

Installation and service instructions

VIESMANN

for contractors

Vitotherm ES4

Version ES4.A5 K

Version ES4.A5 OK

Version ES4.A5 OTK

Electric water heater

VITOTHERM ES4



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.

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

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

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.
- The appliance must be connected to the power supply via a dedicated fixed socket. The power cable and fuse must be sized appropriate to the output of the appliance.
- This appliance of protection class I must be permanently connected to the 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.
- Comply with the permissible operating data, as specified on the type plate.

If water escapes from the appliance



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.

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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

Electric water heater for pressurised or non-pressurised installation.

Max. water pressure in system: 0.6 MPa

- **Corrosion-resistant stainless steel cylinder**
Anode does not need to be replaced on a regular basis.
- **Efficient heating module**
Output: 2000 W
DHW heating from 10 to 40 °C in 5.5 min for 5 l
- **Energy efficiency class A**
Very low energy loss.
- **Functional temperature control**
Water temperature can be variably adjusted between 23 and 70 °C

Types of installation

Types ES4.A5 OK and ES4.A5 OTK:
Appliances for installation above a washbasin with water connections pointing vertically downwards.

Type ES4.A5 K:
Appliances for installation below a washbasin with water connections pointing vertically upwards.

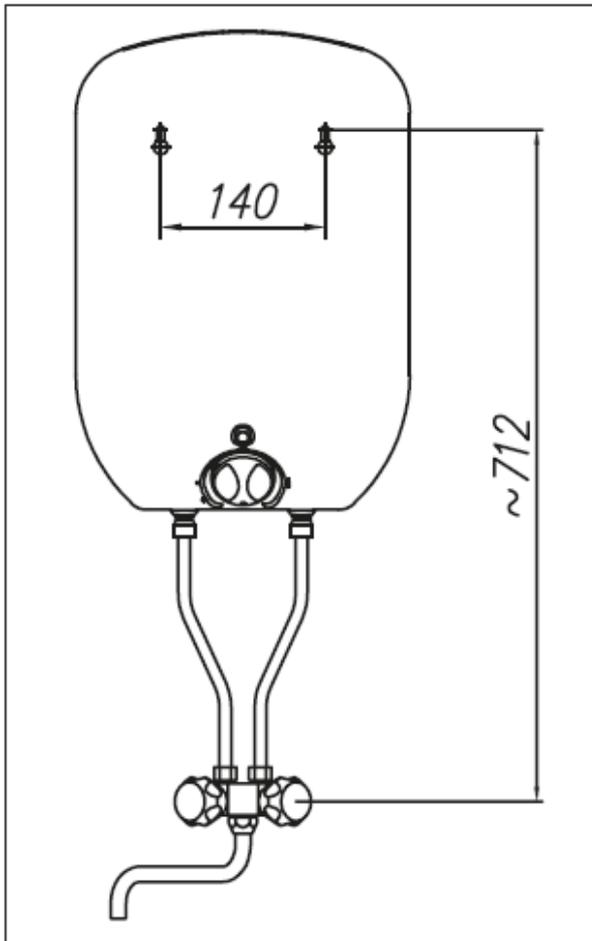
Note:

In a pressurised installation, water may occasionally escape from the safety valve. In a non-pressurised installation, water may occasionally escape from the hot water draw-off point.

This is not a malfunction.

Any water that occasionally escapes must be able to drain away freely at all times.

Installation



Fit the appliance to a stable wall in a vertical position. Connections are at the top or bottom, depending on the type.

Type ES4.A5 OTK:

- Install only with water connections pointing vertically downwards.
- Only connect the fitting that has been supplied with this appliance.
- A pressure reducer and safety valve are not required as the appliance is only operated as a non-pressurised system.

Fastening with rawl plugs:

1. Insert two 8 mm diameter rawl plugs into the wall 140 mm apart.
2. Screw in the fixing screws until the clearance between the screw head and the wall is no more than 4 mm.
3. Hang the electric water heater on the screws.

