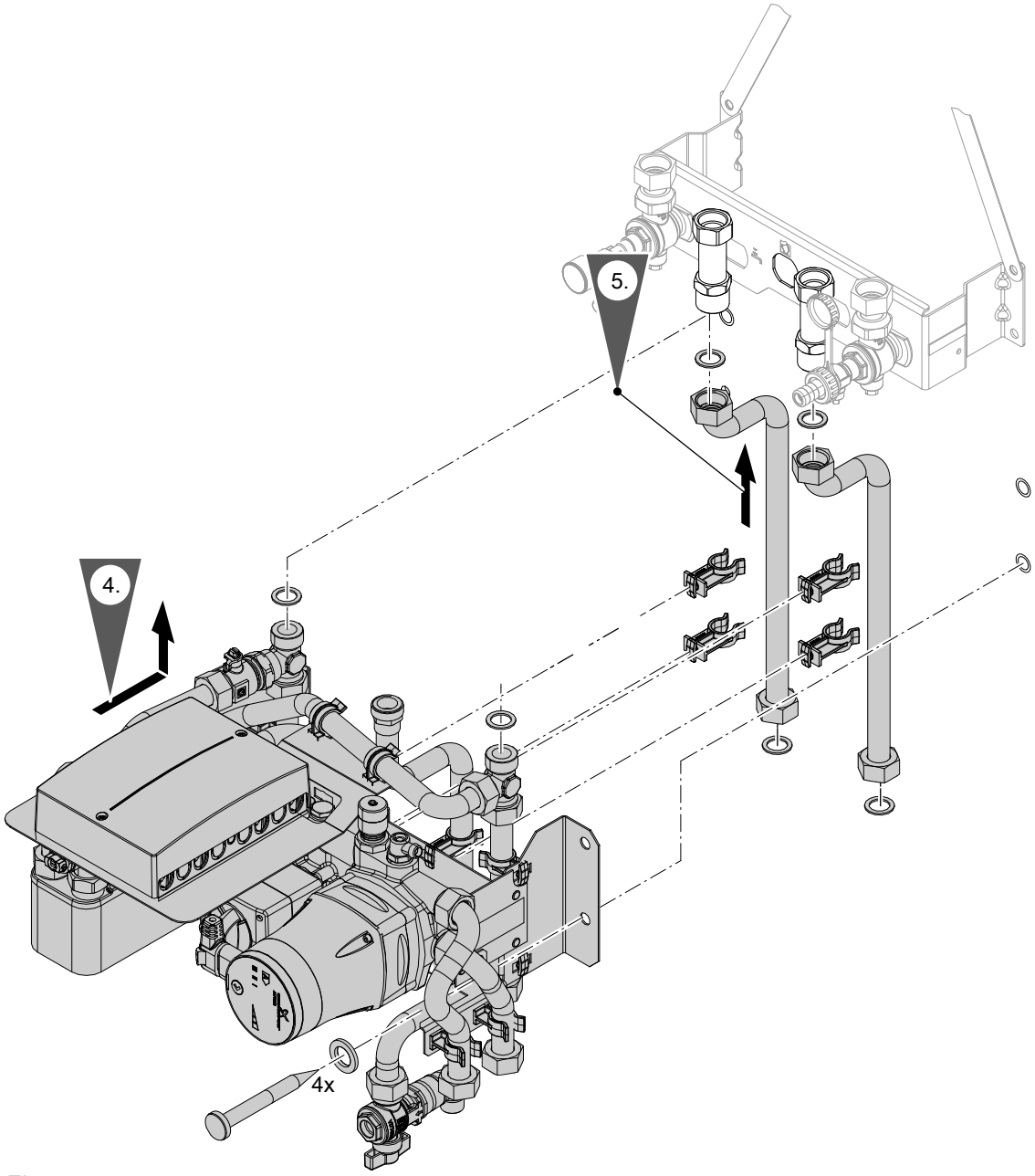

Fig. 4

4. Insert gaskets. Secure the sub-mounting kit to the wall with the screws and washers supplied.

5. Only for appliances with separate DHW cylinder: Mount pipe bends for the cylinder flow and return with gaskets.

Fitting the sub-mounting kit (cont.)

