Installation and service instructions

for contractors

Vitotherm EI5

Version EI5.A3 K

Version EI5.A5 K

Electric instantaneous water heaters

VITOTHERM EI5

6167196 GB 11/2020

Please retain for future use

For your safety

⚠ Before installing, commissioning and operating the appliance, please read the documents enclosed with the appliance.
Follow the safety instructions closely to prevent hazards, injury and material losses.
Store the supplied documents in a safe place.

Safety instructions explained

⚠ **Danger**
This symbol warns against the risk of injury.

! **Caution**
This symbol warns against the risk of material losses and environmental pollution.

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

Target group

These instructions are exclusively intended for qualified contractors.

- Work on electrical equipment must only be carried out by a qualified electrician.
- The system must be commissioned by the system installer or a qualified person authorised by the installer.

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
- Relevant safety regulations
- Requirements stipulated by the local power supply utility
- Requirements stipulated by the local water company

For your safety (cont.)

Safety instructions for working on the appliance

Installation work

- Only install the appliance on a suitably stable wall with the fixing materials provided.
- Do not make any structural modifications to the appliance.
- Install an isolator in the power cable to provide omnipolar separation from the mains for all active conductors, corresponding to overvoltage category III (3 mm) for full isolation. The isolator must be fitted in the permanent electrical installation, in line with installation requirements. We also recommend installing an RCD (Class A) for pulsating DC (fault) currents.
- Connect the power cable to the electricity supply using a fixed connection.
  Select a cable cross-section and fuse appropriate to the output of the appliance.
- An appliance of protection class I must be permanently connected to an earth conductor.
- Provide protection against contact with live parts. Install covers.

Maintenance work

- Switch off the power supply, e.g. at the separate fuse or a mains isolator.
- Safeguard the power supply against reconnection.
- Check that it is no longer live.
- Do not make any modifications to the water or electrical installations.
- Do not make any structural modifications to the appliance.

⚠ **Danger**
Contact with live components can result in severe injuries. Some components remain live even after the power supply has been switched off. Wait at least 4 minutes for the voltage to discharge before removing the appliance covers.

⚠ **Danger**
Hot surfaces and fluids can cause burns.

- Switch off the appliance and allow it to cool down before carrying out any maintenance work.
- Do not touch hot surfaces on the appliance, fittings or pipes.

For your safety (cont.)

Repair work

Caution
Repairing components that fulfil a safety function can compromise the safe operation of the appliance.
Replace faulty components only with genuine Viessmann spare parts.

Auxiliary components, spare parts and wearing parts

Caution
Spare parts and wearing parts that have not been tested together with the appliance can compromise its function.
Installing non-authorised components and making non-approved modifications or conversions can compromise safety and may invalidate our warranty.

- For replacements, only use original Viessmann parts or spare parts approved by Viessmann.
- For appliances with a power cable, use only original Viessmann spare parts.

Safety instructions for operating the device

Operation of the appliance

- Only operate the appliance after it has been properly installed on the wall.
- For showers, the DHW temp. must not exceed 55 °C (EN 60335-2-35). If necessary, install safety equipment to prevent scalding.
- Comply with the permissible operating data, as specified on the type plate.

If water escapes from theappliance

Danger
If there are leaks in the appliance, there is a risk of electric shock.

- Isolate the appliance from the power supply e.g. At the separate fuse or by means of a mains isolator.
- Close the cold water supply shut-off valve.

Danger
If water escapes from the appliance, there is a risk of scalding.
Never touch hot water.

Table of contents

Disposal of packaging

Please dispose of packaging waste in line with statutory regulations.

Intended use

The appliance is used for the heating of domestic hot water and can supply one or more draw-off points as applicable.

The appliance is intended for domestic use. It can be operated safely by untrained persons. The appliance can also be used in a non-domestic environment, e.g. in a small business, as long as it is used in the same way.

Any use that differs from or goes beyond this is considered inappropriate.
Intended use also extends to compliance with these instructions and with the instructions for any accessories used.

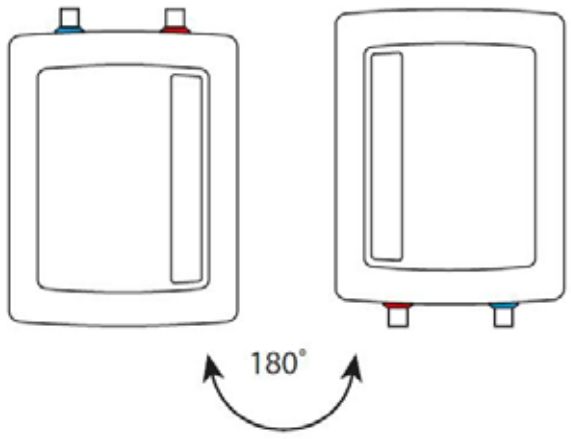
Product information

The appliance is suitable for pressure-tested and non-pressurised installation.

The appliance is equipped with a differential pressure switch.
The differential pressure switch automatically switches on the heating function when sufficient water flows through the appliance.

