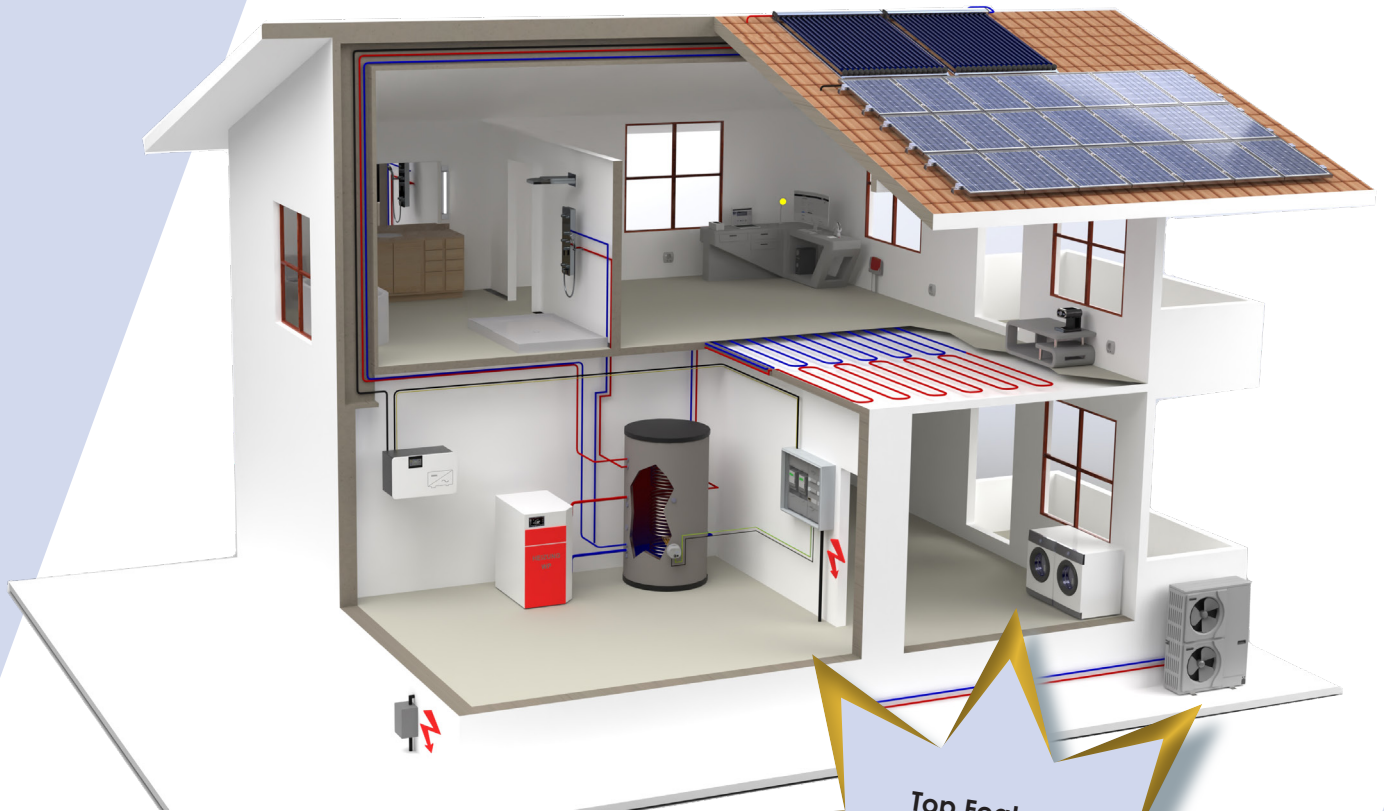# ASKOMA
we care about energy

Top Features

Store excess electricity in heat at all times

Expandable to **ASKO**FAMILY**+** at any time

Open to all heat pump systems

ASKO*HEAT-PtH*

THE POWER TO HEAT ENTRY SOLUTION FOR EVERY BUDGET

- **ASKO***HEAT***+** Screw-in and flange heater
- **ASKO***WALL* Wall console ready for connection
- Bidirectional meter

THE ASKO*HEAT+* IS USED WITH THE BIDIRECTIONAL METER

The **ASKO***HEAT+* 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. The whole thing is easy to install thanks to the finished cable connector system. The heating element can be controlled via LAN, Modbus TCP / RTU, REST API JSON and 0-10V.