Fastening with wall mounting bracket:

1. Fit the wall mounting bracket.
2. Hang the electric water heater on the wall mounting bracket and secure it in place with the fixing screws.
For type ES4.A5 OTK, a clearance must be maintained between the fixing screws and the fitting.

Connection to the water system

Shutting off the cold water supply will cause the appliance to malfunction.

Non-pressurised installation:

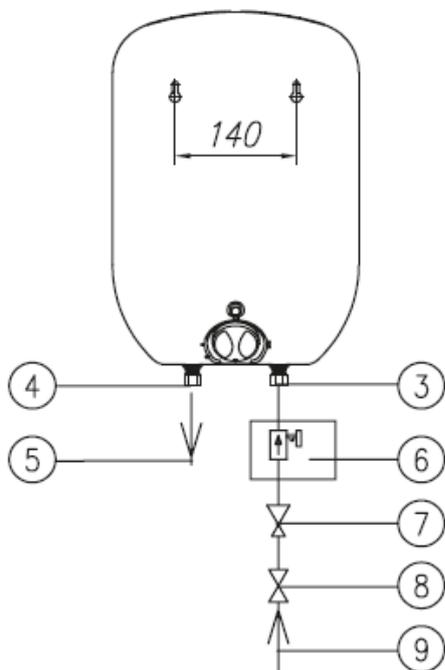
- Fit the hot water tap over a basin with a drain.
- Do not install any devices between the hot water outlet of the appliance and the water outlet of the fitting which could inhibit the flow. A free outflow of water must be guaranteed at all times.

Pressurised installation:

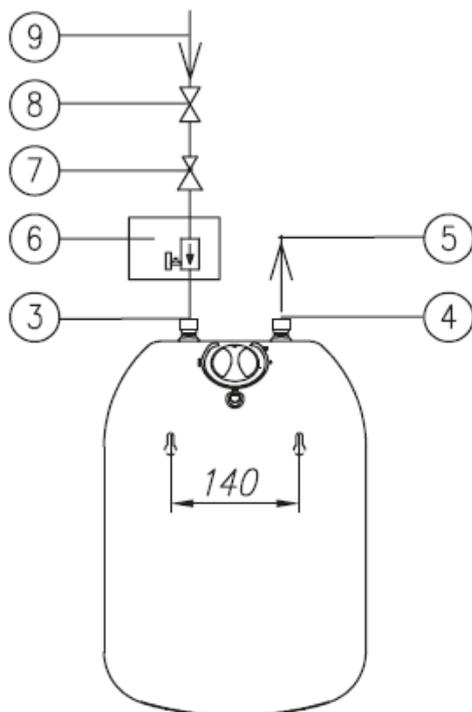
- For system water pressures above 0.6 MPa, a pressure reducing valve must be installed upstream of the safety valve on the cold water supply.
- Connect the safety valve to a drain line.
- The safety valve and the outlet line must not be installed in rooms where temperatures below 0 °C occur.
- Do not install a shut-off valve between the safety valve and the electric water heater.

Installation with safety valve for pressure-tested installation

Type ES4.A5 OK must be installed with connections pointing vertically downwards.



Type ES4.A5 K must be installed with connections pointing vertically upwards.



1. Prepare the cold water supply according to local regulations and connect to the appliance:

Types ES4.A5 OK and ES4.A5 K:

Connect the cold water pipe to the inlet connector and the DHW outlet to the outlet connector: See adjacent diagrams. It is essential that a safety valve [6] with a nominal pressure of 0.6 MPa is installed in the cold water supply.

