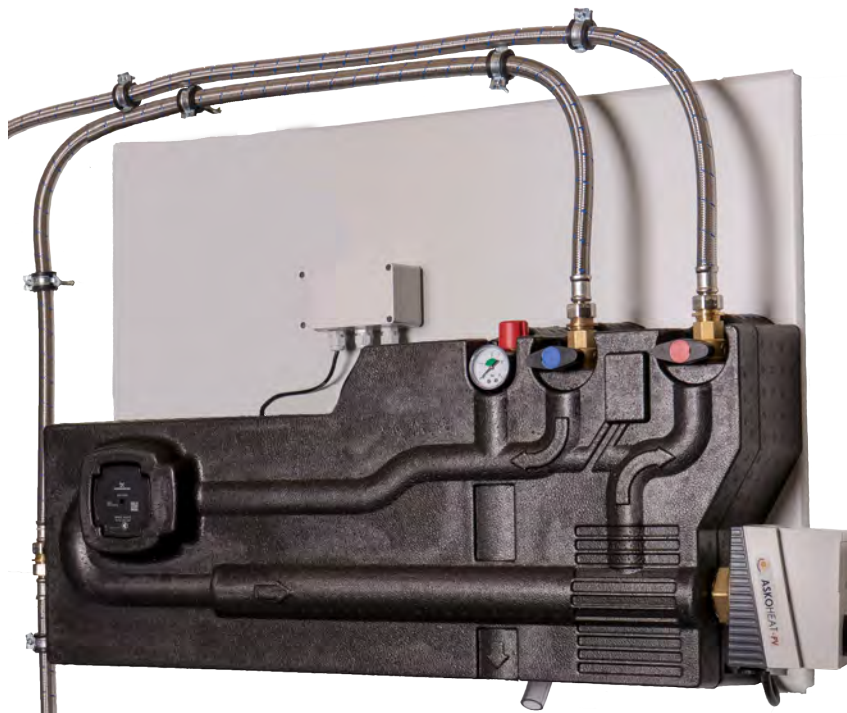




# ASKOWALL

FOR HIGH STORAGE TEMPERATURES, LEGIONELLA  
PROTECTION AND FOR SURPLUS PV POWER STORAGE



CE

**ASKOMA**  *we care  
about energy*

## WALL CONSOLE READY FOR CONNECTION

- High efficient tank charging
- Easy to install
- No turbulence in thermal stratification
- Max. surplus PV power storage
- Efficient legionella protection

## APPLICATION EXAMPLES

The **ASKOWALL** is designed for easy installation on any conventional buffer tank to provide the user with energy-efficient, smooth, high-temperature stratification.

To this end, the **ASKOWALL** can be connected directly to the **relevant buffer tank**.

On the **ASKOWALL** the user sets the thermostatic valve (no. 8) to the desired temperature, at which the valve should open, to fill the buffer tank with a minimum temperature. This can be chosen between 50 and 75°C.

Example: desired temperature is set at 60°C. The heating water in the **ASKOWALL** circulates within the internal circuit until the water is heated to 60°C. The thermostatic valve then opens and the hot water passes to the tank. This continues for as long as water at the desired temperature is available. Then, the thermostatic valve closes and the process begins again.

The **ASKOHEAT** can heat the heating water up to 85°C and then the smart thermostat switches off.

**ASKOHEAT** heating elements are available in a variety of power output levels and in the following variants: 7 levels and continuously variable. They are suitable for enamelled and black steel boilers, and thanks to a dip switch also for stainless steel tanks.

The **ASKOHEAT+** can be controlled via 7 levels via LAN, Modbus TCP / RTU, REST API JSON and 0-10V. It's available in 230V and 400V. Which of these should be used depends on the surplus power output of your PV system, your energy management system and the size of the buffer tank. It sounds complicated, but it isn't – we are happy to provide you with information about which **ASKOHEAT** heating element you require for your system.

The **ASKOWALL** can also be used as direct heating.

### Connection example on a buffer tank

Connect the inlet flow (red / no. 7) of the **ASKOWALL** in the upper area, the return flow (blue / no. 6) in the lower area of the tank. Thus, the full storage volume is used.

- **ASKOHEAT** heating elements are available in many performance sizes (see last page).

