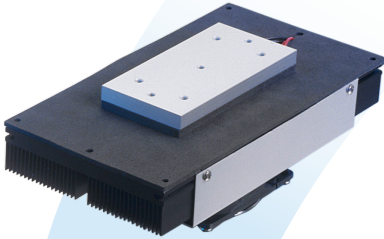


# DA PowerCool Series, DA-075-12-02

## Thermoelectric Assembly



### POWERCOOL SERIES DIRECT-TO-AIR 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 through 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

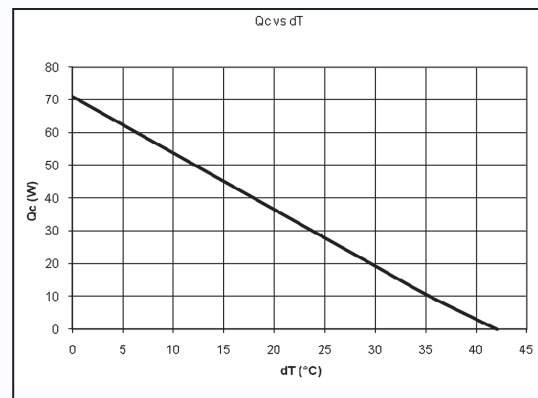
#### APPLICATIONS

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

#### Specifications

Cooling Power $Q_{cmax}$ (W)	71
Running Current (A)	7.2
Startup Current (A)	8.1
Nominal Voltage (V)	12
Max Voltage (V)	15
Power Input (W)	86
Operating Temperature (°C)	-10 to 47
Weight (kg)	1.7
MTBF (fans – hrs)	50,000
Performance Tolerance	±10%

#### PERFORMANCE CURVE



global solutions: local support™

Americas: +1.888.246.9050

Europe: +46.31.704.67.57

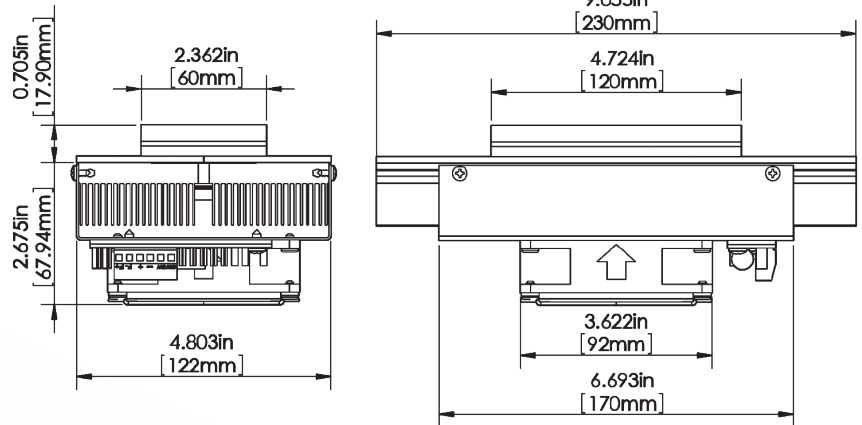
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CLV-customerservice@lairdtech.com

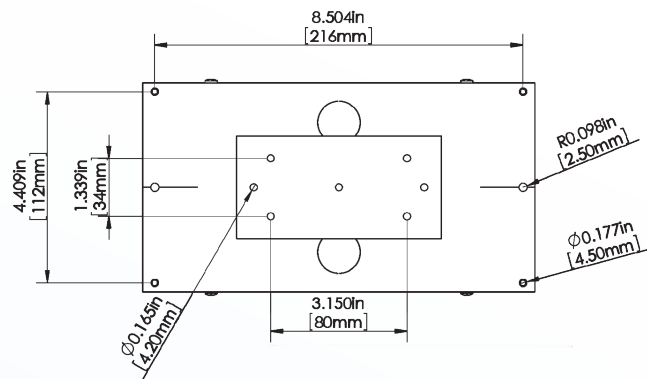
[www.lairdtech.com/thermal](http://www.lairdtech.com/thermal)

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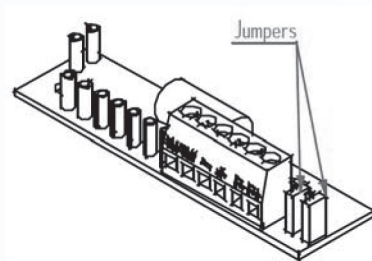
## ISOMETRIC DRAWINGS



## MOUNTING HOLE LOCATION



## WIRING SCHEMATIC



### Electrical connections:

- "+" : +TEM
- "-" : -TEM
- "F+" : +Fan(s)
- "F-" : -Fan(s)

To use single supply:  
Lift the jumpers and rotate 90° to short-cut the pin pairs.  
Connect the unit to "+" & "-".

**Warning: Single supply not applicable in heating mode or with PWM-regulation.**

## NOTES

- For indoor use only
- Thermally Conductive Grease enclosed
- Overheating Thermostat: 75°C ± 5°C on hot side heat sink surface

THR-DS-DA-075-12-02 0610

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