



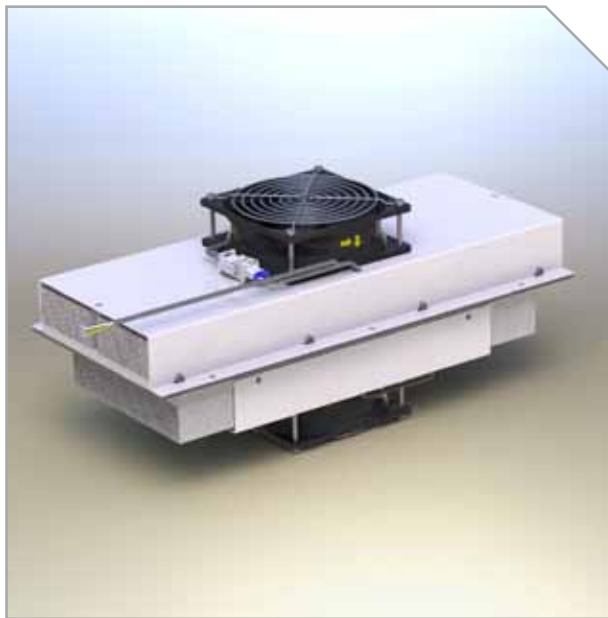
marlow
industries, inc.



Climatherm™

Thermoelectric

250W AIR-TO-AIR ASSEMBLY



CAPACITIES: 250W @ 0 / 135W @ 20°C ΔT
VOLTAGE: 24V or 48V option
COP > 0.7

FEATURES:

- 5.5 kg total weight
- IP55 Rated Fans
- Industry-leading performance
- Fits standard 200W package dimensions
- Hot- or Cold-side wiring
- Fan option for high performance, or low

Climatherm™ Air-to-Air Assemblies offer a durable solution to protect electronics under extreme conditions. Designed with the industry's highest cooling performance (250W) in a lightweight, compact package, the Climatherm™ series ensures long lifetime and cost efficiency for electronic enclosures, battery cases, refrigerated cabinets and other industrial assemblies.

At the core, Climatherm™ assemblies use Marlow's high performance thermoelectric technology, optimized for power consumption and reliability. The assembly's patent-pending construction offers heat transfer efficiency through an advanced heat sink design. The solid-state construction eliminates the need for CFC refrigerants and offers enhanced durability under rugged environmental conditions. The assembly's fans also come equipped with an IP55 rating.

Customers may leverage Marlow's manufacturing facilities in the US and Vietnam to meet their volume and cost targets. All facilities are ISO 9001 certified, as well as meet the requirements for Automotive TS16949, Telcordia, Space Qualification and other industry-specific needs.

Standard Climatherm™ assemblies are currently available online at Marlow.com. Custom configurations are available; please contact customerservice@marlow.com.

TESTED COOLING POWER

PRODUCT SPECIFICATIONS

ST4054, RoHS 2002/95/EC COMPLIANT ASSEMBLY

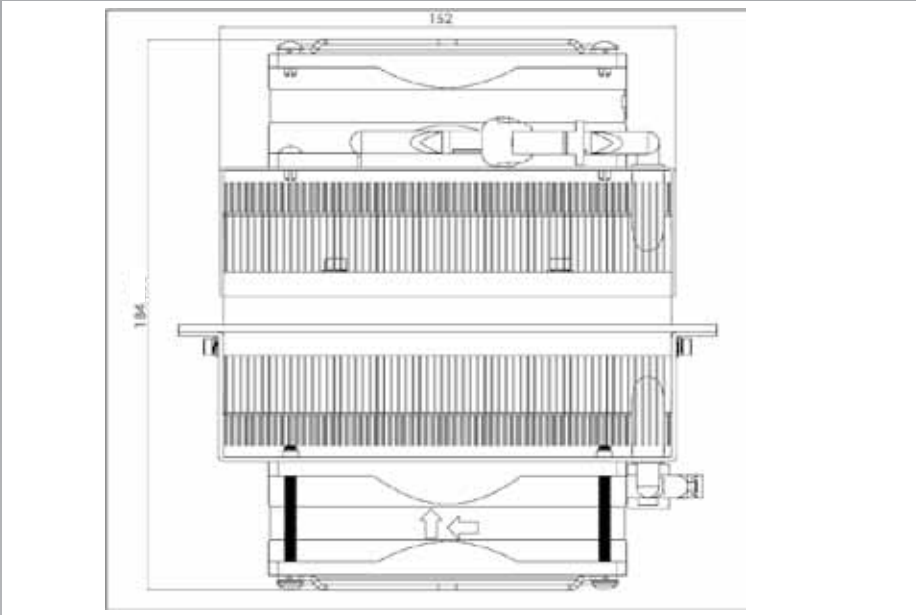
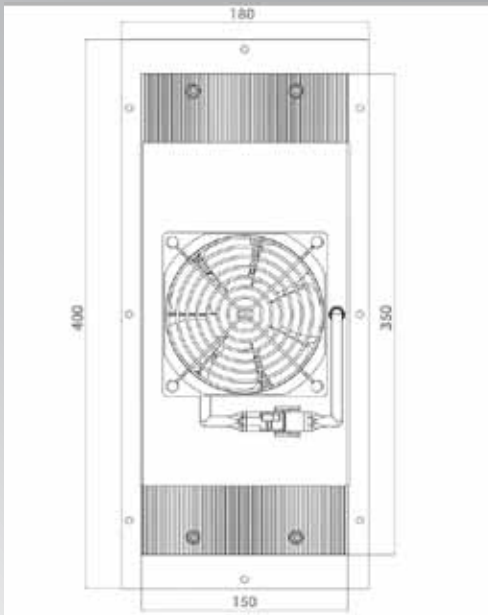
| | |
|----------------------------------|---|
| Cooling Power [W] @ 25°C Ambient | 246 W @ 0 ΔT (Nominal), 132W at 20°C ΔT |
| Voltage [VDC] | 24 Nominal, 28 Max |
| Current [Amps] @ Nominal Voltage | 14 Nominal, 16 Max |
| Weight [kg] | 5.5 kg |
| Overtemp Thermostat | 100°C +/- 5°C (Both Slnks) |
| Operating Temp | -10°C to 60°C |

