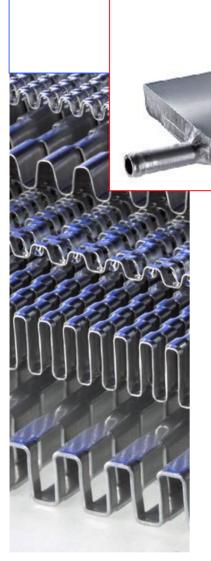


# **Product Information**

## High-performance cold plate for electronic components





AKG is the expert for cooling in many fields. The brazed high-performance cold plates for power electronics offer technical and economic advantages due to their very high cooling capacity and a good power/weight ratio at low cost. With the option of combining different high-performance turbulators the coolers can be optimized for every application with respect to pressure drops and cooling capacity and can be offered in almost all sizes and performance classes.

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 accurate 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-capacity cold plate for electronic components

#### Design:

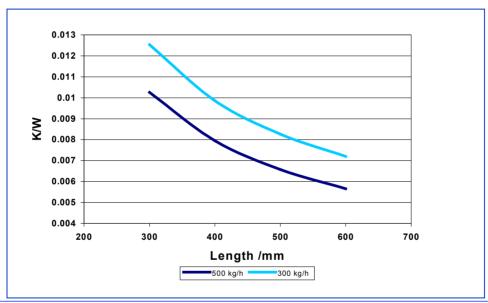
The coolers consist of a cooling plate and water turbulators which are brazed together. The cooling plate is accurately milled which produces a very flat surface with very low roughness.

Material: Aluminium Cooling medium: Water/glycol, oil

#### **Function:**

The electronic components are mounted on the cooling plate and dissipate their heat via the cooling plate and the water turbulator to the coolant.

# Thermal resistance using the cold plate as an example (80 mm x 19.5mm)



## **Applications:**

AKG liquid coolers are suitable for use in:

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

- Electric forklifts and
- Applications in the frequency conversion area

For the cooling of power electronic components which produce a large amount of heat on very small surfaces as well as for dust-sensitive electronic elements.