

ELECTRIC HEATERS

ASKOHEAT

FOR HEATING INDUSTRIAL
AND HEATING WATER



ASKOMA  *we care
about energy*

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ASKOHEAT-S

SCREW-IN HEATER

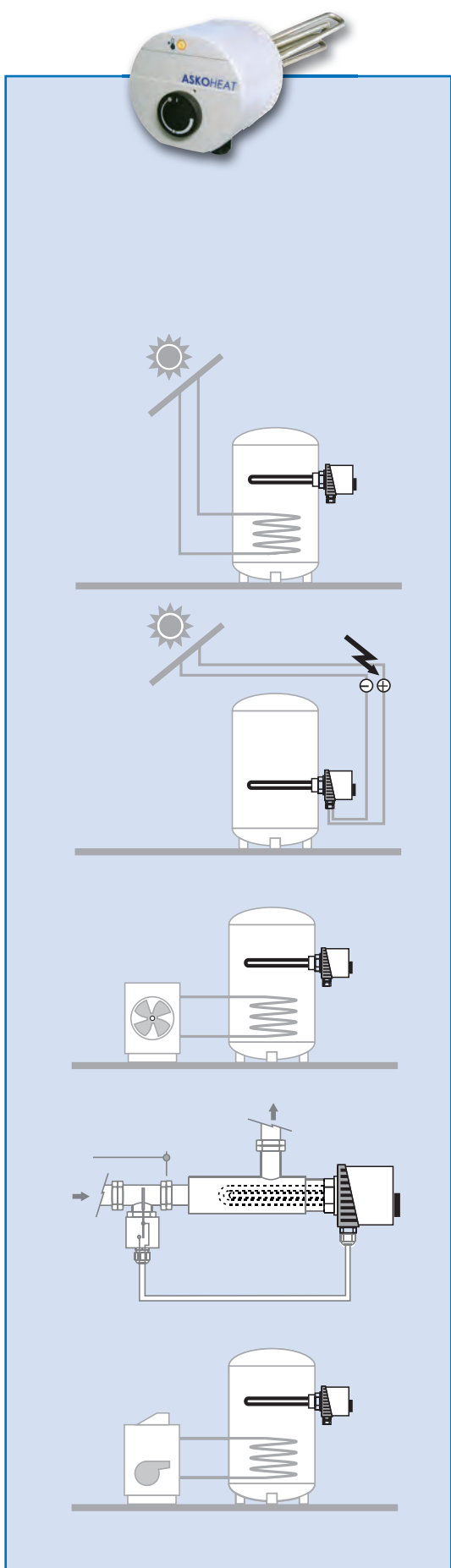
1.1



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SCREW-IN HEATER IN 1½" and 2" MODELS

- Auxiliary heating system of industrial and heating water



FEATURES OF ASKOHEAT-S

- Temperature control and safety temperature limiter
- Operating light
- Suitable for small installation dimensions
- Optimum sensing element position
- 15 cm unheated zone
- Deep surface load

APPLICATION EXAMPLES

Auxiliary heating for solar heat

- Recovery in unfavourable weather conditions

Auxiliary heating for solar power

- Energy storage
- Optimised own power consumption

Auxiliary heating for heat pump

- Recovery in the event of a fault or failure of the heat pump

Application in instantaneous water heaters

- Protection against frost for non-heated buildings
- Heating support

Auxiliary heating for wood, oil and gas

- Recovery
- Summer operation

Technical alterations reserved

ADVANTAGES ASKOHEAT-S

- Dry-run protection without product damage
- 15 cm unheated zone prevents calcification in the connection pipe
- Low surface load; low surface temperature and calcification
- Version for 2" nipple; even lower calcification
- Housing made from impact-resistant polycarbonate
- Secure electrical connection via separate high-quality terminal block

Easy to install

- ① Standard hex for secure tightening with conventional wrenches
- ② Tapered thread for precise housing position and tight installation (1½" and 2" possible)
- ③ High-quality terminal

Technical design

- ④ Low surface load (8 W/cm²) for low calcification
- ⑤ Optimal sensor position in the oval immersion tube for identical temperature measurement of safety temperature limiter and temperature control
- ⑥ Operating light

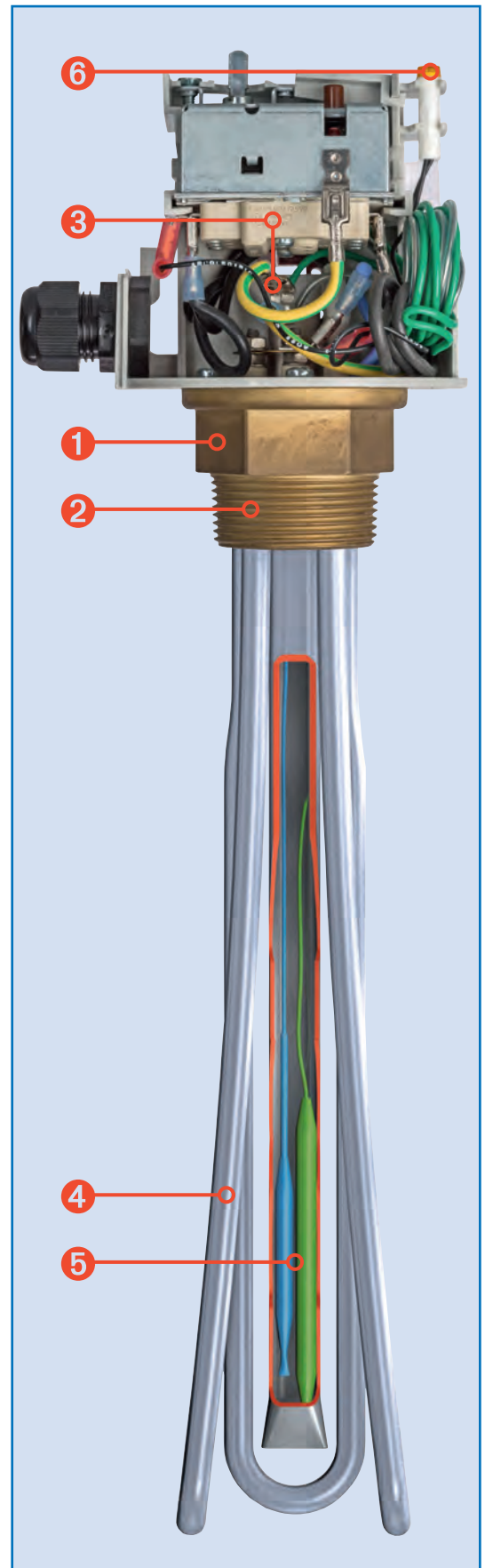
Technical advantages on customer request

- Pre-wired with connection cable
- Different colour options for housing (OEM)
- 400 V and 230 V models
- Fitting thread 1¼" for heating water

Approvals

- EN 60335-2-21
No damage to the heating element during dry run
Overvoltage resistant (7.25 %)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Technical alterations reserved



AHIR-B-S-... AHIR-BI-S-...

Screw-in heater

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



1.4



Application

Features

Auxiliary heating system of industrial water and heating water.

SH The heating element is made of three U-shaped heating tubes, which are mounted isolated into a 1½" conical brass nipple by food-safe plastic sleeves. Thanks to the insulated mounting of the heating tubes, the devices are also suitable for enamelled boilers.

The unheated zone is 150 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 OFF 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

Industrial and heating water
Cronifer 1.4529

Industrial and heating water
Incoloy 825; 2.4858

Type	Order-no.	Power	Immersion length [EL]
AHIR-B-S-1.0	012-4701	1.0kW; 230V~ / 400V 3~	300mm
AHIR-B-S-1.5	012-4702	1.5kW; 230V~ / 400V 3~	300mm
AHIR-B-S-2.0	012-4703	2.0kW; 230V~ / 400V 3~	300mm
AHIR-B-S-2.5	012-4704	2.5kW; 230V~ / 400V 3~	350mm
AHIR-B-S-3.0	012-4705	3.0kW; 230V~ / 400V 3~	400mm
AHIR-B-S-3.8	012-4706	3.8kW; 400V 3~	450mm
AHIR-B-S-4.5	012-4707	4.5kW; 400V 3~	500mm
AHIR-B-S-6.0	012-4708	6.0kW; 400V 3~	600mm
AHIR-B-S-7.5	012-4709	7.5kW; 400V 3~	700mm
AHIR-B-S-9.0	012-4710	9.0kW; 400V 3~	750mm
AHIR-BI-S-1.0	012-4741	1.0kW; 230V~ / 400V 3~	300mm
AHIR-BI-S-1.5	012-4742	1.5kW; 230V~ / 400V 3~	300mm
AHIR-BI-S-2.0	012-4743	2.0kW; 230V~ / 400V 3~	300mm
AHIR-BI-S-2.5	012-4744	2.5kW; 230V~ / 400V 3~	350mm
AHIR-BI-S-3.0	012-4745	3.0kW; 230V~ / 400V 3~	400mm
AHIR-BI-S-3.8	012-4746	3.8kW; 400V 3~	450mm
AHIR-BI-S-4.5	012-4747	4.5kW; 400V 3~	500mm
AHIR-BI-S-6.0	012-4748	6.0kW; 400V 3~	600mm
AHIR-BI-S-7.5	012-4749	7.5kW; 400V 3~	700mm
AHIR-BI-S-9.0	012-4750	9.0kW; 400V 3~	750mm

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

Adjustment range	0...*...28...85 °C
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	± 7 K
Time factor in water	<45 s

Specification

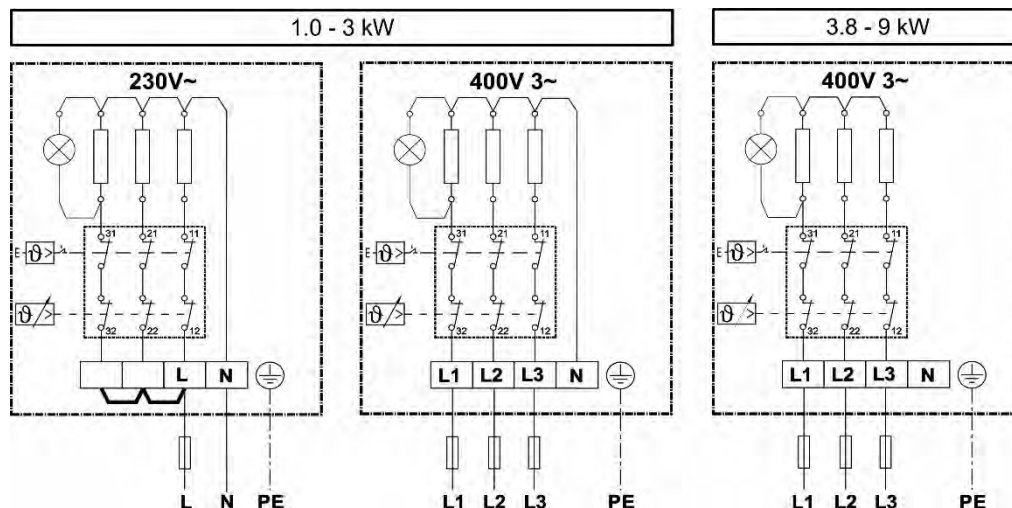
Fitting thread
Brass nipple
Heating tube Cronifer
Heating tube Incoloy 825
Surface load
Electrical connection
Operating pressure
Housing
Protection mode

R 1½" conical
CuZn40Pb2
1.4529, Ø 8.2 mm
2.4858, Ø 8.4 mm
8-9 W/cm²
Screw clip 4 mm²
10 bar max.
Polycarbonate, RAL 7035 (light gray)
IP41 acc. EN 60529

