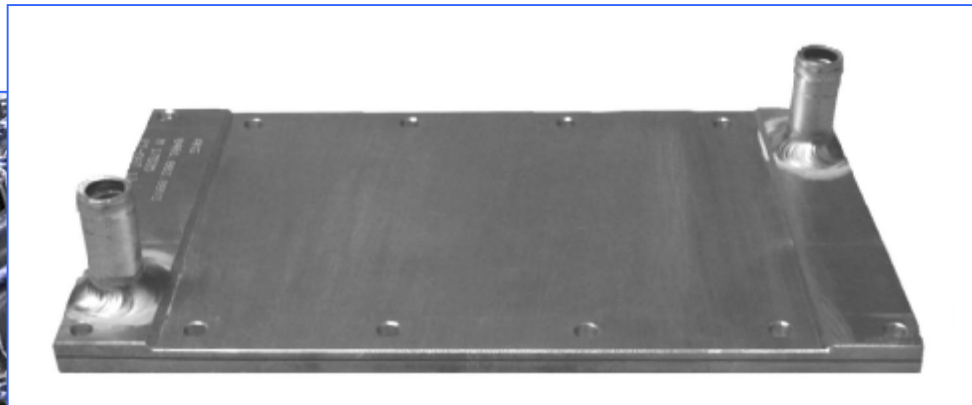
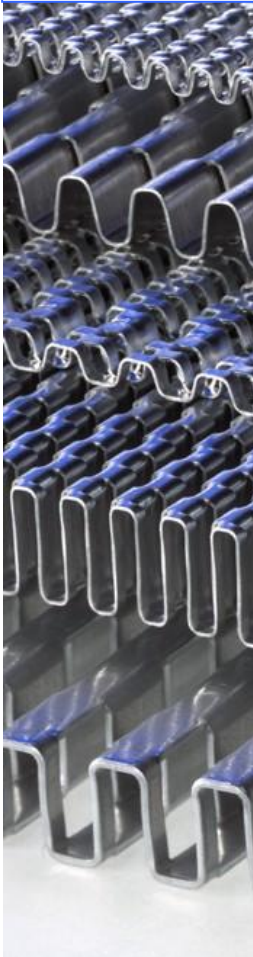


Product Information

High-performance standard liquid cooler for IGBT components



AKG is the cooling expert in many fields. These commercially innovative high-performance cooling units were developed for the cooling of IGBT components with large power loss.

Standardisation ensures that minimum thermal resistance at low cost is achieved. The principle of construction can also be used for cold plates with several IGBTs.

If the customer requires we can supply a complete cooling system, including closed circuit cooling.

AKG has the solution for every cooling problem!

Product features:

- Robustness due to the brazed design
- Excellent heat transfer properties with low pressure drops
- Through the use of turbulators the heat transfer is an order of magnitude better than that of traditional cold plates with simple tubes or grooves
- Minimal thermal resistance between electronic elements and coolers due to milled cooling surfaces
- Extra high power density
- Cooling of dust-sensitive components through liquid circuit (no dust due to the sucked-in cooling air)

Technical Data

High-performance standard liquid cooler for IGBT components

Design:

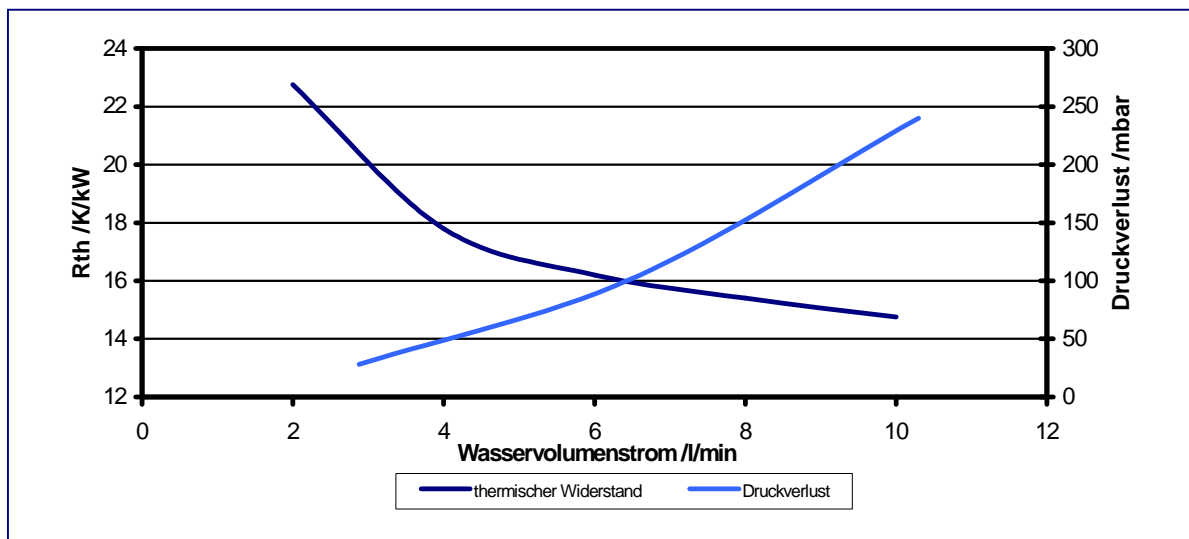
The coolers consist of two cooling plates and liquid laminations, which are brazed together. The cooling plates are accurately milled, which produces a very flat surface with very low roughness.

Material: Aluminium
Cooling medium: Water/Glycol, Oil

Function:

The IGBT components, which can be mounted on one side or on both sides of the liquid cooler, dissipate their heat via the cooling plate and water laminations to the cooling liquid.

Thermal resistance using a liquid cooler as an example



The temperature for determining the thermal resistance was measured on the baseplate of the IGBT, directly below the semiconductor. The displayed values therefore also comprise the thermal resistance of baseplate – cooling element.

Applications:

AKG liquid coolers are suitable for use in

- Control cabinets
- Wind generators
- Transmission systems
- Rail vehicles
- Block heating/power plant

- Electric forklifts
- Applications in the frequency conversion area

For the cooling of IGBT components which produce a large amount of heat on very small surfaces.