### Connection example on an integrated heat exchanger in the tank

The **ASKOWALL** can be connected directly to the heat exchanger loop. This requires the customer to connect an on-site expansion tank to connection no. 4 (size must be dimensioned and supplied by the technician on the basis of internal volume).

- **ASKOHEAT** heating elements are available in many performance sizes (see last page).

Subject to technical changes



## ADVANTAGES ASKOWALL

### Easy to install

- Simple wall installation
- Ready to connect with two flexible oxygen-tight OXYban hoses (can be ordered)
- Pump incl. time delay relay

#### Optional:

- Incl. heating element wiring
- Incl. pre-wiring for customer-specific control of surplus PV power usage (details of control manufacturer required)

### Technical design

- ① Mud flap
- ② Filling valve
- ③ Vent valve
- ④ Connection for possible expansion tank
- ⑤ Pressure relief valve
- ⑥ Return flow shutoff (and OXYban hose connection)
- ⑦ Flow shutoff (and OXYban hose connection)
- ⑧ Thermostatic valve 50-75°C
- ⑨ Screw-in heater **ASKOHEAT** according to choice of power and regulation
- ⑩ Drain cock
- ⑪ Circulation pump
- ⑫ Insulation housing
- ⑬ Instantaneous water heater **ASKOFLOW** up to 9kW
- ⑭ Junction box with pump time delay relay
- ⑮ Console rear wall