FEATURES

- Compact, Lightweight Design
- Solid-state Construction
- Optimized Thermoelectric Technology
- High Efficiency Heat Transfer
- Advanced Heat Sink Design
- IP55 Rated Fans
- No CFC Refrigerants
- RoHS Compliant
- DC Powered
- Maintenance-free

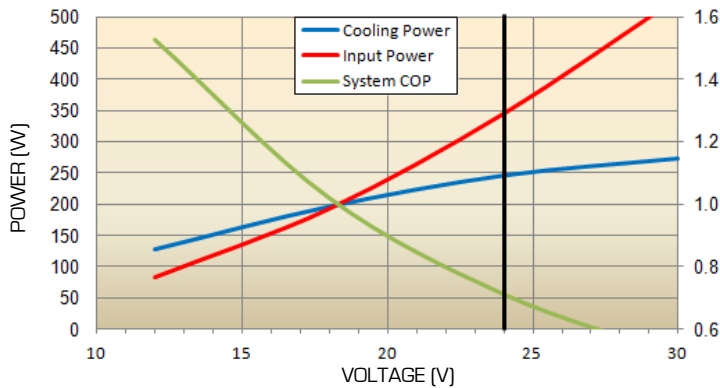
APPLICATIONS

- Electronic Enclosure Cooling
- Food & Beverage Storage
- Back-up Battery System Cabinet Cooling
- Analytical & Diagnostic Instrumentation
- Industrial Precision Cooling Applications

