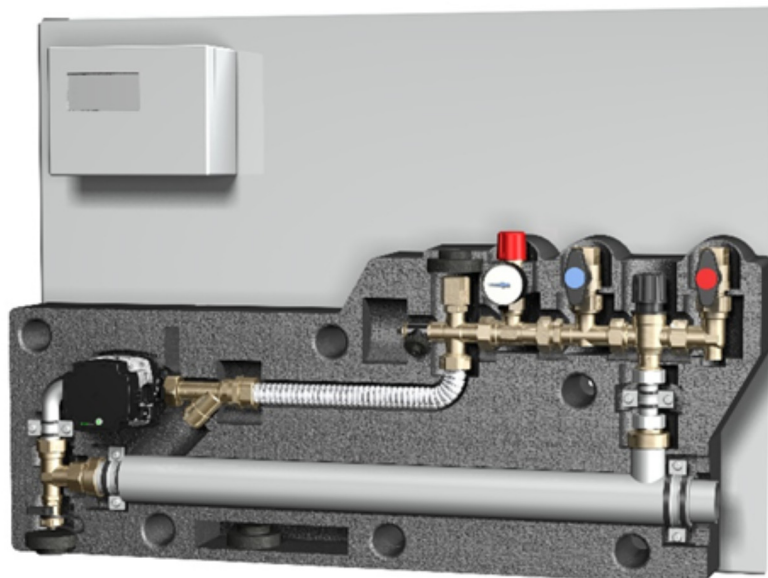


## Fitting instruction, user manual and service

Please keep in a safe place

Wall console ready for connection for heating water

- ASKOWALL+
- 012-2103



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## General safety information



Do not place the device into operation until after having read user manual.



These devices may be used by children aged 8 or more and by persons with reduced physical, sensory or mental capacity or those lacking in experience and/or knowledge if they are supervised or if they have been instructed in safe operation of the device and understood the resultant dangers.

Children may not play with the device. The device may not be cleaned or serviced by children unless they are supervised.

The legal regulations of the respective country, the local electricity supply company and the waterworks must be observed.

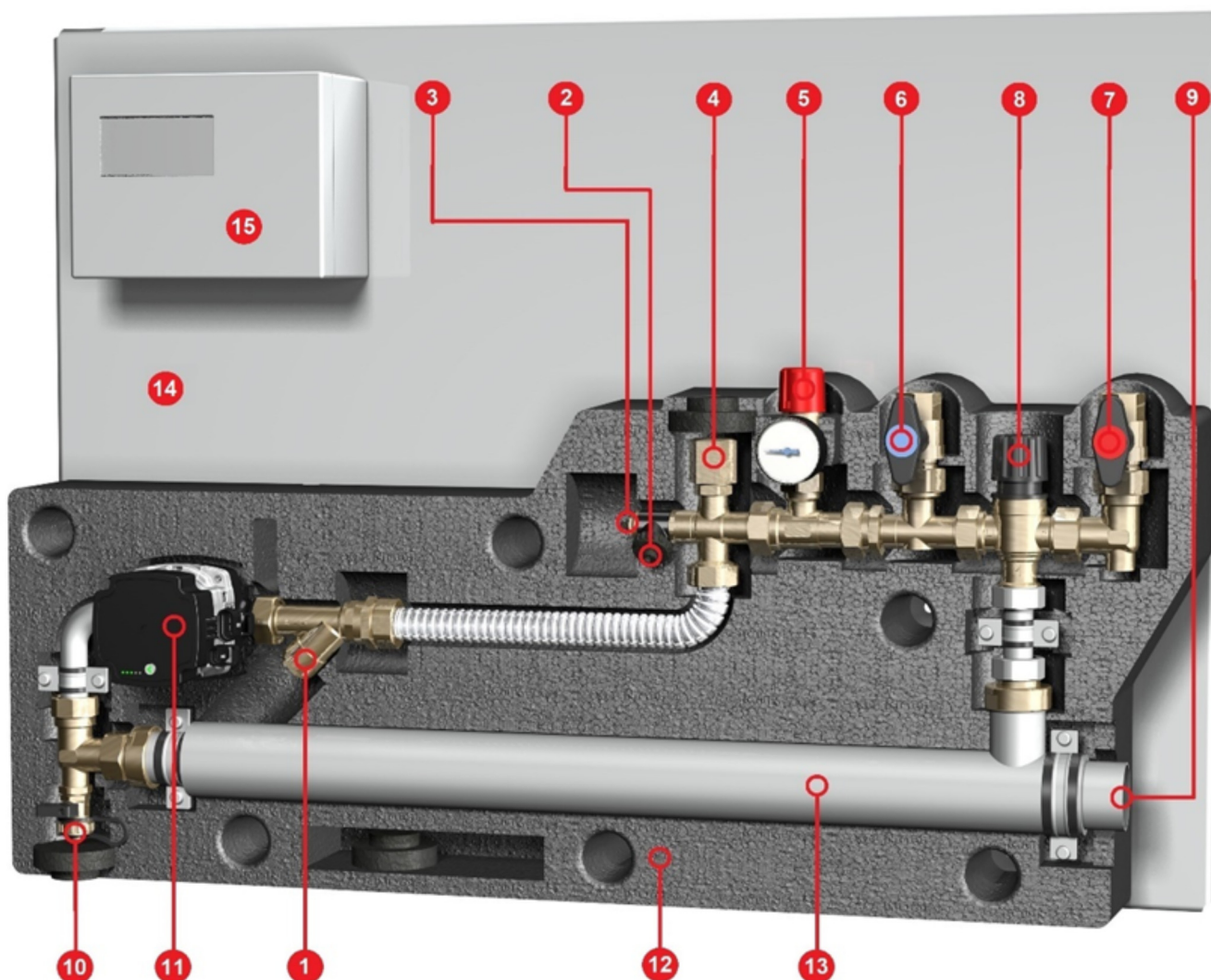
The **ASKOWALL** is a device of protection class I and must be connected to the protective conductor.



The **ASKOWALL** is only suitable for closed (pressurised system) operation.

We do not accept any guarantee or liability for any damage caused by improper repair attempts or the independent installation of inadmissible components or by changes to the installed safety devices.

