

Installation instructions

for contractors



Assembly kit with mixer

Heating circuit distribution for Vitodens 222-F, 242-F and 333-F
With connection set for installation on finished walls

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.

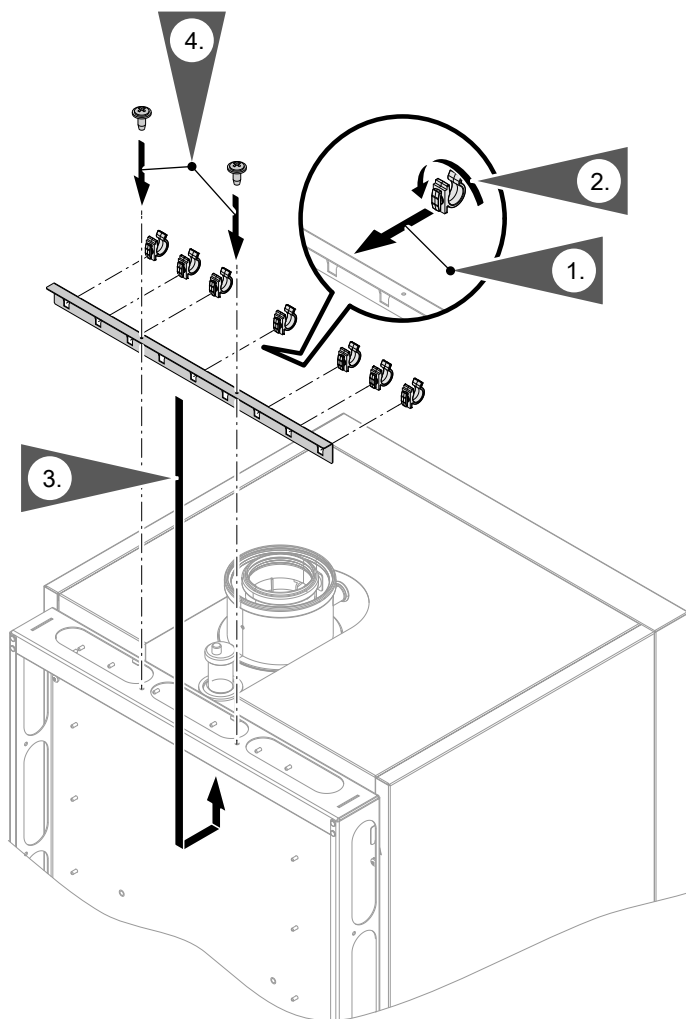
Installation, initial start-up, inspection, maintenance and repairs must only be carried out by a competent person (heating engineer/installation contractor).

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.

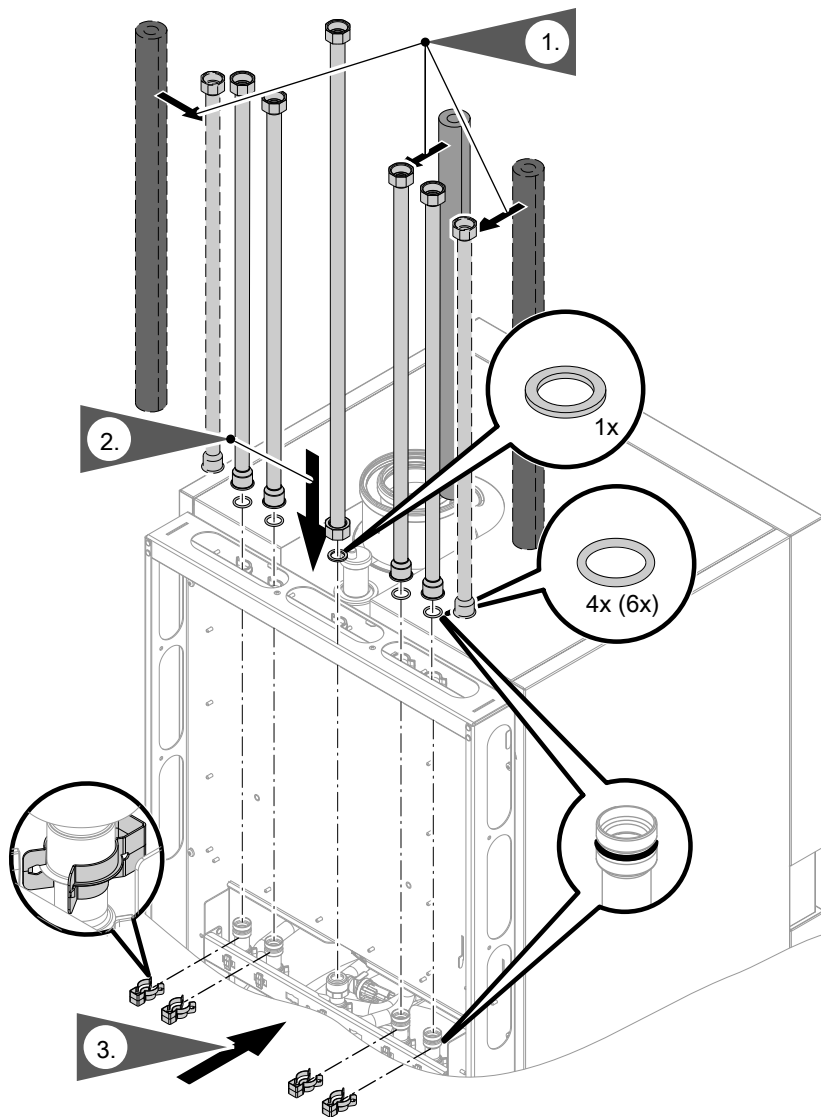
When using gas as fuel, also close the main gas shut-off valve and safeguard against unauthorised reopening.

