

# Thermoelectric Cooler Assembly

## Air To Air

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### Description

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. In Air-to-Air cooling assemblies heat is pumped from one side of the thermoelectric assembly (cold side) using Peltier thermoelectric modules and is dissipated from the other (hot side) of the assembly to the environment through the use of bespoke heat sinks and highly efficient DC axial fans. The thermoelectric modules, whose reliability and maintenance-free operation have been well proven, are carefully selected for each assembly in order to ensure the best cooling performance and to minimise power consumption.

Air-to-air assemblies are available in a variety of cooling power outputs with a range of supply voltages.

### Features

- Easy to install
- High reliability
- Low noise
- Precise temperature control

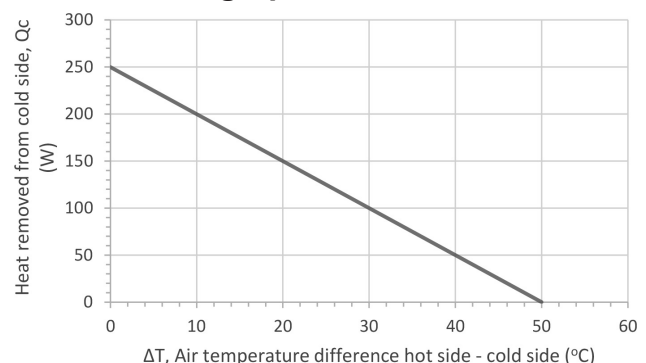
### Applications

- Incubator
- Battery compartment
- Various types of cabinets

### Specification

Maximum cooling power	: 250W
Nominal voltage	: 48V
Maximum voltage	: 52.8V
Maximum current	: 7.5A
Power input	: 290W
Operating temperature	: -20°C to +55°C
Weight	: 7.1kg
Performance tolerance	: 10%
L10 of fans at 40°C	: Hot side:90000hrs Cold side:70412hrs
TEC hot side	: 80°C
temperature protection	
Hot side IP code	: IP54
Fan	: Dual ball bearing fan with UL approval

### Performance graph



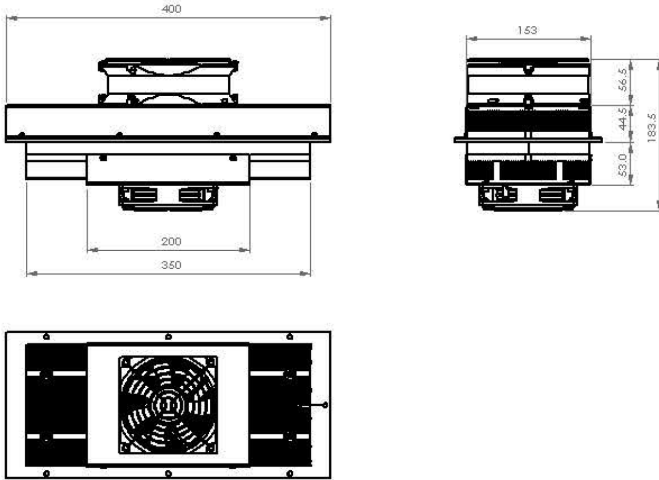
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# Thermoelectric Cooler Assembly Air To Air



## Diagram



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Thermoelectric Cooler, Adaptive Valve, Air To Air, 250W, 48V DC	MP-AR-AR-250-48-ADV

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