**Installation, setting and removal must be carried out only by sanitary and electrical specialists.**

**Design** for the user and qualified installer**Overview of the components and the function**

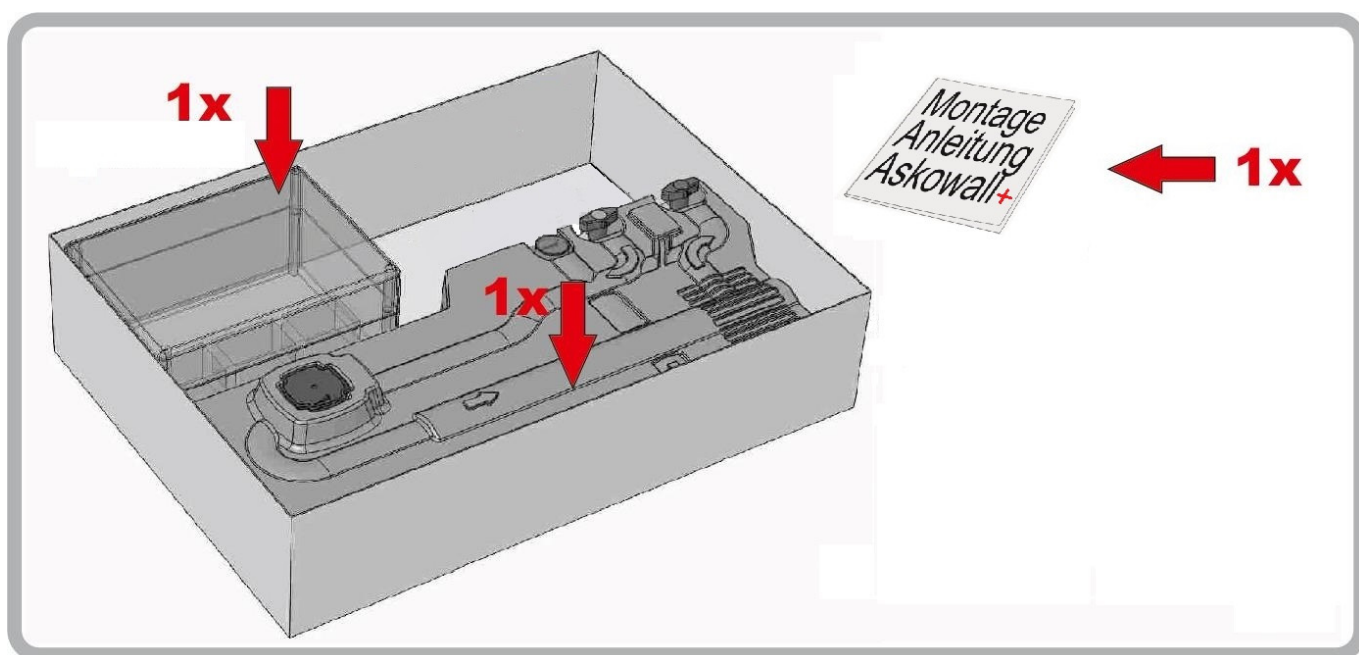
1. Mud flap
2. Filling valve
3. Vent valve
4. Connection for possible expansion tank (1" internal thread, flat sealing)
5. Pressure relief valve
6. Return flow shutoff & OXYban hose connection
7. Flow shutoff & OXYban hose connection
8. Thermostatic valve 50 - 75°C
9. 1½" threaded connection for screw-in heater
10. Drain cock
11. Circulation pump
12. Insulation housing
13. Instantaneous water heater **ASKOFLOW**
14. Console rear wall
15. Electrical junction box prepared for **ASKOHEAT+** screw-in heater & energy manager

## Functional description

### Function

The **ASKOWALL+** is a hydraulic unit with connections for cold water, hot water and a screw-in heater. The heating water is circulated in this hydraulic unit by means of an integrated speed-controlled circulation pump. The screw-in heater heats the circulating heating water. When the heating water reaches the temperature set on the thermostatic valve, it opens and the heated water is pumped into the storage tank. At the same time, cold water flows through the cold water connection and cools the circuit, and the thermostatic valve then closes again. The heating water now circulates again until the temperature is reached. As a result of this process, the storage tank is loaded with hot water from top to bottom and there is no turbulence in the storage tank.

## Scope of delivery



### Scope of delivery

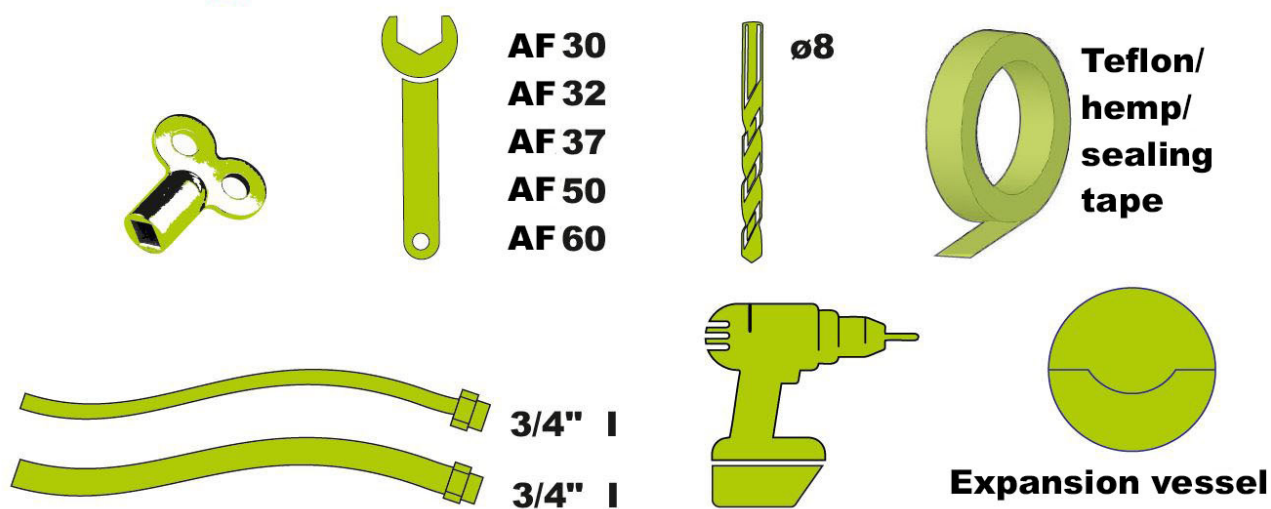
The delivery includes the **ASKOWALL+** incl. the rear wall and two-part insulating sleeve, these assembly instructions, four screws (6 x 70mm), four dowels (8 x 50mm) and a piece of hose for the connection to the blow-off line.

The **ASKOWALL+** also includes a housing for connecting the electrical cables.

The **ASKOWALL+** **does not** include any connection hoses or screw-in heater. This screw-in heater is required for commissioning, but must be ordered separately.