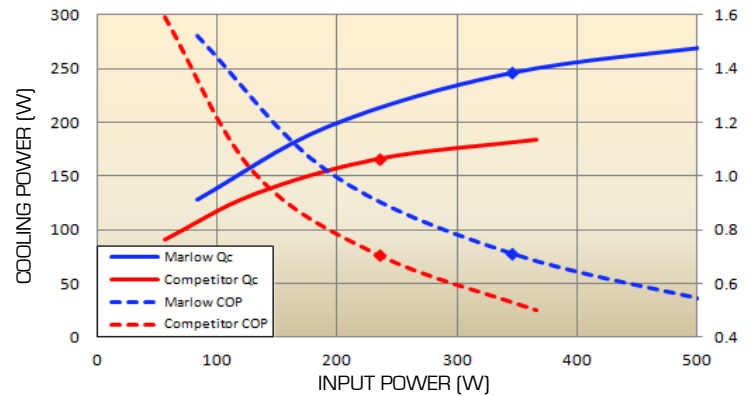


INDUSTRY LEADING PERFORMANCE

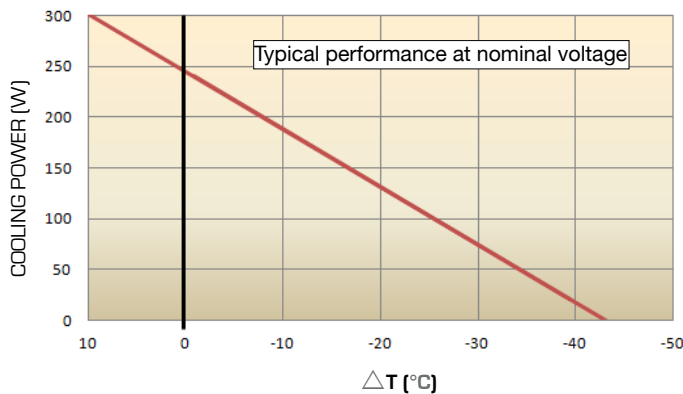
ASSEMBLY WITH STANDARD FAN



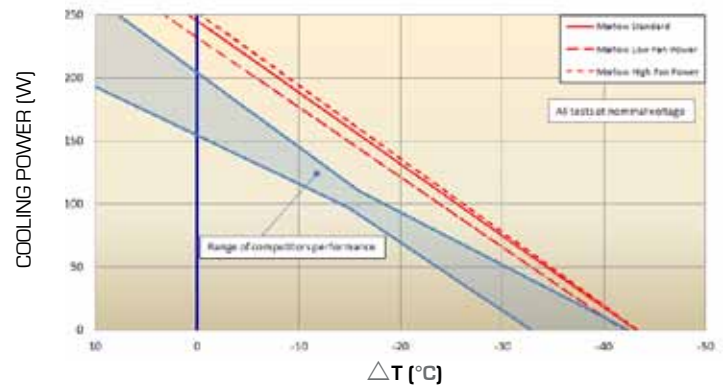
COMPETITIVE COMPARISON



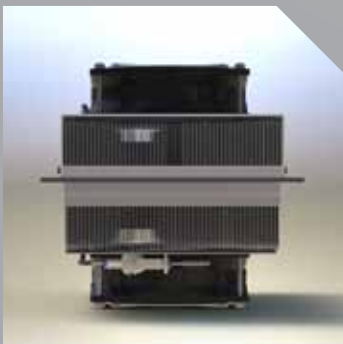
COOLER PERFORMANCE



PERFORMANCE TEST DATA



MARKET CONTRIBUTION



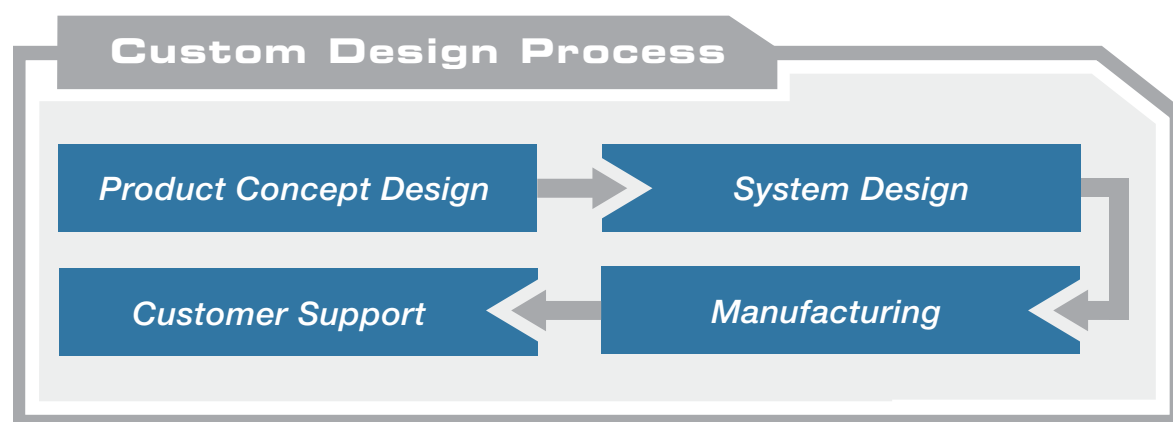
Delivering the thermoelectric industry's highest cooling performance in a compact package is quite a feat. Climatherm does not disappoint, with up to 125% higher cooling power than comparable market offerings in a standard package size. Over the full ΔT range, Climatherm continues to offer superior performance.

In an exceptionally lightweight, and compact package, Climatherm is only 5.5 kg—35% lighter than comparable market offerings. Ideally suited for the industry standard package space (352mm x 154mm mounting hole template).

OPTIONS

| PART NUMBER | VOLTAGE | WIRING LOCATIONS |
|-------------|---------|------------------|
| ST4054-01 | 24 | Hot Side |
| ST4054-02 | 24 | Cold Side |
| ST4054-03 | 48 | Hot side |
| ST4054-04 | 48 | Cold Side |

concept to COMPLETION



Marlow Industries gained a reputation for quality and service through partnership with our customers. From concept to thorough product development and production, Marlow is a full-service manufacturer with reliable processes and personnel that you can count on for your next application.

If you require a custom configuration or have unique manufacturing considerations, our engineers will design a tailored solution for you, without the expected high price-tag of a custom design. Contact Marlow for more information.

TECHNICAL SUPPORT - ORDER INFORMATION

+1 [877] 627-5691 | www.marlow.com | customerservice@marlow.com

Visit Marlow.com for regional office locations, distributors and additional contact information.

Marlow Industries, a subsidiary of II-VI Incorporated, is the world leader in quality thermoelectric cooling technology. For more than 30 years, Marlow Industries has developed and manufactured thermoelectric coolers (TECs) and subsystems for the aerospace, defense, medical, industrial, automotive, power generation and telecommunications markets. Marlow prides itself on providing standard or custom modules and sub-assemblies to meet our customers' exacting needs. Marlow is Telcordia and ISO 9001:2008 compliant and a Malcolm Baldrige National Quality Award winning company.