

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



PV-Own power consumption

- 1-stage activation with built-in contactor
- Manual switching on/off
- 400V~ possible (different device series)



Application

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

Features

EHK The heating element is made of three U-shaped heating tubes, which are soldered into a 1 ½ " pressed brass nipple.

The not heated zone is 150 mm for all types.

TR Electromechanical temperature control acc. DIN 3440, not fail safe.

STB Electromechanical safety limit thermostat according DIN 3440, 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 °C.

- Time factor of sensing element according to DIN 3440
- Operation type TR: Type 2 B according (EN 60 730-1 /-2-9)
- Operation type STB: Type 2 BK according (EN 60 730-1 /-2-9)

Type summary

industrial water
Cronifer 1.4529

heater water
CN 18/8 1.4541

Type	Order-No.	Power	Immersion length [EL]
AHR-B-C-1.0	012-3401.230	1.00 / 0.66 / 0.33kW; 230V~	300 mm
AHR-B-C-1.5	012-3402.230	1.50 / 1.00 / 0.55kW; 230V~	300 mm
AHR-B-C-2.0	012-3403.230	2.00 / 1.33 / 0.66kW; 230V~	300 mm
AHR-B-C-2.5	012-3404.230	2.50 / 1.65 / 0.67kW; 230V~	300 mm
AHR-B-C-3.0	012-3405.230	3.00 / 2.00 / 1.00kW; 230V~	400 mm
AHR-B-C-3.8	012-3406.230	3.80 / 2.52 / 1.26kW; 230V~	450 mm
AHR-B-C-4.5	012-3407.230	4.50 / 3.00 / 1.50kW; 230V~	500 mm
AHR-H-C-1.0	012-3421.230	1.00 / 0.66 / 0.33kW; 230V~	300 mm
AHR-H-C-1.5	012-3422.230	1.50 / 1.00 / 0.55kW; 230V~	300 mm
AHR-H-C-2.0	012-3423.230	2.00 / 1.33 / 0.66kW; 230V~	300 mm
AHR-H-C-2.5	012-3424.230	2.50 / 1.65 / 0.67kW; 230V~	300 mm
AHR-H-C-3.0	012-3425.230	3.00 / 2.00 / 1.00kW; 230V~	400 mm
AHR-H-C-3.8	012-3426.230	3.80 / 2.52 / 1.26kW; 230V~	450 mm
AHR-H-C-4.5	012-3427.230	4.50 / 3.00 / 1.50kW; 230V~	500 mm

Technical data

The following indications are valid for the 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 (0-9K)
	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

Execution

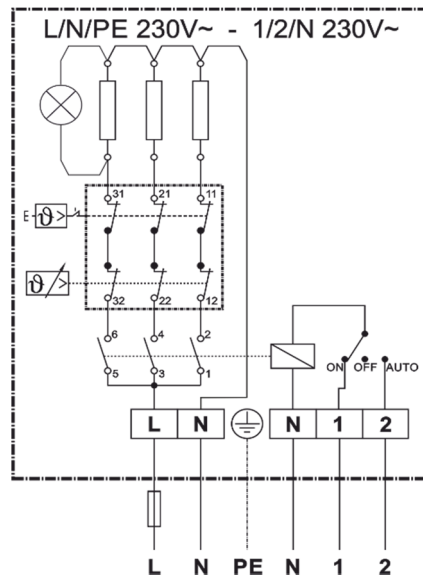
Fitting thread
Press brass nipple
Heating rod industrial water
Heating rod heater water
Surface load
Electrical connection
Operating pressure
Housing cover
Housing base
Protection mode

R 1 1/2 "
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 grey)
Polycarbonate, RAL 7016 (anthracite grey)
IP41 acc. EN60529

Fitting notes

The unit must be installed horizontally. The heating element must be covered entirely by the liquid. The circulation of the liquid shall not be inhibited.

Wiring diagram



Operating Voltage:

Power L1/L2/L3: 230V~
Control voltage 1/N - 2/N: 230V~

Clamp 1 = ON:

230V~ connector from power plant
or carry current

Clamp 2 = AUTO:

230V~ connector hp release auxiliary heating

Dimensions

