



ASKOHEAT+

SCREW-IN AND FLANGE HEATER, 7 LEVELS FOR LAN,
MODBUS TCP/RTU, REST API JSON AND 0-10V



Plug & Play for:

SENEC
Ein Unternehmen der EnBW

KOSTAL

LOXONE

SMA

E3 DC
ENERGY STORAGE

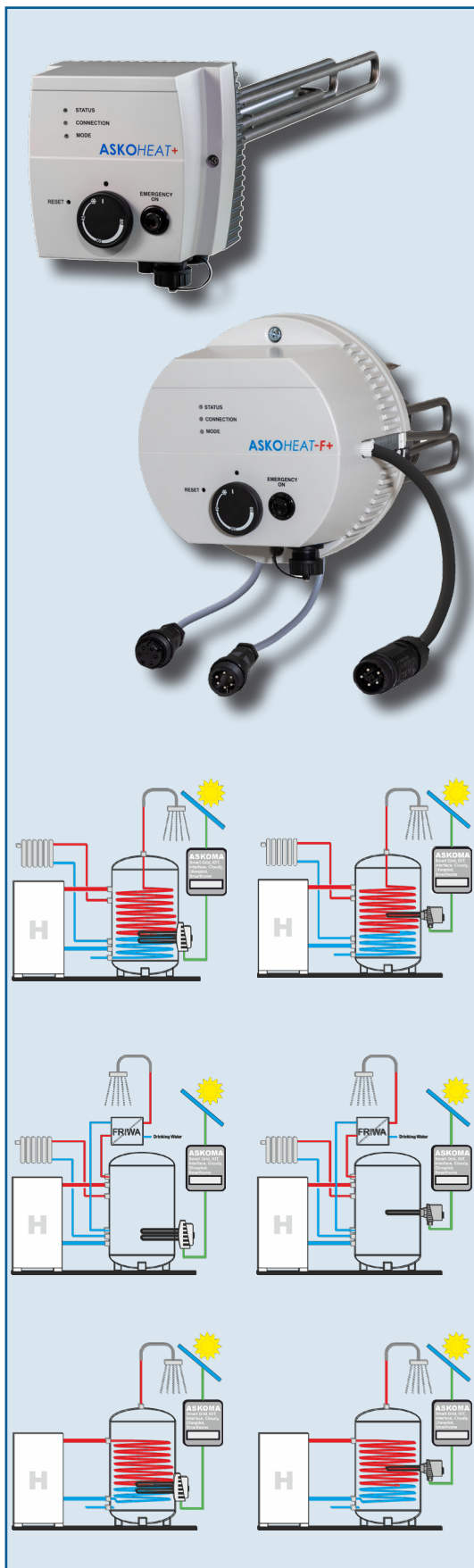
ino
Wärmepumpen made by BARTL

CE

ASKOMA *we care
about energy*

SCREW-IN HEATER 1½" FLANGE HEATER Ø180mm

- 7 levels
- 230V / 400V
- For LAN, Modbus TCP/RTU, REST API JSON and 0-10V
- Control possible via power specification or via excess energy control (feed-in value)



APPLICATION EXAMPLES

ASKOHEAT+ is used in energy management systems that communicate via LAN, Modbus TCP/RTU, REST API JSON or 0-10V.

Our scope of supply includes the ASKOHEAT+ 7 levels in various power classes as 230V or 400V versions. The following device variants are available:

- Screw-in heater 1½"
- Flange heater Ø180mm
- ASKOWALL+

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.

This means: 1000L x 45°C temperature difference to max. 85°C x 1.16 = 52kWh

You can save up to 52kWh PV power.

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.

„Take pleasure in heating“ through the maximum use of surplus, self-produced regenerative energy.

Hygienic tank

- The ASKOHEAT+ flange and screw-in heater are designed for easy, direct installation on a hygienic tank, 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).

Buffer tank, alternatively with fresh water station

- The ASKOHEAT+ flange and screw-in heater are designed for easy, direct installation on a buffer tank, in order 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).

Drinking water storage

- The ASKOHEAT+ flange and screw-in heater are designed for easy, direct installation on a drinking water storage, in order 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)..

Subject to technical changes

ADVANTAGES ASKOHEAT+ SCREW-IN HEATER 1½"

Easy to install

- ① Screw-in heater with insulated mounted heating tubes are suitable for enamelled and black steel boilers and thanks to a dip switch also for stainless steel tanks
- ② Standard hex for secure tightening with conventional wrenches
- ③ Tapered thread for precise housing position and tight installation (1½" standard)
- ④ Factory internal wiring and supplied mating connectors

Technical design

- ⑤ Surface load 8-9W/cm², suitable for heating and drinking water
- ⑥ Optimal sensor position in the oval immersion tube for identical temperature measurement of safety temperature limiter and temperature control

Technical advantages (on customer request)

- Pre-wired with connection cable (OEM) or finished plug
- Various colour options for housing (OEM)
- 400V and 230V models
- 7 stage settings for heating elements

ADVANTAGES ASKOHEAT-F+ FLANGE HEATER Ø 180mm

Easy to install

- ① Standard flange Ø180mm are suitable for enamelled and black steel boilers, and thanks to a dip switch also for stainless steel tanks
- ② Flat gasket included
- ③ Factory internal wiring and supplied mating connectors