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.

Fitting the connection set



Fitting the connection set (cont.)

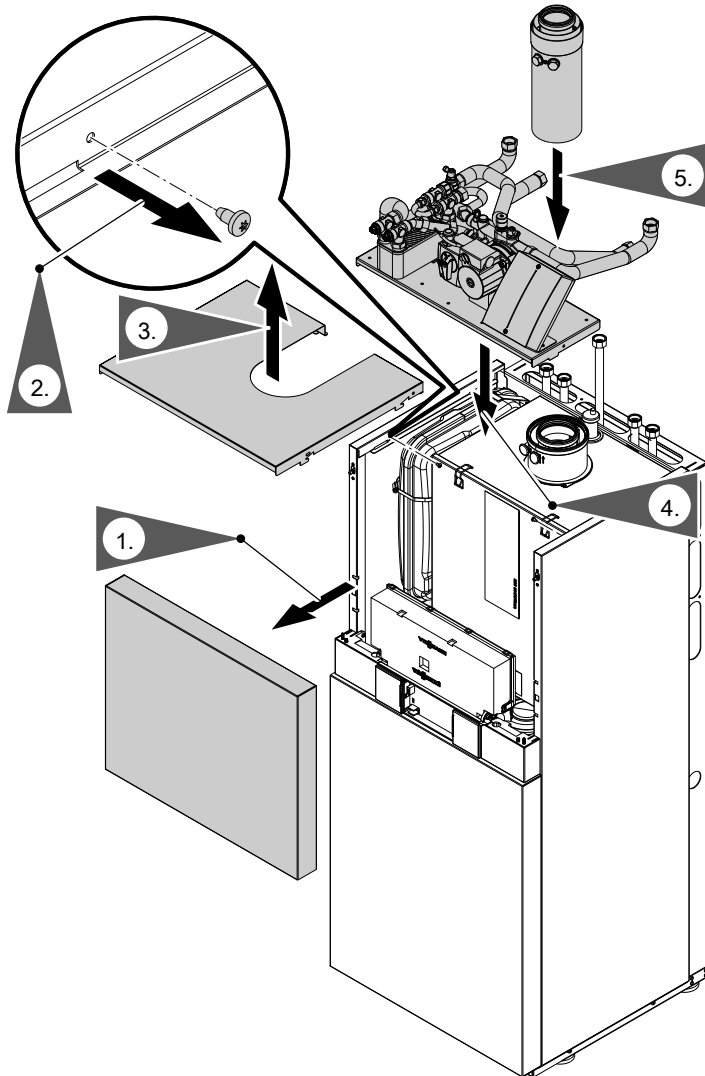


Fitting the connection set (cont.)