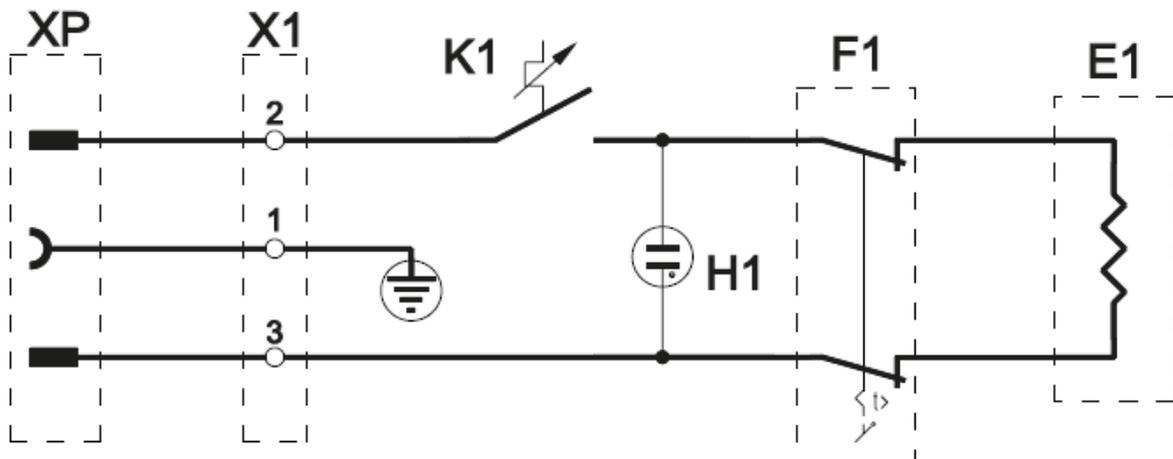
Type ES4.A5 OTK:

Insert gaskets into the nuts and connect the fitting to the appliance using metal pipes or flexible hoses. Recommended distance between metal pipes and wall: **~34 mm.**

2. Route the drain line for the safety valve downwards, ensuring it is located in a frost-free environment.
3. Open the hot water tap (red) and fill the integral cylinder completely with water (water must run out of the hot water tap free of bubbles).
4. Check connections for tightness.