## Assembly and installation

### On site

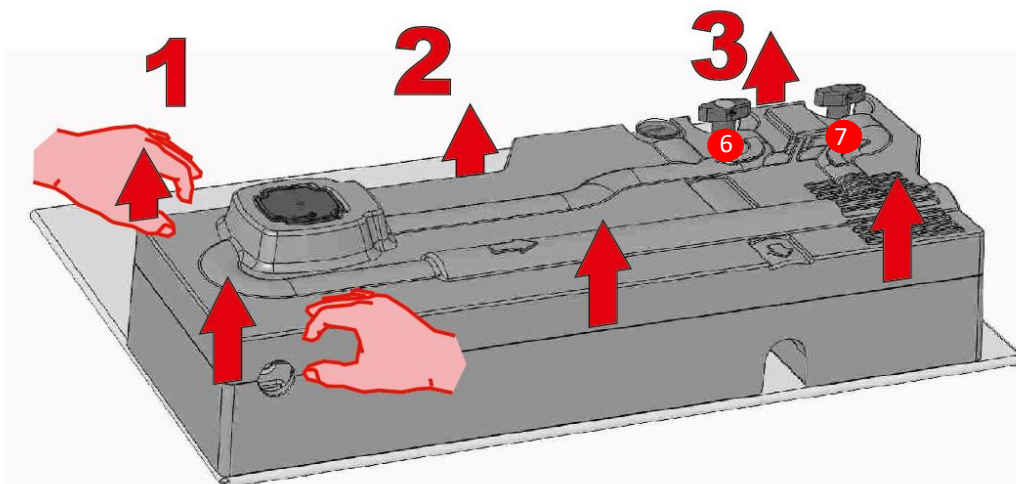


### Material and tools

Various open-end wrenches, impermeable material, a  $\varnothing$  8mm rock drill & impact drill (for wall mounting on a brick or concrete wall), a heating vent key and hoses for filling and ventilation are required for the installation of the ASKOWALL+.

If the ASKOWALL+ is connected to a heat exchanger, a suitable expansion vessel is necessary.

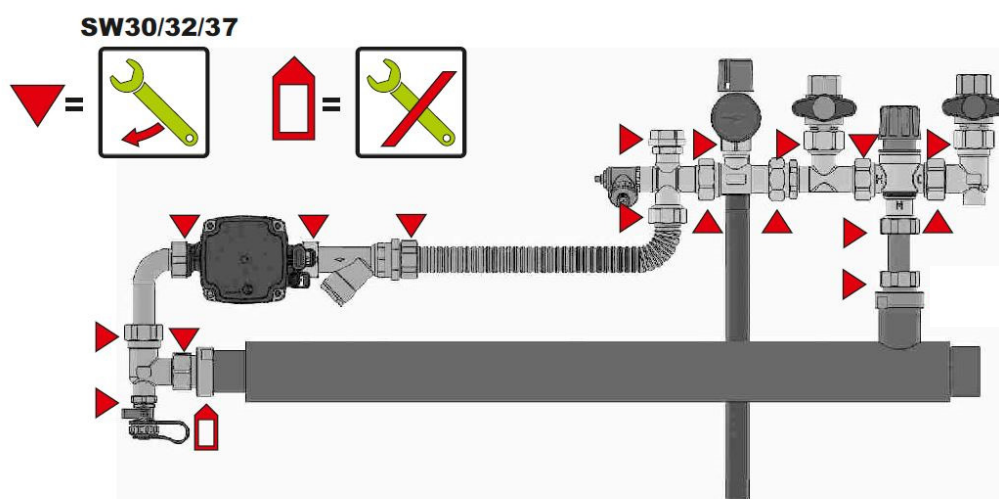
## Assembly and installation



### Opening the insulation cover

Before opening the insulation cover, the two shut-off valves of flow and return (no. 6 and no. 7) must be closed.

Remove the insulation cover carefully and, if possible, evenly so that the six locking pins on the cover do not tear off.