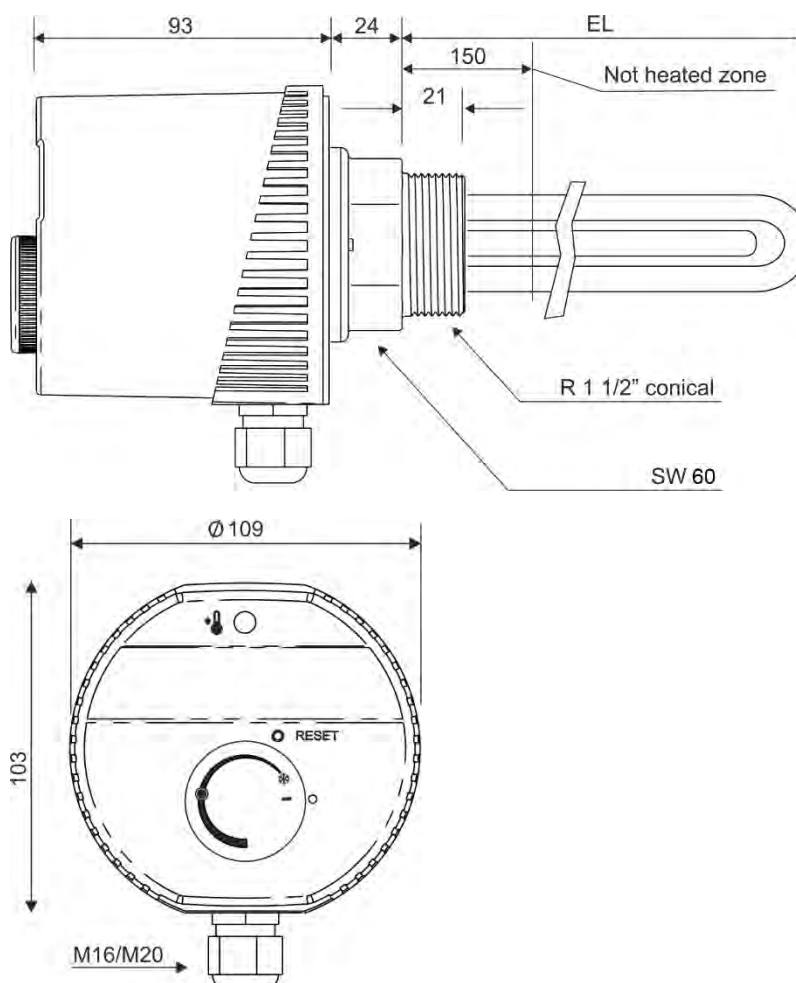
Fitting notes

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



Notes

ASKOHEAT-E

SCREW-IN HEATER

1.7



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SCREW-IN HEATER IN 1½" and 2" MODELS

- Auxiliary heating system of industrial and heating water



FEATURES OF ASKOHEAT-E

- Temperature control and safety temperature limiter
- Optional integrated contactor, ON/OFF/AUTO switch and operating light
- Optimum sensing element position
- 15 cm unheated zone
- Deep surface load

APPLICATION EXAMPLES

Auxiliary heating for solar heat

- Recovery in unfavourable weather conditions

Auxiliary heating for solar power

- Energy storage
- Optimised own power consumption

Auxiliary heating for heat pump

- Recovery in the event of a fault or failure of the heat pump

Heating support for air water heat pump

- Recovery in the event of very low outdoor temperatures

Application in instantaneous water heaters

- Protection against frost for non-heated buildings
- Heating support

Auxiliary heating for wood, oil and gas

- Recovery
- Summer operation

Technical alterations reserved

ADVANTAGES ASKOHEAT-E

Type A

With internal temperature adjustment, IP41 according to EN 60529

Type B

With operating light and integrated power contactor

Type C

With integrated power contactor and on / off / auto switch

Easy to install

- ① Standard hex for secure tightening with conventional wrenches
- ② Tapered thread for precise housing position and tight installation (1½" and 2" standard)
- ③ High-quality terminal

Technical Design

- ④ Low surface load (8 W/cm²) for low calcification
- ⑤ Optimal sensor position in the oval immersion tube for identical temperature measurement of safety temperature limiter and temperature control
- ⑥ Operating light
- ⑦ Power contactor
- ⑧ On / off / auto switch

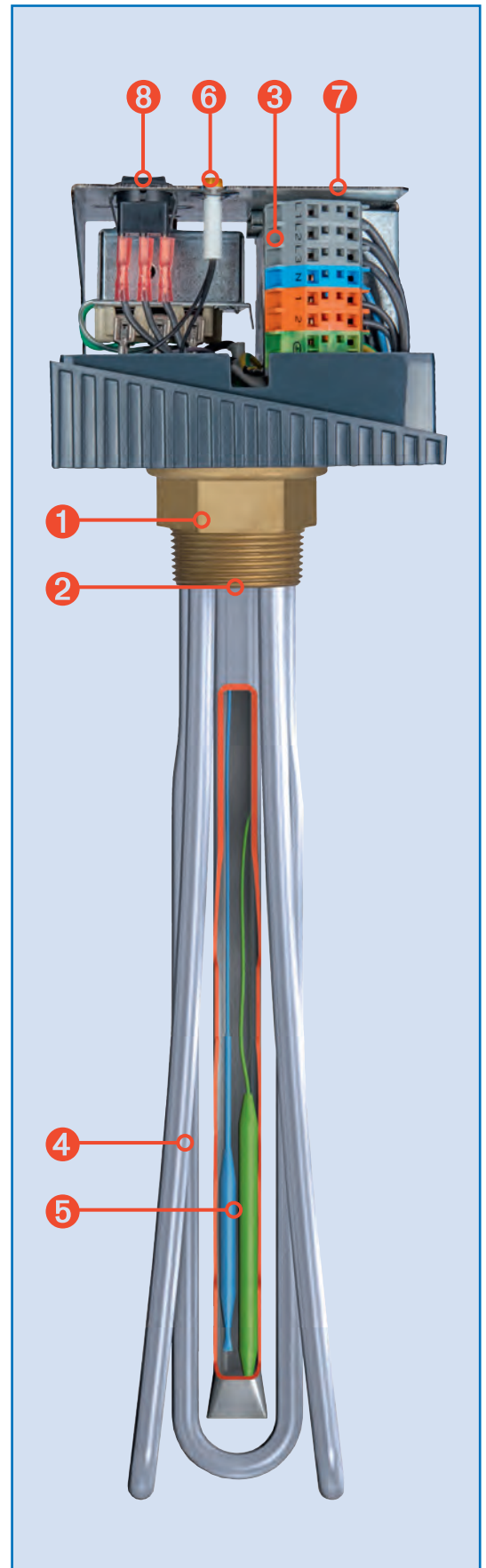
Technical advantages (on customer request)

- Pre-wired with connection cable
- Different colour options for housing (OEM)
- 400 V and 230 V models
- Multi-stage settings for heating elements
- Fitting thread 1¼" for heating water

Approvals

- EN 60335-2-21
Condensate drain in housing prevents corrosion
No damage to the heating element during dry run
Overvoltage resistant (7.25 %)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Technical alterations reserved



Screw-in heater

with combination of temperature control, safety
temperature limiter, operating light, contactor and
change-over switch



1.10



Application

Auxiliary heating system of industrial water and heating water in solar plants and heat pump systems.

Features

- SH The heating element is made of three U-shaped heating tubes, which are mounted isolated into a 1½" conical brass nipple by food-safe plastic sleeves.
Thanks to the insulated mounting of the heating tubes, the devices are also suitable for enamelled boilers.
The unheated zone is 150 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 OFF 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

Industrial and heating water
Cronifer 1.4529

Type	Order-no.	Power	Immersion length [EL]
AHIR-B-C-1.0	012-4401	1.0kW; 400V 3~	300mm
AHIR-B-C-1.5	012-4402	1.5kW; 400V 3~	300mm
AHIR-B-C-2.0	012-4403	2.0kW; 400V 3~	300mm
AHIR-B-C-2.5	012-4404	2.5kW; 400V 3~	300mm
AHIR-B-C-3.0	012-4405	3.0kW; 400V 3~	400mm
AHIR-B-C-3.8	012-4406	3.8kW; 400V 3~	450mm
AHIR-B-C-4.5	012-4407	4.5kW; 400V 3~	500mm
AHIR-B-C-6.0	012-4408	6.0kW; 400V 3~	600mm
AHIR-B-C-7.5	012-4409	7.5kW; 400V 3~	700mm
AHIR-B-C-9.0	012-4410	9.0kW; 400V 3~	750mm
AHIR-BI-C-1.0	012-4441	1.0kW; 400V 3~	300mm
AHIR-BI-C-1.5	012-4442	1.5kW; 400V 3~	300mm
AHIR-BI-C-2.0	012-4443	2.0kW; 400V 3~	300mm
AHIR-BI-C-2.5	012-4444	2.5kW; 400V 3~	300mm
AHIR-BI-C-3.0	012-4445	3.0kW; 400V 3~	400mm
AHIR-BI-C-3.8	012-4446	3.8kW; 400V 3~	450mm
AHIR-BI-C-4.5	012-4447	4.5kW; 400V 3~	500mm
AHIR-BI-C-6.0	012-4448	6.0kW; 400V 3~	600mm
AHIR-BI-C-7.5	012-4449	7.5kW; 400V 3~	700mm
AHIR-BI-C-9.0	012-4450	9.0kW; 400V 3~	750mm

Industrial and heating water
Incoloy 825; 2.4858

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	Adjustment range	0...*...28...85 °C
	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	± 7 K
	Time factor in water	<45 s

Specification

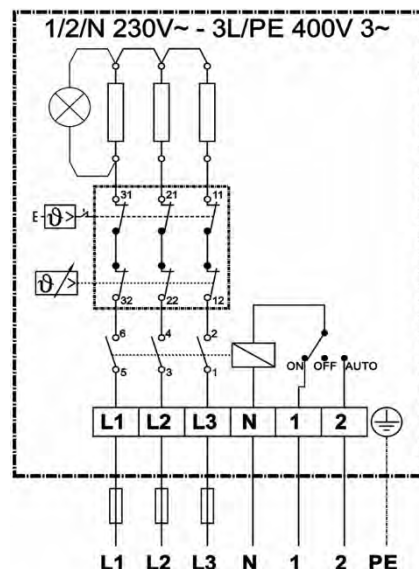
Fitting thread
Brass nipple
Heating tube Cronifer
Heating tube Incoloy 825
Surface load
Electrical connection
Operating pressure
Housing cover
Housing base
Protection mode

R 1½" sonical
CuZn40Pb2
1.4529, Ø 8.2 mm
2.4858, Ø 8.4 mm
8-9 W/cm²
Spring clip
10 bar max.
Polycarbonate, RAL 7035 (light gray)
Polycarbonate, RAL 7016 (anthracite gray)
IP41 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



Operating voltage

L1/L2/L3 400 V 3~
1/N - 2/N 230 V~

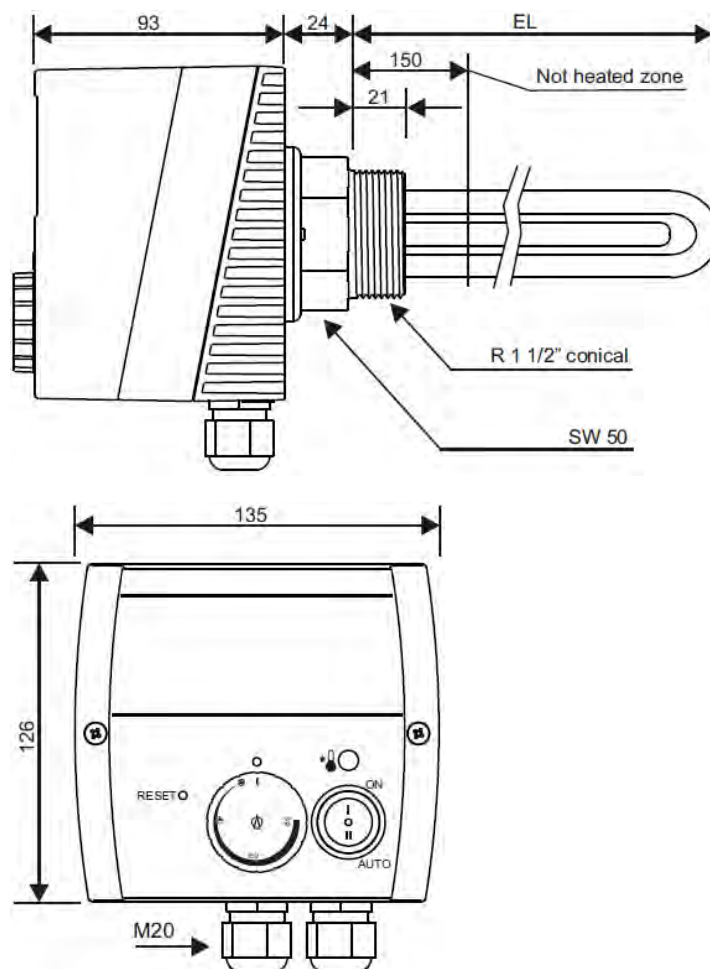
Clamp 1 = ON

230 V~ connection from power plant
or carry current

Clamp 2 = AUTO

230 V~ connection hp release auxiliary heating

Dimension drawing



Screw-in heater

with combination of temperature control and safety
temperature limiter

AHIW-B-A-...
AHIW-BI-A-...



