

SolabChiller

Heat driven cooling

The SolabChiller uses heat to supply energy efficient cooling. During the summer dwellings are kept on a pleasant temperature level with the system. The heat can be derived from district heating, but also from solar collectors or cogeneration. Temperature of the heat ranges from 60 to 95 °C. The SolabCascade applies adsorption technology to generate chilled water.

Energy efficient cooling

The SolabCool technology applies heat that often is wasted. This leads to energy efficient cooling that reduces CO₂ emission. Compared to conventional air conditioning the SolabChiller reduces electricity used consumption up to 75%. Besides that water functions as coolant and only environmentally save materials are applied in the system.

For houses

Insulation of houses has improved, good during the winter, but in the summer time this fuels the need for cooling. The SolabChiller is specially developed to maintain a comfortable temperature, also during the summer. It is an integrated system, with a compact design and is placed outside.



Newly built houses have improved insulation.

Cooling power

The required cooling capacity depends on the size and the construction type of the dwelling. Providing a maximum cooling power of 5 kW the SolabChiller is suitable for most dwellings. Also for small offices the SolabChiller offers an energy efficient cooling solution. For larger buildings the SolabCascade is the best choice.

Easy connection

The SolabChiller can be connected to the (existing) heat distribution system in the dwelling such as floor heating or radiators. This way all rooms can be kept on a comfortable temperature level using just one cooling unit. The SolabCascade has a long lifetime with limited maintenance.

Smart operation

Both hydraulics and heat rejection unit are integrated in the SolabChiller. Because the system is equipped with a smart control unit, operation by the end user is easy. The desired temperature can be set with a room thermostat.

SolabChiller*	Nominal conditions**
Cooling power	4,5 kW
Driving temperature	72 °C
COP _{thermal}	0,6
Volume flow cooling circuit	1000 l/h

SolabChiller	Operational range
Cooling power	3 – 5 kW
Driving temperature	60 – 95 °C
Chilled water temperature	12 – 21 °C
COP _{thermal}	0,5 - 0,65

SolabChiller	Dimensions
Size	130 x 122 x 80 cm (h x w x d)
Weight	260 kg (with integrated heat rejection unit)
Electrical power drawn	0,60 kW (including pumps and heat rejection unit)

* Can be ordered from end of May 2014.

** Water based system.