

About Adaptive Cooler Assemblies

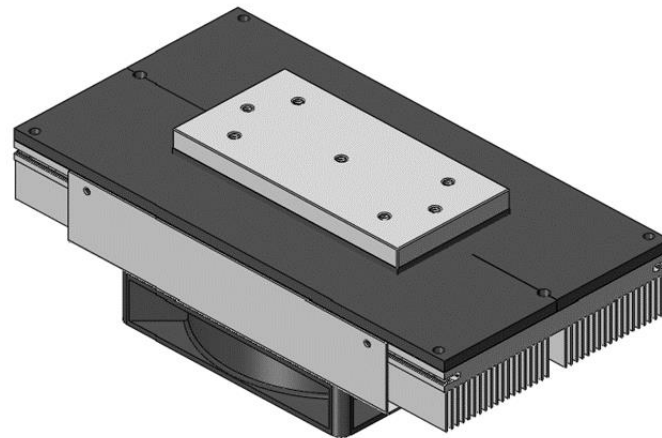
Adaptive thermoelectric cooling assemblies come in direct to air, air to air and liquid to air variations comprising thermoelectric cooler module/s, heat exchangers, fan/s and thermal interfaces which are optimised for effective heat transfer.

European Thermodynamics are specialists in thermal management and thermoelectrics, developing the high performance thermoelectrics products and materials of the future.

The Direct-to-Air Thermoelectric cooling assemblies are compact devices that can be used to cool down objects through conduction. The objects to be cooled down are mounted onto the metallic plate at the 'cold side' of the assembly from where heat is pumped by Peltier thermoelectric modules and dissipated to the environment through the use of bespoke heat sinks and highly efficient DC fans at the hot side of the assemblies. The thermoelectric modules, whose reliability and maintenance-free operation has been proven by the years, are carefully selected for each assembly to ensure the best cooling performance and minimise power consumption.

Benefits

- Easy to install
- High reliability
- ROHS/REACH compliant
- Low noise
- Precise temperature control



Applications

- Incubator
- Battery compartment
- Various types of cabinets

Data

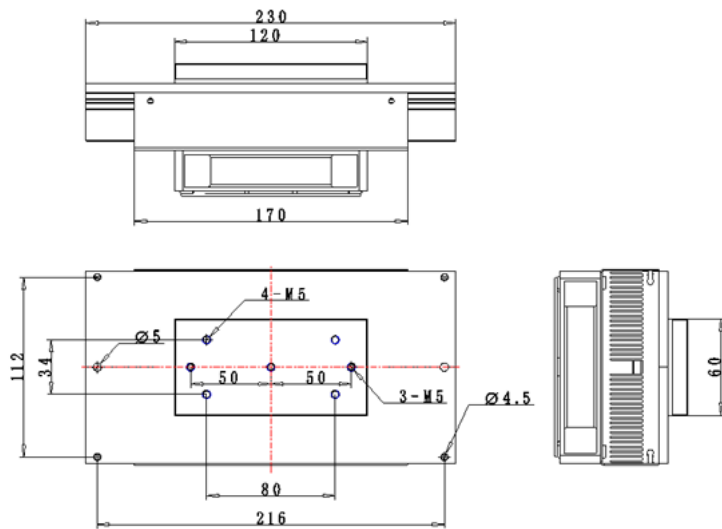
Maximum cooling power	[W]	75
Nominal voltage	[V]	12
Maximum voltage	[V]	15
Maximum current	[A]	7.2
Power input	[W]	86
Operating temperature	[°C]	-10 to 55
Weight	[kg]	1.74
Performance tolerance	[%]	10
L10 of fans at 40°C	[hrs]	Hot side: 70500

Recommended for use

- JUNIOR PID PWM Thermal Controller - accurate to 0.5° (ADJ-48-450-UR) or
- CYCLO Servo PWM Thermal Controller - accurate to 1° (ADC-48-450-U)



Diagram & Dimensions



Performance graph

