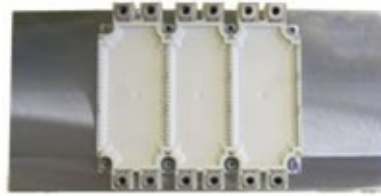




### TURBO BLISTER LIQUID COLD PLATES FOR POWER APPLICATIONS

Aavid Thermalloy Turbo Blister liquid cold plates are designed for customers seeking a cost effective high volume solution for challenging power density applications. Turbo Blister plates increase the surface area in contact with the cooling fluid by using fin structures in the flow path thereby increasing thermal transfer performance. Unlike milled base plate designs, Turbo Blister cold plates allow device mounting holes to be placed anywhere in the base plate without risk of interference with coolant channels.



### CRITICAL APPLICATION NEED:

- *Cost/performance value*
- *Leak free operation*
- *Thermal performance*

### FEATURES AND BENEFITS:

- *Blister design makes the solution suitable for high volume cost sensitive applications*
- *Brazed construction results in a rugged leak free solution*
- *Blister design puts a large area of fluid in contact with the base plate resulting in more uniform heat transfer*

### ORDERING INFORMATION:

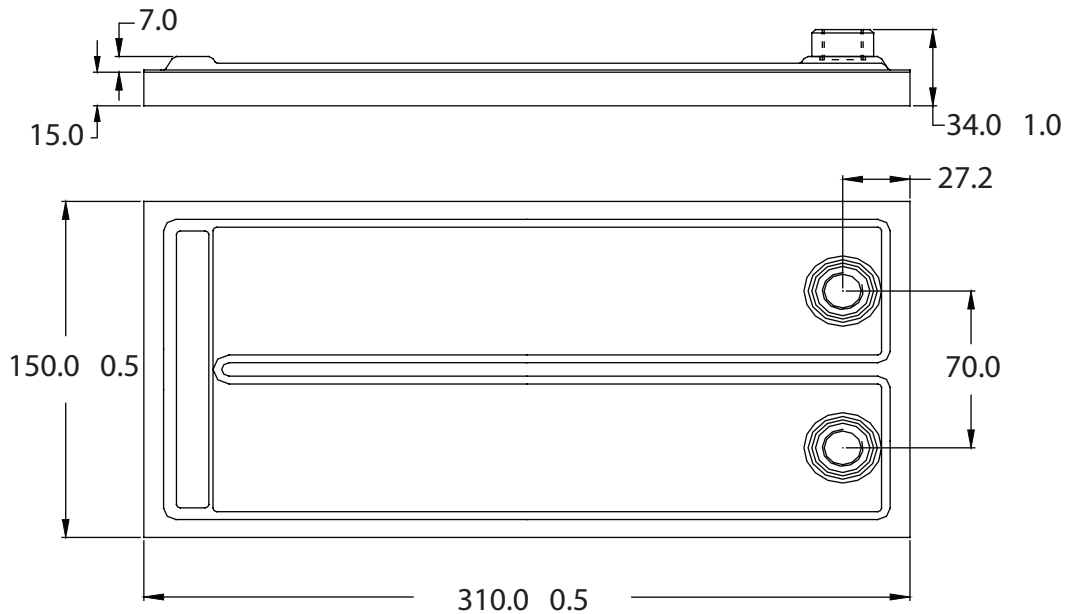
<b>Part Number</b>	<b>Finish</b>	<b>Figure</b>
409932	Unfinished	1

Custom Configurations: See Figure 4 for design guidelines.  
Contact Aavid Thermalloy Application Engineering for assistance.



**MECHANICAL OUTLINE:**

Figure 1



Dimensions as shown are mm (inches)

**SPECIFICATIONS:**

- Plate: Extrusion, aluminum 6060-T5
- Cover Plate: Aluminium 1050A
- Standard Fittings: 3/8 inch gas female fitting
- Inlet and outlet: Top side
- Joints: Brazed
- Standard Finish: Sandblast and wash
- Weight: 1.9Kgs
- Maximum operating pressure: 2.5 bar