Types of installation

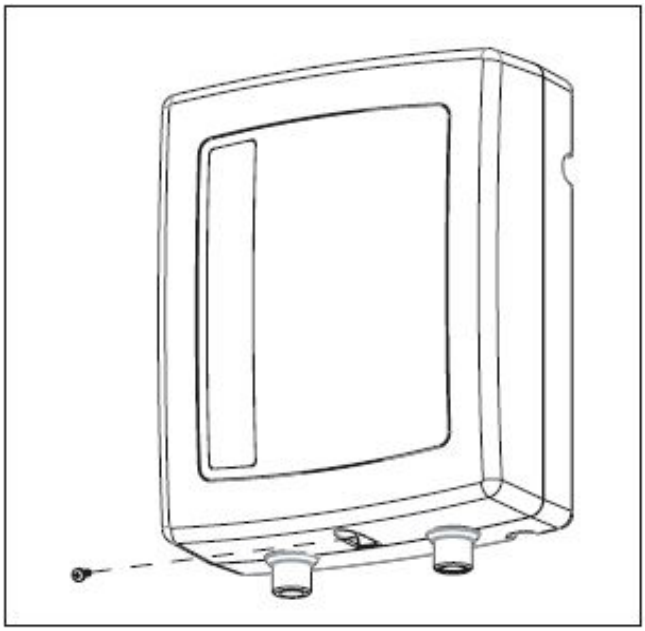
- The appliance can be installed above or below a washbasin.
- The appliance can be installed with water connections at the top or at the bottom.

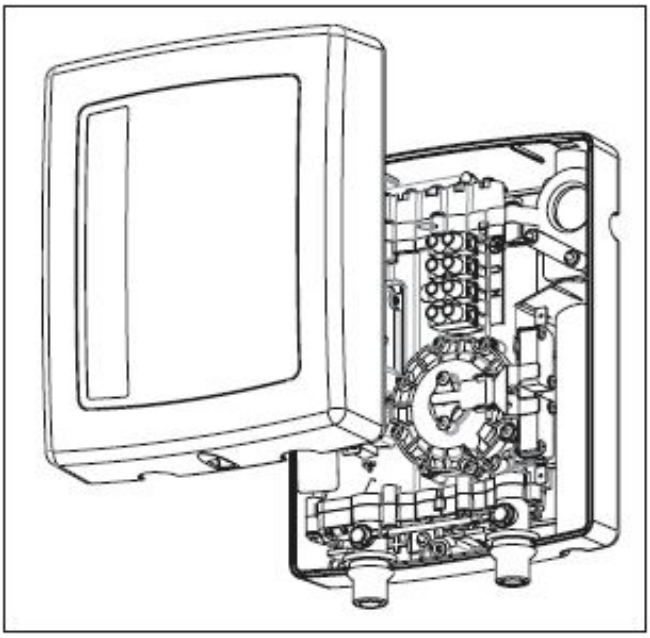


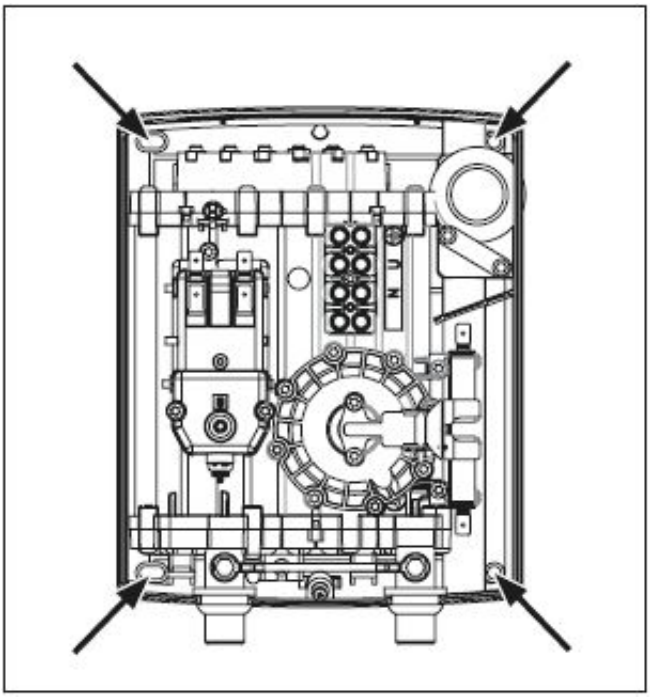
Fine-spray controller (included)

For water and energy savings of up to 50 %, install the supplied fine-spray controller in the water outlet of the fitting.

Installation







Prepare the water pipes and the electric cables according to local regulations and connect to the appliance:

1. Remove the cover from the appliance: Undo the screw. Remove the cover starting on the side with the connections.

2. Secure the appliance to a stable wall in a vertical position, with the inlet and outlet at the top or bottom of the appliance: See the following diagrams.

3. Connect the cold water and DHW pipes to the appliance. When doing so install the supplied fine filter and flow limiter in the cold water supply. Ensure that gaskets are seated correctly.

4. Slowly open the shut-off valve in the cold water supply pipe. Check the appliance and the water connections for leaks.