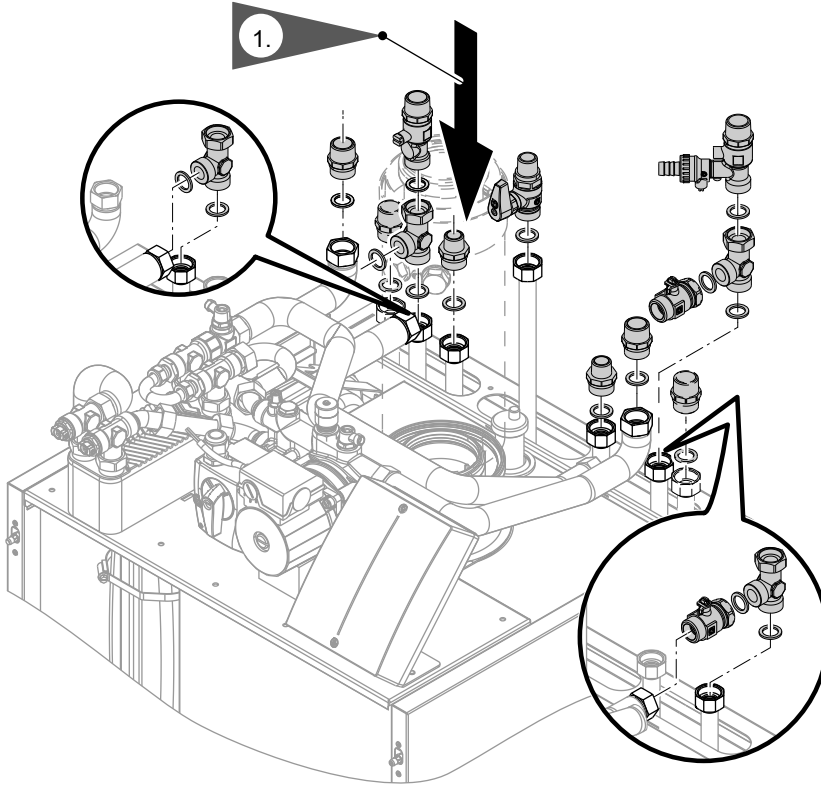
Note

The two outside connection pipes are only available for boilers with solar connection.

Fitting the assembly kit



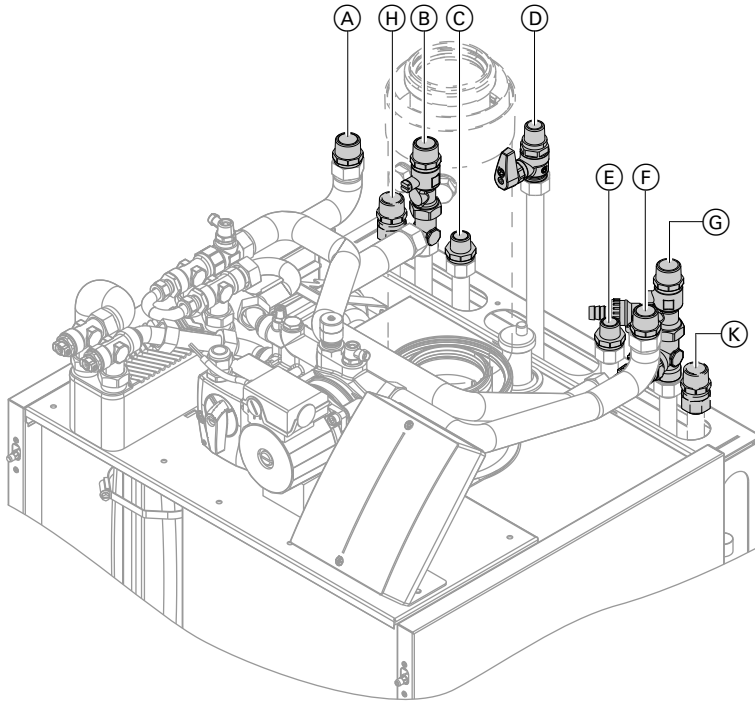
Fitting the assembly kit (cont.)



Note

The two outside connection pipes are only available for boilers with solar connection.

Connecting the heating circuits



- (A) Heating water flow, heating circuit with mixer R $\frac{3}{4}$ "
- (B) Heating water flow, heating circuit without mixer R $\frac{3}{4}$ "
- (C) DHW R $\frac{1}{2}$ "
- (D) Gas connection R $\frac{1}{2}$ "
- (E) Cold water R $\frac{1}{2}$ "
- (F) Heating water return, heating circuit with mixer R $\frac{3}{4}$ "
- (G) Heating water return, heating circuit without mixer R $\frac{3}{4}$ "
- (H) Solar return R $\frac{3}{4}$ " (only for boilers with solar connection)
- (K) Solar flow R $\frac{3}{4}$ " (only for boilers with solar connection)

If supplied: Fit a line regulating valve (accessory) in the on-site lines at the heating water flow of the heating circuit without mixer.