The **ASKO***HEAT+* 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.

With the installation of the energy meter at the building node and the **ASKO***HEAT+* in the buffer storage, you have already taken the first step into the smart home world. You connect your house router and the **ASKO***HEAT+* with an on-site LAN cable. The **ASKO***HEAT+* and the energy meter you connect with an RS 485 cable (two-wire line) and the wiring for Power to Heat is ready.

The following energy meters are available:
• ASKOMA bidirectional meter RTU
• ASKOMA bidirectional meter RTU III
• Carlo Gavazzi EM340
• Optec ECS M3
• Eastron SDM72D-M
• Fronius Smart Meter
• Huawei Smart Meter

### Functions available in the house network via WEB Interface

• PV surplus electricity prioritised to an **ASKO***HEAT+*
• Power to Heat 7 levels
• System self-regulating via information from the bidirectional meter
• System can be viewed via home network
• Visualisation of the house network via PC, tablet, mobile phone
• No cloud necessary
• Real-time visualisation only
• Storage temperature can be read out with 4 sensor (PT1000)
• Control as emergency heating of heat pumps (100%)
• Manual operation of the heating element 100% (shutdown after 24h)
• Legionella protection management (daily, weekly, fortnightly, monthly, always measured from the time of the last high temperature, thus max. PV power utilisation)

DEVICE VARIANTS
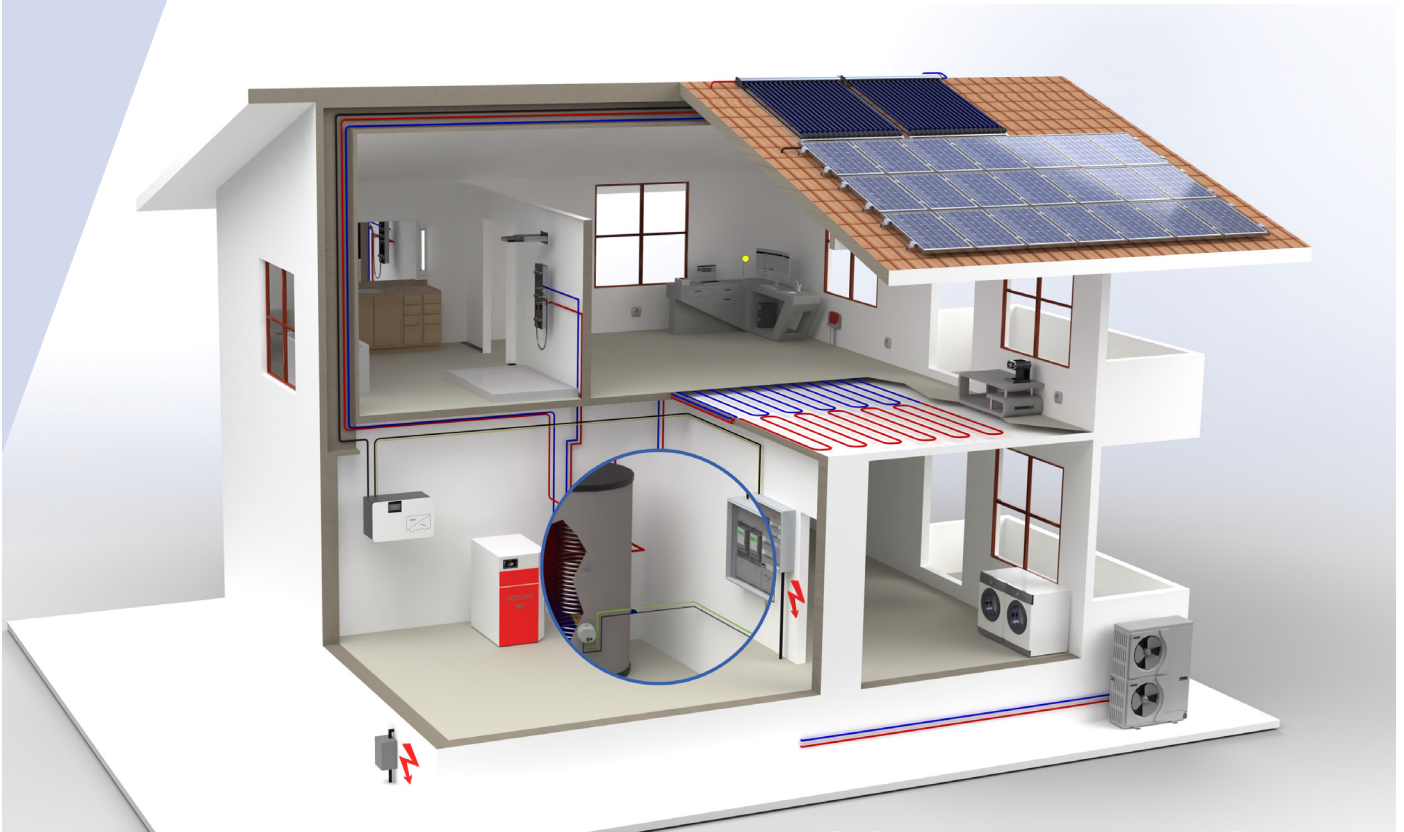
ASKO*HEAT+* screw-in and flange heater together with bidirectional meter