Connecting the DHW cylinder

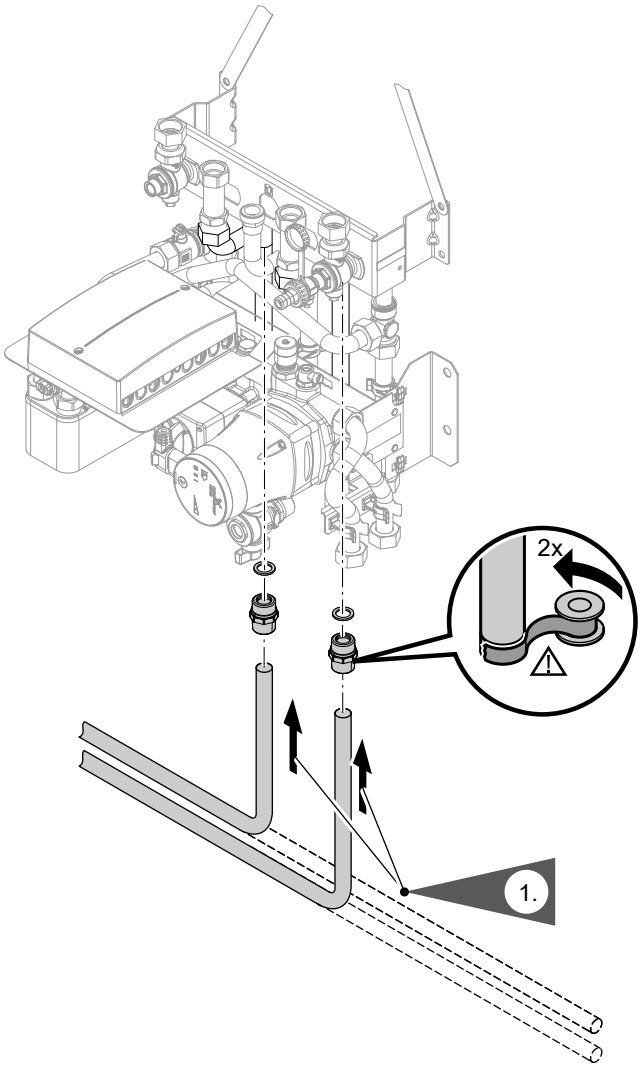

Fig. 5

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 pipes to the pipe bend for the cylinder flow and return.