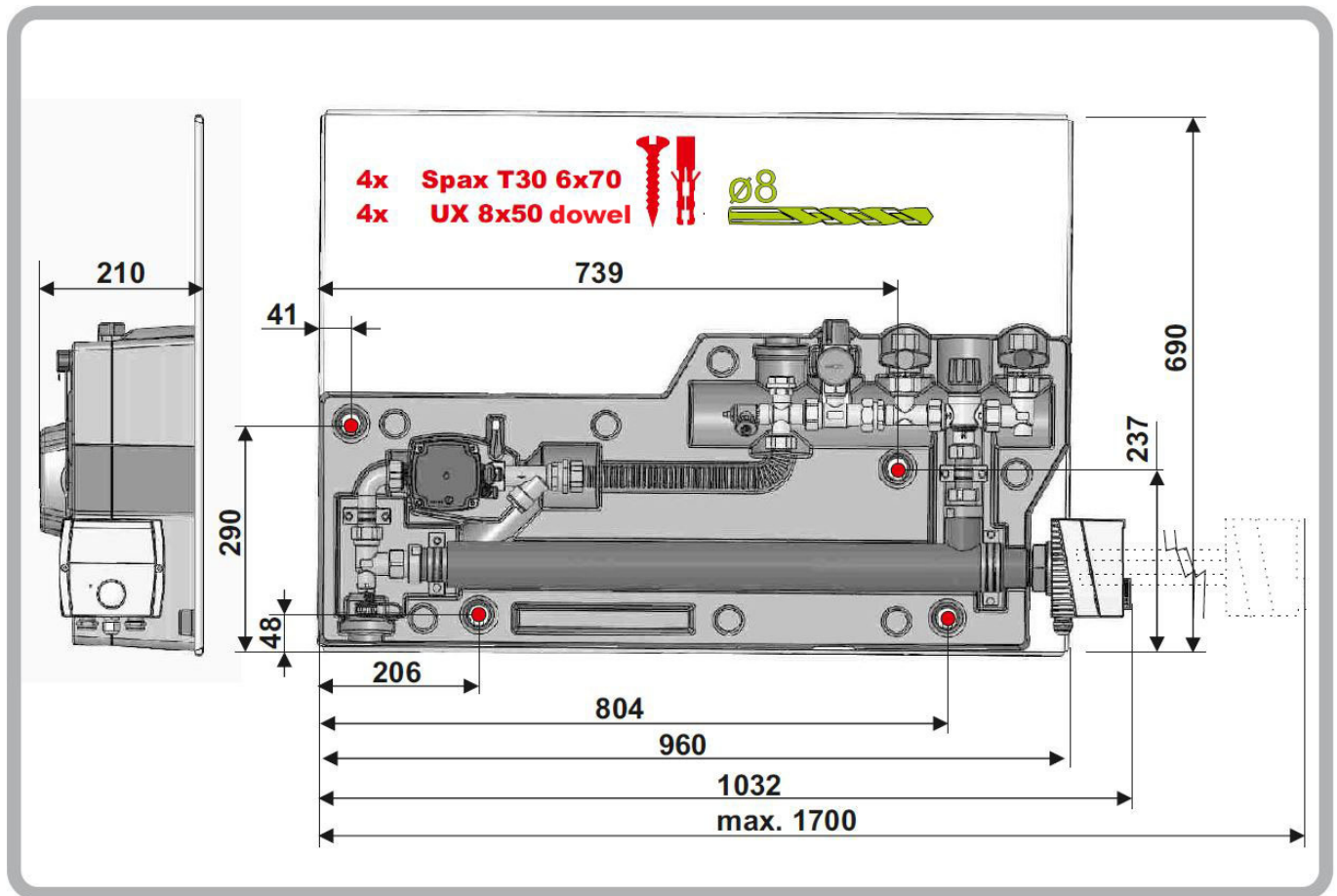


### Retighten screw connections

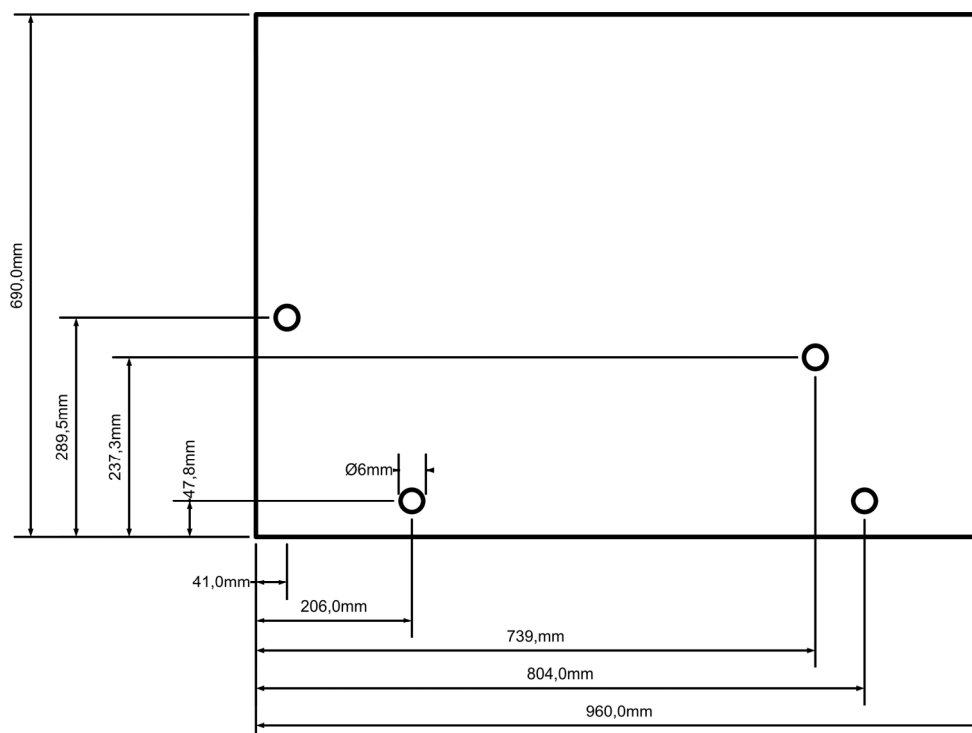
All screw connections marked with a red dot must be retightened for safety reasons. A leak test has already been carried out at the factory during manufacture.



## Assembly and installation

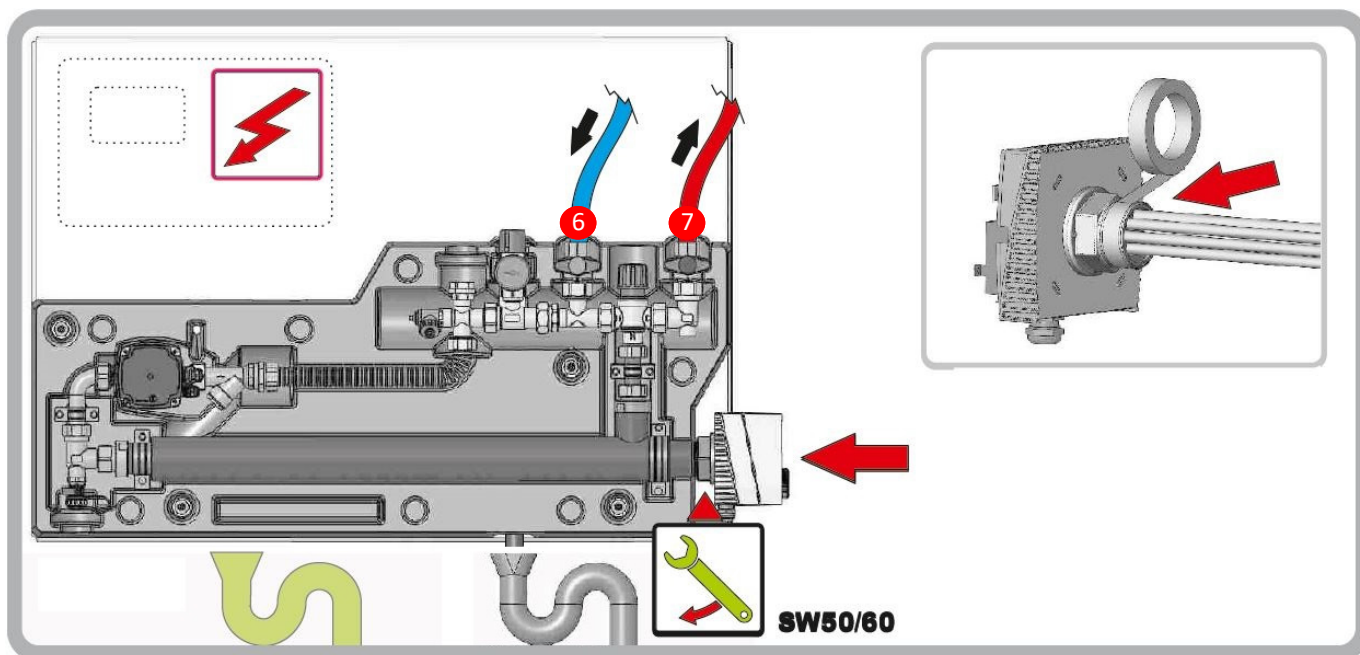


The **ASKOWALL+** can be attached to the wall using the four screws supplied.



The holes have to be drilled according to the drawing.