ASKO*WALL* incl. **ASKO***HEAT+* screw-in heater together with bidirectional meter
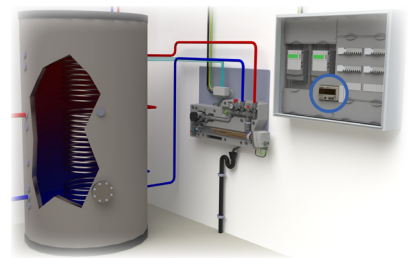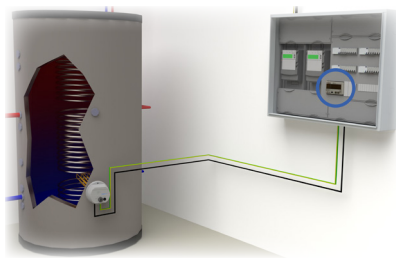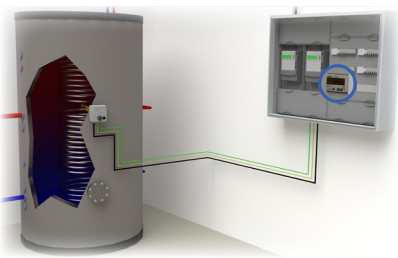
Initial temperature in storage tank [°C]	40
Storage capacity [L]	1000

Final storage temperature [°C]	50	60	70	80	85
Rise of storage temperature [K]	10	20	30	40	45

Installation method of the heating element	Volume							
ASKO*WALL* uses the whole storage capacity	100%		PV power storage [kW]	11.6	23.2	34.8	46.4	52.2
Screw-in heater is in the middle area	50%		PV power storage [kW]	5.8	11.6	17.4	23.2	26.1
Flange heater is in the lower range	75%		PV power storage [kW]	8.7	17.4	26.1	34.8	39.2