Connections on the DHW side for gas condensing combi boilers

Pre-plumbing jig installation instructions

Fitting the boiler

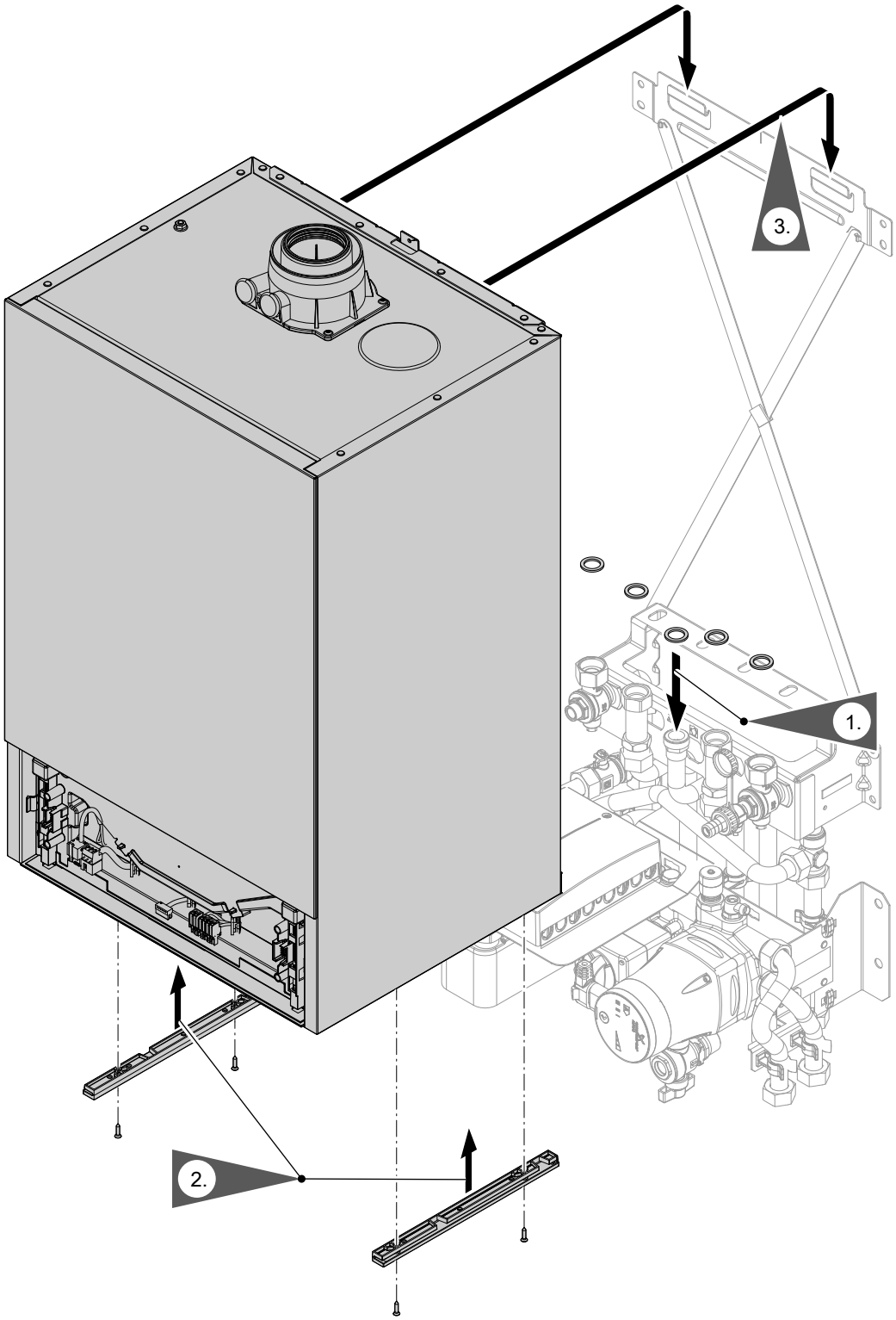

Fig. 6

1. Insert gaskets.

2. Fit the retaining rails for the casing.

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

Boiler and pre-plumbing jig installation instructions

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Connecting the heating circuits