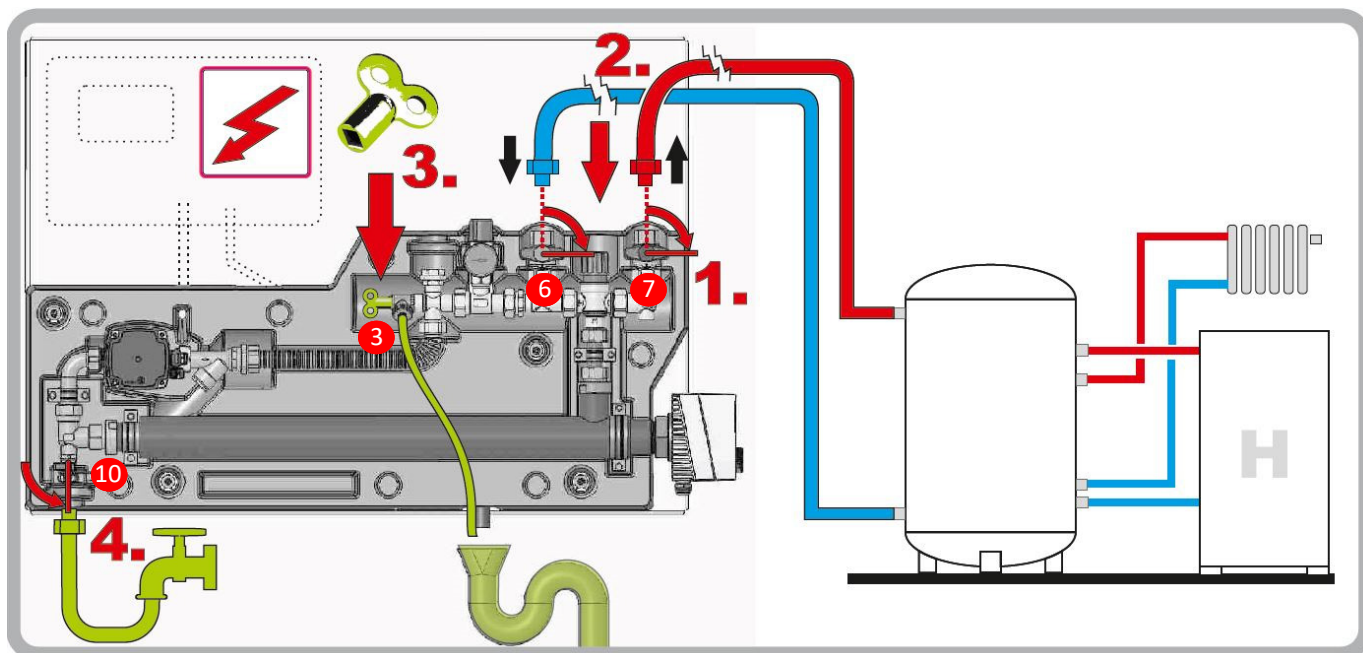
## Assembly and installation



- Seal the screw-in heater with approved sealing material and screw it in.
- The screw-in heater's plug-in connections must be positioned downwards.
- Connect the drain hose of the safety valve to the on-site drain according to the regulations.
- Connect the supply and return lines on the shut-off valves (no. 6 and no. 7) of the **ASKOWALL+**. Therefor the connection hoses for **ASKOWALL+** with a length of 1.6m and  $\frac{3}{4}$ " connection with the article number 012-0130 can optionally be used.



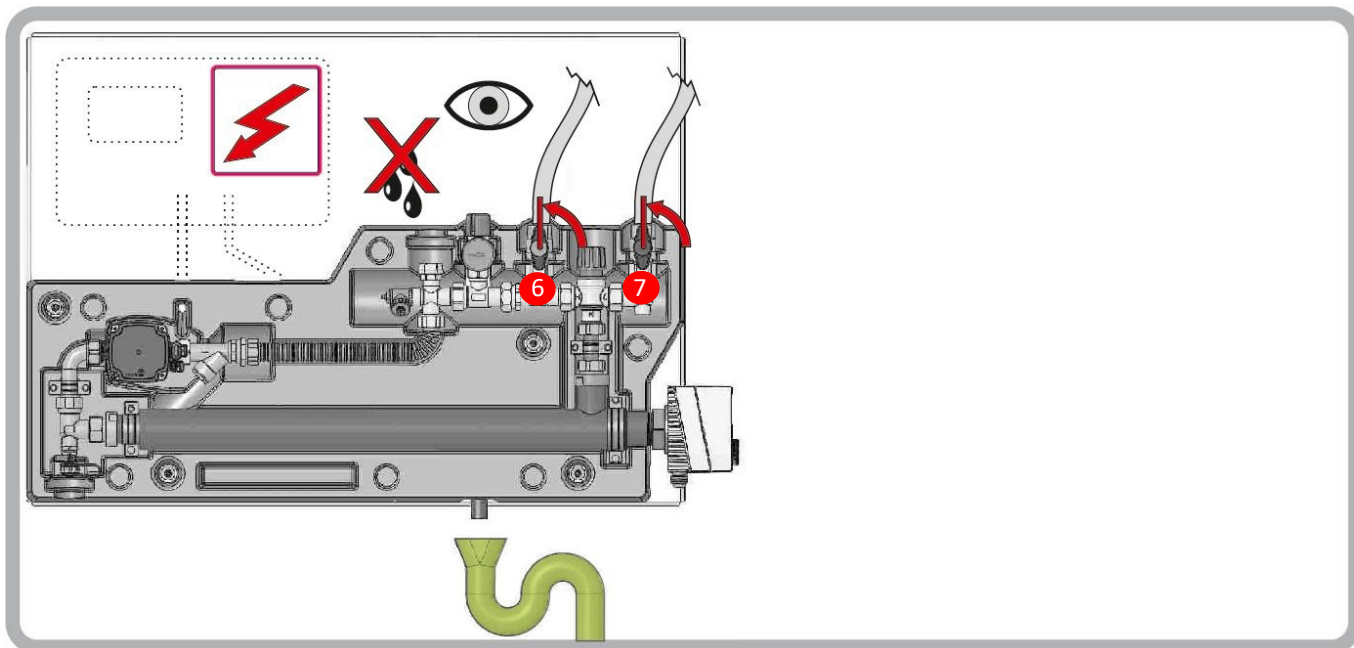
## Filling



## Filling the ASKOWALL+

1. Return flow shutoff (no. 6) and flow shutoff (no. 7) must be closed.
2. Connect the flow line (right / red) to the top of the storage tank.  
Connect the return line (left / blue) to the bottom of the storage tank.
3. Connect the on-site mobile ventilation hose to the ventilation valve (no. 3) and open it.
4. Connect the heating water inlet to the drain cock (no. 10) and open the drain cock.  
The **ASKOWALL+** is filled by supplying the heating water, the air can escape from the open vent valve.  
If only heating water comes out of the vent valve, the **ASKOWALL+** is completely filled and the vent valve (no. 3) can be closed. The drain cock must be closed before dismantling the heating water supply.