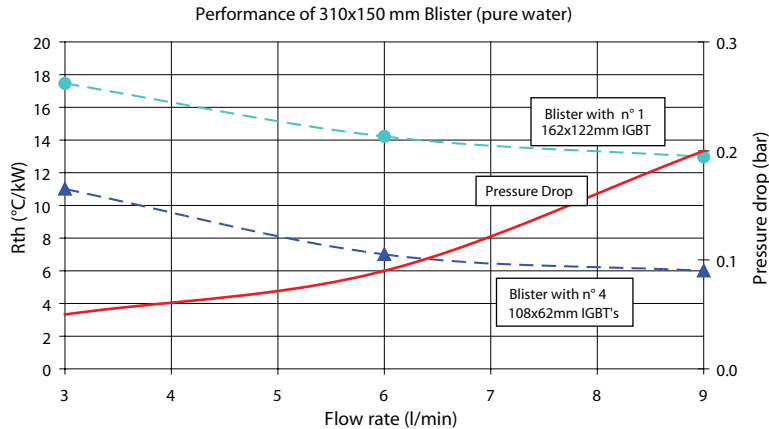
**AVAILABLE OPTIONS:**

- Finishes: Contact Applications Engineering
- Fittings: Custom fittings available
- Length/Width: Custom lengths available

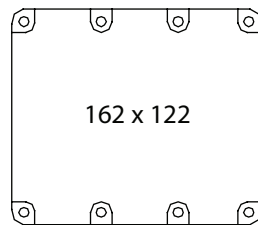
Contact Aavid Thermalloy Applications Engineering Department when ordering custom configurations.



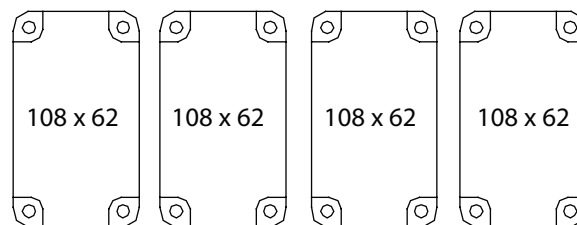
**PERFORMANCE:**



Note 1. Pure Water is used for testing only



310x150mm Blister with  
1x162x122mm device



310x150mm Blister with 4 x 108x62mm device

**LIQUID COLD PLATE TESTING**

All LCP parts are 100% leakage and pressure drop tested during production in accordance with European Norm PED 97-23.

- Leakage test with air from 50 to 6000 mbar (6 bar) with  $\pm 0.5\%$  accuracy
- Measurement of flow rate, Pressure Drop and graph construction 0 - 10 bar. Nominal flow max 47 l/min  $\pm 0.5\%$  accuracy

Additionally further tests may be carried out subject to customer requirements as follows;

- Leakage test with air up to 14 bar with  $\pm 0.4\%$  accuracy
- Water tests;
  - Stress test 1 - 100 bar ( $\pm 0.2\%$  accuracy)
  - Static pressure with closed circuit 1 - 100 bar ( $\pm 0.2\%$  accuracy)
  - Pulsing pressure with closed circuit 1 - 100 bar ( $\pm 0.2\%$  accuracy, 1 Hz frequency)
  - Pulsing pressure test with open circuit 0.5 - 10 bar ( $\pm 0.2\%$  accuracy, 1 Hz frequency)



**AAVID  
THERMALLOY**

**Turbo Blister  
Liquid Cold Plates**

**RoHS   
Compliant**

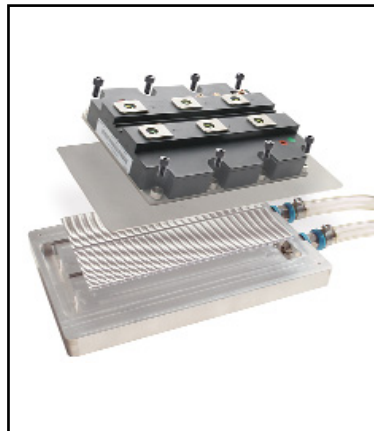
**OTHER AAVID THERMALLOY LIQUID COOLING PRODUCTS**



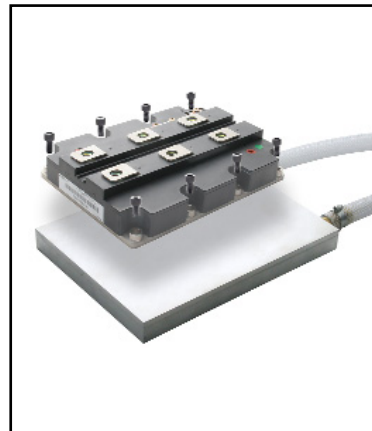
**Turbo Tube LCP**



**HiContact LCP**



**Turbo Fin**



**Turbo Flow LCP**

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