

**Flange heater Ø 180 mm
Incoloy 825; 2.4858**

**AHFOR-BI-OP-... /
AHFOR-BI-SE-...**

With combination of temperature control and safety
temperature limiter
Compatible with the consumption regulator
Fronius Ohmpilot, incl. seal



PV own power consumption

- Heating elements for stepless control with:
 - Fronius Ohmpilot up to 9 kW
 - AC•THOR (my PV)
 - o AC•THOR up to max.3 kW
 - o AC•THOR 9s up to max. 9 kW
 - SolarEdge Home hot water controller up to max. 3 kW
- Power regulation from 0 to 100%



Application

Auxiliary heating system of drinking water and heating water.

Features

- FH** The heating element is made of three U-shaped heating tubes, each press-fitted into a press-fitting nipple. These are bolted with the immersion tube onto a steel flange. A food-safe plastic disk serves as insulation. Thanks to the insulated mounting of the heating tubes, the devices are also suitable for enamelled boilers. By using the integrated DIP switch, the potential equalisation resistance for the usage in stainless steel tanks is bridgeable. The unheated zone is 70 mm for all types.
- TC** Electromechanical temperature control acc. EN 14597, not fail safe.
- STL** Electromechanical safety temperature limiter acc. EN 14597, fail safe. If nominal value is reached, the limiter switches and stays locked in this position. Reset is performed manually and is only possible after the sensing element is cooled off by approx. 10 K.
- Time factor of sensing element acc. EN 14597
 - Operation type TC Type 2 B acc. EN 14597
 - Operation type STL Type 2 BK acc. EN 14597

Type summary

Drinking- and heating water
Incoloy 825, 2.4858

Type	Order no.	Power	Immersion length [EL]
AHFOR-BI-OP-2.0	012-5601	2.0kW; 230V~ / 400V 3~	260mm
AHFOR-BI-OP-2.5	012-5602	2.5kW; 230V~ / 400V 3~	310mm
AHFOR-BI-OP-4.0	012-5603	4.0kW; 400V 3~	260mm
AHFOR-BI-OP-5.0	012-5604	5.0kW; 400V 3~	300mm
AHFOR-BI-OP-6.0	012-5605	6.0kW; 400V 3~	360mm
AHFOR-BI-OP-7.5	012-5606	7.5kW; 400V 3~	420mm
AHFOR-BI-OP-8.0	012-5607	8.0kW; 400V 3~	450mm
AHFOR-BI-OP-9.0	012-5608	9.0kW; 400V 3~	490mm
AHFOR-BI-SE-3.0	012-5803	3.0 kW; 230V~ / 400V 3~	260mm

Technical data

The following indications are valid for the above listed standard types. Due to the function, other types might show different data.

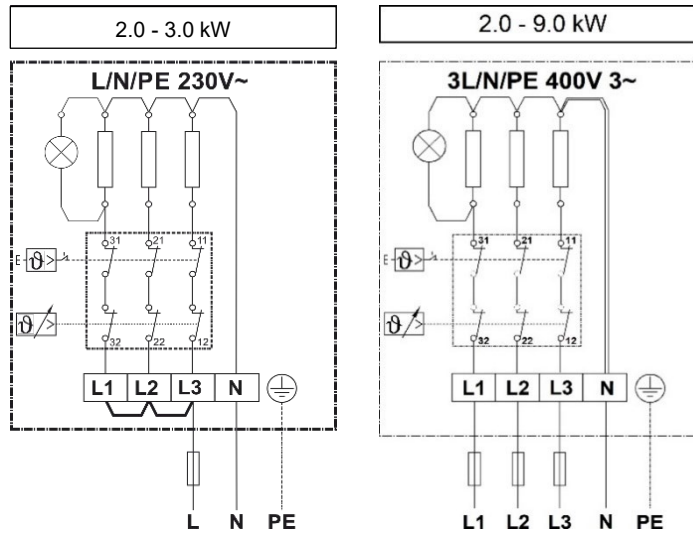
Application range	Adjustable cut-off temperature	0...*...28...85 °C
	Safety cut-off temperature ϑ_{off}	110 °C (0-9 K)
	Ambient temperature on switching head	max. 50 °C (T50)
	Thermal switching differential	11.0 K ± 5.5 K
	Ambient temperature for storage and transport	-30...+90 °C

Calibration	Calibration tolerance Time factor in water	$\pm 7\text{ K}$ <45 s
Specification	Flange material Outside flange diameter Pitch circle diameter Flange seal Plastic disk Heating tube Immersion tube Surface load Electrical connection Operating pressure Housing cover Protection mode	St 37 $\varnothing 180\text{ mm}$ $\varnothing 150\text{ mm} / 8 \times \text{M12}$ EPDM, KTW and FDA certification PP-H, FDA certification Incoloy 825; 2.4858, $\varnothing 8.2\text{ mm}$ Incoloy 825; 2.4858 7 W/cm^2 Screw clip 4mm^2 max. 10 bar Polycarbonate, RAL 7035 (light gray) IP21 acc. EN 60529

Fitting notes

The device must be installed horizontally. The heating tubes must be covered entirely by the liquid. The circulation of the liquid shall not be inhibited.

Wiring diagram



Dimension drawing