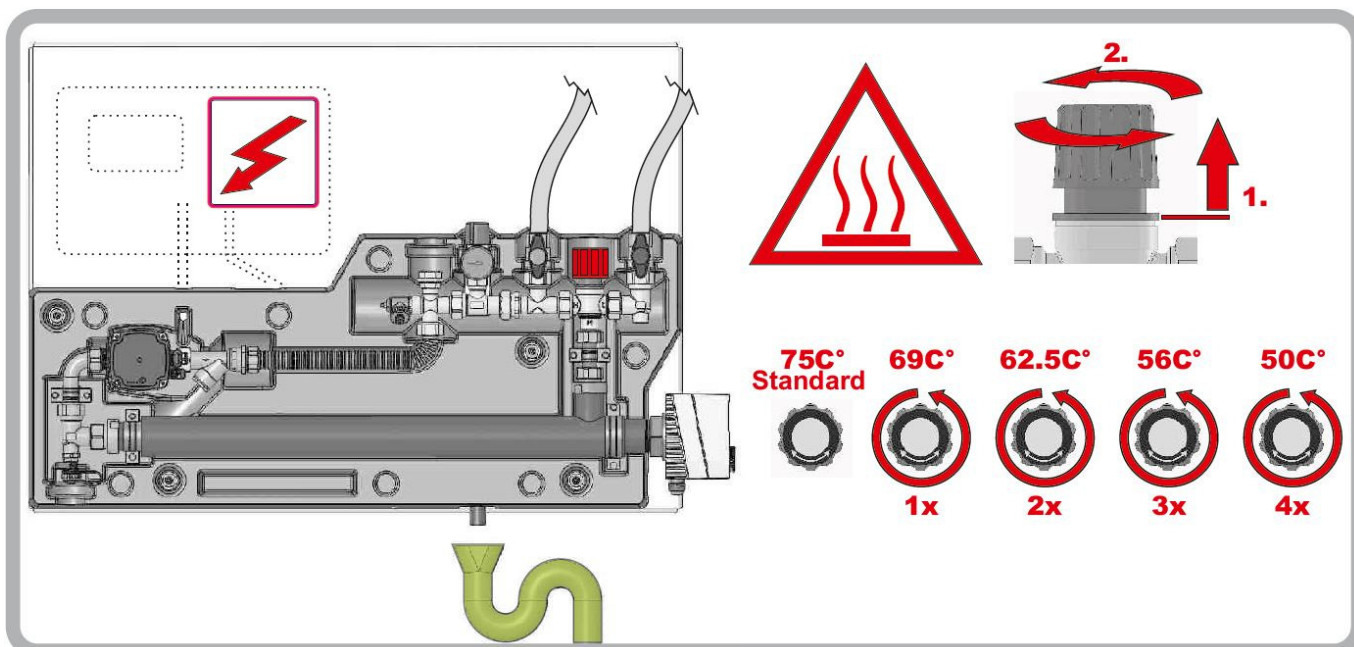
## Leakage check



After opening the two shutoff of flow and return (no. 6 & 7), the system must be checked for leaks. No water leakage may be detected.

If a screw connection is leaking, it must be retightened.

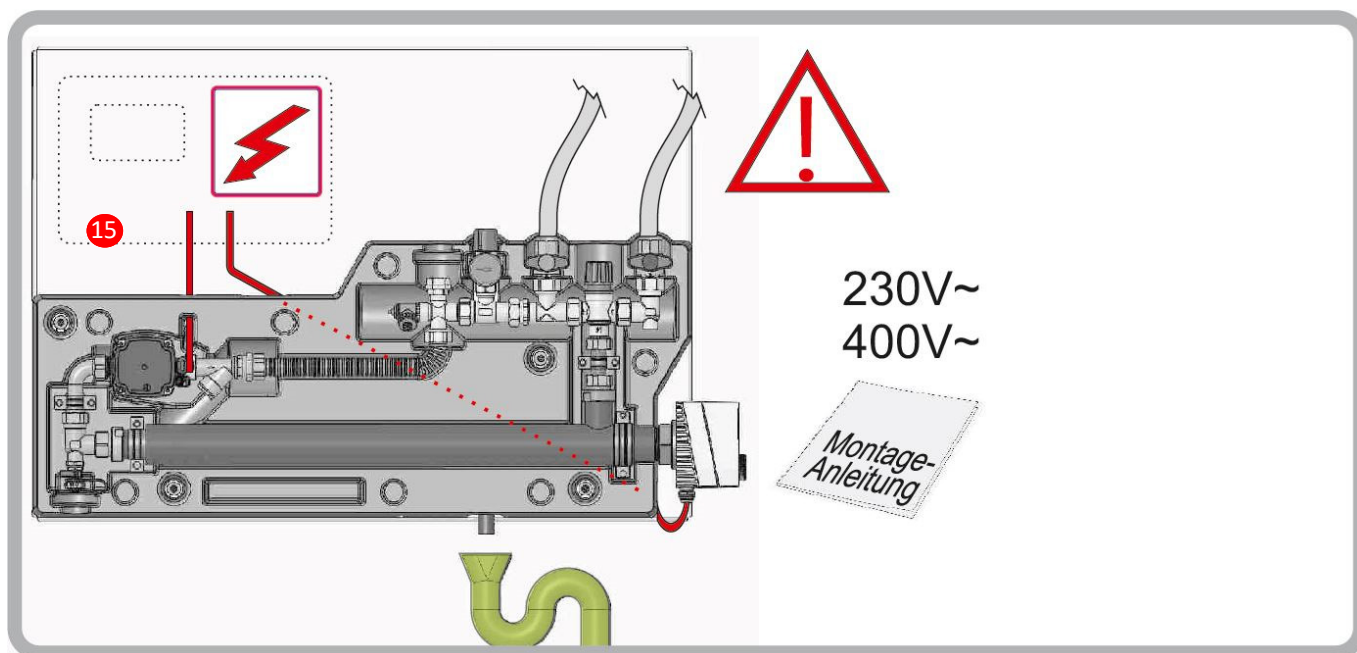
## Setting of the thermostatic valve



### Setting the output temperature to the buffer tank (opening temperature of the thermostatic valve)

1. Pull the lower plastic ring up and hold it there.
2. Set the rotary control to the desired temperature (turn). Then release the lower plastic ring and snap it into place.

## Electrical connection



There are pre-wired connection cables on the junction box.

These may only be connected or plugged in after the screw-in heater has been installed and it's leak test has been carried out.

A supply line to the junction box for the energy manager and the circulation pump must be created. An additional supply line must be created for the **ASKOHEAT+**.

