

**Liquid Series Thermoelectric Cooler Assembly**

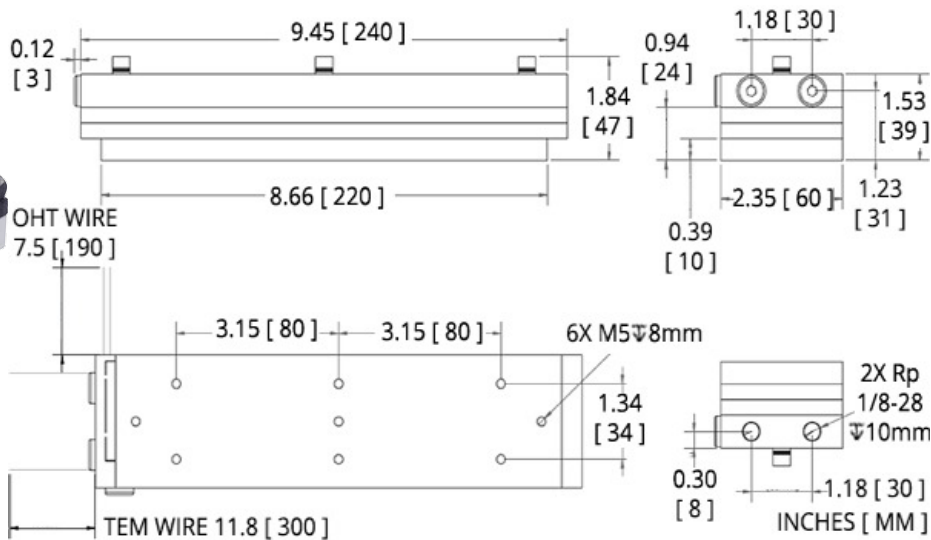
The DL-210-24-00 thermoelectric assembly (TEA) offers dependable, compact performance by cooling objects via liquid to transfer heat. Heat is absorbed through a cold block and dissipated thru a second liquid heat exchanger. The thermoelectric modules are custom designed to achieve a high coefficient of performance (COP) to minimize power consumption. It has a maximum Qc of 247 Watts when ΔT = 0 and a maximum ΔT of 38 °C at Qc = 0. The liquid heat exchanger is designed to accommodate distilled water with glycol. Corrosion resistant turbulators are enclosed inside channels to increase heat transfer. Mating port adaptors are sold separately.

**Features**

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

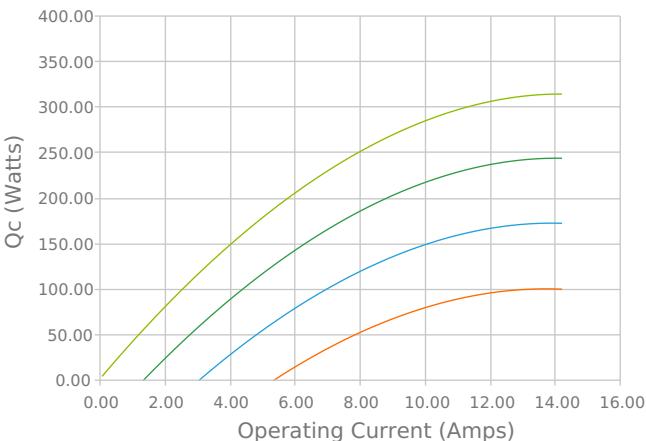
**Applications**

- Medical Diagnostics
- Industrial Lasers
- Medical Lasers
- Analytical Instrumentation