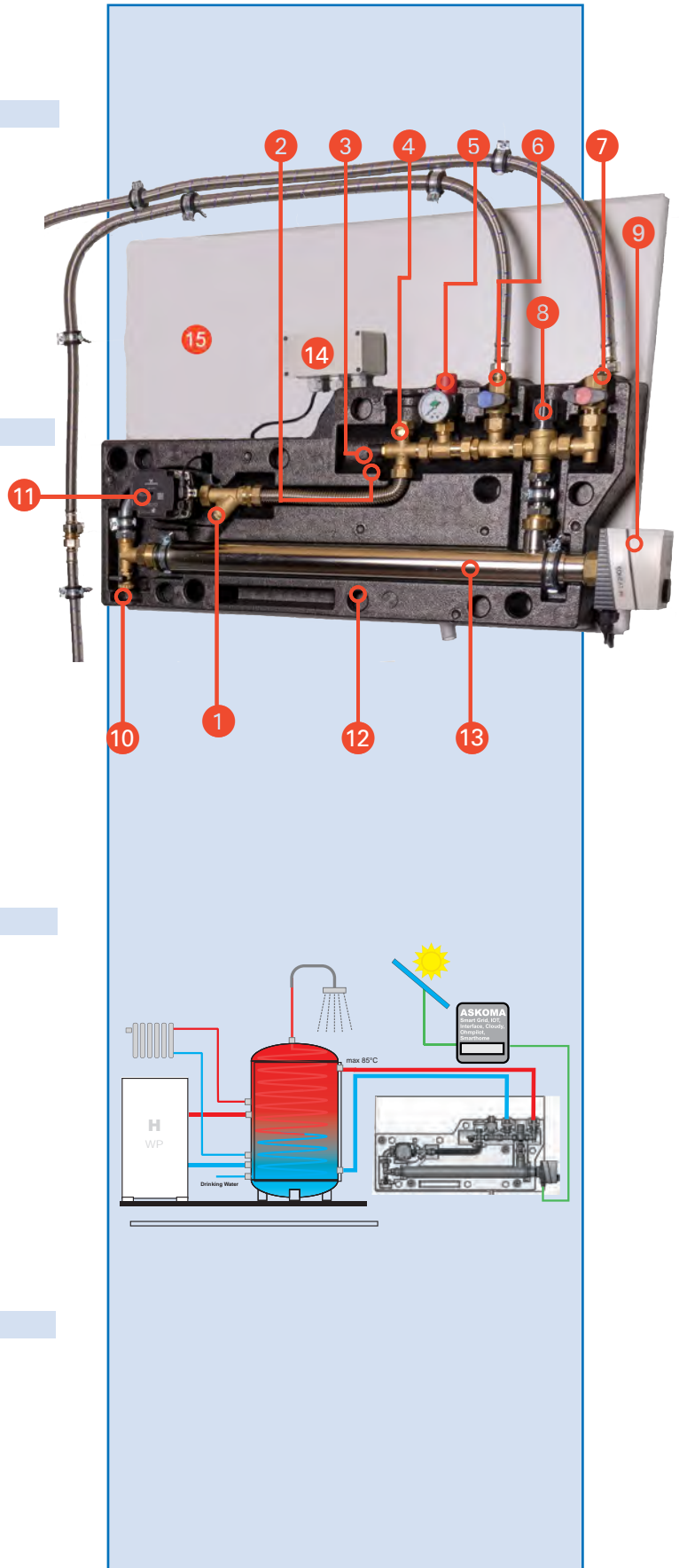
### Technical advantages






- For max. surplus PV power storage
- Automatic temperature control
- Min. flow temperature can be freely selected (50-75°C)
- Temperatures up to 85°C possible
- Full buffer tank volume can be used
- Legionella protection thanks to high temperature
- Self-regulating pump
- No turbulence in thermal stratification of tank
- Pressure relief valve 3 bar
- Hydraulic unit tested up to 10 bar
- Slight changes possible
- Heating elements up to 9kW can be used

### Approvals

- EN 60335-2-21  
Condensate drain in housing prevents corrosion  
No damage to the heating element during dry run  
Overvoltage resistant (7.25%)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Subject to technical changes



	Order no.	Appellation	Description	Immersion length mm	Use
<b>1.1. ASKO WALL</b>					
	012-2102	ASKO WALL	ASKO WALL for heating water, composed of a hydraulic unit with mud flap, filling valve, vent valve, connection for possible expansion tank, pressure relief valve, return flow shutoff, flow shutoff, thermostatic valve 50-75°C, connection for ASKO HEAT according to choice of power and regulation, drain cock, circulation pump and insulation housing. The electrical junction box is pre-wired for the circulation pump and contains the time delay relay.	1300x700	
<b>2.1. Screw-in heater ASKO HEAT +, 7 levels, 230V / 400V, LAN, Modbus TCP / RTU, REST API JSON and 0-10V</b>					
	012-6391	AHIR-BI-plus-1.75	ASKO HEAT +, 230V / 400V, 7 levels 1.75kW	400	WALL/Tank
	012-6392	AHIR-BI-plus-3.5	ASKO HEAT +, 400V, 7 levels 3.5kW	600	WALL/Tank
	012-6393	AHIR-BI-plus-4.4	ASKO HEAT +, 400V, 7 levels 4.4kW	700	WALL/Tank
	012-6394	AHIR-BI-plus-5.2	ASKO HEAT +, 400V, 7 levels 5.2kW	750	WALL/Tank
<b>2.2. Screw-in heater ASKO HEAT -PV, 7 levels, 230V / 400V, Relay control</b>					
	012-6171	AHIR-BI-PV4-A-1.75	ASKO HEAT -PV, 230V / 400V, 7 levels 1.75kW	400	WALL/Tank
	012-6172	AHIR-BI-PV4-A-3.5	ASKO HEAT -PV, 400V, 7 levels 3.5kW	600	WALL/Tank
	012-6173	AHIR-BI-PV4-A-4.4	ASKO HEAT -PV, 400V, 7 levels 4.4kW	700	WALL/Tank
	012-6174	AHIR-BI-PV4-A-5.2	ASKO HEAT -PV, 400V, 7 levels 5.2kW	750	WALL/Tank
<b>3.1. Options</b>					
	012-0130	ASKO HOSE	Two oxygen-tight OXYban connection hoses for a flexible connection of the ASKO WALL to the buffer tank (length 1600mm)		WALL
	012-0126	ASKO SENSOR	Probe set with 4 x PT1000 probes for ASKO HEAT + to be attached on the ASKO WALL		WALL

We produce the ASKO WALL in different types, prepared for several energy manager:

ASKO WALL + For ASKO FAMILY +, Modbus TCP / RTU, LAN  
For ASKO HEAT +, LAN, Modbus TCP / RTU, REST API JSON and 0-10V

ASKO WALL -OP For Fronius Ohmpilot continuously variable

Separate brochures are available under [www.askoma.com](http://www.askoma.com) or via e-mail upon request