

Screw-in heater

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

PV-Own power consumption

- 1-stage activation with built-in contactor
- 230 V~ single phase use possible

**Application**

Auxiliary heating system of drinking 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 soldered into a 1½" conical brass nipple.
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 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

Drinkingwater
Cronifer 1.4529

Type	Order-no.	Power	Immersion length [EL]
AHR-B-B-1.0/230	012-3301.230	1.0kW; 230V~	300mm
AHR-B-B-1.5/230	012-3302.230	1.5kW; 230V~	300mm
AHR-B-B-2.0/230	012-3303.230	2.0kW; 230V~	300mm
AHR-B-B-2.5/230	012-3304.230	2.5kW; 230V~	350mm
AHR-B-B-3.0/230	012-3305.230	3.0kW; 230V~	400mm
AHR-B-B-3.8/230	012-3306.230	3.8kW; 230V~	450mm
AHR-B-B-4.5/230	012-3307.230	4.5kW; 230V~	500mm
AHR-H-B-1.0/230	012-3321.230	1.0kW; 230V~	300mm
AHR-H-B-1.5/230	012-3322.230	1.5kW; 230V~	300mm
AHR-H-B-2.0/230	012-3323.230	2.0kW; 230V~	300mm
AHR-H-B-2.5/230	012-3324.230	2.5kW; 230V~	350mm
AHR-H-B-3.0/230	012-3325.230	3.0kW; 230V~	400mm
AHR-H-B-3.8/230	012-3326.230	3.8kW; 230V~	450mm
AHR-H-B-4.5/230	012-3327.230	4.5kW; 230V~	500mm

Heatingwater
CN 18/8 1.4541

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 ± 7 K
 Time factor in water <45 s

Specification

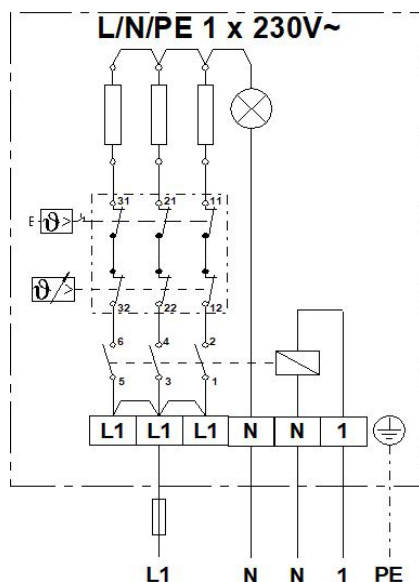
Fitting thread
Brass nipple
Heating tube drinking water
Heating tube heating water
Surface load
Electrical connection
Operating pressure
Housing cover
Housing base
Protection mode

R 1½" sonical
CuZn40Pb2
Cronifer 1.4529, Ø 8.2 mm
CN 18/8 1.4541, Ø 8.2 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/N/PE 1x 230 V~
1/N 1x 230 V~

Clamp 1

230 V~ connection hp release auxiliary heating

Dimension drawing