Torque settings for the fittings:
- G ½: 24 Nm
- G ¾: 30 Nm

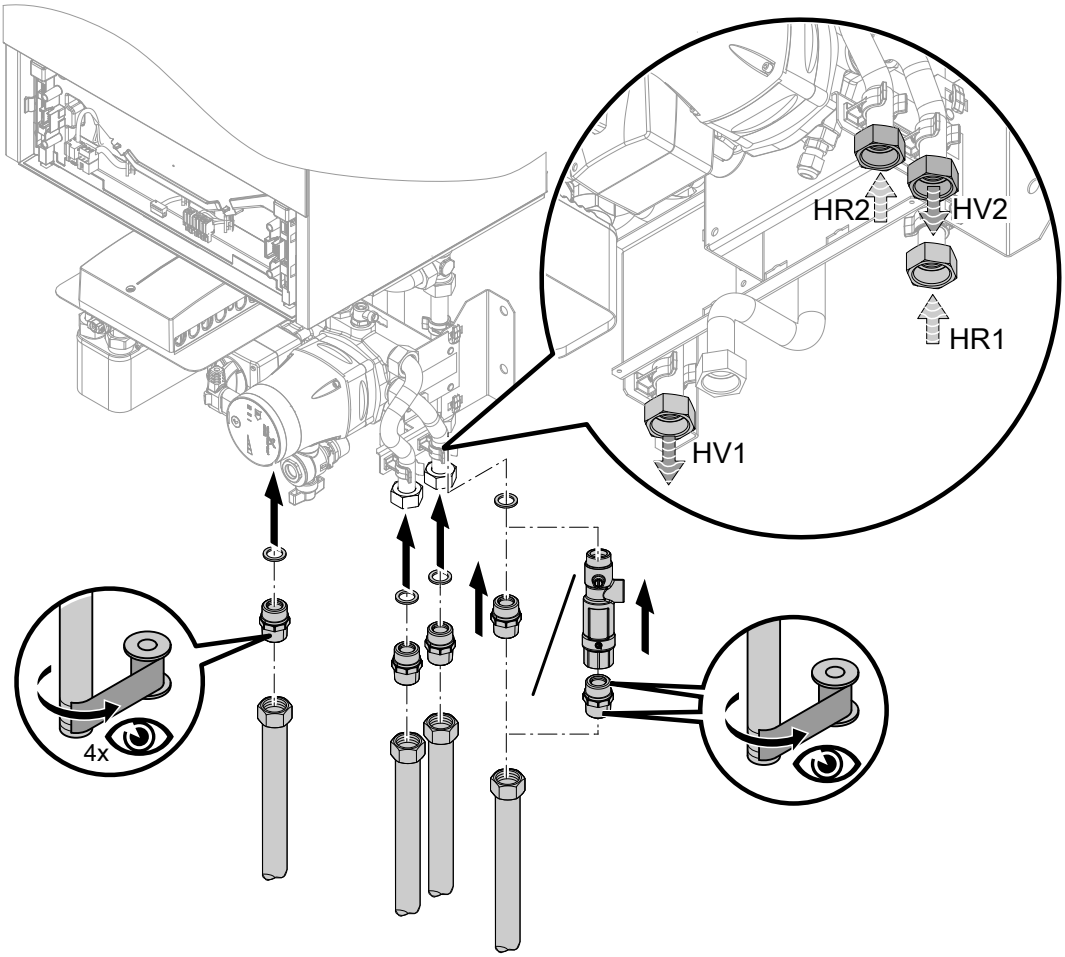

Fig. 7

HR1 Heating water return, heating circuit without mixer G ¾
HR2 Heating water return, heating circuit with mixer G ¾
HV1 Heating water flow, heating circuit without mixer G ¾
HV2 Heating water flow, heating circuit with mixer G ¾

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 (HR1).

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

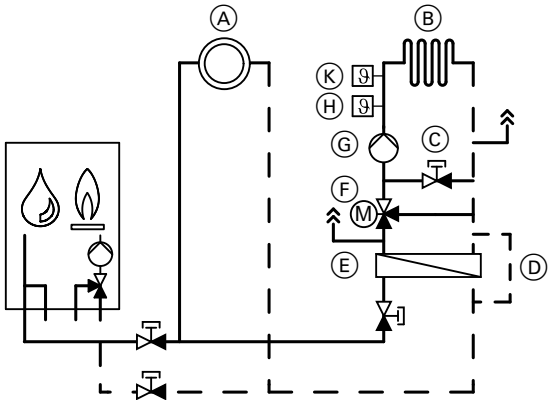

Fig. 8

Ⓐ Heating circuit without mixer
Ⓑ Heating circuit with mixer (underfloor heating circuit)
Ⓒ Bypass
Ⓓ Volume balancing line
Ⓔ Plate heat exchanger for system separation
Ⓕ 3-way mixer
Ⓖ Heating circuit pump
Ⓗ Flow temperature sensor
Ⓚ 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 Ⓚ 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.

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Connecting the heating circuits (cont.)

