

Gewässer **Umwelt** Schutz GmbH



# Accessories

- Product brochure with - HEI HER 3.0

  - Leaf protection grille - Level-free overflow

## Water - our most important resource

Since 2005, GUS Gewässer-Umwelt-Schutz GmbH has been offering comprehensive solutions with safety catchment systems in the refrigeration and air-conditioning technology sector to help you meet legal requirements.

Our qualified sales representatives are ready to help you throughout Germany, Belgium, the Netherlands, Luxembourg, the Czech Republic, Denmark, Poland, Austria, Switzerland and other European countries. want to see if we can help?

This brochure presents an overview of our accessories. Do you have your own idea and want to see if we can

#### help?

Get in touch with us. We look forward to hearing from you. We would be happy to discuss the best possible solution in a personal meeting with you directly on site.



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## HEITHER 3.0

A protector is generally resistant to sub-zero temperatures. The material can also withstand ice formation in the separator without damage. If the water contained in the protector during normal operation freezes, this does not impair the protector's functionality. The

necessary collection volume (and the functionality of the protector) is guaranteed in freezing rainwater and snow-fall even without heating.

#### **Freezing rainwater**

The functionality of the AUW/CUW Oil Protector and the GGW/AGW Glycol protector is still guaranteed, given the collection volume is still available. The GGW/AGW Glycol protector valve closes while the drain is blocked by ice so that oil and glycol are retained (even during thawing).

#### Snowfall

Snow only falls in the overhang area of the protector, not below the aggregate. The protector volume always takes into account a certain amount of precipitation / snow without limiting safety functionality. AUW/CUW Oil Protector and GGW/AGW Glycol Protector functionality is still guaranteed, as the necessary collection volume is still available.





#### Snowfall example





## HEITHER 3.0

#### What happens when using a heat pump?

At temperatures just below freezing, humidity is high, and water condenses on the heat pump fins, and freezes.

The defrost cycles flush this into the protector, where it freezes again.

Without heating, a layer of ice builds up, which can severely restrict the collection volume of the protector.

In this case, a full-surface heating system is the solution. In order to meet these requirements, we offer a system that records the temperature and water level in the protector in order to control the heating precisely and efficiently.

#### The modern way to thaw

Heating is only activated when the ice layer has built up so much condensation that it could affect the function of the protector. The ice thaws, and the excess water drains away. The heating then switches off. In addition, the control system has an isolated fault signal contact if water or ice accumulates to warn the operator. The smooth heating mats are installed underneath the protectors. This ensures an even distribution of heat. Alternatively, it can also be placed on the exterior walls.

Efficiency is of a particular importance for heat pumps. Therefore, the targeted and efficient use of electrical energy is extremely important.



## Description

### HEI HER 3.0



These antifreeze systems are ideally suited to protect AUW/CUW oil protectors and GGW/AGW glycol protectors from freezing. The combined temperature and water level thermostats detect both the outside temperature as well as the water level in the catchment tray, and switch the included heating element depending on the backwater level reached. If required, the operator can also pick up a fault and operating message. As per the circuit diagram, the **HEI** HER **3.0** is connected to the power supply with 230 Volt.

The silicone heating mats are positioned below or to the side of the protector, and connected to the **HEI** HER**3.0** as per the circuit diagram.

Properly installed, the functionality of the safety device is constantly monitored.

The**HEI**HER**3.0** is equipped with a rear-mounted mounting plate, with which it is fixed to the protector from the outside (as shown).



Due to the different construction heights of the protectors, the switch boxes are available in two designs.

10 - 60 **HEI** HER **3.0** is designed for protectors with a backsplash from 10 - 60 mm; 60 - 150 **HEI** HER **3.0** with a backsplash from 61 - 150 mm.

The mounting plate must be pushed onto the backsplash up to the lower stop collar.

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## **HEITHER 3.0 AND SILICONE HEATING MATS**

## HEI HER 3.0 (thermostat with level detection)

Operating voltage	230 V AC / 50 Hz
Protection	10 A
Dimensions	Var.1 (170x120x56 mm), Var.2 (260x120x56 mm)
Protection class	IP66
Temperature measurement	-30 °C+130 °C ±2 °C
Relay outputs	Heating: 230 V / 10 A max. Fault: Isolated, 230 V AC / 2 A max. Switch point temp: on: 3 °C; off: 4 °C
Climate conditions	according to DIN EN 60204-1 (05-2010) Abient temperature operation: -20 +60 °C Transport / storage: -25+60 °C
Power consumption	2.400 watts

Silicon heating mat	
area output	200 watts (AUW - / CUW oil protector 1 - 3) or 400 watts (AUW - / CUW oil protector 4 - 10)
Heating surfac	200 x 300 mm (other custom sizes on request)
Lowest ambient temperatur	- 60 °C
Heat distribution	Uniformly over entire heating surface
Certification labels	VDE, CE, SEV, UL
Protection class	IP65
Limiter	85 °C
Compressive strength	30 N/cm <sup>2</sup>
Thickness	3,0 mm
Power tolerance	+/- 10 %
Insulation	Silicon-glassfibre fabric
Dielectric strength	12 kV/mm - Resistant to aging and weathering - food safe - very good chemical compatibility - Environmentally friendly

## Leaf protection grille

Special applications require the protectors to be modified. For example, if the installation site is in an area covered by trees, we recommend our leaf protection grilles. These keep the foliage away from the drain during autumn and maintain its functionality.

Leaf protection grilles are available for all protectors.

We would be happy to advise you on your individual project needs to help you select the size that's just right for you.

## Leaf protection grille (CUW version)





#### Leaf protection grille (AUW version)







## **Protector holder**

This protector holder has been developed for installing a protector below a mounting system.

The fixing claws are placed on the vertical struts and fixed with screws. The brackets are available in two designs, for 40 mm and 50 mm vertical struts. The matching protector is manufactured according to requirements and inserted laterally under the mounting level. This system allows the refrigeration and air conditioning units to be screwed directly onto the mounting system.

The protector can be retrofitted at any time





# Level-free overflow for algae formation reduction

The level-free tray connection is cleverly used without a light liquid separator in the protector, and prevents backwater at the overflows between two tray elements through a near-level overflow.

The superimposed material creates an ideal sealing surface with minimal gradation in material thickness. The level-free overflow consists of two ground-level overflows with a width of 150 mm per tray connection, each fixed with two welding studs and washers and nuts.

The shape of the connection ensures that the included sealant is applied evenly and over a large area, and that a secure and reliable connection is guaranteed - even with high temperature fluctuations.



Side view





Top view



# **Optional Accessories**

Description		
Pedestals for placing machine above possible liquid line and backsplash of protector		
Pressure sensor for second circuit		
SMS fault message module in switch box (SMS, fax or email)		
Weather protection covers		
Ball valve		
GES sensor (Glycol recognition system)	Draufsicht	











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