Technical design

- ④ Low surface load (7W/cm²) for low calcification
- ⑤ Optimal sensor position
- ⑥ Insulated mounting of the heating tubes for low corrosion

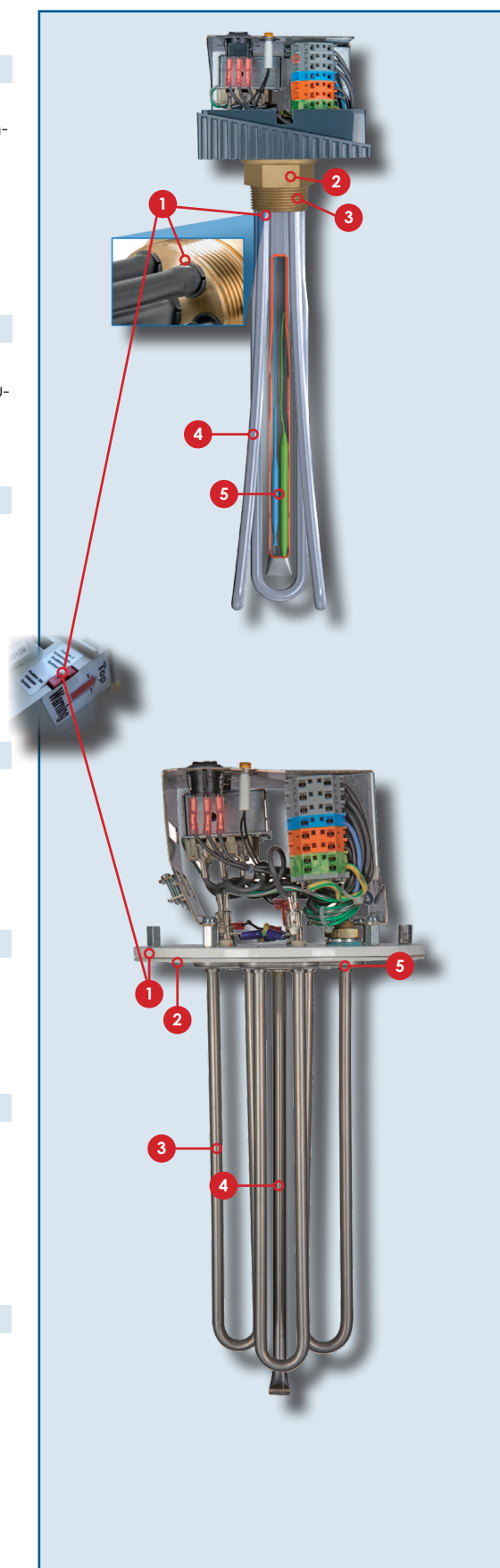
Technical advantages (on customer request)




- Pre-wired with connection cable plug
- Various colour options for housing (OEM)
- 400V and 230V models
- 7 stage settings for heating elements

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

Subject to technical changes



	Order no.	Appellation	Description	Immersion length mm	Use
1.1. Screw-in heater ASKOHEAT+, 7 levels, 230V / 400V, LAN, Modbus TCP/RTU, REST API JSON and 0-10V					
	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
1.2. Flange heater ASKOHEAT-F+, 7 levels, 230V / 400V, LAN, Modbus TCP/RTU, REST API JSON and 0-10V					
	012-6791	AHFR-BI-plus-1.75	ASKOHEAT-F+, 7 levels, 230V / 400V, 1.75kW	250	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
3.1. Options					
	012-0125	ASKOSENSOR	Probe set with 3 x PT1000 probes and junction box for ASKOHEAT+ if used in tank		Tank

The advantages of an ASKOHEAT+ are as follows:

Settings

- The heating element has a **local web interface**. All settings can be conveniently made locally with the usual web browsers, which means that there is also an up-to-date 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 **easily** and completely disconnected from the power and data network **for service work**.
- Can be used in an **insulated design with a dip switch** for all storage materials and for heating as well as drinking water.

Function

- The **7 power levels** can be controlled via **Modbus TCP/RTU, REST API JSON** or via **0-10V**.
- Power to Heat** function directly via bidirectional energy meter, energy manager or building automation controls.
- Control can either take place via **specified power** or **energy surplus control** (feed-in value).
- Plug & Play** for **SENEC.Home** battery and **SMA Sunny Home Manager (SEMP)**, **E3DC S10**, **TQ** energy manager, **Kostal** energy manager
- Loxone** template is available via Modbus TCP
- Extensive API** or Modbus TCP/RTU for complete control and monitoring of the heating element by the customer's own automation
- Button for emergency heating** on the device = Heating element switches to 100% output for 24 hours
- Heat pump request** via **potential-free input** (output 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).
- Use for emergency heating** = drinking water can be kept at the desired, freely adjustable temperature in the boiler with night power (low rate tariff).
- Minimum temperature** = A minimum temperature can be defined, which is never undercut.

Possible meters RTU/RS485

- ASKOMA bidirectional meter
- Carlo Gavazzi EM340
- Optec ECS M3

The following option extensions are available to you

This system can be expanded at any time with the energy manager **ASKOSET** and its software extensions **ASKOHOMES** and **ASKOHOMES+**. A demo version is available in the App- or Play Store under **ASKOHOMES+**. You can find more about this in the **ASKOFAMILY+** brochure.