Removing the volume balancing line

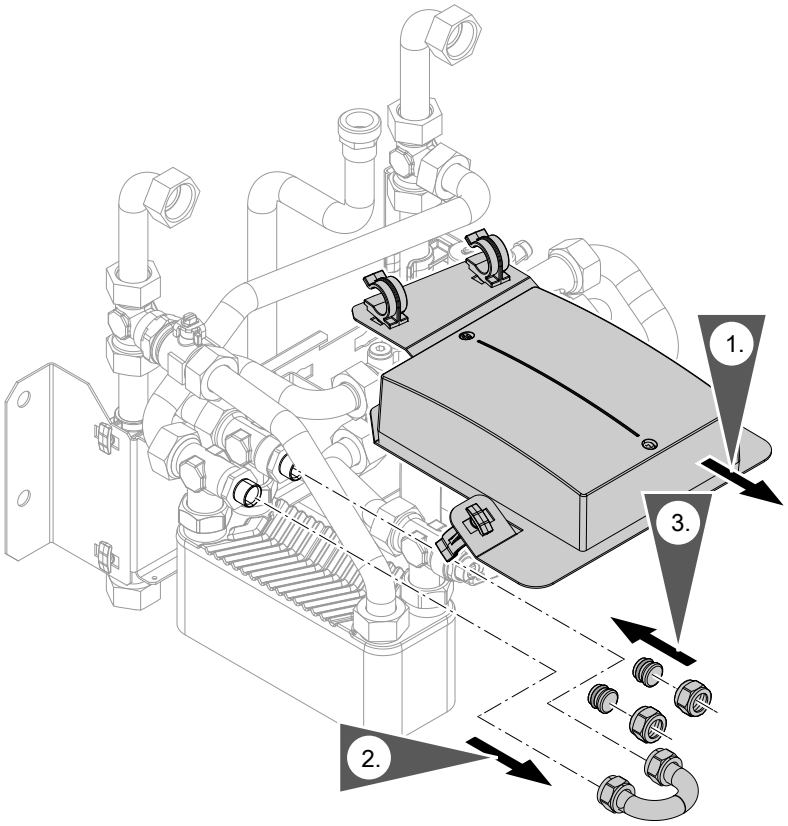

Fig. 9

1. Remove the electronics module from the retaining clips.

2. Undo the union nuts. Remove the balancing line with locking rings.

3. Seal the connections with the plugs and union nuts supplied.
Lubricate the O-rings with the valve grease supplied.

Rotary switch S1

Rotary switch S1 is located in the electronics module of the sub-mounting kit.

Rotary switch S1 (cont.)

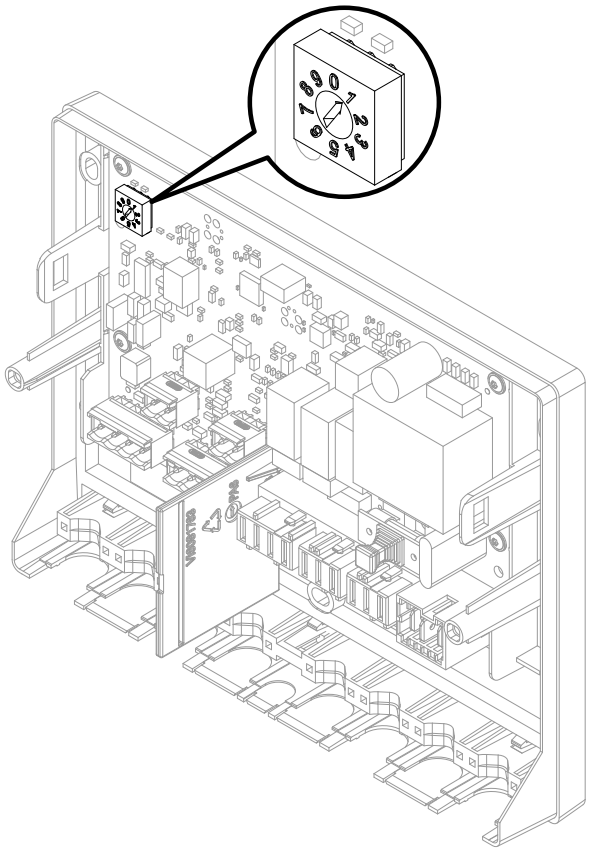

Fig. 10

1. Open the electronics module.
2. If several mixer extension kits are being connected, set rotary switch S1.

   Set the rotary switch on each extension kit to a consecutive number:
   - Heating circuit with mixer M2: Rotary switch to 1
   - Heating circuit with mixer M3: Rotary switch to 2
   - Heating circuit with mixer M4: Rotary switch to 3
   - With EM-P1 extension connected: Rotary switch to 4

   Note

   Always set the EM-P1 extension subscriber number to a consecutive number after the EM-M1 or EM-MX extensions.

Electrical connections

Connecting the mixer control to the heat generator control unit

Connection to the heat generator control unit:

