

# ASKOMA *we care about energy*



Plug & Play for:

**SENEC**  
Ein Unternehmen der EnBW

**KOSTAL**

**LOXONE**

**fronius**

**PLEXLOG**

**SKE**  
lead the change

**SMA**

**E3 DC**  
ENERGY STORAGE

**ino**  
Wärmepumpen made by BRITZ

**Top Features**  
Insulated construction with dip switch  
Heating power 3 to 19 levels  
Local web interface

## ASKOHEAT+

SCREW-IN AND FLANGE HEATER, MULTI-LEVEL, FOR LAN, MODBUS TCP/RTU, REST API JSON AND 0-10V



- **ASKOHEAT+** Screw-in heater 1½", 3 and 7 levels
- **ASKOHEAT-F+** Flange heater Ø 180mm, 3 and 7 levels
- **ASKOHEAT-F+** Flange heater Ø 240/280mm, 6 and 19 levels

## THE ASKOHEAT+ IS USED FOR ENERGY MANAGEMENT SYSTEMS THAT COMMUNICATE VIA LAN, MODBUS TCP/RTU, REST API JSON OR 0-10V



The **ASKOHEAT+** converts your electricity surplus from the PV system, wind turbine, water turbine or CHP into heat and stores it in your buffer tank / boiler in the house. This heat is then available when needed.



Example for maximum PV electricity storage:  
You have a 1000L buffer tank with a fresh water station that you heat up to 40°C with your heat pump with a high COP. With the **ASKOWALL+** and the **ASKOHEAT+** you can load this buffer tank up to 85°C.

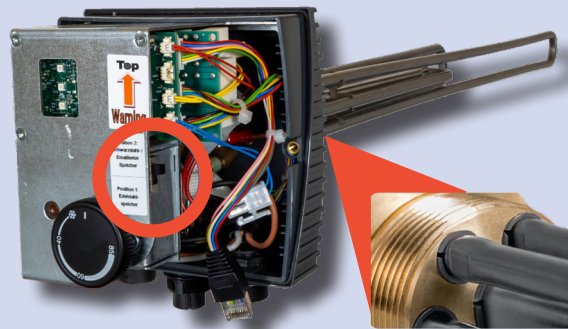
Example: 1000L by 35°C (from 40 - 75°C) x 1.16 = 40kWh  
**You can save up to 40kWh PV electricity.**



Thanks to the PV surplus storage, you can protect the compressor of your heat pump in summer operation and increase the service life of the heat pump due to the hot water heating.  
This energy will then be available on demand as needed.

The **ASKOHEAT+** flange and screw-in heaters are produced as Incoloy 825 version, suitable for a simple direct mounting in all heating and drinking water tanks.

Thanks to the insulated construction and the dip switch, they can be used in black steel, enamelled as well as stainless steel tanks. This solves the problem of corrosion with regard to the different storage materials.



### 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 60335-2-7
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

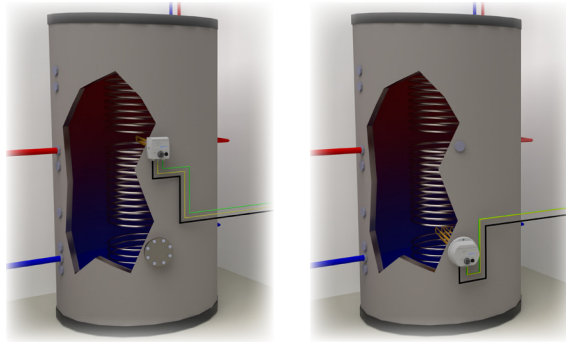
## DEVICE VARIANTS AND ADVANTAGES OF AN ASKOHEAT+

The **ASKOHEAT+** flange and screw-in heaters are designed for an easy and direct installation on a

- Hygienic tank
- Heating buffer tank, alternatively with fresh water station
- Drinking water storage

to give the user the opportunity to store the maximum excess PV power.

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



### Settings

- The heating insert has a local web interface. With the usual web browsers, all settings can be made comfortably locally and there is a current device status display.
- Enter in the web browser: <http://askoheat.local> or the IP address (e. g. <http://192.168.1.29>).

### Assembling

- The electrical connection of the device is easy to install using the supplied plug.
- Thanks to these plugs, the device can be disconnected easily and completely from the power and data network for service work.

### Function

- Power to Heat works directly via bidirectional energy meter, energy manager or building automation controls.
- Control can either take place via allowed power or energy surplus control (feed-in value).
- Extensive API or Modbus TCP/RTU for complete control and monitoring of the heating element through customer-owned automation.
- Button for emergency heating on the device = heating element switches to 100% power for 24 hours.
- Heat pump request via potential-free input (performance adjustable).