1.12



Application

Features

Auxiliary heating system of industrial water and heating water.

SH The heating element is made of three U-shaped heating tubes, which are mounted isolated into a 1½" conical brass nipple by food-safe plastic sleeves.
Thanks to the insulated mounting of the heating tubes, the devices are also suitable for enamelled boilers.
The unheated zone is 150 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 OFF 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

Industrial and heating water
Cronifer 1.4529

Industrial and heating water
Incoloy 825; 2.4858

Type	Order-no.	Power	Immersion length [EL]
AHIW-B-A-1.0	012-4501	1.0kW; 400V 3~	300mm
AHIW-B-A-1.5	012-4502	1.5kW; 400V 3~	300mm
AHIW-B-A-2.0	012-4503	2.0kW; 400V 3~	300mm
AHIW-B-A-2.5	012-4504	2.5kW; 400V 3~	300mm
AHIW-B-A-3.0	012-4505	3.0kW; 400V 3~	400mm
AHIW-B-A-3.8	012-4506	3.8kW; 400V 3~	450mm
AHIW-B-A-4.5	012-4507	4.5kW; 400V 3~	500mm
AHIW-B-A-6.0	012-4508	6.0kW; 400V 3~	600mm
AHIW-B-A-7.5	012-4509	7.5kW; 400V 3~	700mm
AHIW-B-A-9.0	012-4510	9.0kW; 400V 3~	750mm
AHIW-BI-A-1.0	012-4541	1.0kW; 400V 3~	300mm
AHIW-BI-A-1.5	012-4542	1.5kW; 400V 3~	300mm
AHIW-BI-A-2.0	012-4543	2.0kW; 400V 3~	300mm
AHIW-BI-A-2.5	012-4544	2.5kW; 400V 3~	300mm
AHIW-BI-A-3.0	012-4545	3.0kW; 400V 3~	400mm
AHIW-BI-A-3.8	012-4546	3.8kW; 400V 3~	450mm
AHIW-BI-A-4.5	012-4547	4.5kW; 400V 3~	500mm
AHIW-BI-A-6.0	012-4548	6.0kW; 400V 3~	600mm
AHIW-BI-A-7.5	012-4549	7.5kW; 400V 3~	700mm
AHIW-BI-A-9.0	012-4550	9.0kW; 400V 3~	750mm

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	Adjustment range	40...60...85 °C
	Cut-off temperature ϑ_{off}	110 °C (0-9 K)
	Ambient temperature on switching head	max. 50 °C (T50)
	Thermal switching differential	15.0 K ± 7.5 K
	Ambient temperature for storage and transport	-30...+90 °C
Calibration	Calibration tolerance	± 5 K
	Time factor in water	<45 s

Specification

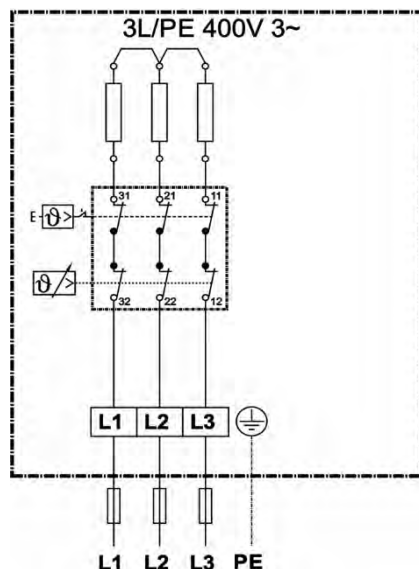
Fitting thread
Brass nipple
Heating tube Cronifer
Heating tube Incoloy 825
Surface load
Electrical connection
Operating pressure
Housing cover
Housing base
Protection mode

R 1½" sonical
CuZn40Pb2
1.4529, Ø 8.2 mm
2.4858, Ø 8.4 mm
8-9 W/cm²
Spring clip
10 bar max.
Polycarbonate, RAL 7035 (light gray)
Polycarbonate, RAL 7016 (anthracite gray)
IP41 acc. EN 60529

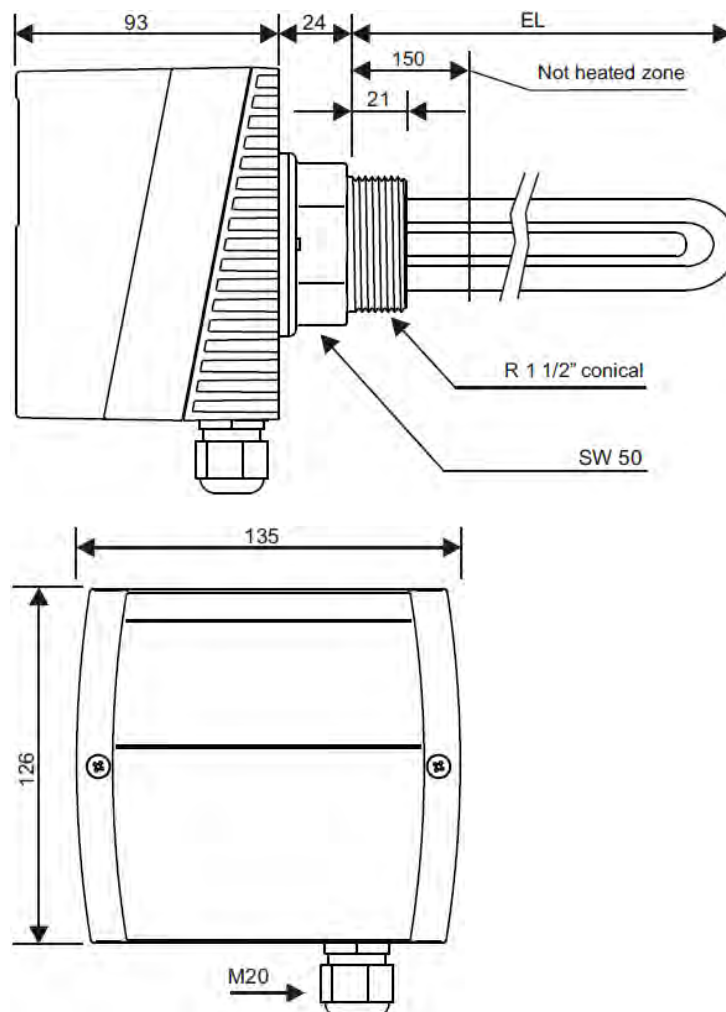
Fitting notes

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



1.13

Notes

ASKOHEAT-F

FLANGE HEATER



2.1

ASKOMA *we care
about energy*

FLANGE HEATER Ø 180 – 280 mm

- Auxiliary heating system of industrial and heating water



FEATURES OF ASKOHEAT-F

- Temperature control and safety temperature limiter
- Optional integrated contactor, ON/OFF/AUTO switch and operating light
- Deep surface load

APPLICATION EXAMPLES

Auxiliary heating for solar heat

- Recovery in unfavourable weather conditions

Auxiliary heating for solar power

- Energy storage
- Optimised own power consumption

Auxiliary heating for heat pump

- Recovery in the event of a fault or failure of the heat pump
- Legionella remediation

Auxiliary heating for wood, oil and gas

- Recovery
- Summer operation

Drinking and heating water charging

Suitable for special applications such as

- Legionella remediation
- Cleaning of milking systems

Technical alterations reserved

ADVANTAGES ASKOHEAT-F

Type FO

With operating light and external temperature control

Type A

With internal temperature control, IP21 according to EN 60529

Type C

With integrated power contactor and on / off / auto switch

Easy to install

- ① Standard flange Ø 180 mm
- ② Flat gasket included
- ③ High-quality terminal

Technical design

- ④ Low surface load (7 W/cm²) for low calcification
- ⑤ Optimal sensor position
- ⑥ Operating light
- ⑦ Insulated assembly of the heating elements for low corrosion
- ⑧ Power from 25 kW: optional switchbox with power contactors available

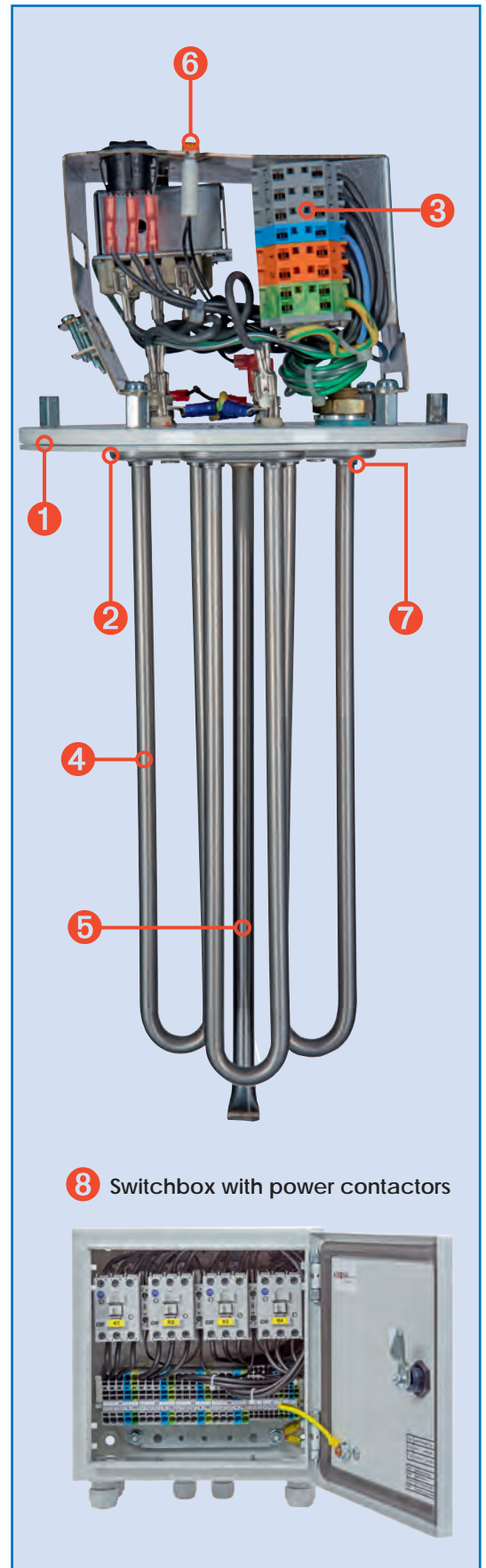
Technical advantages (on customer request)

- Cable entry possible on the side at the top
- Pre-wired with connection cable
- Different colour options for housing (OEM)
- 400 V and 230 V models
- Multi-stage settings for heating elements

Approvals

- EN 60335-2-21
Condensate drain in housing prevents corrosion
No damage to the heating element during dry run
Overvoltage resistant (7.25 %)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Technical alterations reserved



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.
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. 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.

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

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 180 mm

Pitch circle diameter

Ø 150 mm / 8 X M12

Flange seal

EPDM, KTW and FDA certification

Plastic disk

PP-H, FDA certification

Heating tube industrial water

Incoloy 825; 2.4858, Ø 8.2 mm

Immersion tube

Cronifer 1.4529

Surface load

7 W/cm²

Electrical connection

screw-type terminal

Operating pressure

10 bar max.