Heat generator installation and service instructions

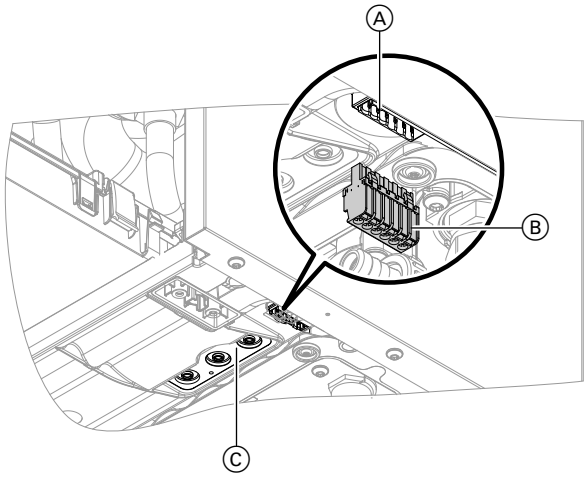

Fig. 11

Ⓐ Plug-in connector on underside of appliance.
Ⓑ Plug for connecting sensors and PlusBus. Plug located in the packaging of the installation components.
Ⓒ Cable entry.

Electrical connections (cont.)

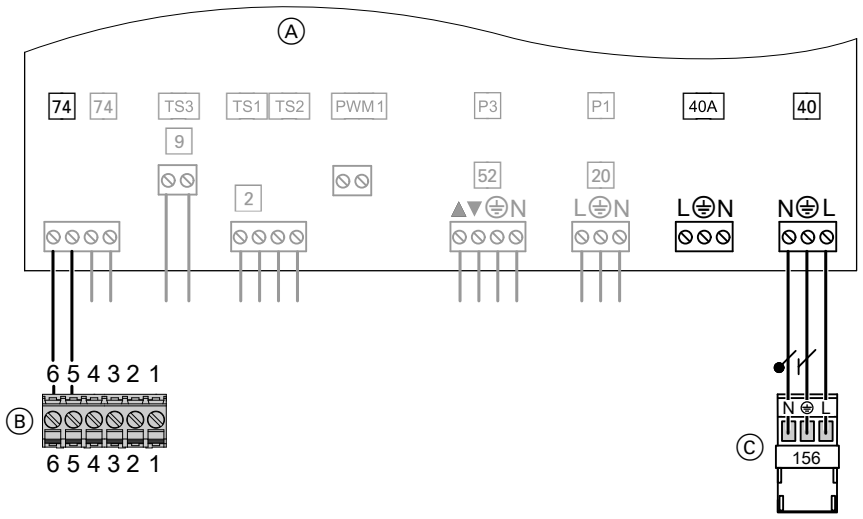

Fig. 12

Ⓐ Mixer extension kit (ADIO electronics module)
- 40 Power supply
- 40A Power supply for further accessories
- 74 PlusBus

Ⓑ External plug on heat generator (part of standard delivery of heat generator)

156 Plug for power supply to accessories in the heat generator control unit

1. Create the power supply connection.
Route the power cable through the grommet to the control unit of the heat generator. Connect to plug 156.
If the power supply connection is made to another accessory, use plug 40A provided.

Heat generator installation and service instructions

Danger
Incorrect core assignment can result in serious injury and damage to the appliance.
Take care not to interchange wires "L1" and "N".

2. Create the PlusBus connection.
Disconnect one plug from the supplied cable. Connect the wires to terminals 5 and 6 of the external plug on the heat generator.

Note
PlusBus cores are interchangeable.

Heat generator installation and service instructions

3. Bundle the connecting cables at the electronics module.

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.

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Venting the heating circuit with mixer

