

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

**AHFOR-BI-A-...**  
**AHFOR-BI-E-...**

with combination of temperature control,  
safety temperature limiter and operating light



### Application

Auxiliary heating system of industrial 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.  
The unheated zone is 70 mm for all types.

- Type A**
- 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 E**
- 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 BDEFHKL acc. EN 14597

### Type summary

	Type	Order-no.	Power	Immersion length [EL]
Type A	AHFOR-BI-A-2.0	012-1641	2.0kW; 230V~ / 400V 3~	260mm
	AHFOR-BI-A-2.5	012-1642	2.5kW; 230V~ / 400V 3~	310mm
	AHFOR-BI-A-4.0	012-1643	4.0 / 2.6 / 2.0kW; 400V 3~	260mm
	AHFOR-BI-A-5.0	012-1644	5.0 / 2.5kW; 400V 3~	300mm
	AHFOR-BI-A-6.0	012-1645	6.0 / 3.0kW; 400V 3~	360mm
	AHFOR-BI-A-7.5	012-1646	7.5kW; 400V 3~	420mm
	AHFOR-BI-A-8.0	012-1647	8.0kW; 400V 3~	450mm
	AHFOR-BI-A-9.0	012-1648	9.0kW; 400V 3~	490mm
	AHFOR-BI-A-10.0	012-1649	10.0kW; 400V 3~	540mm
Type E	AHFOR-BI-E-12.0	012-1650	12.0kW; 400V 3~	640mm
	AHFOR-BI-E-15.0	012-1651	15.0kW; 400V 3~	780mm
	AHFOR-BI-E-15.0	012-1652	15.0kW; 400V 3~	650mm

## Technical data

### Application range

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

### Calibration

### Specification

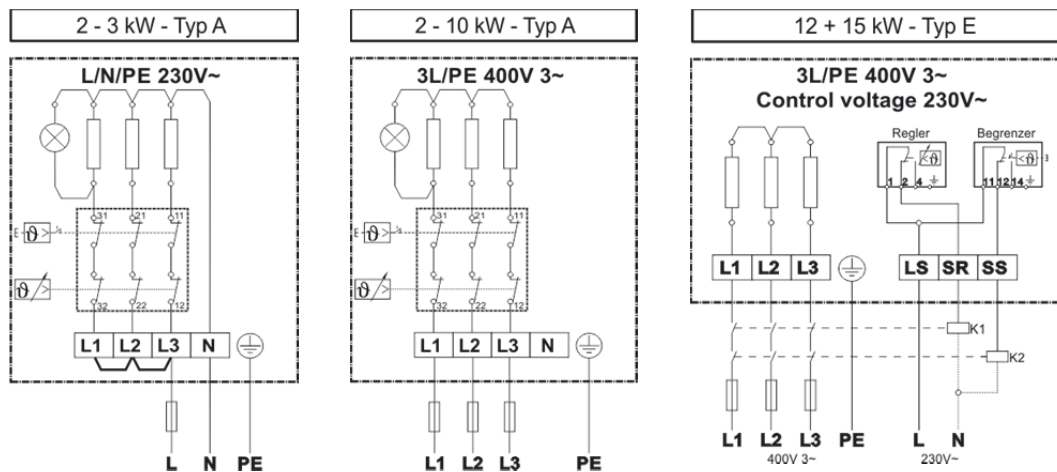
Adjustable cut-off temperature Type A / Type E  
Safety cut-off temperature  $\vartheta_{\text{off}}$   
Ambient temperature on switching head  
Thermal switching differential Type A / Type E  
Ambient temperature for storage and transport  
Calibration tolerance Type A / Type E  
Time factor in water

0...\*...28...85 °C / 15...95 °C  
110 °C (0-9 K)  
max. 50 °C (T50)  
11.0 K  $\pm$  5.5 K / 4.0 K  $\pm$  2.0 K  
-30...+90 °C  
 $\pm$  7 K /  $\pm$  6 K  
<45 s  
St 37  
 $\varnothing$  180 mm  
 $\varnothing$  150 mm / 8 X M12  
EPDM, KTW and FDA certification  
PP-H, FDA certification  
Incoloy 825; 2.4858,  $\varnothing$  8.2 mm  
Cronifer 1.4529  
7 W/cm<sup>2</sup>  
screw-type terminal  
10 bar max.  
Polycarbonate, RAL 7035 (light gray)  
IP21 acc. EN 60529

## Fitting notes

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

## Wiring diagram



## Dimension drawing