Housing cover

Polycarbonate, RAL 7035 (light gray)

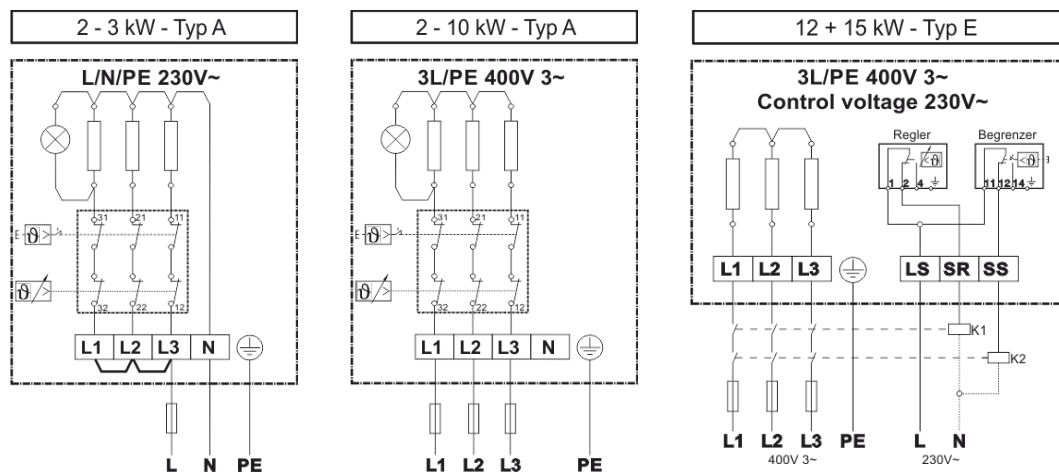
Protection mode

IP21 acc. EN 60529

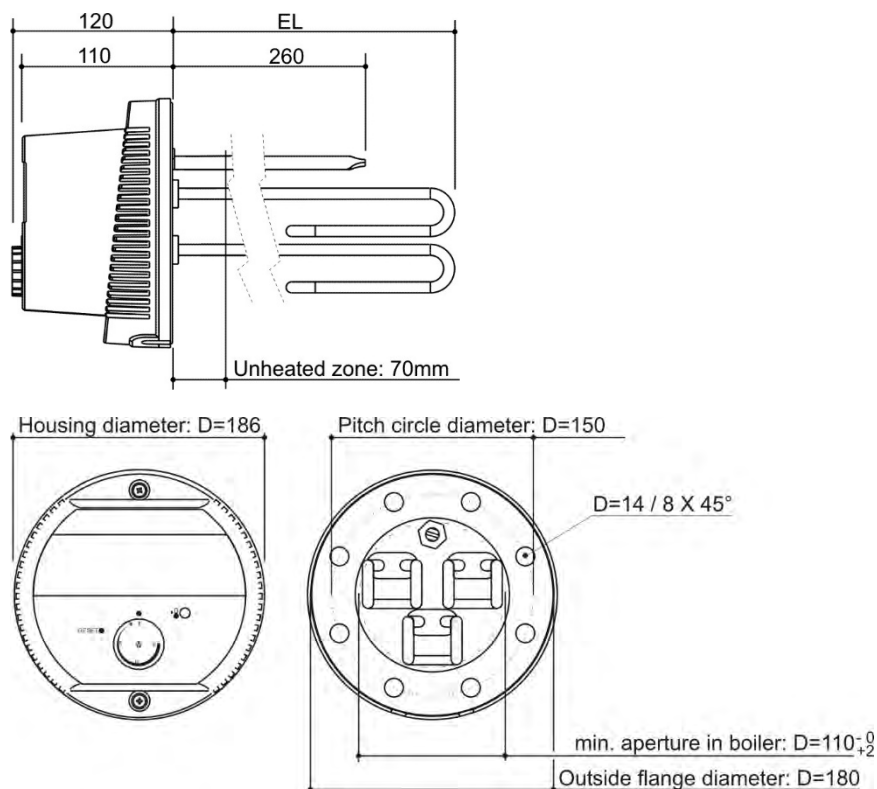
Fitting notes

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



Flange heater

AHFR-B-C-...
AHFR-BI-C-...

with combination of temperature control, safety
temperature limiter, operating light, contactor and
change-over switch



Application

Auxiliary heating system of industrial water and heating water in solar plants and heat pump systems

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.
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.

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

Industrial and heating water
Cronifer 1.4529

Type	Order-no.	Power	Immersion length [EL]
AHFR-B-C-2.0	012-1401	2.0kW; 400V 3~	260mm
AHFR-B-C-4.0	012-1403	4.0kW; 400V 3~	260mm
AHFR-B-C-6.0	012-1405	6.0kW; 400V 3~	360mm
AHFR-B-C-7.5	012-1406	7.5kW; 400V 3~	420mm
AHFR-B-C-9.0	012-1408	9.0kW; 400V 3~	490mm
AHFR-B-C-10.0	012-1409	10.0kW; 400V 3~	540mm
AHFR-BI-C-2.0	012-1441	2.0kW; 400V 3~	260mm
AHFR-BI-C-4.0	012-1443	4.0kW; 400V 3~	260mm
AHFR-BI-C-6.0	012-1445	6.0kW; 400V 3~	360mm
AHFR-BI-C-7.5	012-1446	7.5kW; 400V 3~	420mm
AHFR-BI-C-9.0	012-1448	9.0kW; 400V 3~	490mm
AHFR-BI-C-10.0	012-1449	10.0kW; 400V 3~	540mm

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 \pm 5.5 K
Ambient temperature for storage and transport -30...+90 °C

Calibration

Calibration tolerance \pm 7 K
Time factor in water <45 s

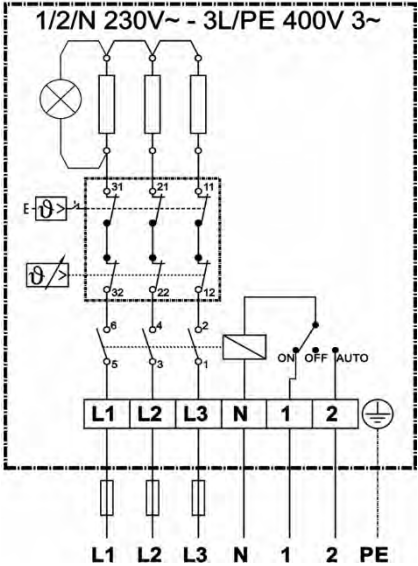
Specification

Flange material	St 37
Outside flange diameter	Ø 180 mm
Pitch circle diameter	Ø 150 mm / 8 X M12
Flange seal	EPDM, KTW certification
Plastic disk	PP-H, FDA certification
Heating tube industrial water	Cronifer 1.4529, Ø 8.2 mm
Heating tube industrial water	Incoloy 825; 2.4858, Ø 8.2 mm
Surface load	7 W/cm ²
Electrical connection	Spring clip
Operating pressure	10 bar max.
Housing cover	Polycarbonate, RAL 7035 (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



Operating voltage

L1/L2/L3 400 V 3~
1/N - 2/N 230 V~

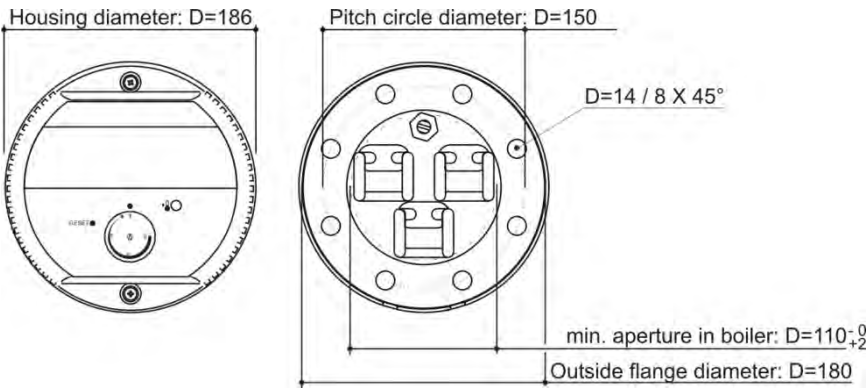
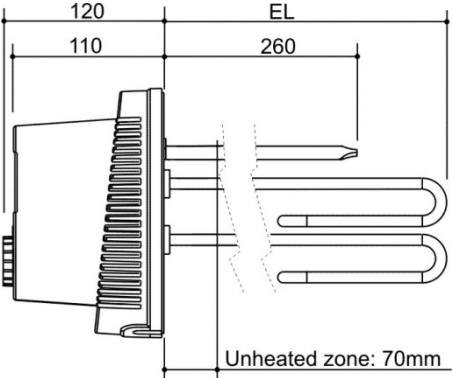
Clamp 1 = ON

230 V~ connection from power plant
or carry current

Clamp 2 = AUTO

230 V~ connection hp release auxiliary heating

Dimension drawing



Flange heater Ø 180 mm
Incoloy 825; 2.4858

AHFW-BI-A-...

with combination of temperature control and safety
temperature limiterApplication
Features

Auxiliary heating system of industrial water and heating water.

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. 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.

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

Industrial and heating water
Incoloy 825; 2.4858

Type	Order-no.	Power	Immersion length [EL]
AHFW-BI-A-2.0	012-1541	2.0kW; 400V 3~	260mm
AHFW-BI-A-2.5	012-1542	2.5kW; 400V 3~	310mm
AHFW-BI-A-4.0	012-1543	4.0kW; 400V 3~	260mm
AHFW-BI-A-6.0	012-1545	6.0kW; 400V 3~	360mm
AHFW-BI-A-7.5	012-1546	7.5kW; 400V 3~	420mm
AHFW-BI-A-8.0	012-1547	8.0kW; 400V 3~	450mm
AHFW-BI-A-9.0	012-1548	9.0kW; 400V 3~	490mm
AHFW-BI-A-10.0	012-1549	10.0kW; 400V 3~	540mm

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 40...60...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 15.0 K \pm 7.5 K
 Ambient temperature for storage and transport -30...+95 °C

Calibration

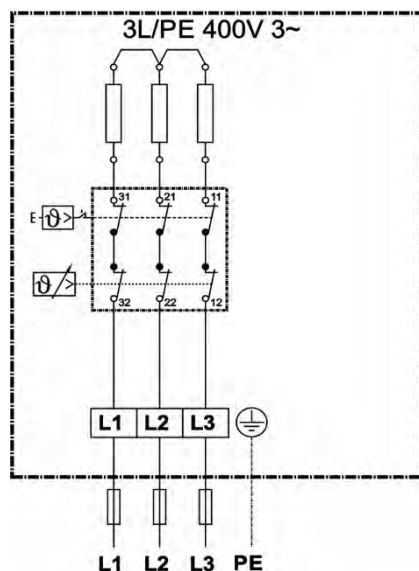
Calibration tolerance \pm 5 K
 Time factor in water <45 s

Specification	Flange material	St 37
	Outside flange diameter	Ø 180 mm
	Pitch circle diameter	Ø 150 mm / 8 X M12
	Flange seal	EPDM, KTW certification
	Plastic disk	PP-H, FDA certification
	Heating tube	Incoloy 825; 2.4858, Ø 8.2 mm
	Immersion tube	Cronifer 1.4529
	Surface load	7 W/cm ²
	Electrical connection	Spring clip
	Operating pressure	10 bar max.
	Housing cover	Polycarbonate, RAL 7035 (light gray)
	Protection mode	IP21 acc. EN 60529