Information regarding the heating circuit with mixer

Install a fill & drain valve on site in the heating circuit with mixer.

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

Connecting the heating circuits (cont.)

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

Maximum temperature limit in the underfloor heating circuit

Fit the maximum temperature limiter to the on-site heating flow line at least 1 m downstream of the circulation pump.



Separate installation instructions

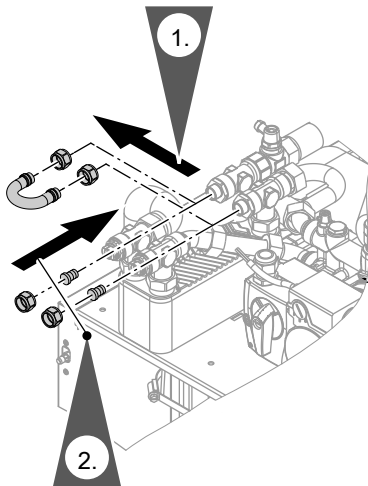
Connecting heating circuits with permeable pipework

Seal off the volume balancing line between both heating circuits when connecting heating systems with permeable pipework (DIN 4726).

Note

Install a separate expansion vessel in the regulated heating circuit if the volume balancing line has been closed.

Removing the volume balancing line



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

Electrical connections

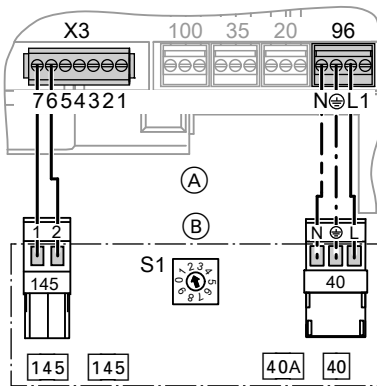
Connecting the mixer control to the boiler control unit

Connection to the boiler control unit:



Boiler installation instructions.

Boiler without integral solar control unit



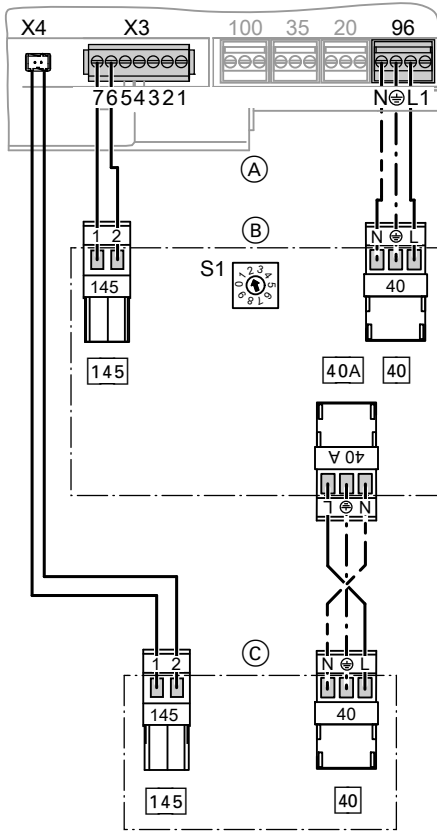
(A) Wall mounted gas boiler control unit

(B) Mixer control assembly kit

1. Connect the cable with plug **145** of the assembly kit to terminals 6 and 7 at plug X3 of the control unit or to the KM BUS distributor.
2. Connect the power cable with plug **40** of the assembly kit to plug **96** of the control unit.

Electrical connections (cont.)

Boiler with integral solar control unit






(A) Wall mounted gas boiler control unit

(B) Mixer control

(C) Solar control module

1. Connect the cable with plug **145** to terminals 6 and 7 at plug X3 of the control unit or to the KM BUS distributor.
2. Disconnect and remove the power cable of the solar control module from plug **96** of the control unit.
3. Connect the power cable with plug **40** of the assembly kit to plug **96** of the control unit.

Electrical connections (cont.)

4. Connect the power cable with 2 plugs  (supplied with the connection set "Solar extension") into  A at the assembly kit and at  at the solar control 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.

Matching the control settings

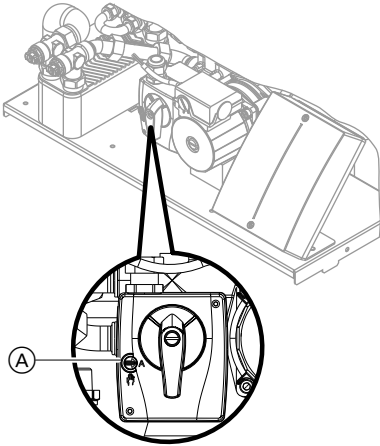
At the boiler control unit, select code "9F: 12".



