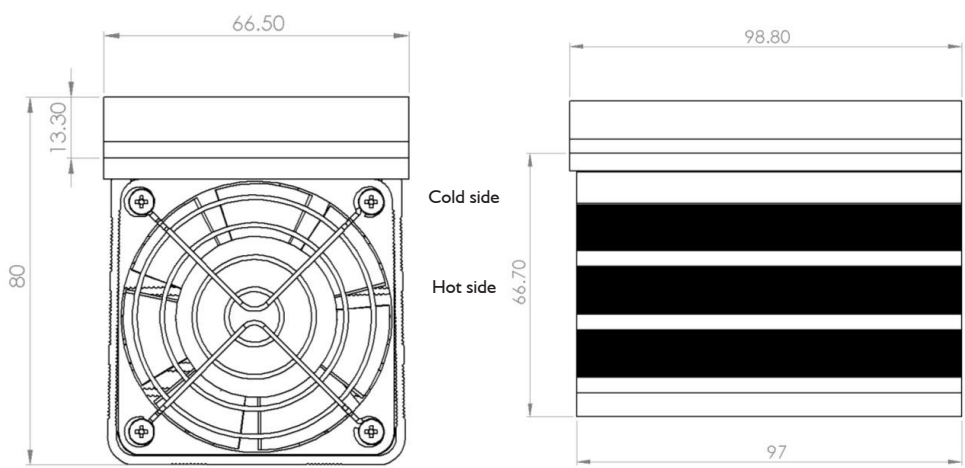


DT-AR-024-12

DIRECT TO AIR THERMOELECTRIC ASSEMBLY

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.



Notes:

1. All dimensions are in mm.
2. Thermally conductive interface material is applied on thermoelectric modules' surfaces for more efficient heat transfer.
3. The assembly, with its current configuration, is for indoor use only.

Features

- Reliability
- Compact design
- Excellent Control over Temperature
- DC operation (12V nominal voltage input)
- Thermoelectric modules with high Coefficient of Performance (COP)
- RoHS compliant

Applications

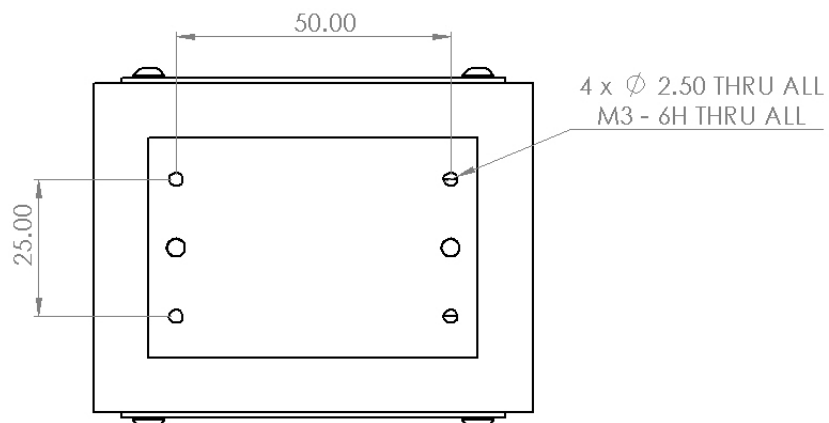
Electronics' Cabinets, Medical Instrumentation, Analytical Diagnostics, Industrial Automation, Food and Beverage Cooling, Laser Systems' Cooling.

CHARACTERISTICS

| | | |
|-----------------------|-------|------------|
| Maximum Cooling Power | [W] | 20.4 |
| Nominal Voltage | [V] | 12 |
| Maximum Voltage | [V] | 15 |
| Nominal Current | [A] | 2.83 |
| Start-up Current | [A] | 4.025 |
| Power Input | [W] | 33.96 |
| Operating Temperature | [°C] | -10 to +44 |
| Weight | [KG] | 0.56 |
| Performance Tolerance | [%] | ± 10 |
| L10 of fans at 40°C | [hrs] | 19150 |