5. Thoroughly vent the appliance and the water pipes: See chapter "Venting".

6. Electrical connections:
   Connect the power cable. Fit the strain relief.

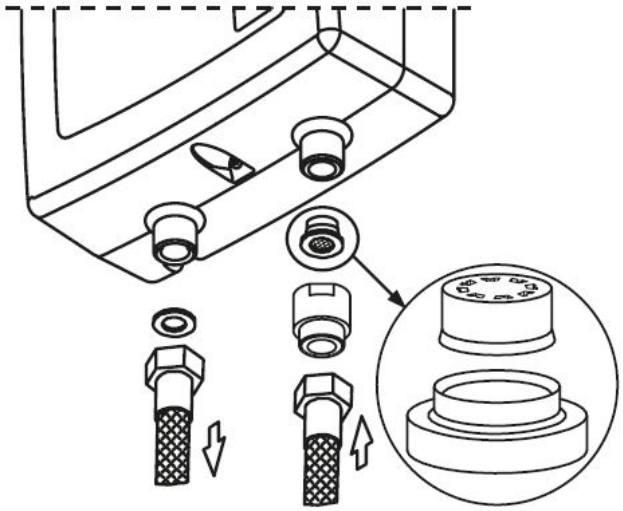
7. Fit cover.

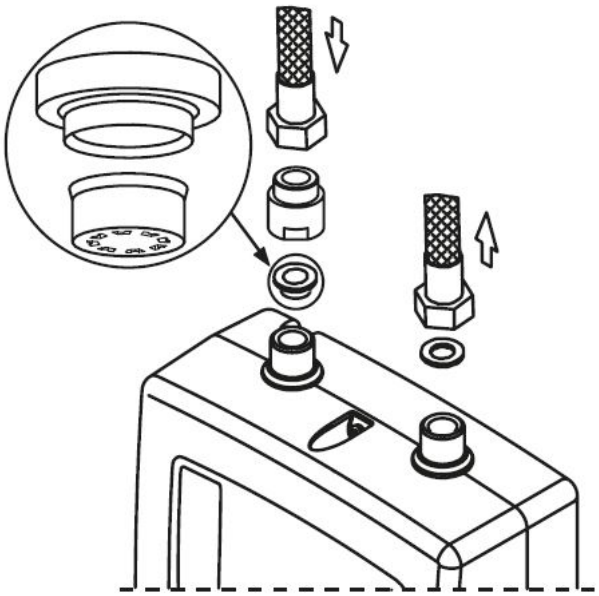
8. Ensure that live parts cannot be touched through the openings on the back of the appliance.

9. Switch on the power supply. Check that the appliance is working correctly.

Installation (cont.)

Assembly with inlet and outlet pipes at the bottom of the appliance.



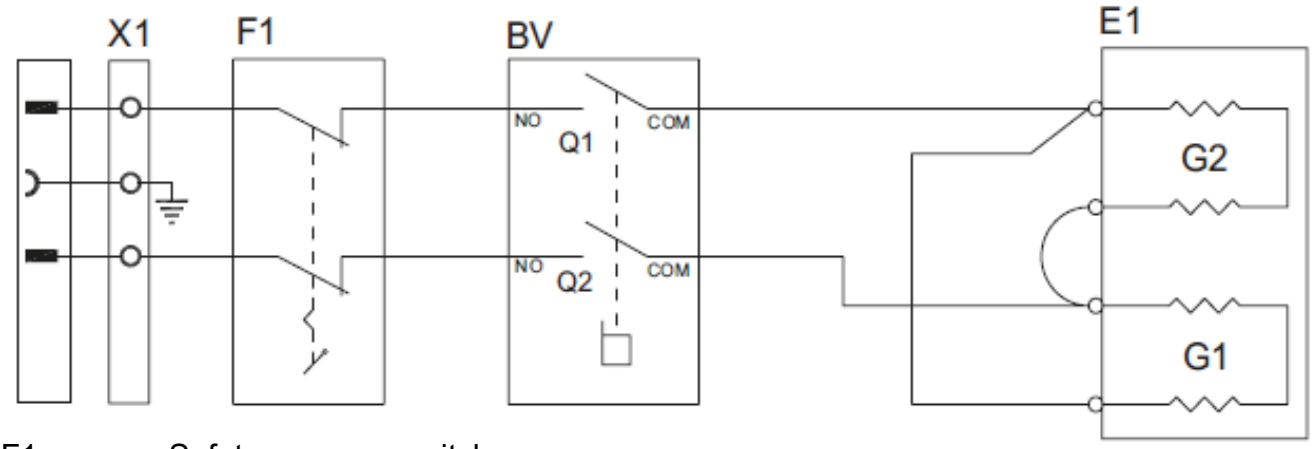


Assembly with inlet and outlet pipes at the top of the appliance.