The energy manager that is to be placed in the junction box must be connected to an on-site router with a LAN connection. The **ASKOHEAT+** can either be connected directly to the ASKOMA energy manager or to an on-site router.

### Pre-wired connection cables

- Pump cable 1 x230V (3 x 0.75mm<sup>2</sup>)
- Connection line sensor / pump control (6 x 0.34mm<sup>2</sup>) with plug Z2
- Connection line heat pump request (6 x 0.34mm<sup>2</sup>) with plug Z3
- LAN connection for the energy manager between junction box and **ASKOHEAT+** with plug Z4

### Connections to be set up by the customer

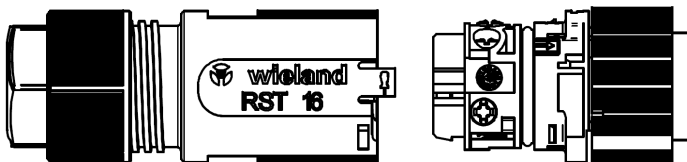
- A supply line for the energy supply of the energy manager and the pump must be created
- A connection from the energy manager to the local LAN network must be created
- A supply line for the load circuit of the screw-in heater **ASKOHEAT+** must be created
  - ◆ Optionally the 4 sensors of the sensor set (012-0126) can be connected in the junction box
  - ◆ As an option, the heat pump request can be connected in the junction box
  - ◆ An analog 0-10V control signal can optionally be connected in the junction box

## Connector plugs

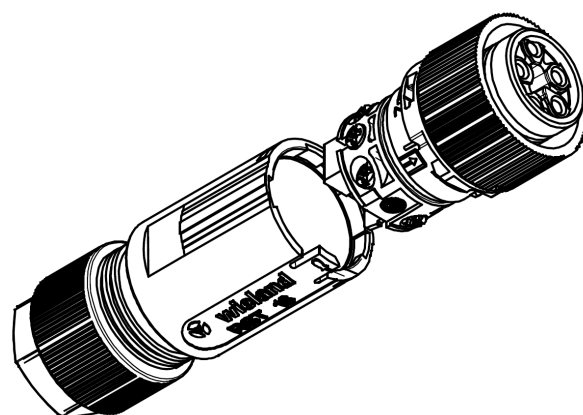
### Plug Z1 - energy supply ASKOHEAT+

The 5-pin Wieland RST16 plug (Z1) is used to supply energy to the screw-in heater and to control it. This plug is included in the scope of delivery of the screw-in heater.

The plug must be connected to the supply line to be provided by the customer and must be connected to the underside of the heating element.



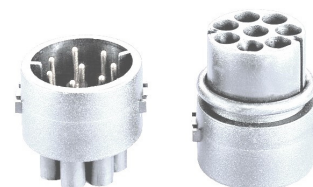
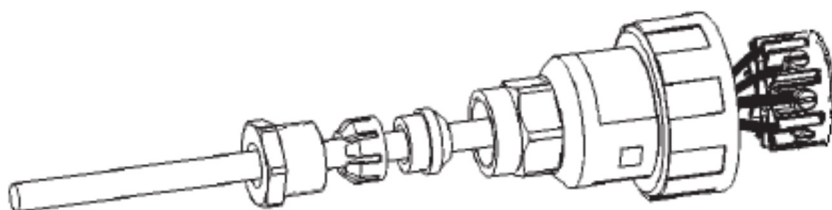
- Plug connection contact 1 - outer conductor L1
- Plug connection contact 2 - outer conductor L2
- Plug connection contact 3 - outer conductor L3
- Plug connection contact N - neutral conductor
- Plug connection contact PE - earth connection



### Plug Z2 & Z3 - control ASKOHEAT+

The 6-pin Bulgin Mini Buccaneer plug (Z2) and Z3 are used to control and transfer the sensor values to the ASKOHEAT+. These plugs are included in the scope of delivery of the screw-in heater.

These plugs must be connected to the existing connection cables of the junction box and connected to the bottom of the heating element.



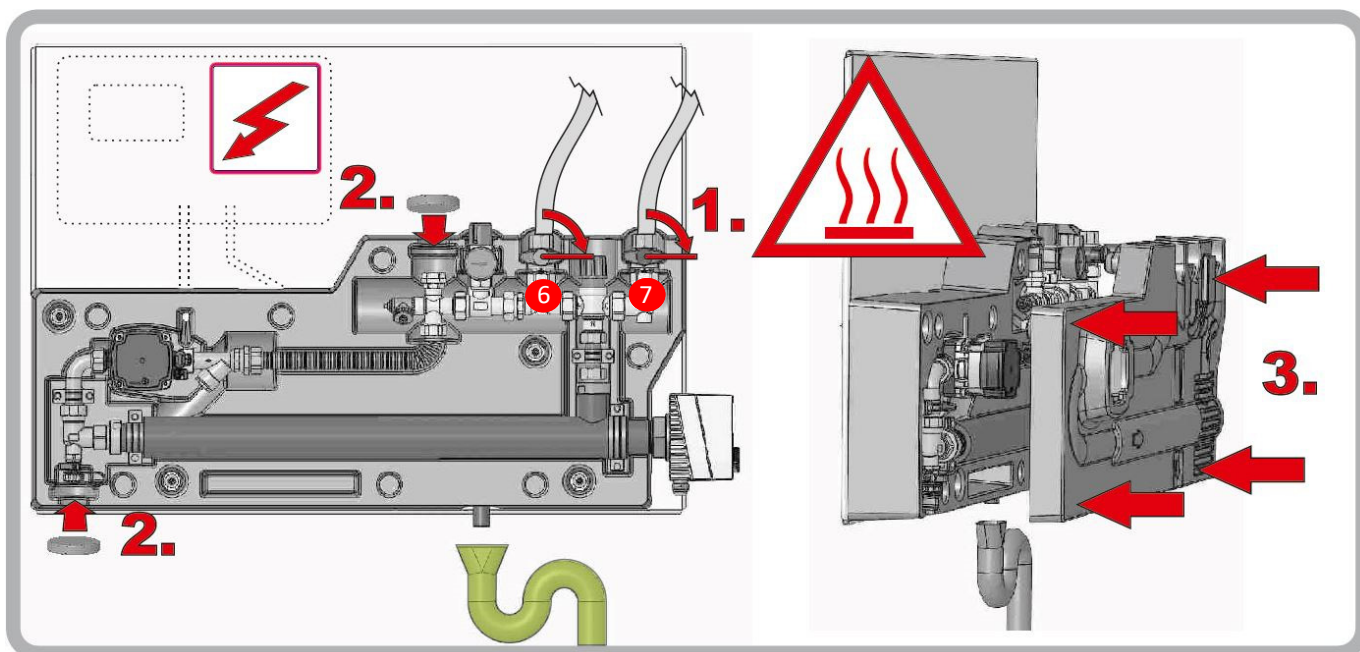
#### Plug Z2

- Plug connection contact 1 - sensor F1
- Plug connection contact 2 - sensor F2
- Plug connection contact 3 - sensor F3
- Plug connection contact 4 - sensor F4
- Plug connection contact 5 - GND
- Plug connection contact 6 - relay K4

#### Plug Z3

- Socket connection contact 1 - GND
- Socket connection contact 2 - heat pump request
- Socket connection contact 3 - analog input 10V
- Socket connection contact 4 - reserve
- Socket connection contact 5 - reserve
- Socket connection contact 6 - reserve

## Insulation



**ATTENTION:** Before closing the insulation cover, the two shut-off valves of flow and return (no. 6 and no. 7) must be closed. Otherwise the insulation cover cannot be closed.