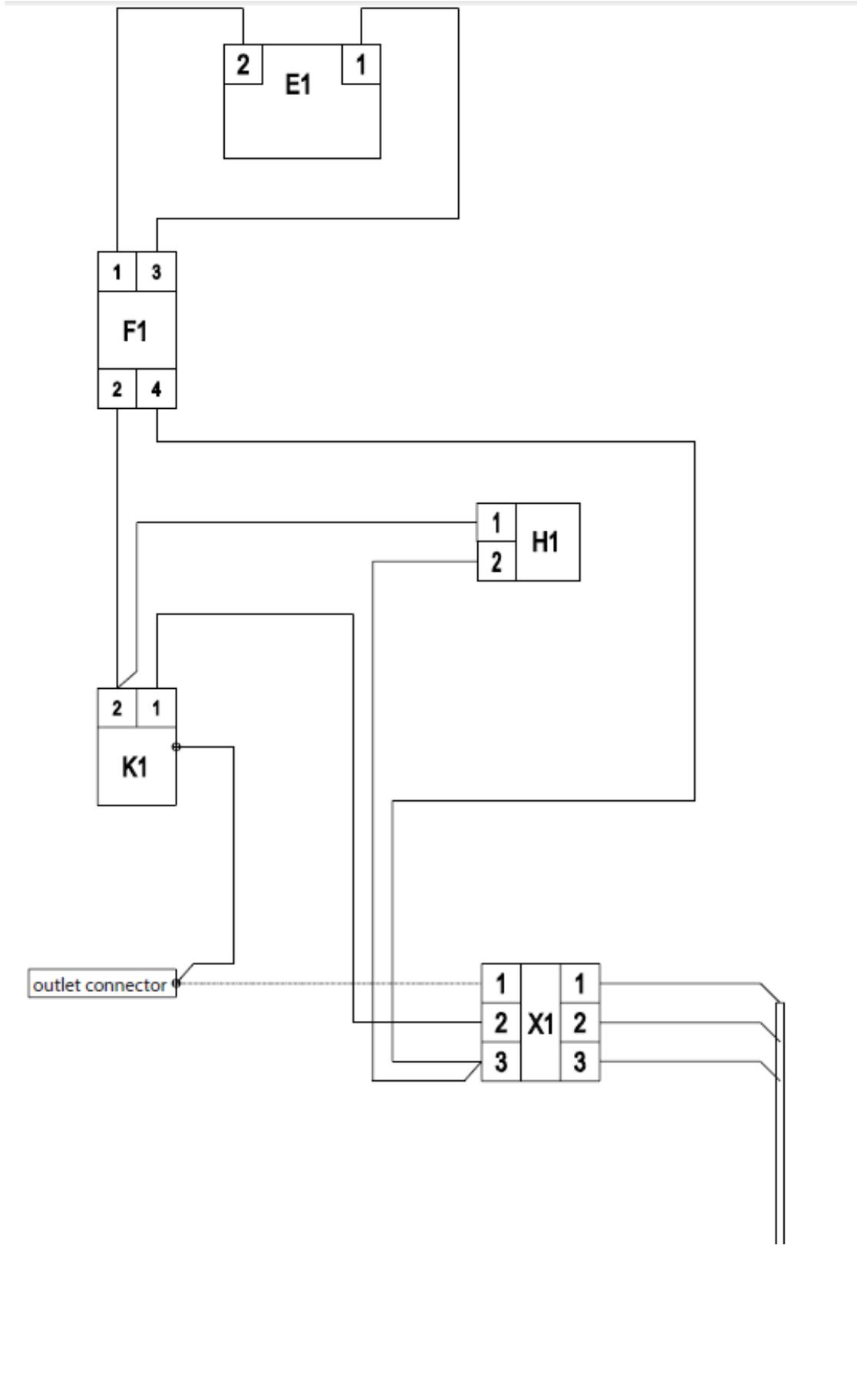
- ③ Inlet connector (cold water)
- ④ Outlet connector (DHW)
- ⑤ DHW outlet
- ⑥ Safety valve
- ⑦ Pressure reducing valve (for system water pressures above 0.6 MPa)
- ⑧ Shut-off valve
- ⑨ Cold water supply

Wiring diagram



- E1 – Heating module
- F1 – Thermal circuit breaker
- K1 – Thermostat
- X1 – Terminal strip
- XP – Power cable
- H1 – Heating display

Electrical installation



Operation

Switching on

! **Caution**
The appliance may be damaged if it is switched on before it is completely filled. Do not switch on the appliance until the integral cylinder is completely filled with water.

! **Caution**
The appliance may be damaged if the safety valve is not functioning correctly.

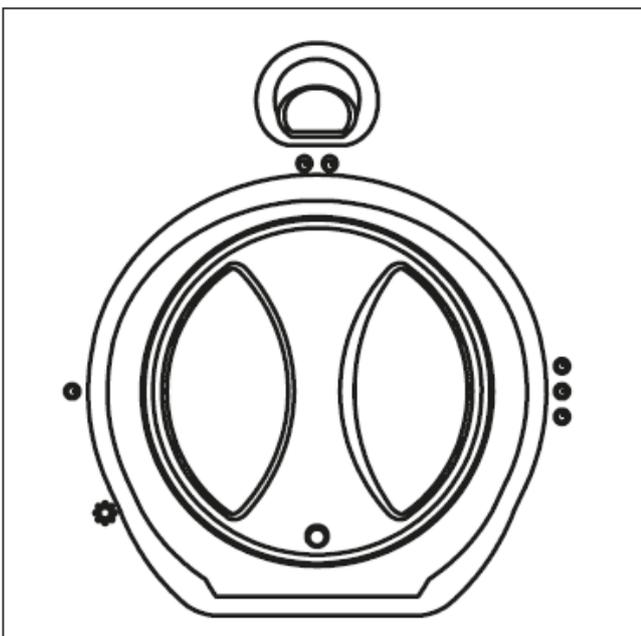
- Open the safety valve regularly and remove any deposits.
- Check the safety valve regularly for blockages and correct operation: Turn the lever of the safety valve so that water flows out of the outlet pipe. If no water comes out of the outlet pipe, the valve is faulty and the appliance must not be operated in pressurised water systems.