Boiler service instructions.

Commissioning and adjustment (cont.)

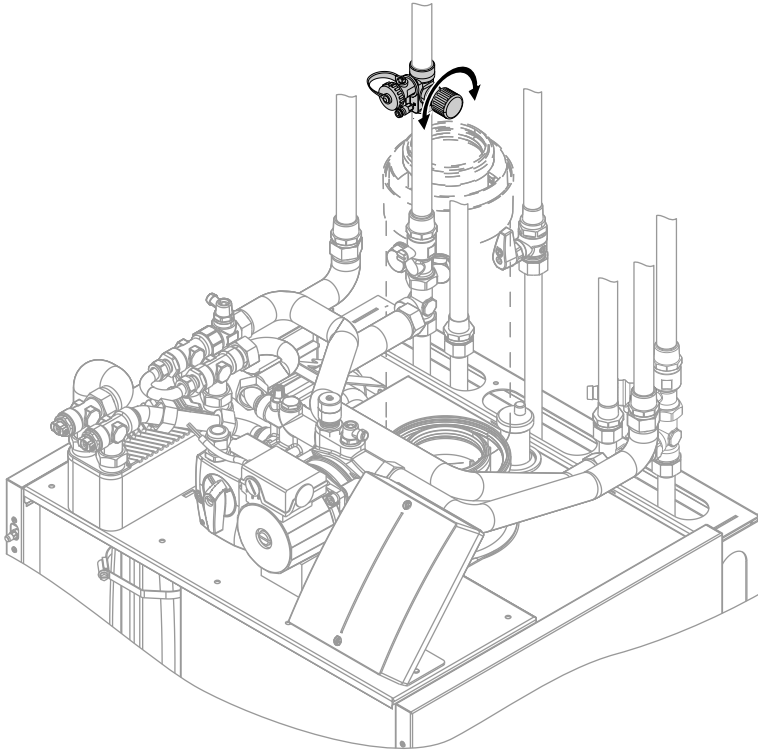
Switch position at the mixer



Rotary selector (A) at the mixer servo-motor must be set to automatic (arrow towards "A"). In case of mixer control faults, turn the rotary selector to "manual", and manually adjust the mixer (emergency mode).

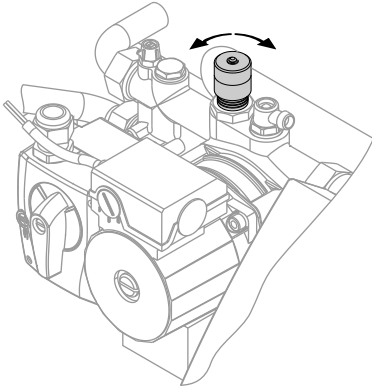
Commissioning and adjustment (cont.)

Adjusting the flow rate at the line regulating valve (accessory)



Commissioning and adjustment (cont.)