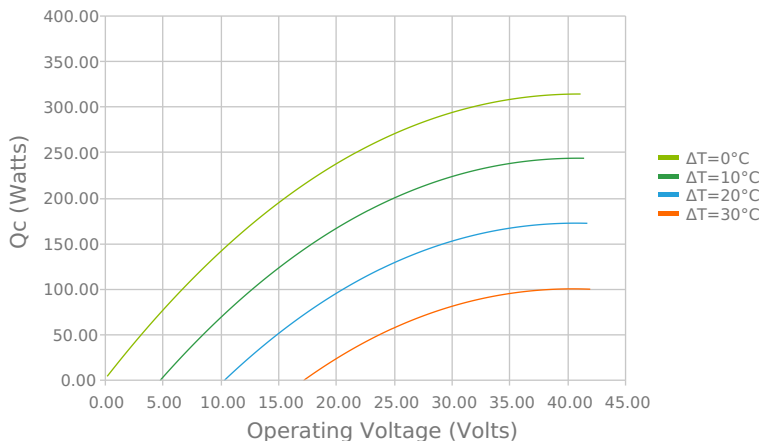


**ELECTRICAL AND THERMAL PERFORMANCE**

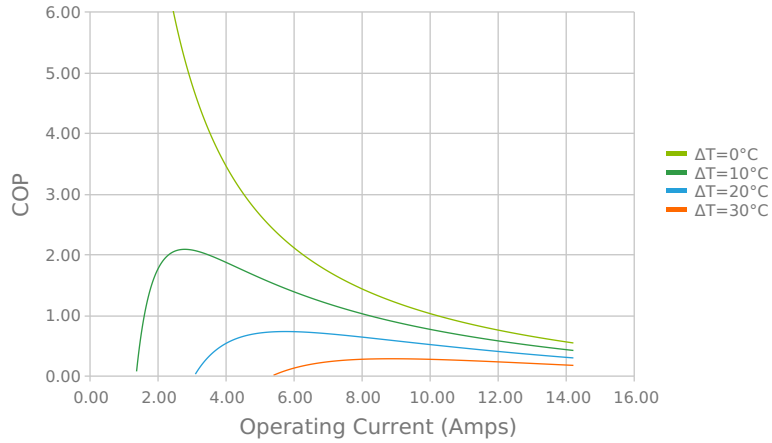
Heat Pumped at Cold Side (Qc)  
 Tambient = 35°C | Tcontrol = 20°C



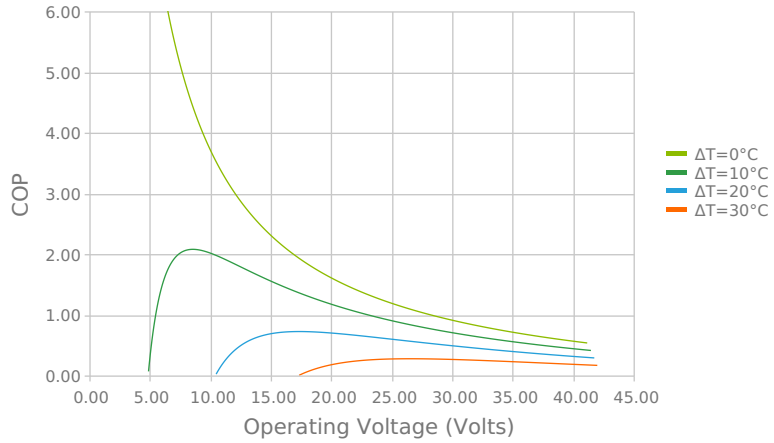
Heat Pumped at Cold Side (Qc)  
 Tambient = 35°C | Tcontrol = 20°C



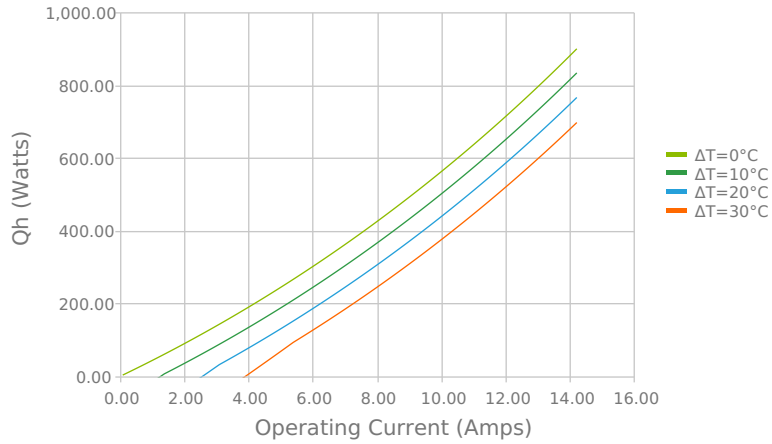
Coefficient of Performance (COP = Qc/Pin)  
 Tambient = 35°C | Tcontrol = 20°C



