



# ASKOHEAT-OP

SCREW-IN AND FLANGE HEATER, SUITABLE FOR THE CONTINUOUSLY ADJUSTABLE REGULATION

- ASKOHEAT-op Screw-in heater 11/2", continuously adjustable
- ASKOHEAT-FOP Flange heater Ø 180mm, continuously adjustable
- ASKOHEAT-FOP Flange heater Ø 240/280mm, continuously adjustable

## IF YOU WANT TO STORE ECXESS ELECTRICITY WITH A FRONIUS OHMPILOT, THE ASKOHEAT-OF WILL BE USED

The **ASKO**HEAT-**op** combined with the Ompilot, converts your electricity surplus from the PV system into heat and stores it in your buffer tank / boiler in the house. This heat is then available when needed.

Example of 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 **ASKO**WALL-OP and the **ASKO**HEAT-OP you can load this buffer tank up to 85°C.

Example: 1000L by  $35^{\circ}$ C (from 40 - 75°C) x 1.16 = 40 kWh 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 live of the heat pump due to the hot water heating. This energy will then be available on demand as needed.

The **ASKO**HEAT-**OP** 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 coorrosion
  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

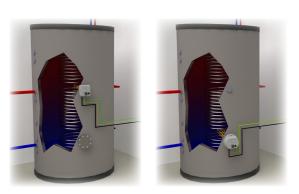
#### DEVICE VARIANTS AND ADVANTAGES OF AN ASKOHEAT-OP

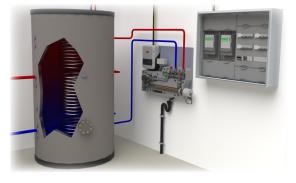
The **ASKO**HEAT-**OP** flange and screw-in heaters are designed for an easy, direct installation on a • Heating buffer tank, alternatively with fresh water station

• Drinking water storage

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

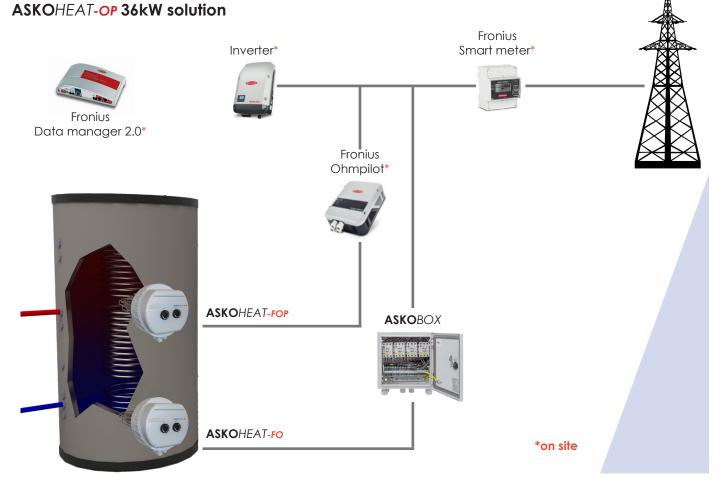
The **ASKO**HEAT-**OP** heating elements are available in many performance sizes (see last page).