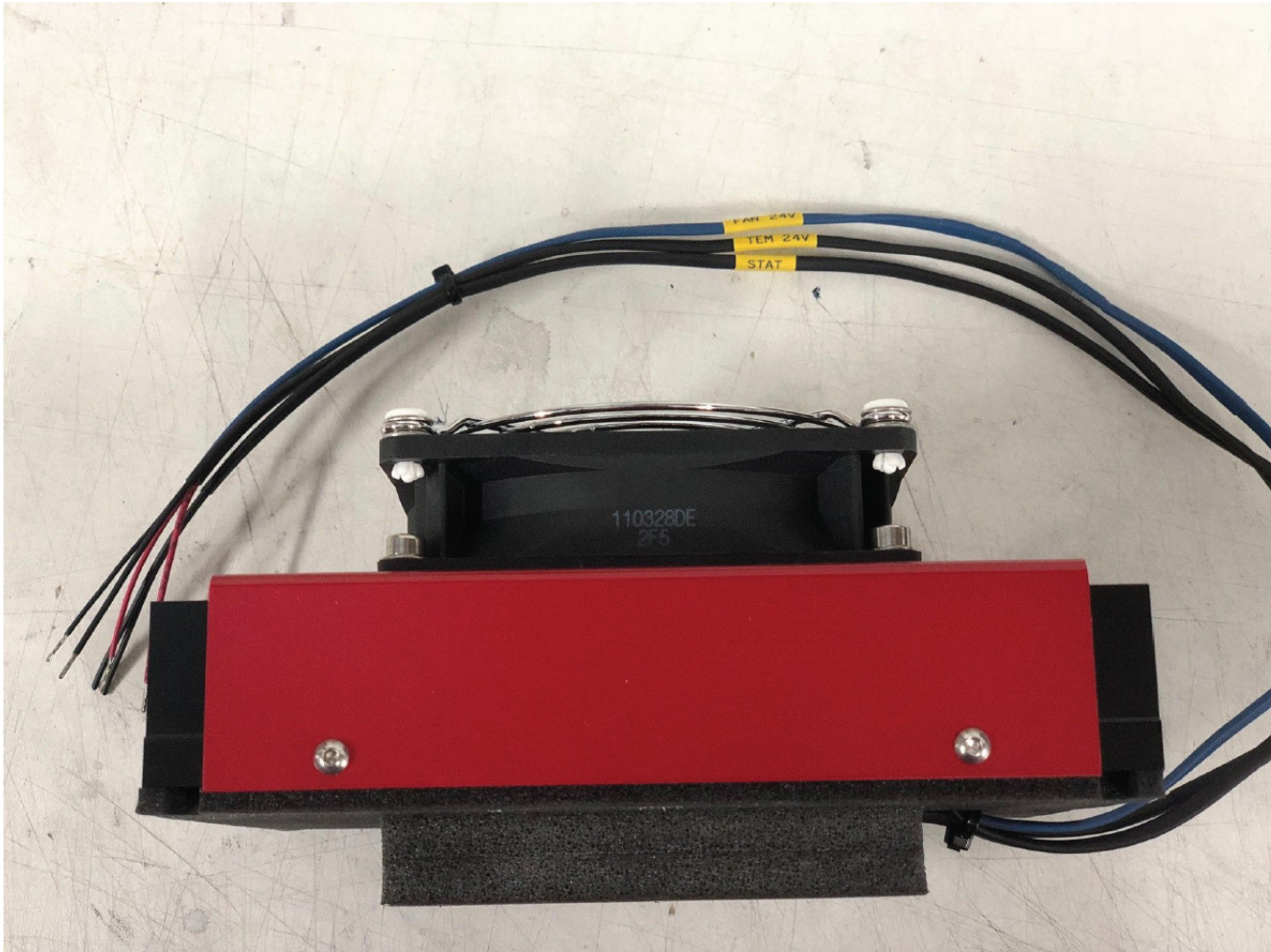
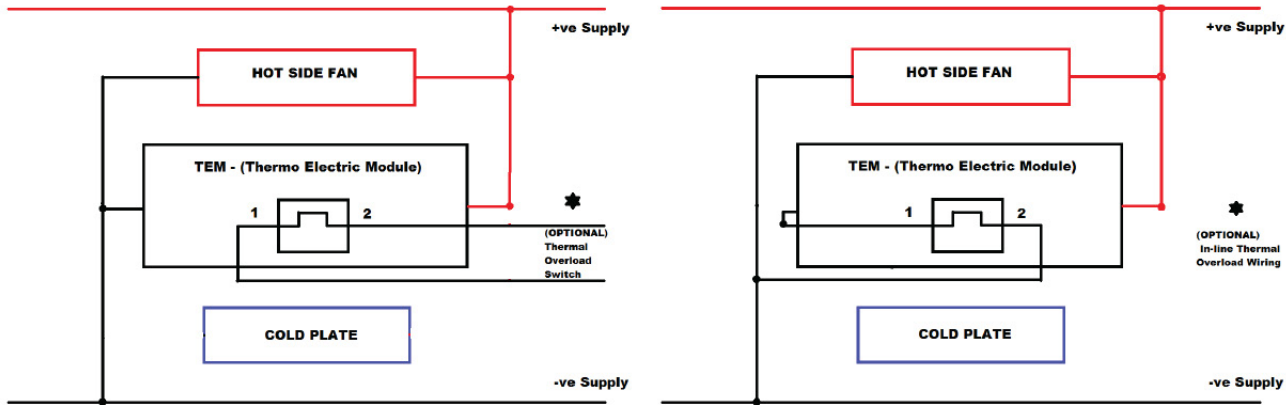
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Location and dimensions of mounting holes



DT-AR-024-12

Direct to Air Thermoelectric Assembly Wiring Diagram



*OPTIONAL: Thermal Overload Switch (If fitted)
 Can be configured as an In-Line circuit break or as an auxiliary control device.