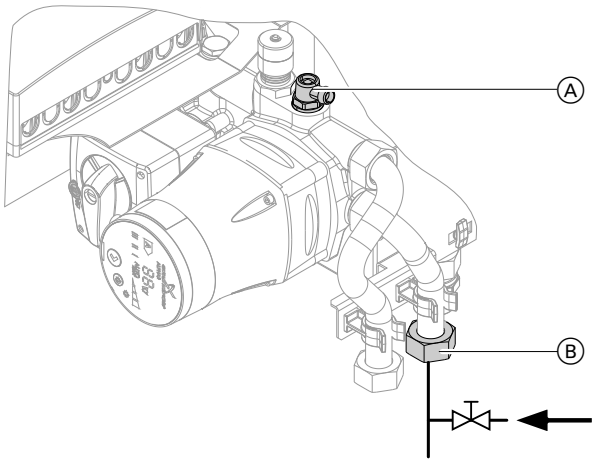

Fig. 13

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

Position of switch on the mixer motor

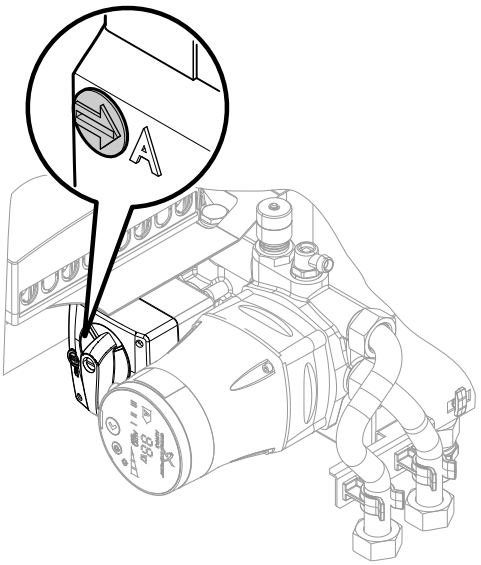

Fig. 14

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

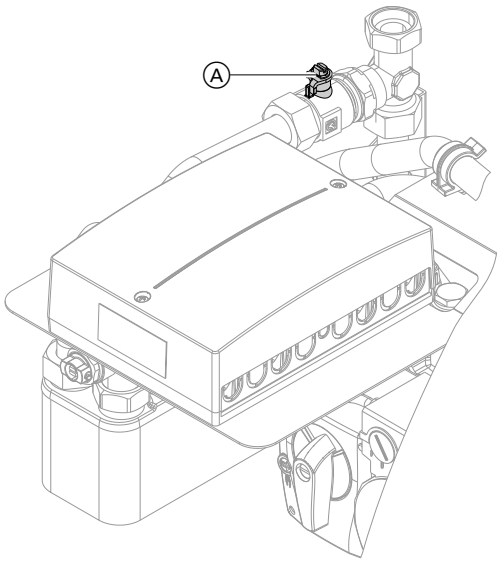

Fig. 15

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

Adjusting the bypass

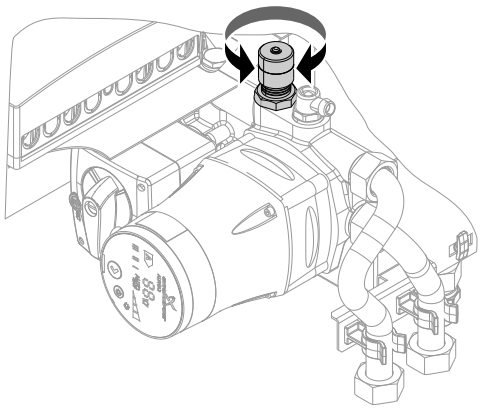

Fig. 16

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).

