

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
- 230V~ up to 4.5kW 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

Type	Order-No.	Power	Immersion length [EL]
AHR-B-C-1.0	012-3401	1.0kW; 400V 3~	300 mm
AHR-B-C-1.5	012-3402	1.5kW; 400V 3~	300 mm
AHR-B-C-2.0	012-3403	2.0kW; 400V 3~	300 mm
AHR-B-C-2.5	012-3404	2.5kW; 400V 3~	300 mm
AHR-B-C-3.0	012-3405	3.0kW; 400V 3~	400 mm
AHR-B-C-3.8	012-3406	3.8kW; 400V 3~	450 mm
AHR-B-C-4.5	012-3407	4.5kW; 400V 3~	500 mm
AHR-B-C-6.0	012-3408	6.0kW; 400V 3~	600 mm
AHR-B-C-7.5	012-3409	7.5kW; 400V 3~	700 mm
AHR-B-C-9.0	012-3410	9.0kW; 400V 3~	750 mm
AHR-H-C-1.0	012-3421	1.0kW; 400V 3~	300 mm
AHR-H-C-1.5	012-3422	1.5kW; 400V 3~	300 mm
AHR-H-C-2.0	012-3423	2.0kW; 400V 3~	300 mm
AHR-H-C-2.5	012-3424	2.5kW; 400V 3~	300 mm
AHR-H-C-3.0	012-3425	3.0kW; 400V 3~	400 mm
AHR-H-C-3.8	012-3426	3.8kW; 400V 3~	450 mm
AHR-H-C-4.5	012-3427	4.5kW; 400V 3~	500 mm
AHR-H-C-6.0	012-3428	6.0kW; 400V 3~	600 mm
AHR-H-C-7.5	012-3429	7.5kW; 400V 3~	700 mm
AHR-H-C-9.0	012-3430	9.0kW; 400V 3~	750 mm

Heater water
CN 18/8 1.4541

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

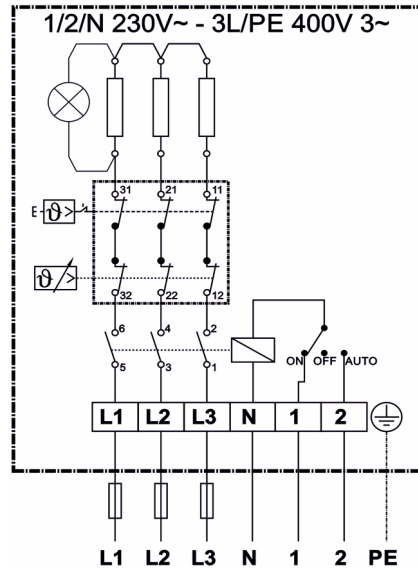
Execution

Fitting thread	R 1 1/2 "
Press brass nipple	CuZn40Pb2
Heating rod industrial water	Cronifer 1.4529, Ø 8.2 mm
Heating rod heater water	CN 18/8 1.4541, Ø 8.2 mm
Surface load	8 - 9 W/cm ²
Electrical connection	Spring clip
Operating pressure	10 bar max.
Housing cover	Polycarbonate, RAL 7035 (Light grey)
Housing base	Polycarbonate, RAL 7016 (anthracite grey)
Protection mode	IP41 acc. EN60259

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:

L1/L2/L3: 3x400VAC
1/N - 2/N: 230VAC

Clamp 1 = ON:

230VAC connector from power plant or carry current

Clamp 2 = AUTO:

230VAC connector hp release auxiliary heating

Dimensions

