

### PowerCool Series Thermoelectric Cooler Assembly

The DA-115-24-02 is a Direct-to-Air Thermoelectric Cooler Assembly 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. It has a maximum Qc of 113 Watts when  $\Delta T=0$  and a maximum  $\Delta T$  of 42 °C at Qc = 0.

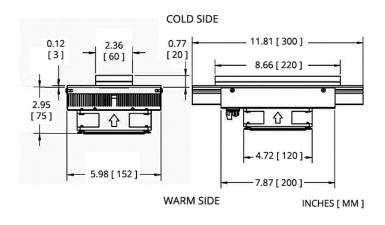


### **Features**

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

### **Applications**

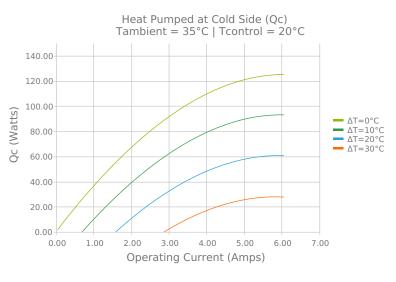
- Medical Diagnostic and Analytical Instrumentation
- Thermoelectric Coolers and Assemblies for Medical Applications
- Liquid Cooling Options for PET and SPECT Scanners
- Cooling for Centrifuges
- High-Performance Liquid Chromatography (HPLC)
- Heating and Cooling for Liquid Chromatography Systems

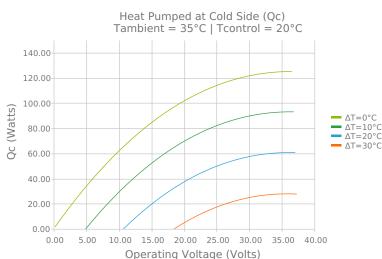




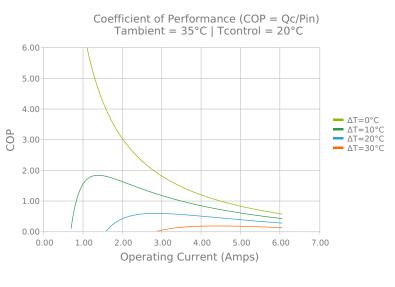


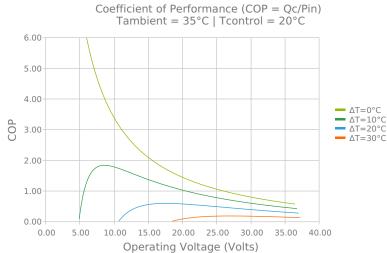
# **ELECTRICAL AND THERMAL PERFORMANCE**

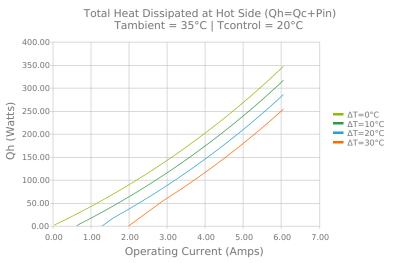


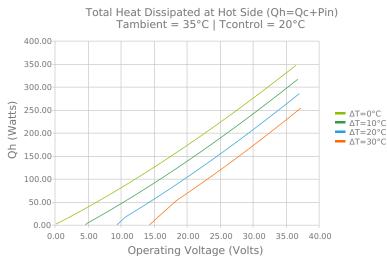


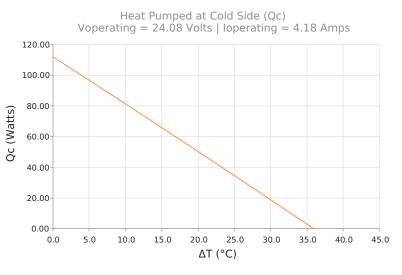


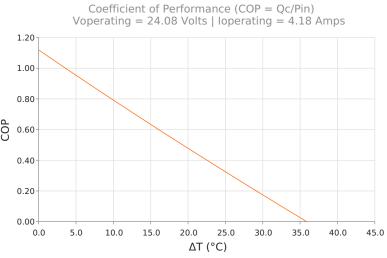














# **SPECIFICATIONS**

**Operating Temperature Range** 

**Supply Voltage** 

**Current Draw** 

**Power Supply** 

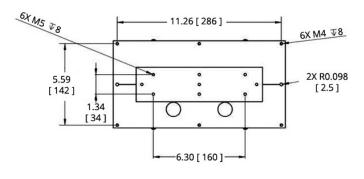
**Performance Tolerance** 

Fan MTBF

Weight

# -10°C to 47°C 24.0 VDC nominal / 30.0 VDC maximum 5.8 A running / 6.7 A startup 139.0 Watts 10% 50,000 hours 2.90 kg

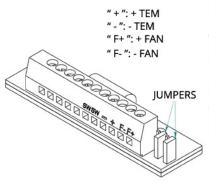
# **MOUNTING HOLE LOCATION**



INCHES [ MM ]

## **WIRING SCHEMATIC**

**ELECTRICAL CONNECTIONS:** 



To use a separate supply for TEMs and FANs: Mount jumpers to not short-cut the pin pairs.

To use a single supply for TEMs and FANs: Mount jumpers to short-cut the pin pairs.

Connect the unit to "+" & "-".

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

# **NOTES**

<sup>1</sup>For indoor use only

<sup>2</sup>Units are generally maintenance free, however occasionally it is recommended to clean the heat sinks and fans of debris. This is best done with compressed air.

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