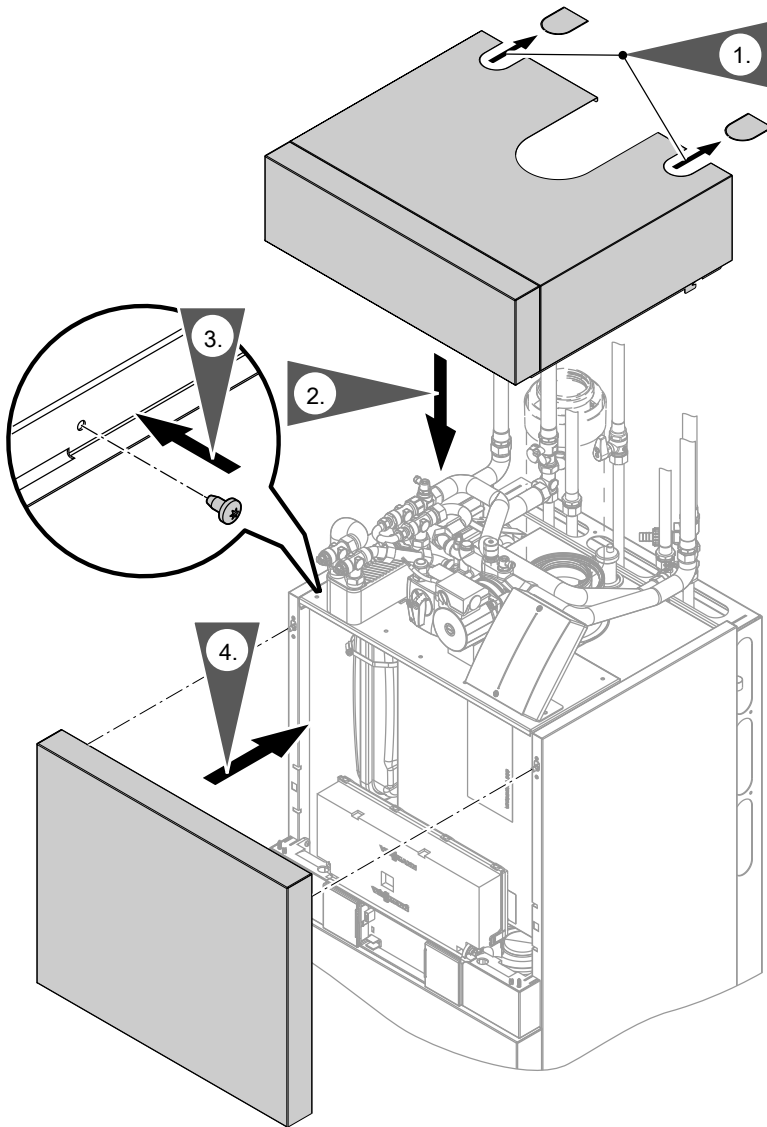
Adjusting the bypass



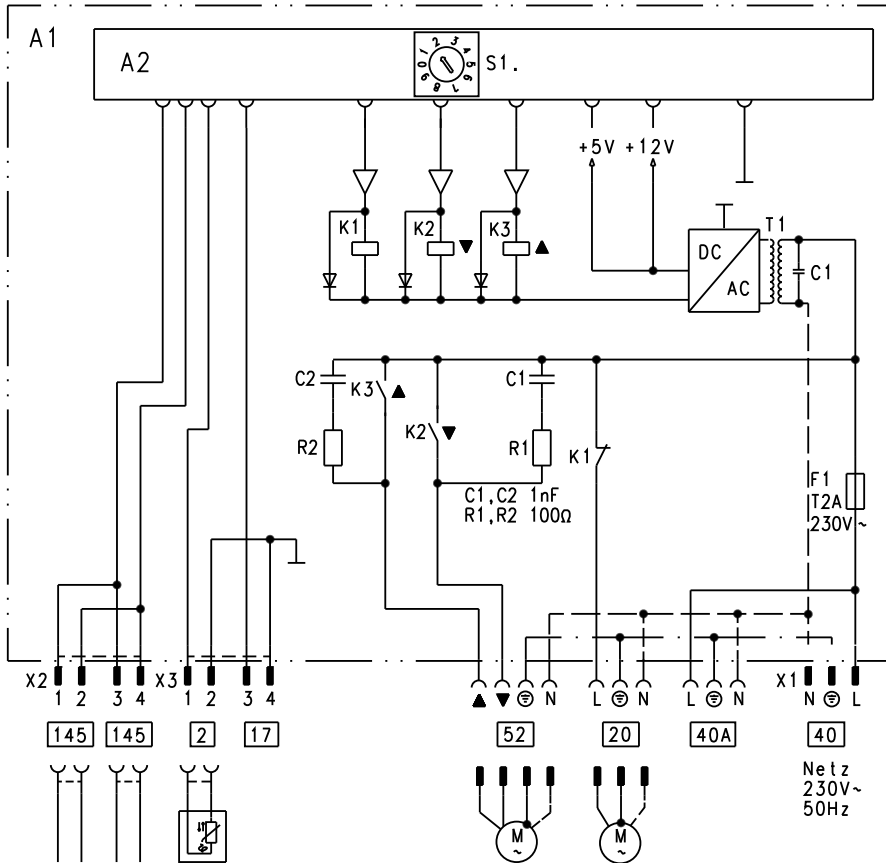
A bypass is integrated into the heating circuit with mixer. On delivery, the bypass is closed. Open the bypass, if required, to minimise temperature peaks (by turning it anti-clockwise).

Commissioning and adjustment (cont.)

Fitting the cover and top panel



Connection and wiring diagram



- 2 Flow temperature sensor
- 17 No function
- 20 Heating circuit pump
- 40 Power supply
- 40A Power outlet
- 52 Mixer motor

- 145 KM BUS
- A1 Main PCB
- A2 PCB
- S1 DIP switch (settings in the delivered condition)
- X ... Electrical interfaces



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