### Comfort control

- Up to 4x PT1000 temperature sensors can be read out in order to display the stratification temperature behavior in the storage tank. In addition, the sensors can be selected individually for regulation.
- 4 dynamic legionella protection time programs are integrated, daily, weekly, fortnightly, monthly (interval start after last high temperature).
- Night power usage = drinking water can be kept on the desired, freely adjustable temperature in the boiler with night current (low tariff).
- Securing temperature = a minimum temperature can be defined, which is never undercut.

### Possible meters RTU/RS485

- Askoma bidirectional meter RTU and RTU III
- Carlo Gavazzii EM340
- OPTEC ECS M3
- Eastron SDM72D-M

## ORDER OPTIONS

Order no.	Appellation	Description	Immersion length mm	Use	
<b>1.1. Screw-in heater ASKOHEAT+, 7 and 3 levels, 230V / 400V</b>					
	012-6391	AHIR-BI-plus-1.75	ASKOHEAT+, 7 levels, 230V / 400V, 1.75kW	400	Wall/Tank
	012-6392	AHIR-BI-plus-3.5	ASKOHEAT+, 7 levels, 400V, 3.5kW	600	Wall/Tank
	012-6393	AHIR-BI-plus-4.4	ASKOHEAT+, 7 levels, 400V, 4.4kW	700	Wall/Tank
	012-6394	AHIR-BI-plus-5.2	ASKOHEAT+, 7 levels, 400V, 5.2kW	750	Wall/Tank
	012-6397	AHIR-BI-plus-7.5	ASKOHEAT+, 3 levels, 400V, 7.5kW	700	Wall/Tank
	012-6398	AHIR-BI-plus-9.0	ASKOHEAT+, 3 levels, 400V, 9.0kW	750	Wall/Tank
<b>1.2. Flange heater ASKOHEAT-F+, Ø 180mm, 7 and 3 levels, 230V / 400V</b>					
	012-6791	AHFR-BI-plus-1.75	ASKOHEAT-F+, 7 levels, 230V / 400V, 1.75kW	260	Tank
	012-6792	AHFR-BI-plus-3.5	ASKOHEAT-F+, 7 levels, 400V, 3.5kW	360	Tank
	012-6793	AHFR-BI-plus-4.4	ASKOHEAT-F+, 7 levels, 400V, 4.4kW	420	Tank
	012-6794	AHFR-BI-plus-5.8	ASKOHEAT-F+, 7 levels, 400V, 5.8kW	540	Tank
	012-6797	AHF180-BI-plus-7.5	ASKOHEAT-F+, 3 levels, 400V, 7.5kW	420	Tank
	012-6798	AHF180-BI-plus-9.0	ASKOHEAT-F+, 3 levels, 400V, 9.0kW	490	Tank
<b>1.3. Flange heater ASKOHEAT-F+, Ø 240mm, 6 and 19 levels, 400V</b>					
	012-1761	AHF240-BI-plus-10.0	ASKOHEAT-F+, 6 levels, 400V, 10.0kW	300	Tank
	012-1763	AHF240-BI-plus-15.0	ASKOHEAT-F+, 6 levels, 400V, 15.0kW	420	Tank
	012-1766	AHF240-BI-plus-20.0	ASKOHEAT-F+, 6 levels, 400V, 20.0kW	540	Tank
	012-1771	AHF240-BI-plus-9.5	ASKOHEAT-F+, 19 levels, 400V, 9.5kW	360	Tank
	012-1774	AHF240-BI-plus-15.8	ASKOHEAT-F+, 19 levels, 400V, 15.8kW	540	Tank
<b>1.4. Flange heater ASKOHEAT-F+, Ø 280mm, 6 and 19 levels, 400V</b>					
	012-1861	AHF280-BI-plus-10.0	ASKOHEAT-F+, 6 levels, 400V, 10.0kW	300	Tank
	012-1863	AHF280-BI-plus-15.0	ASKOHEAT-F+, 6 levels, 400V, 15.0kW	420	Tank
	012-1866	AHF280-BI-plus-20.0	ASKOHEAT-F+, 6 levels, 400V, 20.0kW	540	Tank
	012-1871	AHF280-BI-plus-9.5	ASKOHEAT-F+, 19 levels, 400V, 9.5kW	360	Tank
	012-1874	AHF280-BI-plus-15.8	ASKOHEAT-F+, 19 levels, 400V, 15.8kW	540	Tank
<b>2.1. Options</b>					
	012-0125	ASKOSENSOR	Sensor set with 3x PT1000 sensors and junction box for ASKOHEAT+ if used in tank		Tank
	012-0126	ASKOSENSOR	Sensor set with 4x PT1000 sensors for ASKOHEAT+ to be attached on the ASKOWALL		Wall