Flow limiter	
EI5.A3 K	Black: 1.9 l/min
EI5.A5 K	Violet: 3.4 l/min

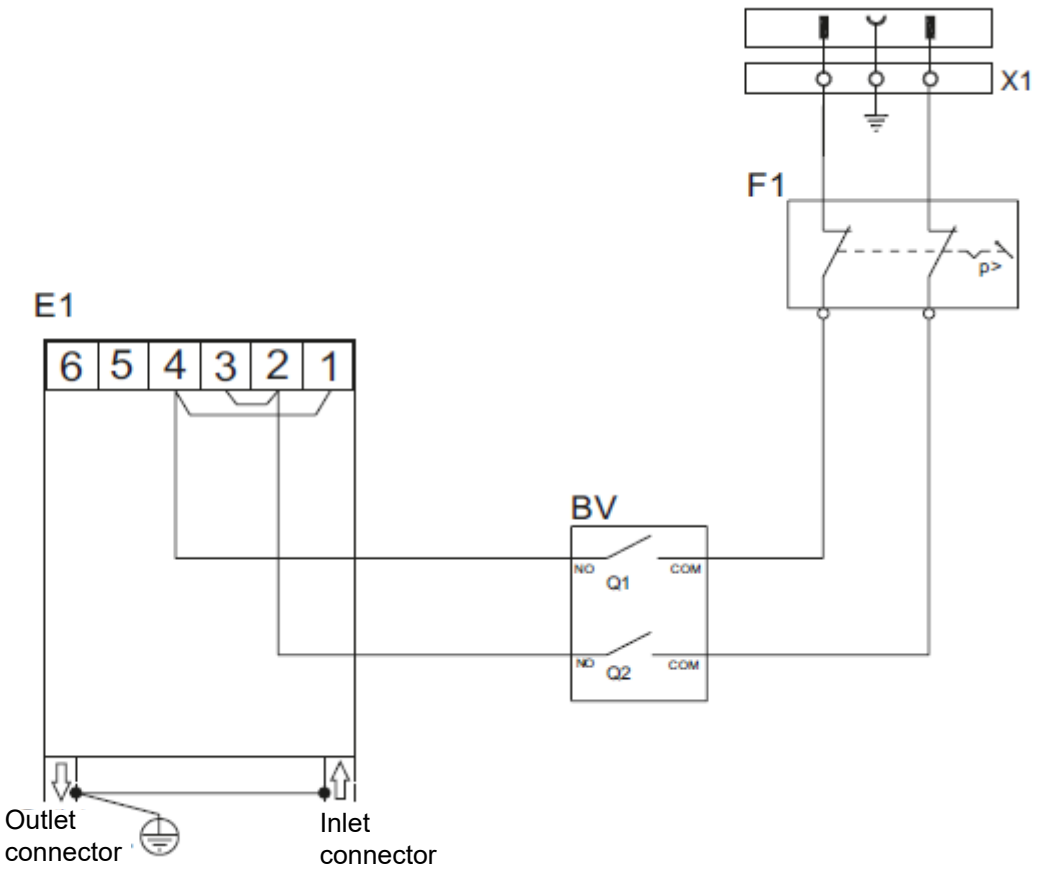
Connection and wiring diagram

Wiring diagram for instantaneous water heater EI5.A3 K



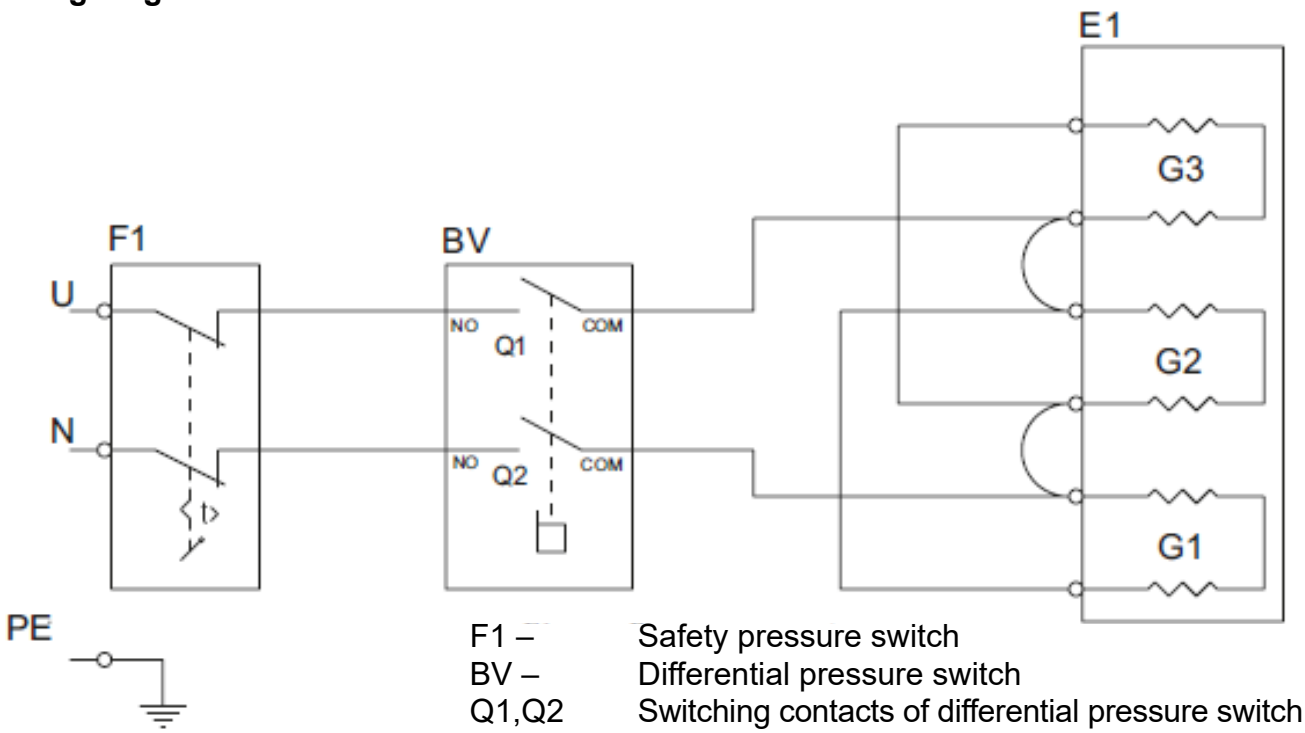
F1 – Safety pressure switch
BV – Differential pressure switch
Q1,Q2 Switching contacts of differential pressure switch
E1 – Heating module
X1 – Power cable