Draining

! **Caution**
The appliance may be damaged if operated in areas at risk from frost. If there is a risk of frost, drain the appliance completely:

- Appliances installed above washbasins (types ES4.A5 OK and ES4.A5 OTK):
Undo the connection pipe from the inlet connector (cold water). Open the hot water tap.
- Appliances installed under the washbasin (type ES4.A5 K):
Undo flexible hoses from inlet and outlet connectors (hot and cold water). Unhook the appliance at the wall and turn it 180° to drain it.

Temperature control



A rotary switch for adjusting the temperature is located on the front of the appliance.

- **Switching on:**
Turn the temperature switch clockwise. The water temperature can be variably adjusted between "⚙" (~7 °C) and "○○○" (~70 °C). In heating mode, the LED illuminates and the water is heated.
- **Switching off:**
Turn the temperature switch anticlockwise. Position when appliance is switched off: See adjacent diagram.

Operation (cont.)**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 until a constant, even flow of water is achieved.
3. Turn the rotary switch to the required temperature.
4. Switch on the power supply.

**Caution**

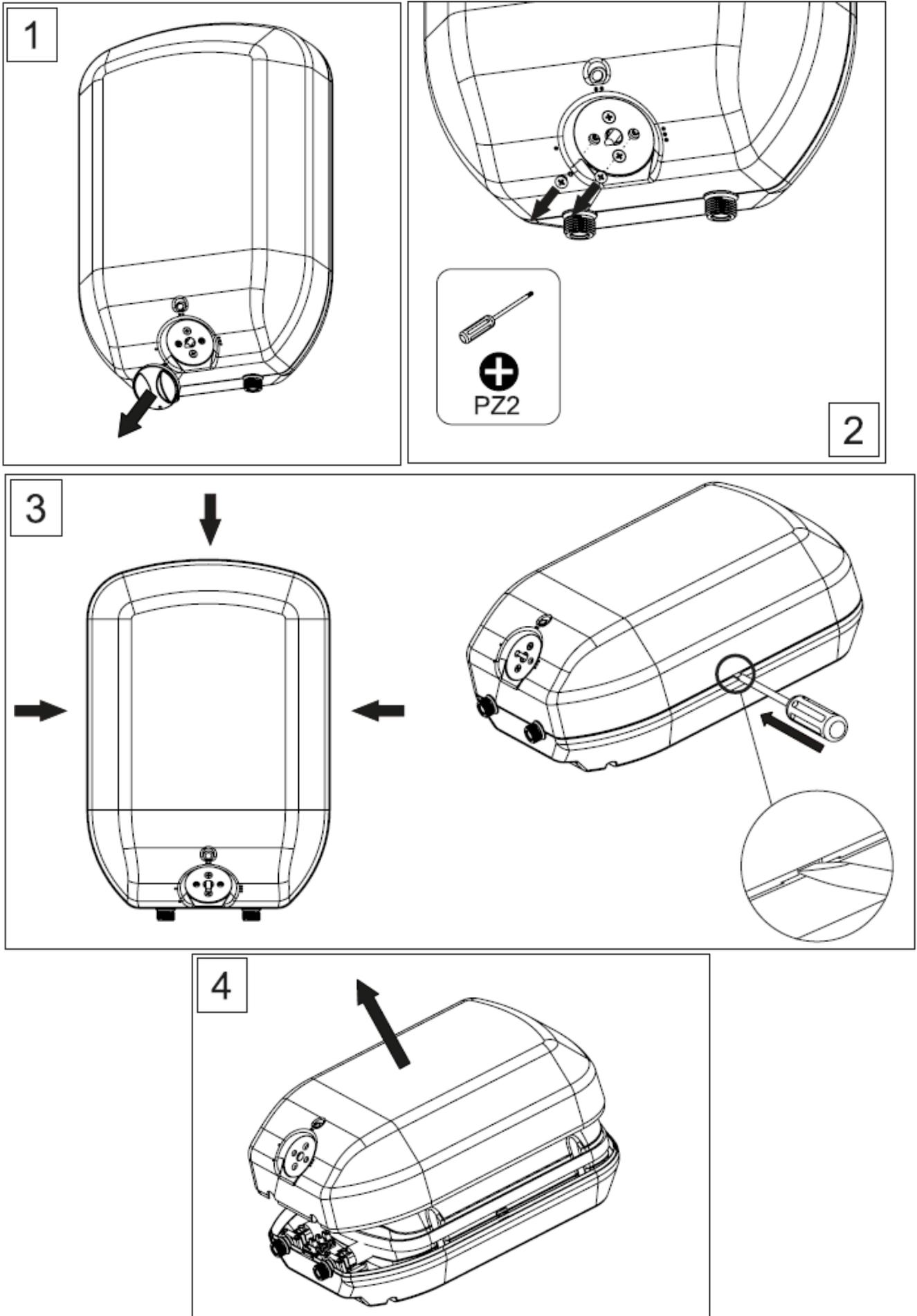
Air in the water installation may damage the appliance.

