



The AA Outdoor Cooler Series is an air-to-air thermoelectric assembly (TEA) that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling objects via convection. Heat is absorbed and dissipated thru high density heat exchangers equipped with air ducted shrouds and brand name fans. The heat pumping action occurs from custom designed thermoelectric modules that achieve a high coefficient of performance (COP) to minimize power consumption.

This product series has been designed to pass rigorous Telcordia test requirements conducted by our customers, such as earthquake resistance, salt fog, wind-driven rain, high temperature exposure and dust contaminants. This is due to the selection of world-class components such as brand fans with the highest degree of environmental protection and lifetime guaranteed waterproof connectors, heavy-duty anodization on the high-density heat sinks, overheat protection, and double environmental seals for the thermoelectric modules.

Patent No.: US 9,360,240

#### FEATURES

- 244W capacity rated at  $\Delta T = 0^{\circ}\text{C}$ ,  $T_{\text{ambient}} = 35^{\circ}\text{C}$
- Wide operating temperature range of  $-40^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$
- Telcordia GR-487-CORE tested and verified by customers when integrated in telecom outdoor enclosures
- UL60950 and UL50 approval obtained by customers when integrated in telecom outdoor enclosure
- Environmentally friendly solid-state operation
  - no compressor or CFC refrigerants
- Cooling and heating in the same unit; optional temperature controller reverses the polarity of current to generate heating

#### APPLICATIONS

- Outdoor telecom enclosures
- Outdoor kiosks and displays
- Harsh condition electronic cabinets
- Battery cabinets

#### TECHNICAL SPECIFICATIONS

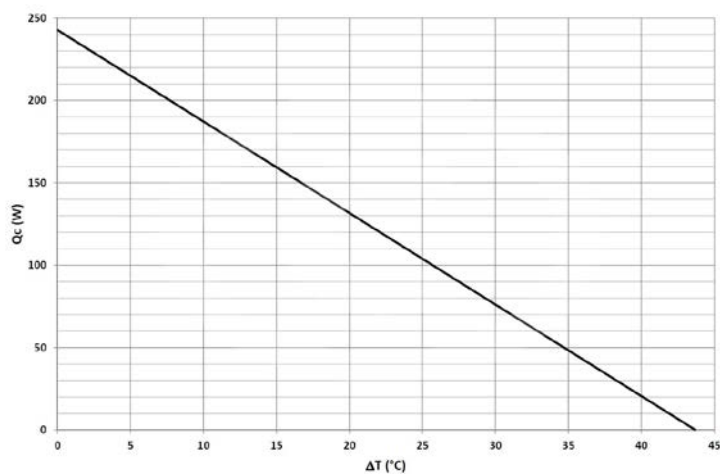
Technology	Thermoelectric modules, forced air, closed loop (non-mixing), filter less, non-refrigerant
Cooling at $dT = 0^{\circ}\text{C}$ , and nominal / float voltage <sup>1</sup> - W	244/262 (832/894 BTU/hr)
Heating (calculated) <sup>2</sup> - W	250 (853 Btu/h)
Voltage, nominal / maximum <sup>4</sup> -VDC	48/60
COP (Coefficient of Performance) - %	85
Grounding (all voltages)	Positive or negative
Current draw, nominal / start-up $\pm 10\%$ - A	6.1/7.8
Weight - kg (lbs)	6.3 (16.9)
Panel mounting	Through (from external side)
Fan life ( $L_{10}$ at $+40^{\circ}\text{C}$ )	$\geq 70,000$ hours
Connector type (on unit / mating side)	Terminal block with cage clamps (AWG 28-12)
Hi-pot testing - VDC	707

### ENVIRONMENTAL

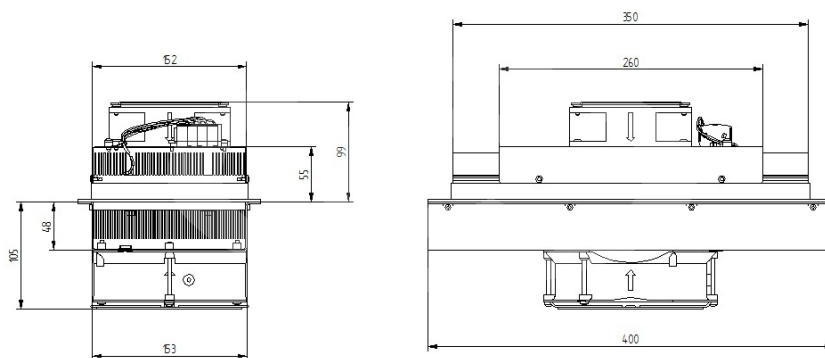
Temperature range <sup>3</sup> , external ambient - °C (°F)	-40 to +55 (-40 to +131)
Temperature range, internal enclosure - °C (°F)	-20 to +55 (-4 to +131)
Degree of protection, unit <sup>5</sup>	IP54
Degree of protection, unit ext. side <sup>5</sup>	IP54
Sound level, 1 m distance - dB(A)	63
Over-Temp Thermostat	75°C ± 6°C (accessory)

1. Cooling capacities at nominal / float voltage are rated at external temperatures of +35°C and +50°C respectively. Float voltage is defined at 27 VDC.
2. Calculated heating capacity is rated at external temperature of -40°C, nominal voltage, and  $\Delta T = -45^\circ\text{C}$ .
3. Controller function shall not operate the external fan during heating mode.
4. Max ripple 5%.
5. Rating for unit without protective shroud. A higher degree of protection can be obtained with external shroud.

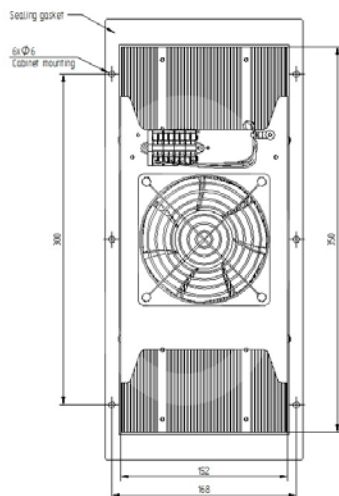
### PERFORMANCE QC VS $\Delta T$



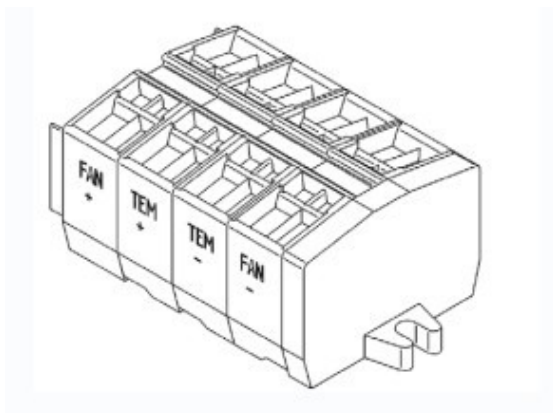
### ISOMETRIC DRAWINGS



### MOUNTING HOLE LOCATION & HANDWARE



### ELECTRICAL CONNECTIONS 24VDC (CAGE CLAMP)



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



Laird warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request.

© Copyright 2018 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trademarks or registered trademarks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9