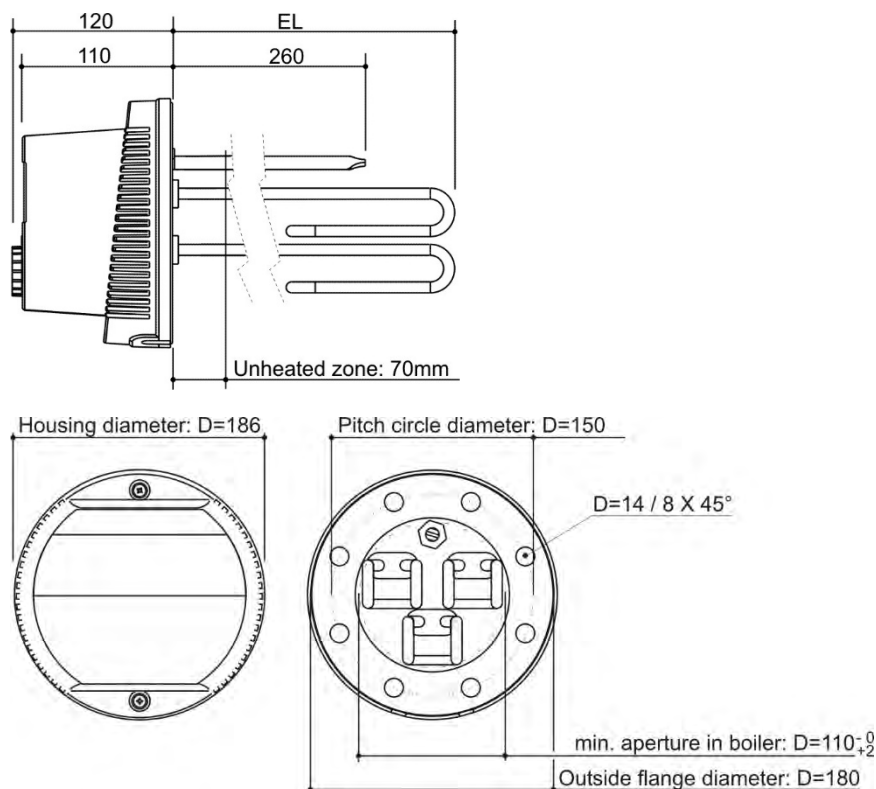
Fitting notes

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



Notes

ASKOHEAT-FO

FLANGE HEATER



3.1

ASKOMA  *we care
about energy*

FLANGE HEATER Ø 240 / 280 mm

- Auxiliary heating system of industrial and heating water



FEATURES OF ASKOHEAT-FO

- Featuring combined temperature regulator/limiter
- Power: up to 30 kW (standard)
- Suitable for enamelled and stainless steel containers
- Low surface load

APPLICATION EXAMPLES

Auxiliary heating for solar heat

- Auxiliary heating for peak demand
- Recovery in the event of poor weather conditions
- Anti-legionella recovery

Auxiliary heating for solar power

- Energy storage
- Optimised own power consumption

Auxiliary heating for heat pump

- Recovery in the event of a fault or failure of the heat pump
- Legionella remediation

Auxiliary heating for wood, oil and gas

- Recovery
- Summer operation

Drinking and heating water charging

- Suitable for treating drinking and heating water as well as other liquid media for industrial processes



Technical alterations reserved

ADVANTAGES ASKOHEAT-FO

Type A

- Power: up to 20 kW
- Featuring combined temperature regulator/limiter
- 3-pole

Type E

- Power: 25 to 30 kW
- Featuring combined temperature regulator/limiter
- 1-pole
- Higher power ratings available on request

Easy to install

- ① Standard flange Ø 240 / 280 mm
- ② Flat gasket included
- ③ High-quality terminal

Technical design

- ④ Low surface load (7 W/cm²) for low calcification
 - ⑤ Optimal sensor position
 - ⑥ Operating light
 - ⑦ Insulated assembly of the heating elements for low corrosion
- Power from 25 kW: optional switchbox with power contactors available

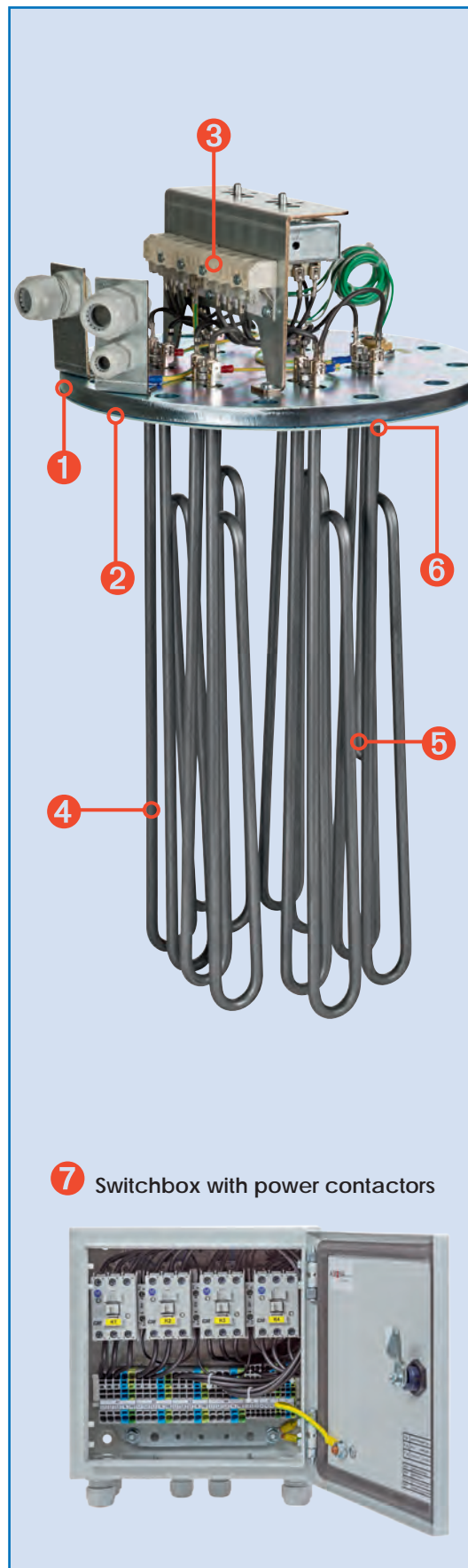
Technical advantages (on customer request)

- Cable entry possible on the side at the top
- Pre-wired with connection cable
- Different colour options for housing (OEM)
- Multi-stage settings for heating elements

Approvals

- EN 60335-2-21
Condensate drain in housing prevents corrosion
No damage to the heating element during dry run
Overvoltage resistant (7.25 %)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Technical alterations reserved



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

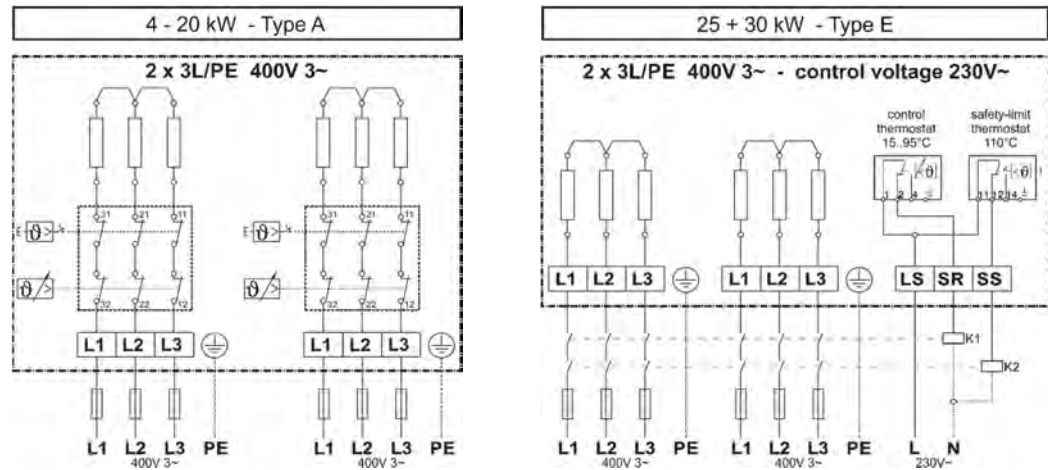
	Type	Order-no.	Power		Immersion length [EL]
Type A	AHFOR-BI-A-4.0	012-1741	4.0 / 3.3 / 3.0 / 2.7 / 2.3 / 2.0kW;	400V 3~	260mm
	AHFOR-BI-A-5.0	012-1742	5.0 / 4.1 / 3.8 / 4.4 / 2.9 / 2.5kW;	400V 3~	260mm
	AHFOR-BI-A-8.0	012-1743	8.0 / 6.7 / 6.0 / 5.3 / 4.7 / 4.0kW;	400V 3~	260mm
	AHFOR-BI-A-10.0	012-1744	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

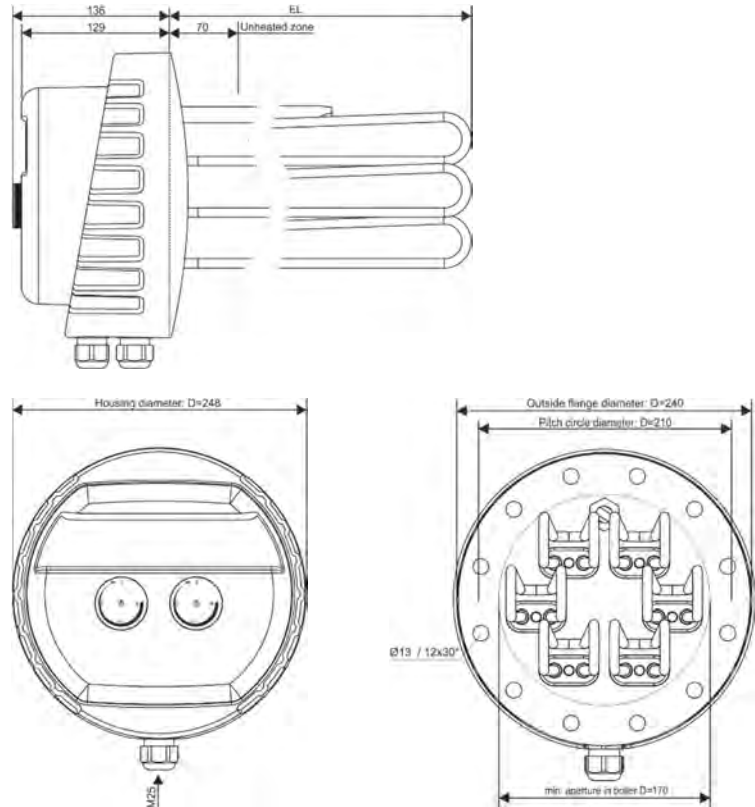
Application range	Adjustable cut-off temperature Type A / Type E Safety cut-off temperature ϑ_{off} Ambient temperature on switching head Thermal switching differential Type A / Type E Ambient temperature for storage and transport Calibration tolerance Type A / Type E Time factor in water	0...*...28...85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



**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

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	012-1841	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

