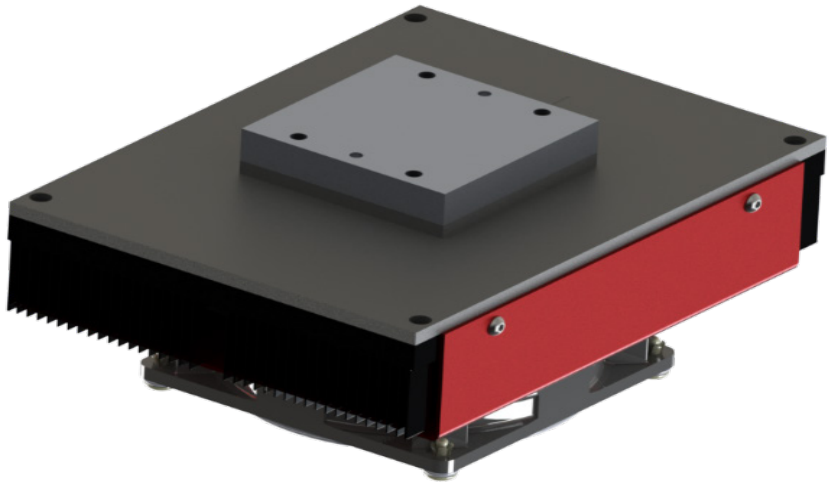
DT-AR-045-24

Thermoelectric assembly



Data

Maximum cooling power (W)	47.9
Nominal voltage (V)	24
Maximum voltage (V)	30
Rated current (A)	2.9
Power input (W)	58
Operating temperature (°C)	-10 to 50
Weight (kg)	1.2
Performance tolerance (%)	±10
L10 of fans at 40°C (hrs)	40k (hot side)

Applications

- Electronics' cabinets
- Medical instrumentation
- Analytical diagnostics
- Food and beverage cooling
- Laser systems' cooling

Features

- Reliable
- Compact design
- Excellent temperature control
- DC operation (24V nominal input voltage)
- Thermoelectric modules with high Coefficient of Performance (COP)
- RoHS compliant

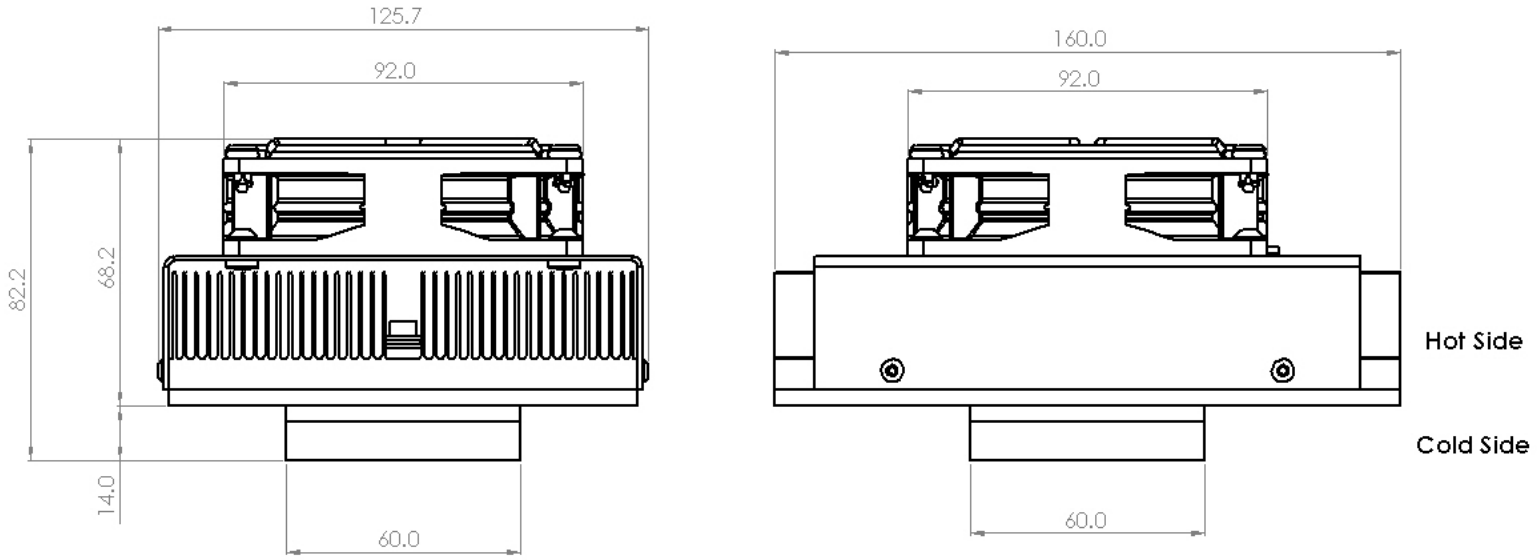
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DT-AR-045-24