1. Close the shut-off valves of flow and return (no. 6 and no. 7).
2. The two insulation washers supplied are for closing the connections of the expansion tank (no. 4) and the drain cock (no. 10) that may not be used. These can be inserted into the prefabricated slots.
3. After closing the cover, the shut-off valves of flow and return can be opened again.



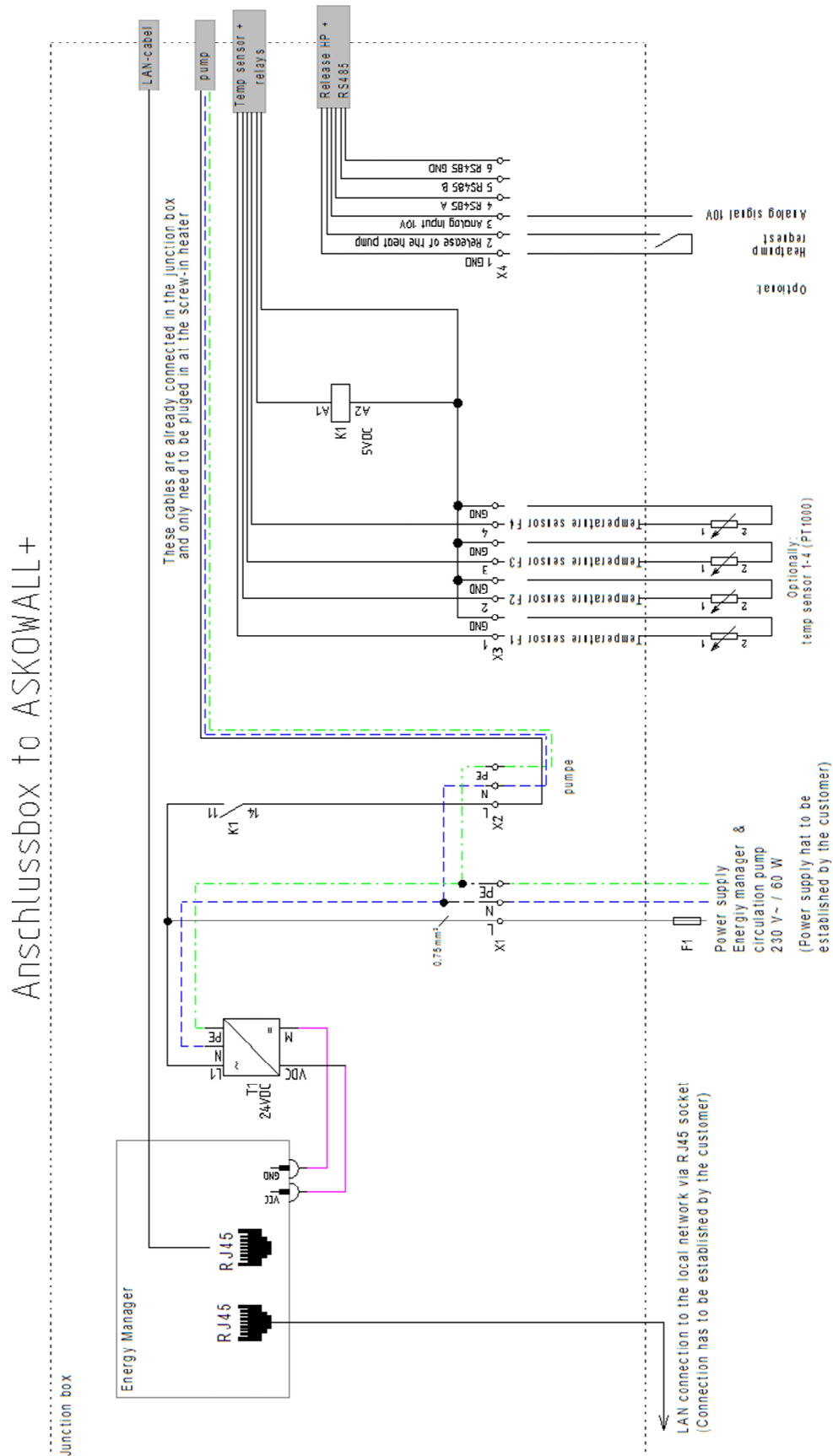
**ATTENTION:**

Pipes, fittings and connection hoses can be hot, there is a risk of burns!



# Electric diagram

## Electric diagram for 012-2103 ASKOWALL+





## Installation instructions

Operating data, application, dimensions and model of the **ASKOWALL+** can be found in the fitting instructions / user manuals of the **ASKOWALL+**. This document is enclosed with the **ASKOWALL+**.

**The conical thread of the screw-in heater must be provided with an approved sealant before installation in the ASKOWALL+.**

**The ASKOWALL+ may only be installed horizontally.**

Turning or tipping is not permitted due to the formation of air pockets.

Make sure that the heating tubes are entirely covered by the liquid before placing into operation. The circulation of the liquid shall not be inhibited.

**The device may only be used to heat up heating water.**

### Electrical connection

The device is intended for fixed connection only and may be connected only to fixed cables. Select a cable cross-section suitable for the power rating on the device. All poles of the device must be able to be disconnected from the mains by means of an at least 3mm isolating distance. The PE wire must be 100mm longer than the other conductors.

**The regulations of the local electricity provider must be observed!**

### In the event of the following the guarantee is void:

- Not complying with this paperwork „Fitting instructions, user manual, and service“
- Not complying with the storage heater manufacturer's fitting instructions
- Technical modifications, repairs or tampering with the device (including exchanging the pump, piping or the valve)
- Direct heating of domestic water
- Applications for which the device was not designed
- Installation of a foreign heating element
- Incorrect operation and maintenance
- Not complying with directive VDI 2035



### **ATTENTION!**

All power supply circuits must have been switched off before accessing the connection terminals.

[illegible]