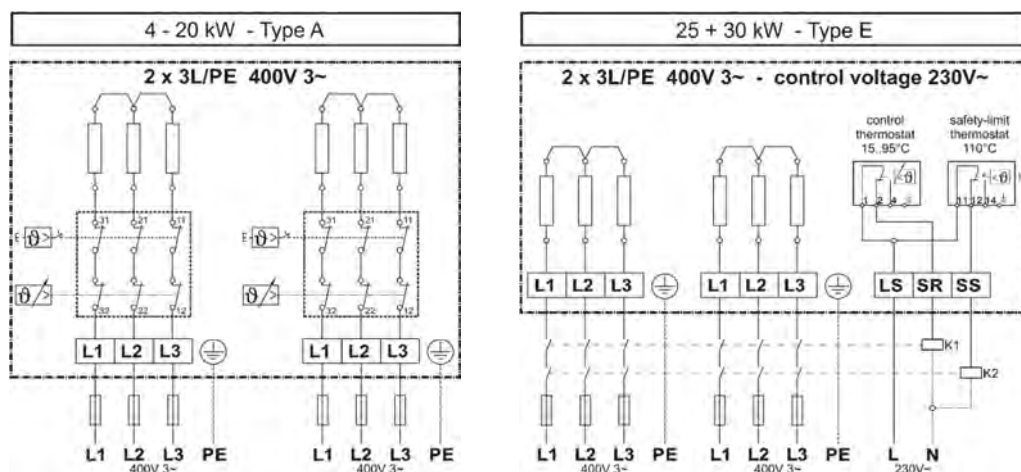
Specification

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

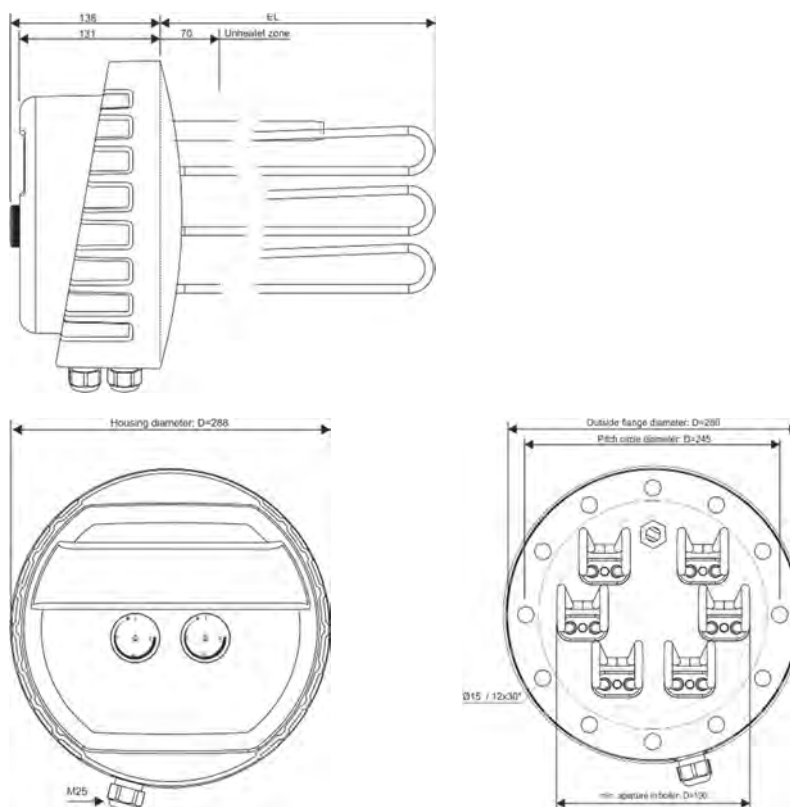
Fitting notes

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



Notes

ASKOHEAT-FK

FLANGE HEATER CERAMIC



ASKOMA  *we care
about energy*

4.1

FLANGE HEATER WITH CERAMIC ELEMENTS

- 100% supply guaranty
- For heating industrial water and heating water



FEATURES OF ASKOHEAT-FK

- Minimal calcification thanks to low surface load, 2–3 W/cm²
- Heating elements can be replaced without draining the tank
- High performance possible
- Stainless heating pipes and flange

APPLICATION EXAMPLES

Auxiliary heating for solar heat

- Auxiliary heating for peak demand
- Recovery in the event of poor weather conditions
- Anti-legionella recovery

Auxiliary heating for heat pumps

- Auxiliary heating for peak demand
- Recovery in the event of a fault or failure of the heat pump
- Anti-legionella recovery

Significant hot water requirement

- 100% supply guaranty
- Heating elements can be replaced without draining the tank



Industrial facilities

- Suitable for treating drinking and heating water as well as other liquid media for industrial processes



Technical alterations reserved

ADVANTAGES ASKOHEAT-FK

- Also suitable for industrial processes
- Replaceable ceramic heating elements (without draining)
- Very long life time
- Very low surface load

Easy to install

- ① Standard flange Ø 280 mm
- ② High-quality terminal
- ③ Flat gasket included

Technical design

- ④ Very low surface load (< 3 W/cm²) for a very low calcification
- ⑤ Optimal sensor position
- ⑥ V4A steel heating tubes (suitable for drinking water)
- ⑦ Durable ceramic heating elements (replaceable)
- ⑧ Performance from 25 kW: optional switchbox with power contactors available

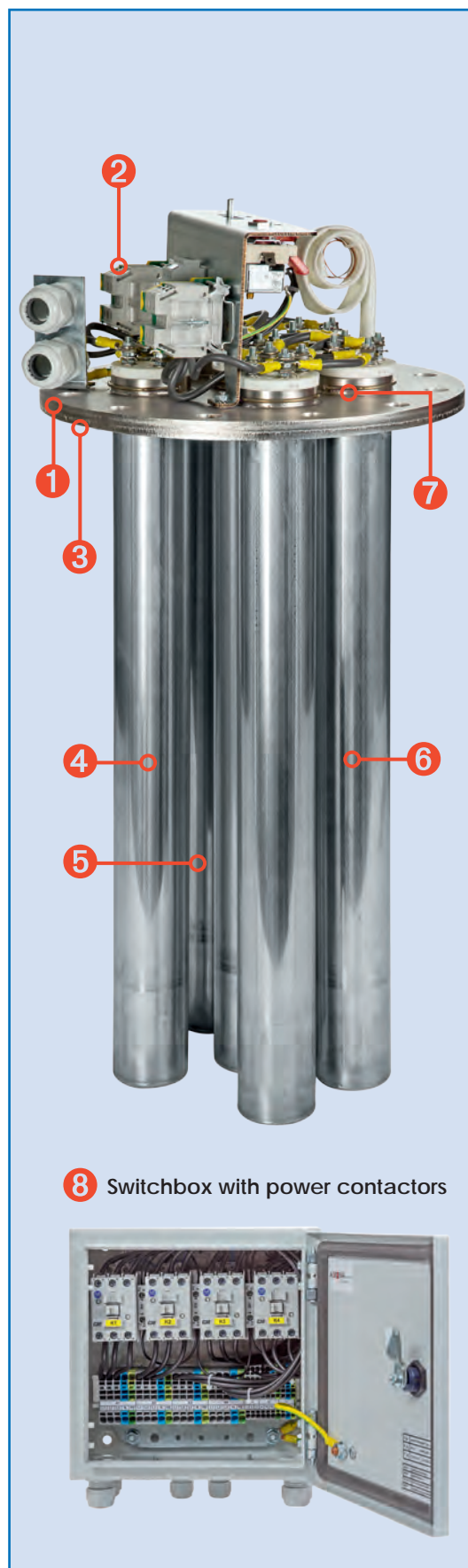
Technical advantages (on customer request)

- Pre-wired with connection cable
- Different colour options for housing (OEM)
- 400 V and 230 V models

Approvals

- EN 60335-2-21
No damage to the heating element during dry run
Overvoltage resistant (7.25 %)
- EN 60335-1, EN 60335-2-73
- EN 55014-1, EN 55014-2
- EN 62233
- EN 60529

Technical alterations reserved



**Flange heater ceramic
Ø 280 mm, V4A**
**AHFR-K-A-...
AHFR-K-E-...**

with combination of temperature control and safety
temperature limiter


Application

Auxiliary heating of industrial water and heating water.

Features

FH The flange with the heating tubes is made of V4A-steel, material no. 1.4404
The ceramic heating elements are 45 mm in diameter
The unheated zone is 110 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	AHFR-K-A-280-10	012-5301	10.0 / 8.3 / 6.7 / 5.0 / 3.3 / 1.7kW	400V 3~	500mm
	AHFR-K-A-280-15	012-5302	15.0 / 12.5 / 10.0 / 7.5 / 5 / 2.5kW	400V 3~	750mm
	AHFR-K-A-280-20	012-5303	20.0 / 16.7 / 13.3 / 10.0 / 6.7 / 3.3kW	400V 3~	850mm
Type E	AHFR-K-E-280-25	012-5304	25.0 / 20.8 / 16.7 / 12.5 / 8.3 / 4.2kW	400V 3~	1000mm
	AHFR-K-E-280-30	012-5305	30.0 / 25.0 / 20.0 / 15.0 / 10.0 / 5.0kW	400V 3~	1250mm
	AHFR-K-E-280-32	012-5306	32.0 / 26.7 / 21.3 / 16.0 / 10.7 / 5.3kW	400V 3~	1250mm
	AHFR-K-E-280-35	012-5307	35.0 / 29.2 / 23.3 / 17.5 / 11.7 / 5.8kW	400V 3~	1450mm
	AHFR-K-E-280-40	012-5308	40.0 / 33.3 / 26.7 / 20.0 / 13.3 / 6.7kW	400V 3~	1450mm
	AHFR-K-E-280-45	012-5309	45.0 / 37.5 / 30.0 / 22.5 / 15.0 / 7.5kW	400V 3~	1850mm

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 ± 5.5 K / 4.0 K ± 2.0 K
	Ambient temperature for storage and transport	-10...+50 °C
Calibration	Calibration tolerance Type A / Type E	± 7 K / ± 6 K
	Time factor in water	<45 s

Specification

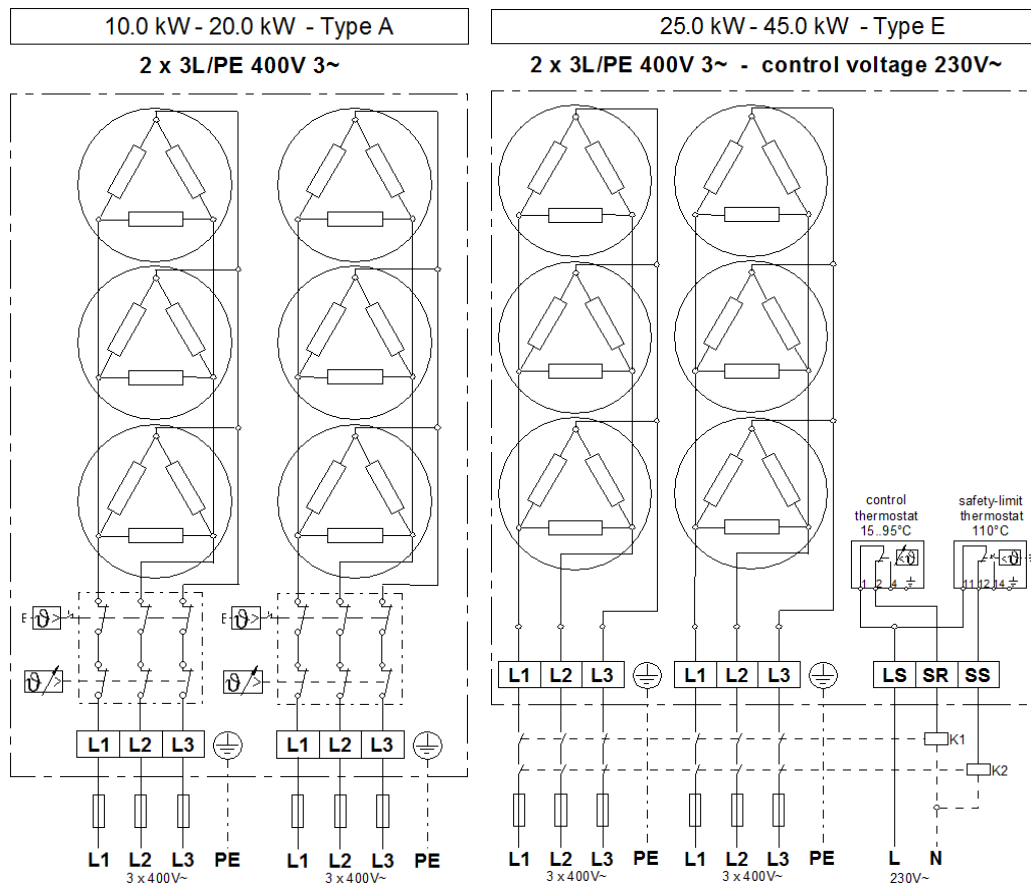
Flange material
Outside flange diameter
Pitch circle diameter
Flange seal
Immersion tube
Surface load
Electrical connection
Operating pressure
Housing cover
Protection mode

CrNi, V4A, W-no. 1.4404
Ø 280 mm
Ø 245 mm / 12 X M14
EPDM-Disk, 90 Shore A
CrNi, V4A, W-Nr. 1.4404
<3 W/cm²
Screw type terminal
10 bar max.
ABS UL94 V0, NCS 2005-R80B (light gray)
IP21 acc. EN 60529

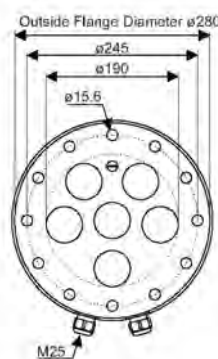
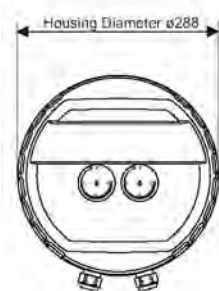
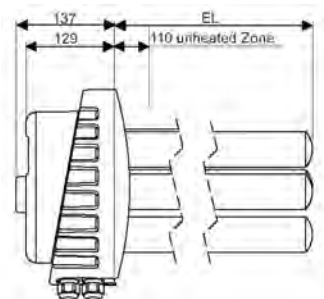
Fitting notes

The device must 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



Switching box with power contactors

for flange heaters



Application Features

For switching rated power of flange heaters.

