

# DA PowerCool Series DA-024-12-02

Americas: +1.919.597.7300 Europe: +46.31.420530 Asia: +86.755.2714.1166 ets.sales@lairdtech.com www.lairdtech.com

# Thermoelectric Assembly

The DA PowerCool Series is a Direct-to-Air thermoelectric assembly (TEA) that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling objects via conduction. Heat is absorbed through a cold plate and dissipated thru a high density heat exchanger equipped with an air ducted shroud and brand name fan. The thermoelectric modules are custom designed to achieve a high coefficient of performance (COP) to minimize power consumption. This product series is available in a wide range of cooling capacities and voltages. Custom configurations and moisture protection options are available, however, MOQ applies.

## **FEATURES**

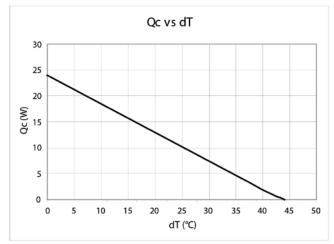
- Compact design
- Precise temperature control
- Reliable solid-state operation
- DC operation
- RoHS compliant

## **APPLICATIONS**

- Analytical instrumentation
- Medical diagnostics
- Photonics laser systems
- Industrial instrumentation
- Food and beverage cooling

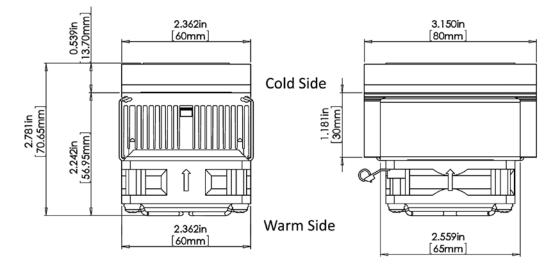
| SPECIFICATIONS             |           |  |
|----------------------------|-----------|--|
| Cooling Power Qcmax (W)    | 24        |  |
| Running Current (A)        | 2.4       |  |
| Startup Current (A)        | 2.8       |  |
| Nominal Voltage (V)        | 12        |  |
| Max Voltage (V)            | 15        |  |
| Power Input (W)            | 29        |  |
| Operating Temperature (°C) | -10 to 48 |  |
| Weight (kg)                | 0.3       |  |
| MTBF (fans - hrs)          | 50,000    |  |
| Performance Tolerance      | ±10%      |  |

# **PERFORMANCE CURVE**

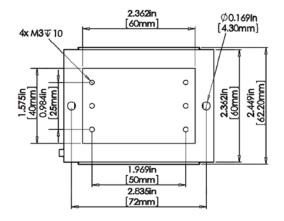




# **ISOMETRIC DRAWINGS**



#### **MOUNTING HOLE LOCATION**



# WIRING SCHEMATIC

| Elec       | trical connections                                |
|------------|---|
| TEN<br>Fan | 1+ : Pink<br>1- : Green<br>+ : Purple<br>- : Blue |

# **NOTES**

For indoor use only Thermally conductive grease enclosed

#### LAIRD-ETS-DA-024-12-02-DATA-SHEET-100616

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