

## HIGH PERFORMANCE Thermal Management

Q-CHILL Internal Fin Technology

### MQT1613 Liquid Cooled Cold Plate

The MQT1613 is a liquid cooled cold plate specifically designed for challenging power density applications requiring a compact and light-weight design. The advanced design of the MQT1613 allows for efficient heat transfer between the cold plate contact area and the power module base plate.

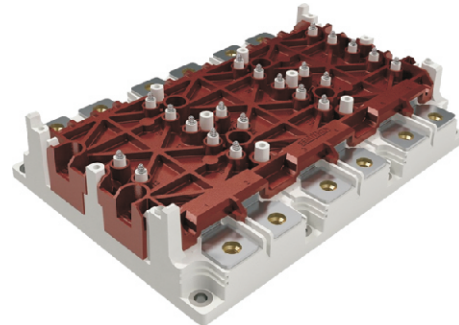


#### Applications

- Electric Vehicle Motor Drives
- Wind Turbines
- Solar Inverters
- Industrial Motor Controls
- Power Converters
- Induction Heaters
- Rail Traction Systems
- Auxiliary Vehicle Systems
- High Performance Motor Sport

#### Compatible Power Module Package

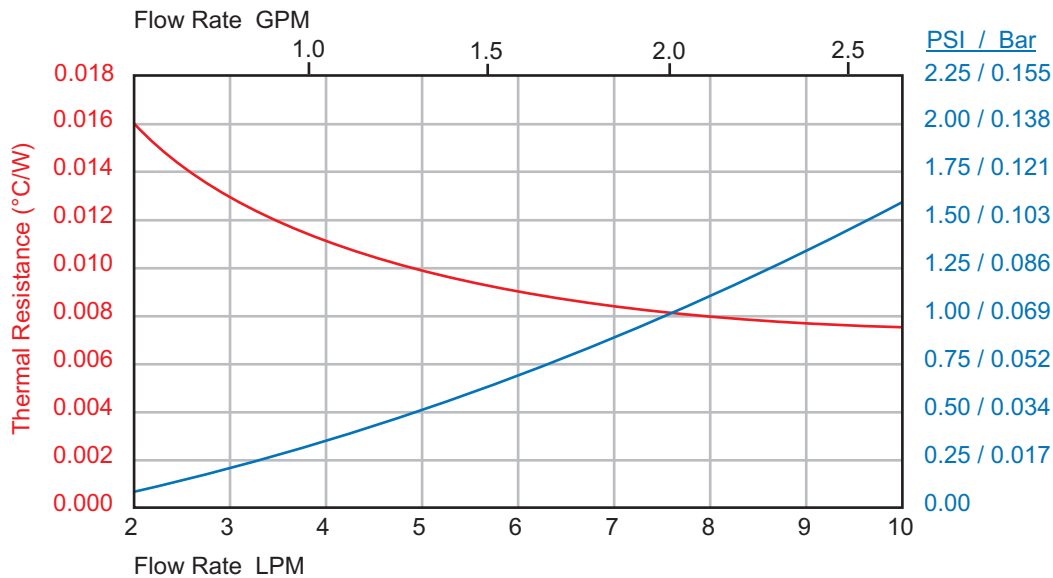
- SEMIKRON SKiM® 63



#### Features

- 3000 Watt heat rejection @ 8 LPM with a 25°C temperature rise from the fluid inlet to the maximum cold plate temperature
- Patent pending Q-CHILL internal fin technology provides for a more uniform top cold plate surface temperature
- Low pressure drop for reduced system cost (1.1 PSI @ 8 LPM)
- Low cost proven aluminum solution with performance comparable to copper based solutions
- Compact and light (1.0 kg)
- Compatible with industry accepted coolants
- Metallurgical seal for robustness and a high pressure rating

## PERFORMANCE CURVES



Cooling Fluid:  
50% Ethylene Glycol  
50% Water

Thermal Resistance values use the difference between the Maximum Cold Plate Temperature and the Fluid Inlet Temperature

Pressure Drop Includes  
1/4 - 18 NPT Hose Barb Fitting

Pressure Drop

## MECHANICAL OUTLINE