The integrated contactors serve to switch the load of flange heaters which have only a single-pole temperature controller and a single-pole temperature limiter. After reaching the set temperature at the temperature controller of the heater, this interrupts the control voltage of the contactors. By breaking the contactors, the voltage is disconnected at all poles, and the heating element waits until the temperature has dropped, and the temperature controller allows the contactors to re-energise. Two series-connected contactors guarantee the disconnection process even when a normally open contact remains stuck.

The switching box is made of robust powder-coated steel sheet.

- Type 1** The type 1 switching box is designed for flange heaters with a diameter of 180 mm in capacities of 12.0 kW and 15.0 kW.
Additional equipment for: AHFOR-B-E-12.0 / AHFOR-BI-E-12.0
AHFOR-B-E-15.0 / AHFOR-BI-E-15.0
- Type 2** The type 2 switching box is designed for flange heaters with a diameter of Ø 180 mm in a capacity of 18.0 kW.
Additional equipment for: AHFOR-B-E-18.0
- Type 3** The type 3 switching box is designed for flange heaters with a diameter of Ø 240 mm and 280 mm in capacities of 25.0 to 35.0 kW.
Additional equipment for: AHFOR-B-E-25.0 / AHFOR-BI-E-25.0 / AHFR-K-E-25.0
AHFOR-B-E-30.0 / AHFOR-BI-E-30.0 / AHFR-K-E-30.0
AHFR-K-E-32.0
AKFR-K-E-35.0
- Typ 4** The type 4 switching box is designed for flange heaters with a diameter of Ø 240 mm and 280 mm in capacities of 40.0 to 45.0 kW.
Additional equipment for: AHFOR-B-E-44.0 / AHFR-K-E-40.0
AHFR-K-E-45.0

Type summary

Type	Order-no.	Power	Voltage	Dimensions (HxWxD)
Type 1	012-0102	12.0 / 15.0kW	400V 3~	280x250x155mm
Type 2	012-0103	18.0kW	400V 3~	280x250x155mm
Type 3	012-0104	25.0 / 30.0 / 32.0 / 35.0kW	400V 3~	280x250x155mm
Type 4	012-0105	40.0 / 45.0kW	400V 3~	280x250x155mm

Technical data

Load rating (AC-1)

Protection class

Dimensions

Cable entries

Electrical connection

Colour

Type 1: 1x 32 A / 3x400 V~

Type 2: 1x 32 A / 3x400 V~

Type 3: 2x 32 A / 3x400 V~

Type 4: 2x 65 A / 3x400 V~

IP 66

280 mm x 250 mm x 155 mm (H x W x D)

Type 1 & 2: 2x M20 + 2x M25

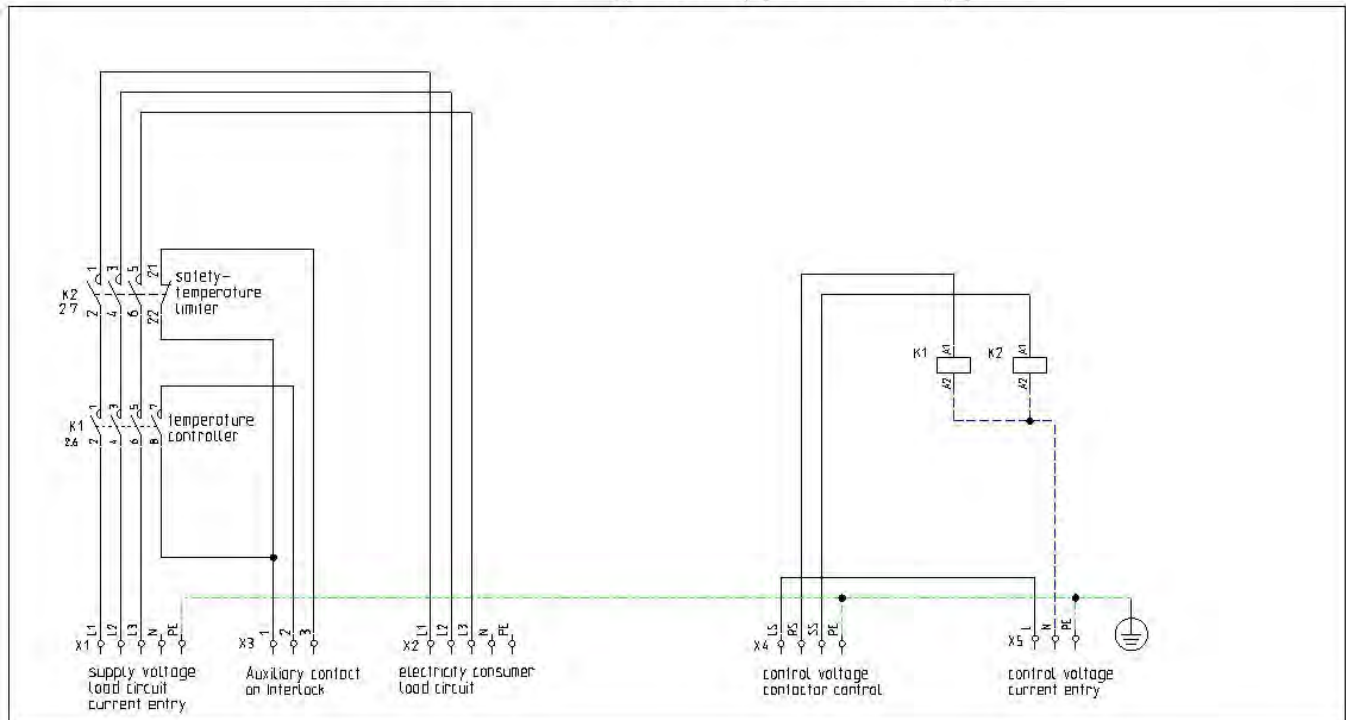
Type 3 & 4: 2x M20 + 4x M25

Spring-type terminals (max.10 mm²)

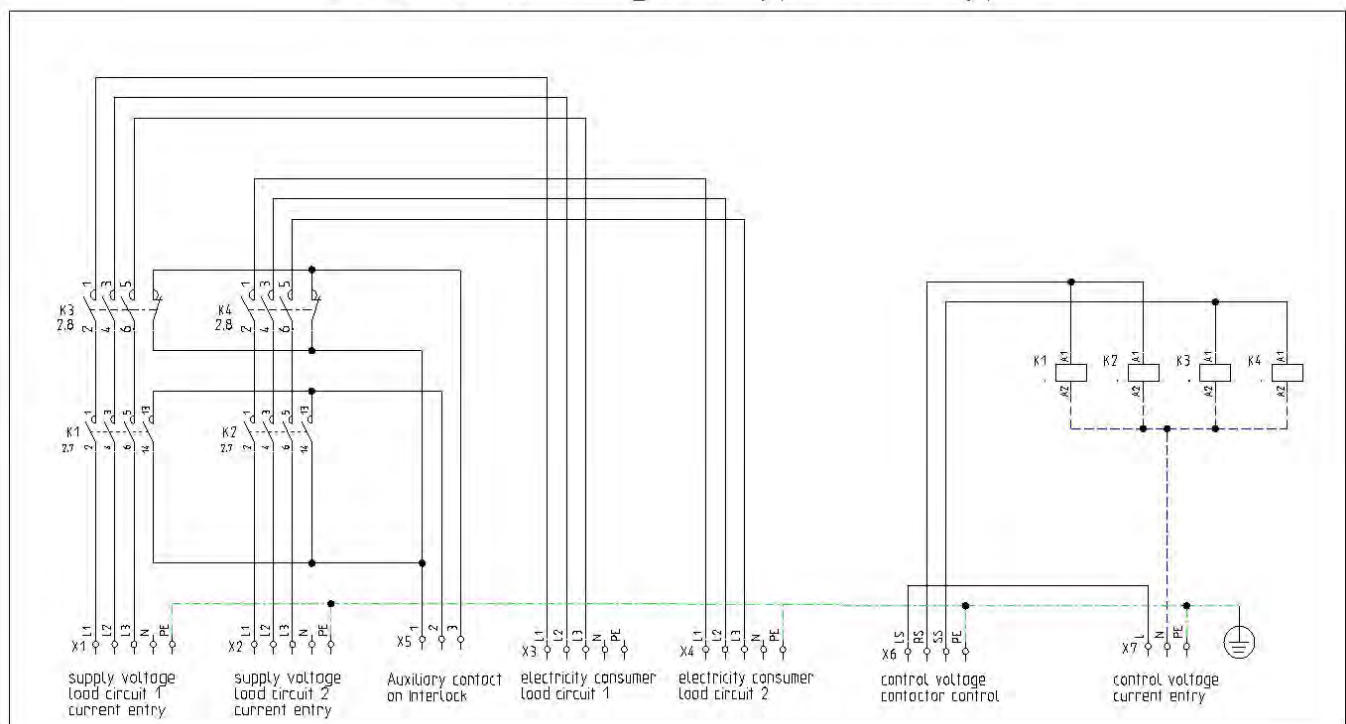
RAL 7035 light gray

Wiring diagram

External switching box type 1 and type 2



External switching box type 3 and type 4



ASKOFLOW

INSTANTANEOUS WATER HEATER



ASKOMA  we care
about energy

INSTANTANEOUS WATER HEATER

- For heating industrial and heating water



FEATURES OF ASKO_{FLOW}

- Compatible with all screw-in heaters of the **ASKOHEAT-E** and **ASKOHEAT-S** series, up to 7.5 kW
- Includes insulation
- Made from stainless steel V2A, suitable for drinking water

APPLICATION EXAMPLES

Auxiliary heating

- Frost protection for non-heated buildings

Auxiliary heating for solar power

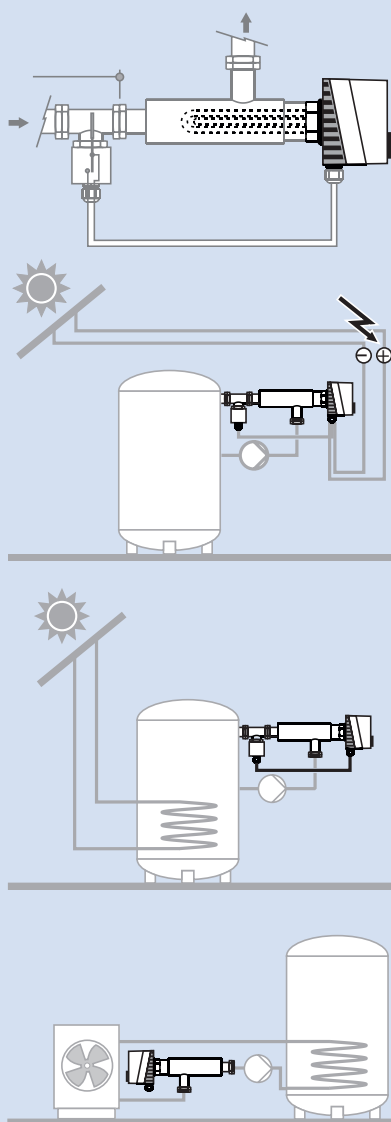
- Energy storage
- Optimised own power consumption

Auxiliary heating for solar heat

- Recovery in unfavourable weather conditions

Auxiliary heating for heat pump

- Recovery in the event of very low outdoor temperatures

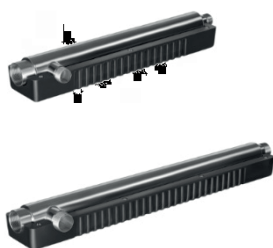


Technical alterations reserved

Instantaneous water heater

DLE...

including insulation, compatible with all screw-in heaters of series ASKOHEAT up to 7.5 kW