Connection diagram for instantaneous water heater EI5.A3 K



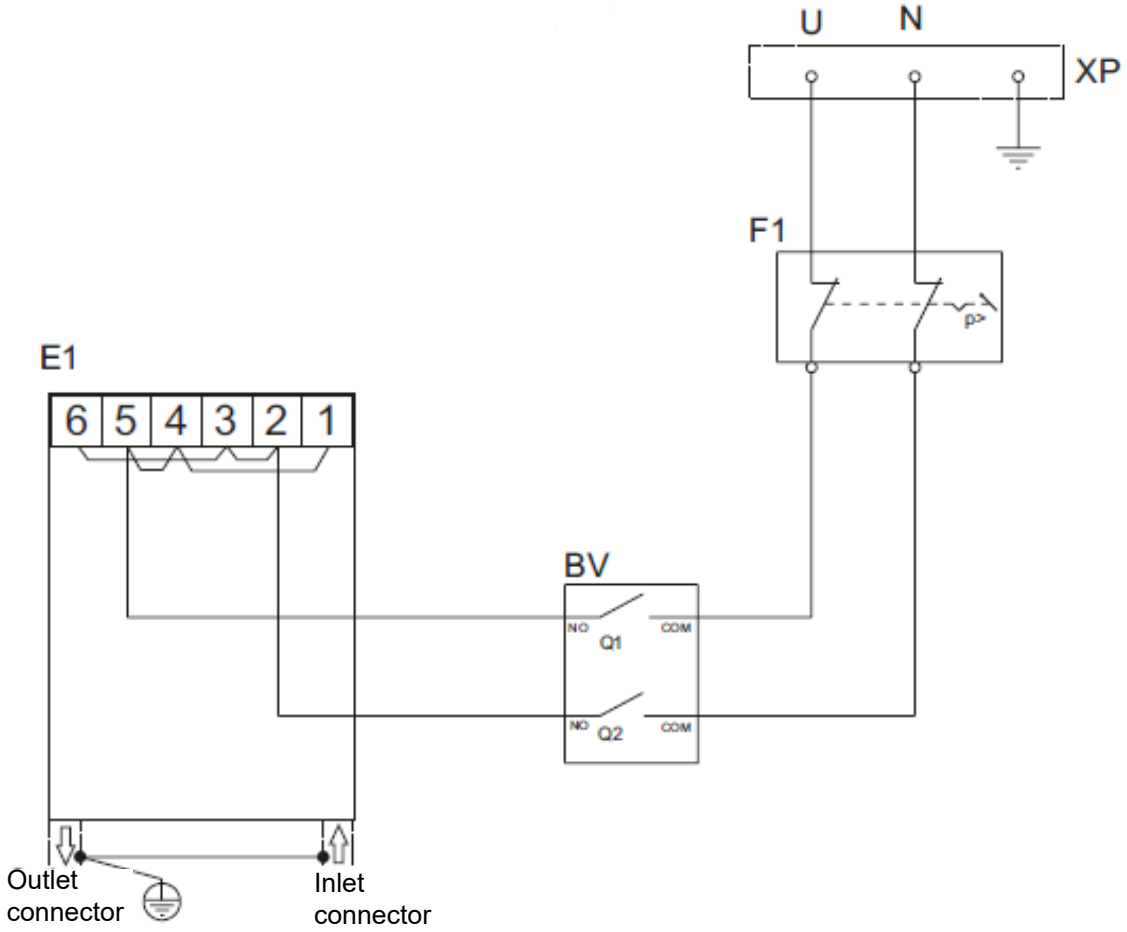
Connection and wiring diagram (cont.)

Wiring diagram for instantaneous water heater EI5.A5 K



F1 –	Safety pressure switch
BV –	Differential pressure switch
Q1,Q2	Switching contacts of differential pressure switch
E1 –	Heating module
XP –	Power cable

Connection diagram for instantaneous water heater EI5.A5 K



6167196 GB

Operation

Venting

1. Switch off the power supply,
   e.g. at the separate fuse or a mains isolator.

2. Open and close the hot water tap several times to vent the water installation (for approximately 15 to 30 seconds), until a constant, even flow of water is achieved.

3. Switch on the power supply.

! Caution
Air in the water installation may damage the appliance.
Vent the system after working on the appliance or the water installation.

