

**Flange heater Ø 240 mm
Incoloy 825; 2.4858**

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

**with combination of temperature control and
safety temperature limiter**



Application

Auxiliary heating system of industrial water and heating water.

Features

FH The heating element is made of six 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 tesnit disk serves as insulation. This heating element is applicable in stainless steel boiler as well as in black steel / black steel enamelled boilers. Select the settings via DIP switch according to the boiler type. 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. 20 K.
- Time factor of sensing element acc. EN 14597
 - Operation type TC Type 1 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-4.0	012-1741	4.0 / 3.3 / 3.0 / 2.7 / 2.3 / 2.0kW;	400V 3~	260mm
	AHFOR-BI-A-5.0	012-1742	5.0 / 4.1 / 3.8 / 4.4 / 2.9 / 2.5kW;	400V 3~	260mm
	AHFOR-BI-A-8.0	012-1743	8.0 / 6.7 / 6.0 / 5.3 / 4.7 / 4.0kW;	400V 3~	260mm
	AHFOR-BI-A-10.0	012-1744	10.0 / 7.5 / 5.0kW;	400V 3~	300mm
	AHFOR-BI-A-12.0	012-1745	12.0 / 9.0 / 6.0kW;	400V 3~	360mm
	AHFOR-BI-A-15.0	012-1746	15.0 / 7.5kW;	400V 3~	420mm
	AHFOR-BI-A-16.0	012-1747	16.0 / 8.0kW;	400V 3~	440mm
	AHFOR-BI-A-18.0	012-1748	18.0 / 9.0kW;	400V 3~	490mm
	AHFOR-BI-A-20.0	012-1749	20.0 / 10.0kW;	400V 3~	540mm
Type E	AHFOR-BI-A-25.0	012-1750	25.0 / 12.5kW;	400V 3~	660mm
	AHFOR-BI-A-30.0	012-1751	30.0 / 15.0kW;	400V 3~	780mm

Technical data

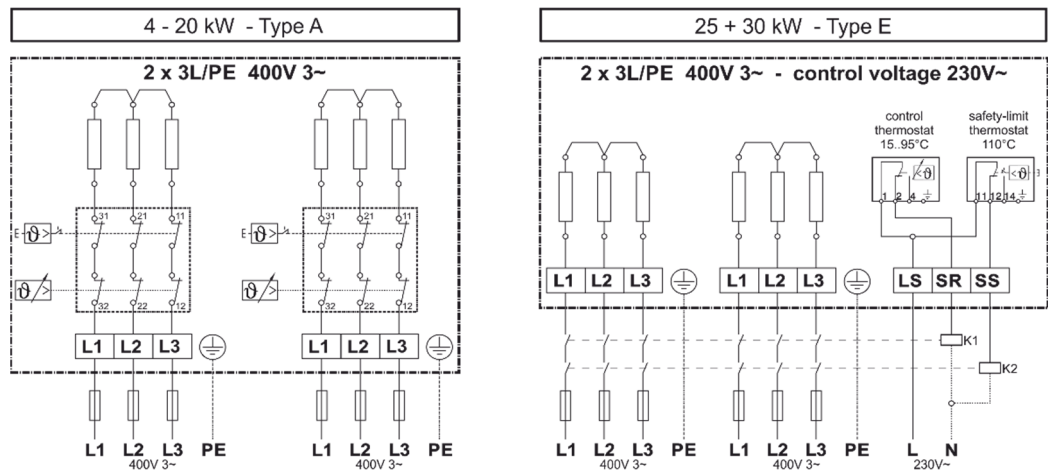
The following indications are valid for the above listed standard types. Due to the function, other types might show different data.

Application range	Adjustable cut-off temperature Type A / Type E	0...*...28...85 °C / 15...95 °C
	Safety cut-off temperature ϑ_{off}	110 °C (0-9 K)
	Ambient temperature on switching head	max. 50 °C (T50)
	Thermal switching differential Type A / Type E	11.0 K \pm 5.5 K / 4.0 K \pm 2.0 K
Calibration	Ambient temperature for storage and transport	-30...+90°C
	Calibration tolerance Type A / Type E	\pm 7 K / \pm 6 K
	Time factor in water	<45 s
Specification	Flange material	St 37
	Outside flange diameter	Ø 240 mm
	Pitch circle diameter	Ø 210 mm / 12 X M12
	Flange seal	EPDM, KTW and FDA certification
	Tesnit disk	Tesnit BA-U light blue, KTW certification
	Heating tube industrial water	Incoloy 825; 2.4858, Ø 8.2 mm
	Immersion tube	Cronifer 1.4529
	Surface load	7 W/cm ²
	Electrical connection	Screw type terminal
	Operating pressure	10 bar max.
	Housing cover	ABS UL94 V0, NCS 2005-R80B (light gray)
	Protection mode	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