Application

- For heating up heating water, for installation in piping systems
- It is imperative that the problems related to "scaling" be assessed in the case of industrial water. This is location-dependent

Warning

- The instantaneous water heater may not be operated if:
- there is a possibility that the water in the instantaneous water heater is frozen
 - there is no water in the instantaneous water heater
 - there is no water flow through the instantaneous water heater

Features

- Min. inlet pressure 0.1 bar [10 kPa], max. inlet pressure 6.0 bar [600 kPa]
- The instantaneous water heater comprises stainless steel V2A [1.4301 / AISI 304]
- The insulation is made of PU solid foam IHS 3080 black and has a thickness of 20 mm
- Data sheets of the compatible **ASKOHEAT** devices:
 - 012-3201 / 012-3301 / 012-3401 / 012-3501 / 012-3701 / 012-3801

Type summary

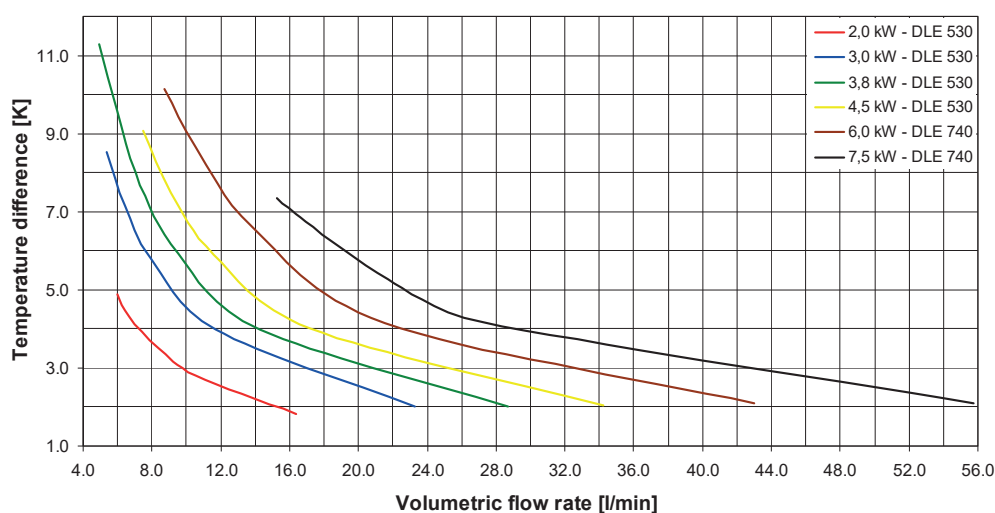
Type	Order-no.	Compatible ASKOHEAT	Installation length
DLE 530, 1½"	012-2533	All standard types up to 4.5 kW	530 mm
Water connection: R 1" external thread			
DLE 740, 1½"	012-2535	All standard types up to 7.5 kW	740 mm
Water connection: R 1¼" external thread			

Technical data

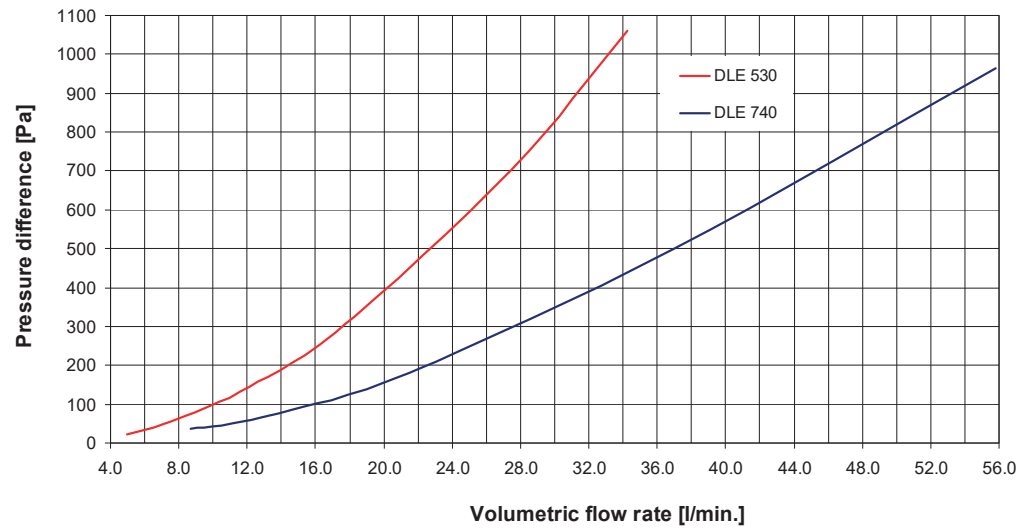
The following indications are valid for the above listed standard types. Due to the function, other types might show different data.

Application range	Liquids	Only for industrial or heating water
Specification	Instantaneous water heater material	V2A 1.4301
	Insulation material	PU solid foam IHS 3080 black
	Connection up to 4.5 kW	1" external thread
	Connection 6.0 & 7.5 kW	1¼" external thread

Hot-water capacity



Pressure loss



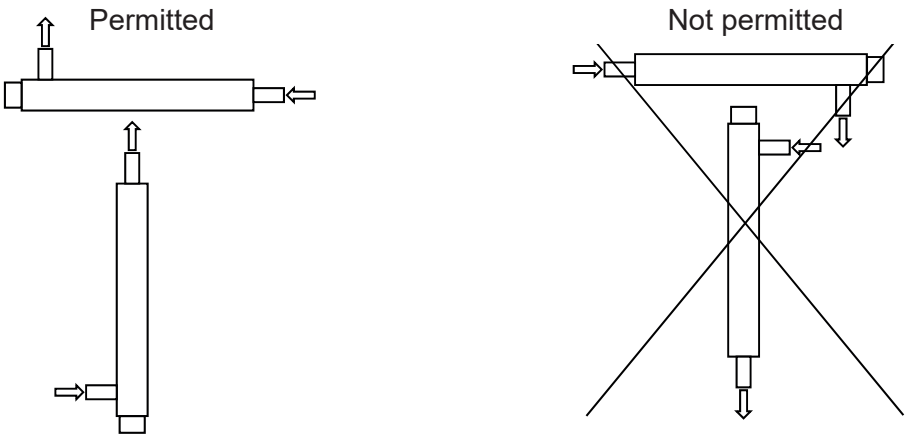
Fitting notes

- The water outlet must always be at the top so that any air can escape, see installation positions
- The instantaneous water heater must not drain independently
- In a piping system, the instantaneous water heater must be fitted at the bottom
- If the instantaneous water heater is installed in the area of combustible items, there must be adequately large spacings or base supports made of non-combustible materials must be fitted

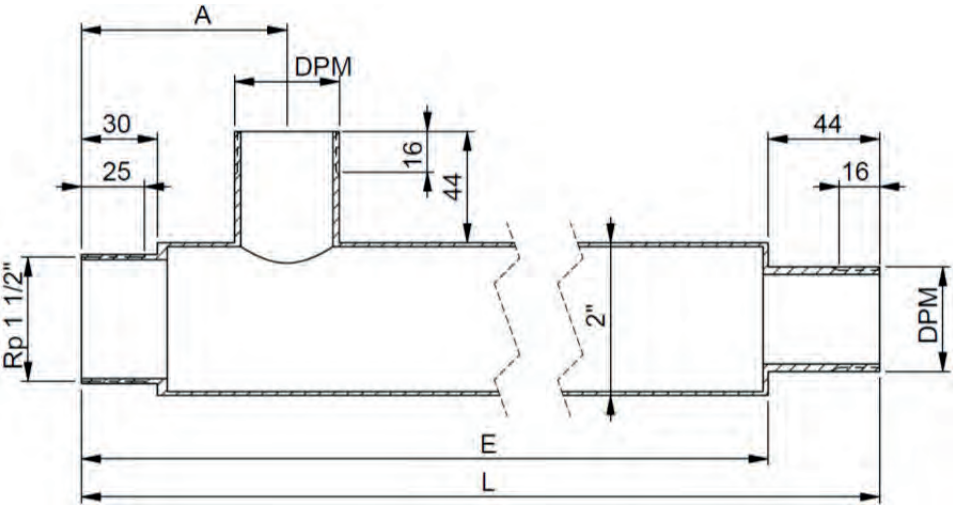
Minimum volumetric flow rate [l/min.]

Horizontal installation (layered construction):		Vertical installation:	
2.0 to 4.5 kW:	5 l/min.	2.0 to 4.5 kW:	2 l/min.
6.0 kW:	9 l/min.	6.0 kW:	3 l/min.
7.5 kW:	15 l/min.	7.5 kW:	4 l/min.

Installation positions flow direction

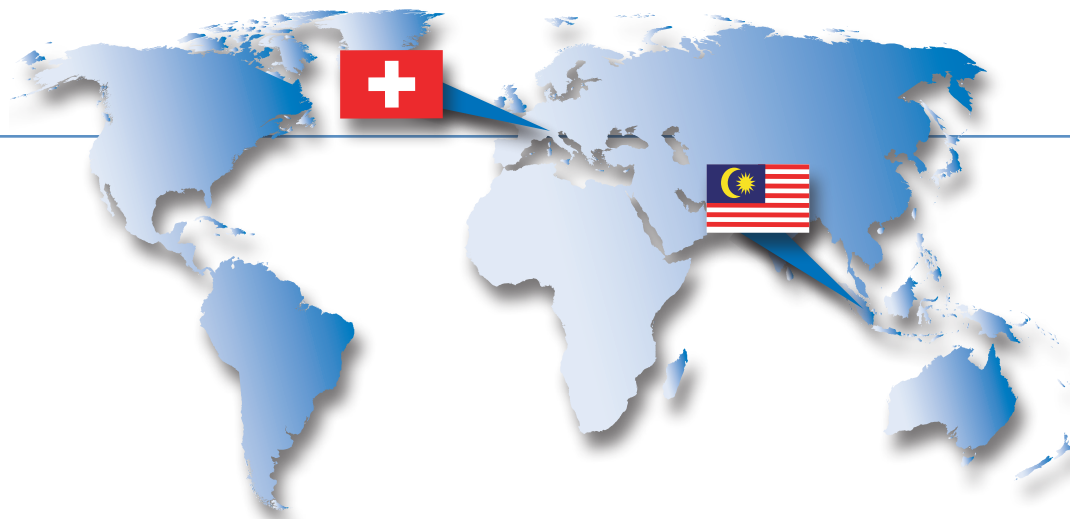


Dimension drawing



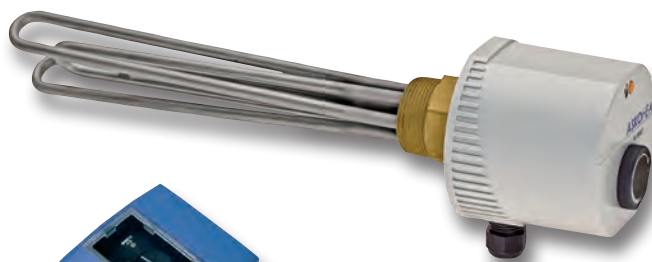
Type	DMP	L	E	A
DLE 530	R 1"	574	530	76.8 mm
DLE 740	R 1 1/4"	784	740	81.2 mm

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HEAT

ASKOHEAT



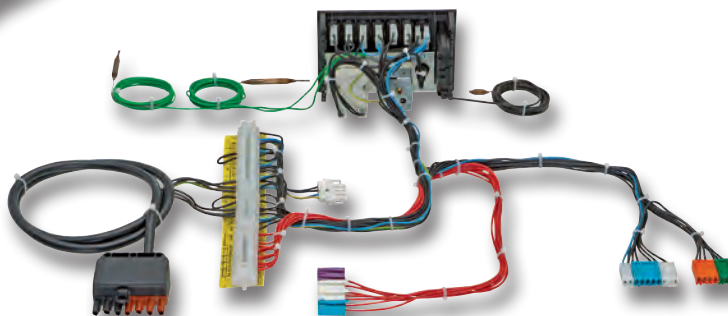
CONTROL

ASKOSTAT



CUSTOMISE

ASKOCONTROL



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