Maintenance

1. Switch off the power supply,
   e.g. at the separate fuse or a mains isolator.

2. Close the shut-off valve in the cold water supply pipe

3. Undo cold water supply pipe on appliance.
   Water may leak out when doing so.

4. Remove the filter from the cold water supply pipe.

5. Clean the filter and reinstall it in its original position.

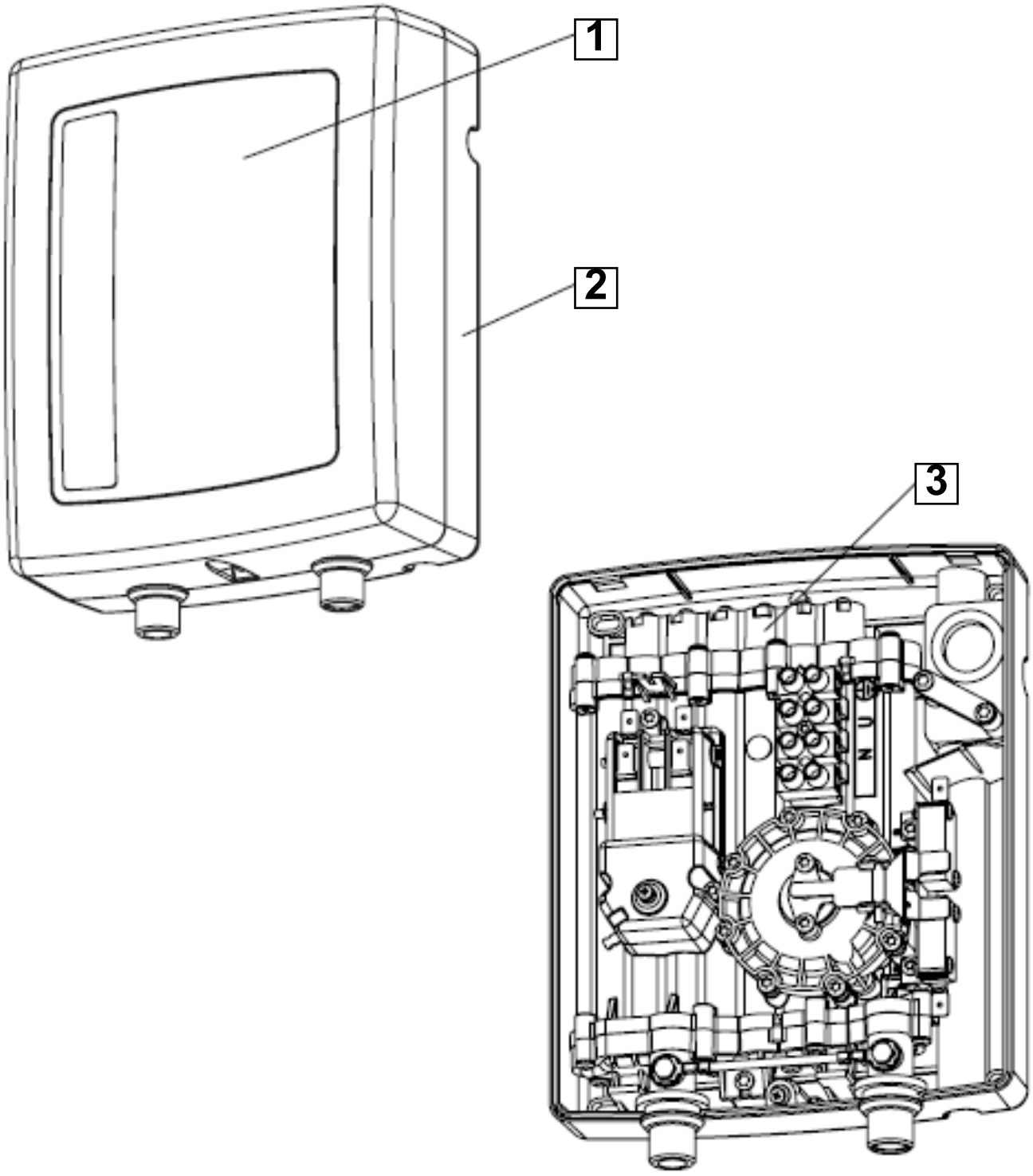
6. Fit cold water supply pipe on appliance.
   Ensure that the gasket is seated correctly.

7. Open the shut-off valve on the cold water supply. Check connections for tightness.

8. Vent the appliance and the water system.

9. Switch on the power supply.

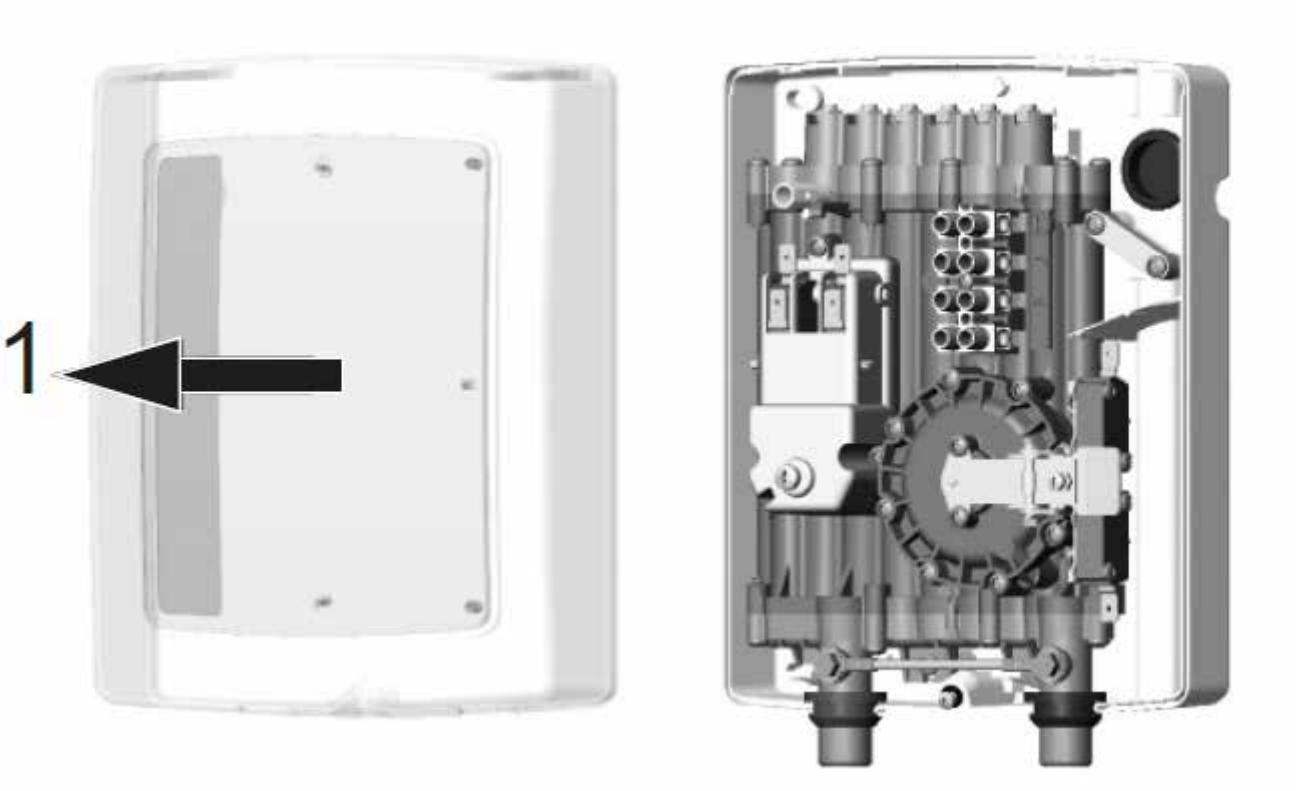
Structure of the instantaneous water heater