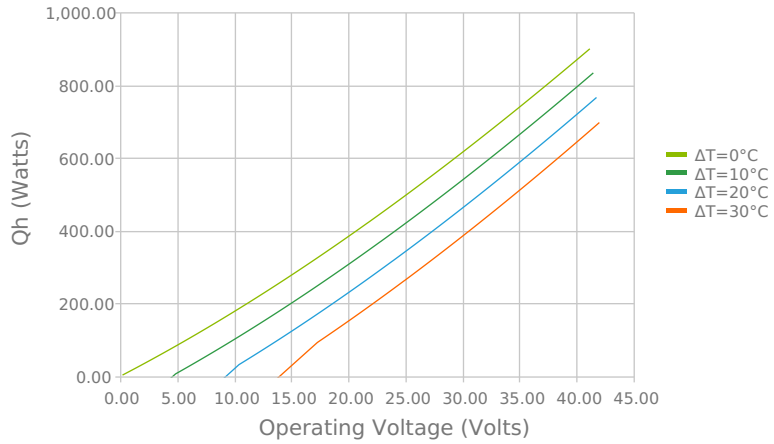
Coefficient of Performance (COP = Qc/Pin)  
 Tambient = 35°C | Tcontrol = 20°C



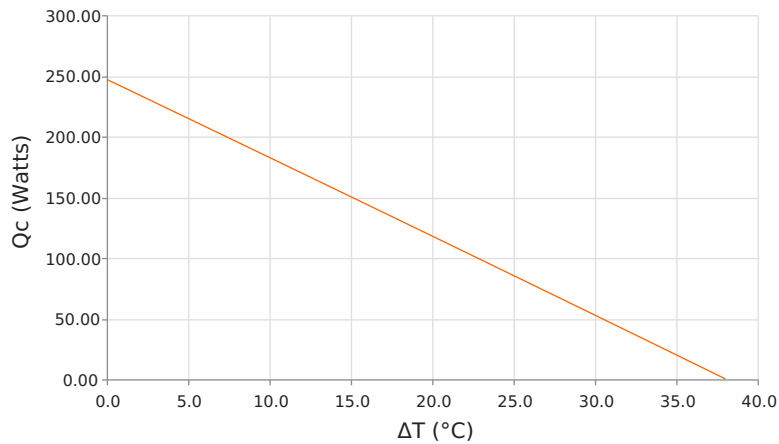
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
 Tambient = 35°C | Tcontrol = 20°C



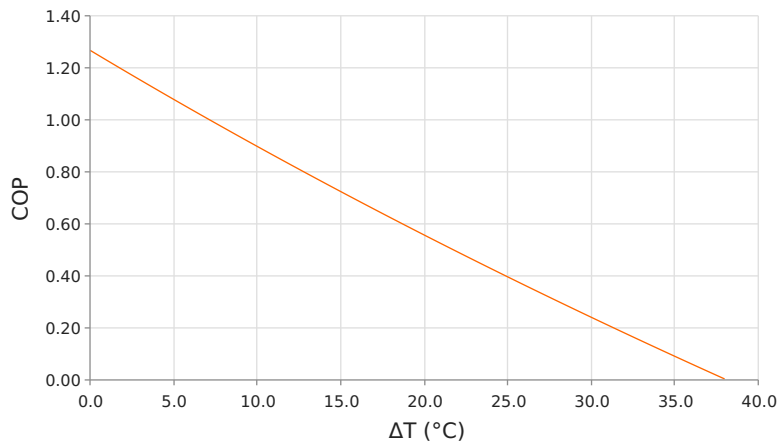
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
 Tambient = 35°C | Tcontrol = 20°C



Heat Pumped at Cold Side (Qc)  
 Voperating = 24.1 Volts | Ioperating = 8.8 Amps



Coefficient of Performance (COP = Qc/Pin)  
 Voperating = 24.1 Volts | Ioperating = 8.8 Amps



## SPECIFICATIONS

**Operating Temperature Range**

-40 °C to 62°C

**Supply Voltage**

24.0 VDC nominal / 28.0 VDC maximum

**Current Draw**

7.8 A running / 8.5 A startup

**Power Supply**

221.0 Watts

**Performance Tolerance**

10%

**Weight**

1.30 kg

## NOTES

<sup>1</sup>Cold block requires insulation to minimize moisture buildup under dew point conditions.

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