Fitting the casing

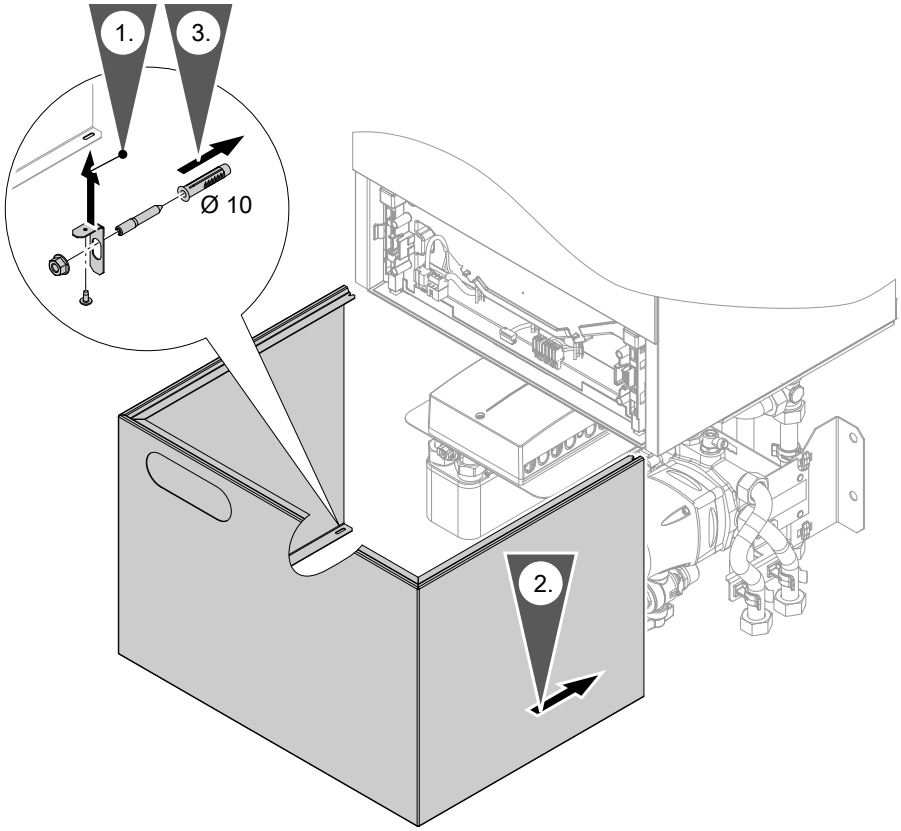

Fig. 17

1. Secure retaining bracket with B 3.9 x 13 self-tapping screw to the casing.

2. Bundle the cables above the electronics module.

3. Slide the casing into the fixing rails from the front.

4. Secure retaining bracket with screw and rawl plug to the wall.

Connection and wiring diagram

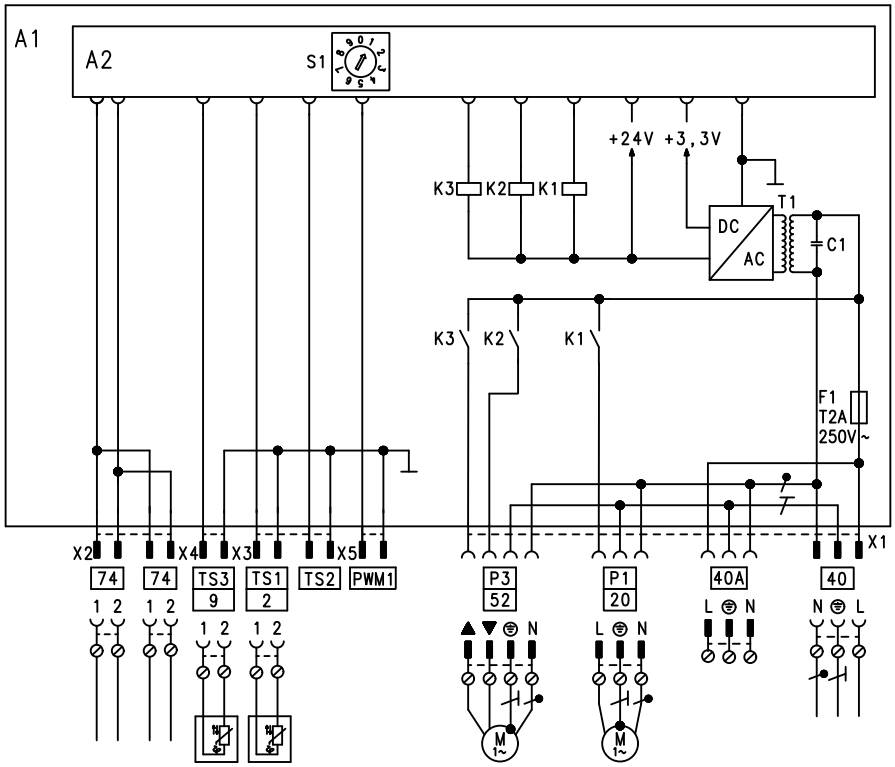

Fig. 18

A1 ADIO electronics module PCB
A2 PCB

230 V~ plugs
P1 [20] Heating circuit pump
P3 [52] Mixer motor
[40] Power supply 230 V/50 Hz
[40]A Power supply for accessories

Extra low voltage (ELV) plug
PWM1 No function
TS1 [2] Flow temperature sensor

F1 Fuse
S1 Rotary switch for subscriber number addressing

TS2 No function
TS3 [9] Temperature sensor, low loss header
[74] PlusBus connection for connecting to the heat generator and another accessory

Declaration of Conformity

We, Viessmann Werke GmbH & Co. KG, D-35107 Allendorf, declare as sole responsible body that the named product complies with the European directives and supplementary national requirements in terms of its design and operational characteristics.

Using the serial number, the full Declaration of Conformity can be found on the following website:
www.viessmann.co.uk/eu-conformity

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