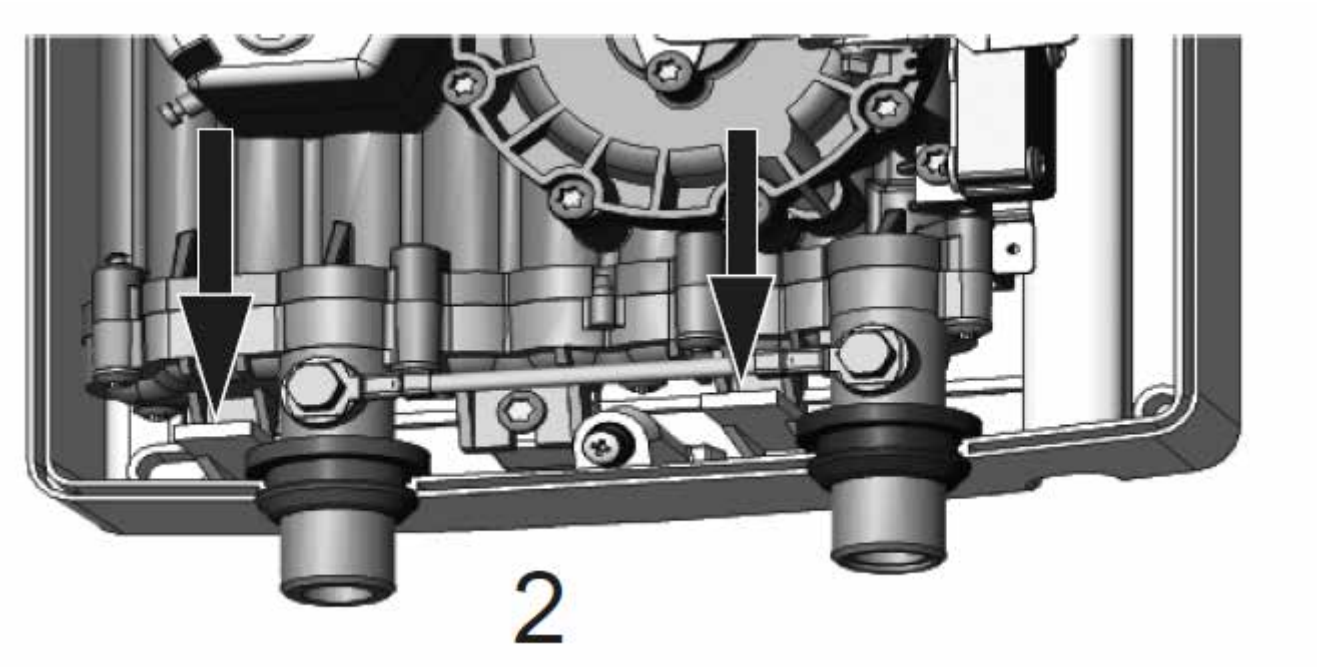
Position	Service code	Description
1	7857222	Front casing EI3 EI5
2	7857721	Back panel EI3 EI5
3	7857719	Heat exchanger, complete EI5 3.5 kW
	7857720	Heat exchanger, complete EI5 5.5 kW
4	7877983	Power cable EI5.A3 GB
5	7877980	Power cable EI5.A5 GB