Thermoelectric assembly

Technical drawing

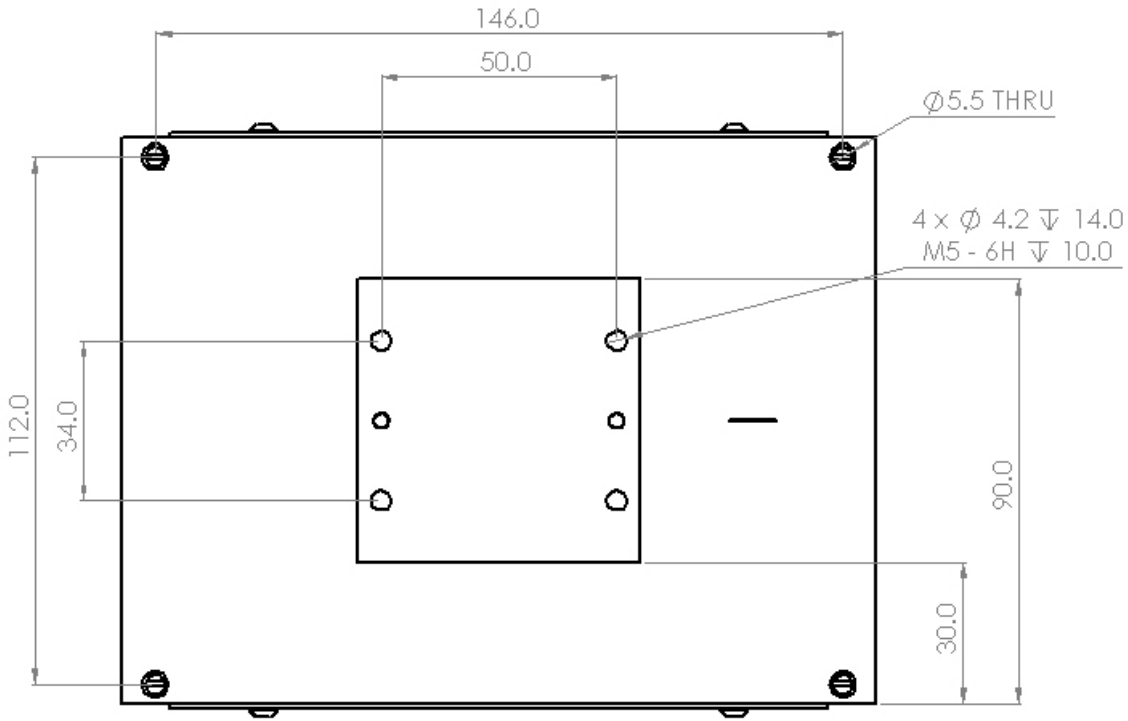


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DT-AR-045-24
Thermoelectric assembly

Location and dimensions of mounting holes



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DT-AR-045-24

Thermoelectric assembly

Details

Direct-to-Air Thermoelectric cooling assemblies are compact devices that can be used to cool down objects through forced convection. 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 has been well proven, are carefully selected for each assembly in order to ensure the best cooling performance and to minimise power consumption.

Direct-to-air assemblies are available in a variety of cooling power outputs with a range of supply voltages. The DT-AR-045 thermoelectric assembly is available in 12V or 24V supply voltage. This is indicated by the part number (DT-AR-045-12 or DT-AR-045-24).

Bespoke solutions/configurations are offered, as well as moisture protection options although minimum order quantities will apply.

Notes

1. All dimensions are in mm.
2. Thermally conductive interface material is applied on the surface of the thermoelectric modules for more efficient heat transfer.
3. The assembly, with its current configuration is for indoor use only. An outdoor variant is available on request.

All assembly specifications are subject to change without prior notice.

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