



Subject to modifications.

GEA Centrifuge Water Saving Unit



Technical data | For cooling motor, hood and solids catcher, using ice water or glycol – new machine version

The GEA Centrifuge Water Saving Unit operates with two separate water circuits. Cooling water is pumped in a closed circuit through the motor, hood and solids catcher. This water is kept at temperature by means of a heat exchanger and ice water or glycol mixture. Venting and water replenishment are performed automatically as required. Furthermore, the unit switches to conventional cooling if the coolant (ice water or glycol mixture) is not available or in case of a malfunction. The compact Water Saving Unit has the dimensions of 380 mm x 380 mm x 495 mm (l x w x h). All line connections are installed on the rear side.

Required for the installation

- Installation area for the Water Saving Unit of 380 mm x 380 mm x 495 mm (l x w x h)
- Ice water or glycol mixture
- Fresh water for make-up
- Max. 5 m distance between the unit and centrifuge

Resource efficient solution

As one of our most resource-efficient solutions, our GEA Centrifuge Water Saving Unit carries the Add Better label.*

The GEA Centrifuge Water Saving Unit enables a transfer of emitted heat from the operating separator via recirculating cooling water to glycol mixture or iced water. This reduces the cooling water consumption by 99.9% compared to conventional cooling of the separator, resulting in savings of more than 1.3 million liters of water per year and per separator.

*The Add Better label relates to the serial product GEA Centrifuge Water Saving Unit, released in September 2022.

The comparison refers to the conventional supply of cooling water to motor, hood and catcher during the operation of a separator.

Main components of the unit

Item	Description
Measuring equipment	IFM
Plate heat exchanger	Zilmet
Valves	IMI Buschjost
Recirculation pump	Wilo
Piping material	Stainless steel (threaded connections)

Operating data of the system

Electrical connection data		
Operating voltage	[V]	230 ± 10% normal
	[Hz]	50 ± 5% normal
Control voltage	[V]	230 AC
	[V]	24 DC
Connection voltage, valves	[V]	24 DC
Type of protection	IP	54

Pre-conditions

	[bar]	[l/min]	[°C]
Cooling medium (Iced water or glycol mixture)	min. 2 max. 3	min. 15	min. -10 max. 5
Water supply back feed (constant)	min. 2 max. 3	min. 7 max. 13	> 10 < 30
System venting	No back pressure	–	–

Dimensioning data, pipeline requirements at battery limit

Water supply back feed	[inch]	¾
System venting	[inch]	¾
Cooling medium feed and return	[inch]	¾

Ambient conditions / design temperatures

Location		
Design temperatures for inside installation	[°C]	min. 5 max. 35