Removing the complete heating module

1. Remove front cover.



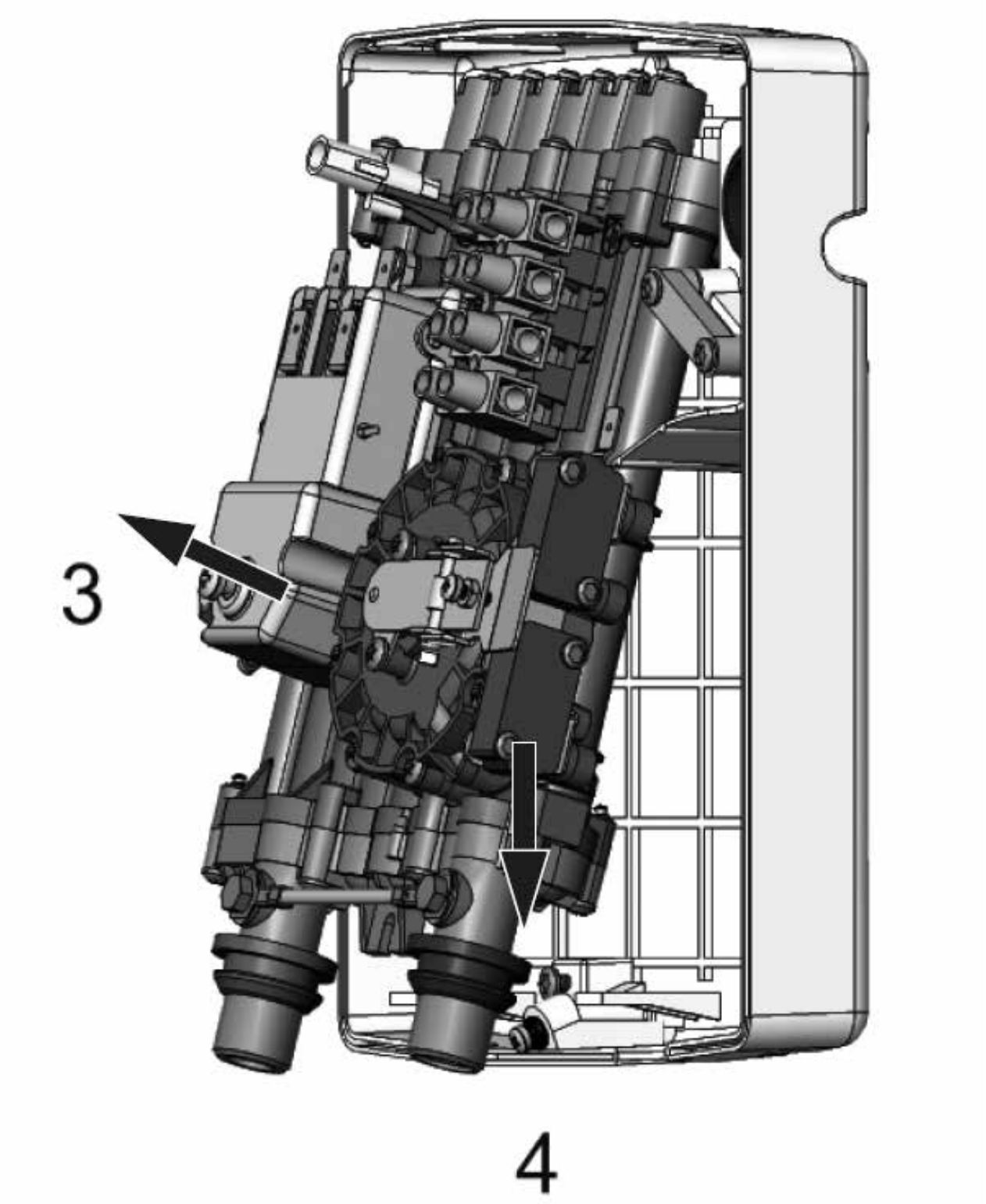
2. Press both locks simultaneously.



Removing the complete heating module (cont.)

3. Tilt the heating module forwards at an angle of 30°.

4. Pull the heating module out of the top locks.



Specification

Electric instantaneous water heaters		EI5.A3 K	EI5.A5 K
Rated voltage		230 V~	
Rated output	kW	3.5	5.5
Power consumption	A	15.2	23.9
Flow rate (at Δt = 30 K)	l/min	1.7	2.6
Rated voltage		220 V~	
Rated output	kW	3.2	5.0
Power consumption	A	14.5	22.7
Flow rate (at Δt = 30 K)	l/min	1.5	2.4
Flow pressure	MPa	0.12 ÷ 0.6	
Start flow rate	l/min	1.2	2.0
Dimensions (height x width x depth)	mm	225 x 170 x 75	
Weight	kg	1.2	
Min. cable cross-section	mm^2	3 x 1.5	3 x 2.5
Max. permissible mains impedance	Ω		0.31
Min. flow resistance at water temperature 15 °C	Ωcm	1100	
Water connection (male thread)		G 3/8 (distance between inlet and outlet 80 mm)	

The appliance must not be disposed of with domestic waste. The appliance must be taken to a collection point for electrical and electronic waste for recycling.

Correct disposal of the product prevents potentially harmful effects on the environment, which can occur due to the improper handling of waste. For more information on recycling this product, please contact your local government, a waste disposal service, or the store where this product was purchased.

Copyright: Viessmann Poland. The reproduction, copying or use of this document or parts thereof without the consent of the author is not permitted. 10/2020

Viessmann Werke GmbH & Co. KG
D-35107 Allendorf
Phone: +49 (0)6452 70-0
Fax: +49 (0)6452 70-2780
www.viessmann.com

6167196 GB

Subject to technical modifications.