

Flange heater Ø 280 mm
Incoloy 825; 2.4858

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

with combination of temperature control and
safety temperature limiter



Application Features

Auxiliary heating system of industrial water and heating water.

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	012-1841	4.0 / 3.3 / 3.0 / 2.7 / 2.3 / 2.0kW;	400V 3~	260mm
	AHFOR-BI-A-5.0	012-1842	5.0 / 4.1 / 3.8 / 4.4 / 2.9 / 2.5kW;	400V 3~	260mm
	AHFOR-BI-A-8.0	012-1843	8.0 / 6.7 / 6.0 / 5.3 / 4.7 / 4.0kW;	400V 3~	260mm
	AHFOR-BI-A-10.0	012-1844	10.0 / 7.5 / 5.0kW;	400V 3~	300mm
	AHFOR-BI-A-12.0	012-1845	12.0 / 9.0 / 6.0kW;	400V 3~	360mm
	AHFOR-BI-A-15.0	012-1846	15.0 / 7.5kW;	400V 3~	420mm
	AHFOR-BI-A-16.0	012-1847	16.0 / 8.0kW;	400V 3~	440mm
	AHFOR-BI-A-18.0	012-1848	18.0 / 9.0kW;	400V 3~	490mm
	AHFOR-BI-A-20.0	012-1849	20.0 / 10.0kW;	400V 3~	540mm
Type E	AHFOR-BI-A-25.0	012-1850	25.0 / 12.5kW;	400V 3~	660mm
	AHFOR-BI-A-30.0	012-1851	30.0 / 15.0kW;	400V 3~	780mm

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

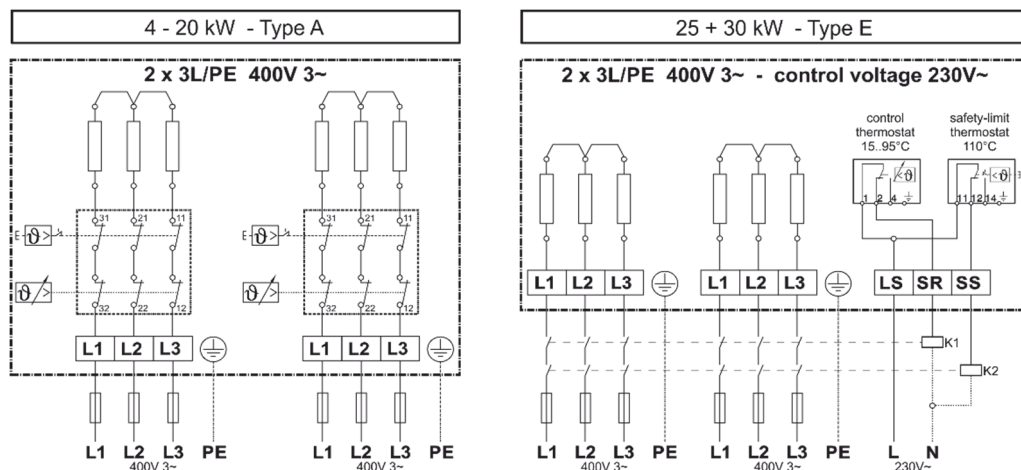
Specification

Adjustable cut-off temperature Type A / Type E	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
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
Flange material	St 37
Outside flange diameter	Ø 280 mm
Pitch circle diameter	Ø 245 mm / 12 X M14
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

