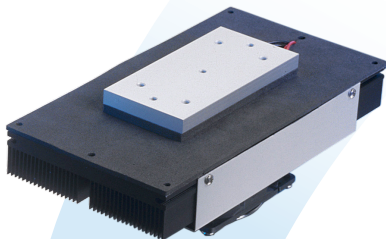


# DA Cascade Series, DAC-035-12-02 Thermoelectric Assembly



## CASCADE SERIES DIRECT-TO-AIR THERMOELECTRIC ASSEMBLY

The DA Cascade Series is an Air to Air thermoelectric assembly (TEA) that 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 multistage cascades to achieve a high temperature differential, which allows this series to reach colder temperatures than standard DA product offerings. 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

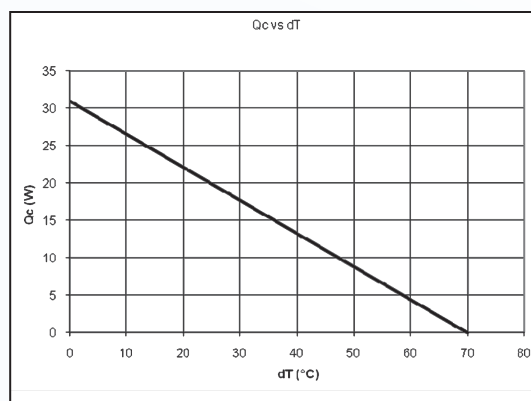
### APPLICATIONS

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

### Specifications

Cooling Power $Q_{cmax}$ (W)	31
Running Current (A)	4.8
Startup Current (A)	5.5
Nominal Voltage (V)	12
Max Voltage (V)	14
Power Input (W)	58
Operating Temperature (°C)	-10 to 54
Weight (kg)	1.2
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

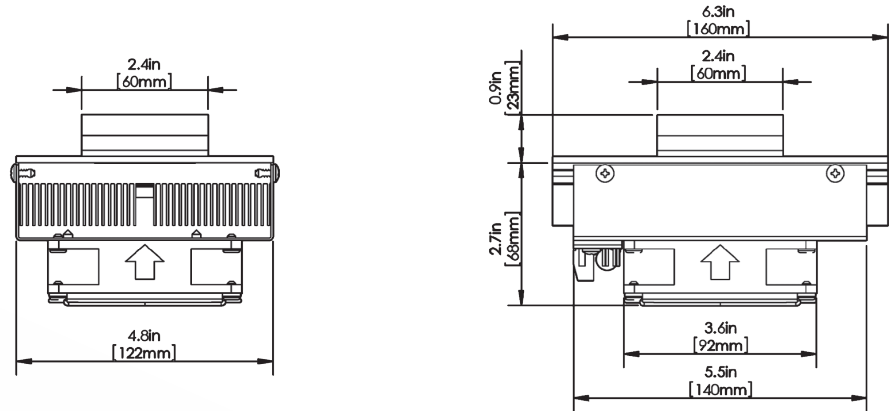
Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com

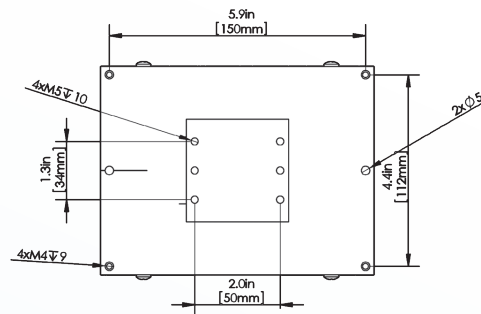
[www.lairdtech.com/thermal](http://www.lairdtech.com/thermal)

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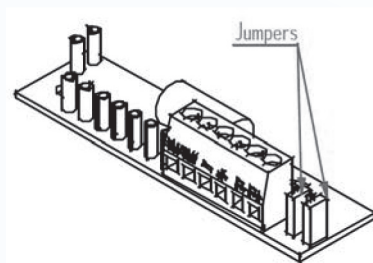
## ISOMETRIC DRAWINGS



## 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-DAC-035-12-02 0610

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