#### ASKOWALL-OP

- 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



4

### ORDER OPTIONS

	Order no.	Appellation	Description	Immersion length mm	Use
	1.1. ASKOV	ALL-OP			
	012-5500	ASKOWALL-OP	<b>ASKO</b> WALL-OP 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, thermosta- tic valve 50-75°C, connection for <b>ASKO</b> HEAT-OP according to choice of power, drain cock, circulation pump and insulation housing. The electrical junction box is pre-wired for the on-site Fronius Ohmpilot as well as for the circulation pump and contains the time delay relay.	1300x700	
	2.1. Screw-	in heater ASKOHEA	T-OP, continuously adjustable, 400V	`	
	012-5501	AHIR-BI-OP-1.0	ASKOHEAT-op, continuously adjustable, 400V, 1.0kW	300	Wall/Tank
	012-5502	AHIR-BI-OP-2.0	ASKOHEAT-OP, continuously adjustable, 400V, 2.0kW	300	Wall/Tank
	012-5503	AHIR-BI-OP-2.5	ASKOHEAT-OP, continuously adjustable, 400V, 2.5kW	350	Wall/Tank
	012-5504	AHIR-BI-OP-3.0	ASKOHEAT-OP, continuously adjustable, 400V, 3.0kW	400	Wall/Tank
	012-5505	AHIR-BI-OP-3.8	ASKOHEAT-OP, continuously adjustable, 400V, 3.8kW	450	Wall/Tank
	012-5506	AHIR-BI-OP-4.5	ASKOHEAT-OP, continuously adjustable, 400V, 4.5kW	500	Wall/Tank
	012-5507	AHIR-BI-OP-6.0	ASKOHEAT-OP, continuously adjustable, 400V, 6.0kW	600	Wall/Tank
	012-5508	AHIR-BI-OP-7.5	ASKOHEAT-OP, continuously adjustable, 400V, 7.5kW	700	Wall/Tank
	012-5509	AHIR-BI-OP-9.0	ASKOHEAT-OP, continuously adjustable, 400V, 9.0kW	750	Wall/Tank
	2.2. Flange	heater ASKOHEAT	FOP, Ø 180mm, continuously adjustable, 400V		
	012-5601	AHFOR-BI-OP-2.0	ASKOHEAT-FOP, continuously adjustable, 400V, 2.0kW	260	Tank
	012-5602	AHFOR-BI-OP-2.5	ASKOHEAT-FOP, continuously adjustable, 400V, 2.5kW	310	Tank
	012-5603	AHFOR-BI-OP-4.0	ASKOHEAT-FOP, continuously adjustable, 400V, 4.0kW	260	Tank
	012-5604	AHFOR-BI-OP-5.0	ASKOHEAT-FOP, continuously adjustable, 400V, 5.0kW	300	Tank
	012-5605	AHFOR-BI-OP-6.0	ASKOHEAT-FOP, continuously adjustable, 400V, 6.0kW	360	Tank
	012-5606	AHFOR-BI-OP-7.5	ASKOHEAT-FOP, continuously adjustable, 400V, 7.5kW	420	Tank
	012-5607	AHFOR-BI-OP-8.0	ASKOHEAT-FOP, continuously adjustable, 400V, 8.0kW	450	Tank
	012-5608	AHFOR-BI-OP-9.0	ASKOHEAT-FOP, continuously adjustable, 400V, 9.0kW	490	Tank
Fronius	3.1. Flange	heater for 18kW so	olution ASKOHEAT-FOP, Ø 240 / 280mm, continuously adjustable	∋, 400V	
	012-5611	AHFOR-BI-OP-18.0, Ø240mm	ASKOHEAT-FOP, continuously adjustable, 400V, 18.0kW	490	Tank
	012-5612	AHFOR-BI-OP-18.0, Ø280mm	ASKOHEAT-FOP, continuously adjustable, 400V, 18.0kW	490	Tank
Fronius	3.2. ASKOMA Components for 36kW solution with connection flange Ø 240mm				
	012-5611	AHFOR-BI-OP-18.0, Ø240mm	ASKOHEAT-FOP, continuously adjustable, 400V, 18.0kW	490	Tank
	012-1748	AHFOR-BI-A-18.0, Ø240mm	ASKOHEAT-FO, cascadable, 400V, 18.0kW	490	Tank
	012-0110	<b>ASKO</b> BOX	Junction box with power contactors for the Fronius 36kW solution HxWxD: 280x250x145mm		
Fronius	3.3. ASKON	A Components for	36kW solution with connection flange Ø 280mm		
	012-5612	AHFOR-BI-OP-18.0, Ø280mm	ASKOHEAT-FOP, continuously adjustable, 400V, 18.0kW	490	Tank
	012-1848	AHFOR-BI-A-18.0, Ø280mm	ASKOHEAT-FO, cascadable, 400V, 18.0kW	490	Tank
	012-0110	<b>ASKO</b> BOX	Junction box with power contactors for the Fronius 36kW solution HxWxD: 280x250x145mm		
	4.1. Option	S			
	012-0130	<b>ASKO</b> HOSE	Two oxygen-tight OXYban connection hoses for a flexible connec- tion of the <b>ASKO</b> WALL to the buffer tank (length 1600mm)		Wall