Subject to technical changes

ORDER OPTIONS

Order no.	Appellation	Description	Immersion length mm	Use
1.1. Screw-in heater ASKO*HEAT***+, 7 and 3 levels, 230V / 400V**				
012-6391	AHIR-BI-plus-1.75	**ASKO***HEAT***+, 7 levels**, 230V / 400V, 1.75kW	400	Wall/Tank
012-6392	AHIR-BI-plus-3.5	**ASKO***HEAT***+, 7 levels**, 400V, 3.5kW	600	Wall/Tank
012-6393	AHIR-BI-plus-4.4	**ASKO***HEAT***+, 7 levels**, 400V, 4.4kW	700	Wall/Tank
012-6394	AHIR-BI-plus-5.2	**ASKO***HEAT***+, 7 levels**, 400V, 5.2kW	750	Wall/Tank
012-6397	AHIR-BI-plus-7.5	**ASKO***HEAT***+, 3 levels**, 400V, 7.5kW	700	Wall/Tank
012-6398	AHIR-BI-plus-9.0	**ASKO***HEAT***+, 3 levels**, 400V, 9.0kW	750	Wall/Tank
1.2. Flange heater ASKO*HEAT-F+***, Ø 180mm, 7 and 3 levels, 230V / 400V**				
012-6791	AHFR-BI-plus-1.75	**ASKO***HEAT-F+***, 7 levels**, 230V / 400V, 1.75kW	260	Tank
012-6792	AHFR-BI-plus-3.5	**ASKO***HEAT-F+***, 7 levels**, 400V, 3.5kW	360	Tank
012-6793	AHFR-BI-plus-4.4	**ASKO***HEAT-F+***, 7 levels**, 400V, 4.4kW	420	Tank
012-6794	AHFR-BI-plus-5.8	**ASKO***HEAT-F+***, 7 levels**, 400V, 5.8kW	540	Tank
012-6797	AHF180-BI-plus-7.5	**ASKO***HEAT-F+***, 3 levels**, 400V, 7.5kW	420	Tank
012-6798	AHF180-BI-plus-9.0	**ASKO***HEAT-F+***, 3 levels**, 400V, 9.0kW	490	Tank
1.3. Flange heater ASKO*HEAT-F+***, Ø 240mm, 6 and 19 levels, 400V**				
012-1761	AHF240-BI-plus-10.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 10.0kW	300	Tank
012-1763	AHF240-BI-plus-15.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 15.0kW	420	Tank
012-1766	AHF240-BI-plus-20.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 20.0kW	540	Tank
012-1771	AHF240-BI-plus-9.5	**ASKO***HEAT-F+***, 19 levels**, 400V, 9.5kW	360	Tank
012-1774	AHF240-Bi-plus-15.8	**ASKO***HEAT-F+***, 19 levels**, 400V, 15.8kW	540	Tank
1.3. Flange heater ASKO*HEAT-F+***, Ø 280mm, 6 and 19 levels, 400V**				
012-1861	AHF280-BI-plus-10.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 10.0kW	300	Tank
012-1863	AHF280-BI-plus-15.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 15.0kW	420	Tank
012-1866	AHF280-BI-plus-20.0	**ASKO***HEAT-F+***, 6 levels**, 400V, 20.0kW	540	Tank
012-1871	AHF280-BI-plus-9.5	**ASKO***HEAT-F+***, 19 levels**, 400V, 9.5kW	360	Tank
012-1874	AHF280-BI-plus-15.8	**ASKO***HEAT-F+***, 19 levels**, 400V, 15.8kW	540	Tank
2.1. Expansion bidirectinal meter				
004-0367	Energy meter up to 100A	Energy meter for node point- or inverter reading up to 100A		Wall/Tank
3.1. Options				
012-0125	**ASKO***SENSOR*	Sensor set with 3x PT1000 sensors and junction box for **ASKO***HEAT*+ if used in tank		Tank
012-0126	**ASKO***SENSOR*	Sensor set with 4x PT1000 sensors for **ASKO***HEAT*+ to be attached on the **ASKO***WALL*		Wall

The following option extensions are available to you:
This system can be expanded at any time with the energy manager **ASKO***SET* and its software extension **ASKO***HOME***+**. A demo version is available in the App or Play Store under **ASKO***HOME***+**.
You can find more about this in the **ASKO***FAMILY***+** brochure.

ASKOMA AG • Industriestrasse 1 • CH-4922 Bützberg • T +41 62 958 70 80 • F +41 62 958 70 81 • info@askoma.com • www.askoma.com

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