Vent the system after working on the appliance or the water installation.

Faults

No.	Fault	Background	Remedy
1.	The appliance is not heating the water and the LED is not illuminated.	Power supply fault.	Check the fuses.
		Fault with the rotary temperature switch.	Replace the rotary temperature switch. (Heating contractor)
2.	The appliance is not heating the water and the LED is illuminated.	Fault with the heating module.	Replace the appliance. (Heating contractor)
		Fault with the temperature limiter.	Switch on the temperature limiter or replace it. (Heating contractor)
3.	The appliance is heating the water and the LED is not illuminated.	Fault with the LED.	Replace the LED. (Heating contractor)

Removing the cover



List of spare parts

Position	Spare part	Description	Quantity (number)
1	7857667	Front casing ES4.A5 OK OTK	1
2	7857674	Back panel ES4.A5 OK OTK	1
3	7857679	Rotary selector ES.A5	1
4	7857673	Front casing ES4.A5 K	1
5	7857674	Back panel ES4.A5 K	1
6	7857668	Cylinder, complete ES4.A5 OK OTK 1/2"	1
7	7857669	Cylinder, complete ES4.A5 K 1/2"	1
8	7857670	Illuminated ring ES4	1
9	7857675	Thermostat ES4.A5	1
10	7857694	Fitting ES4.A5 A10 OTK	1
12	7857671	Pipe set for fitting ES4 OTK 1/2"	1
13	7877982	Power cable ES4.A5 GB	1
14	7857677	Safety valve ES4	1
15	7857676	Safety switch ES4	1
16	7857666	Thermal insulation ES4.A5	1

Specification				
VITOTHERM DHW cylinder		ES4.A5 K	ES4.A.5 OK	ES4.A.5 OTK
Contents	l		5	
Voltage			220 - 240 V~	
Rated output	W		2000	
Rated current	A		8.3 - 9.1	
Temperature range	°C		23 - 70	
Pressure stage	MPa		0.6	
Dimensions (height x width x depth)	mm		427 x 285 x 163	
Weight (dry)	kg		4.4	
IP rating			IP 24	
Water connection (male thread)			G 1/2"	
Water connection (mixer tap)		-	-	G 1/2"



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.