MRC Series MRC300-DH2-HT-DV
MFG Part Number: 385760-001

MRC Series Thermoelectric Cooler Assembly

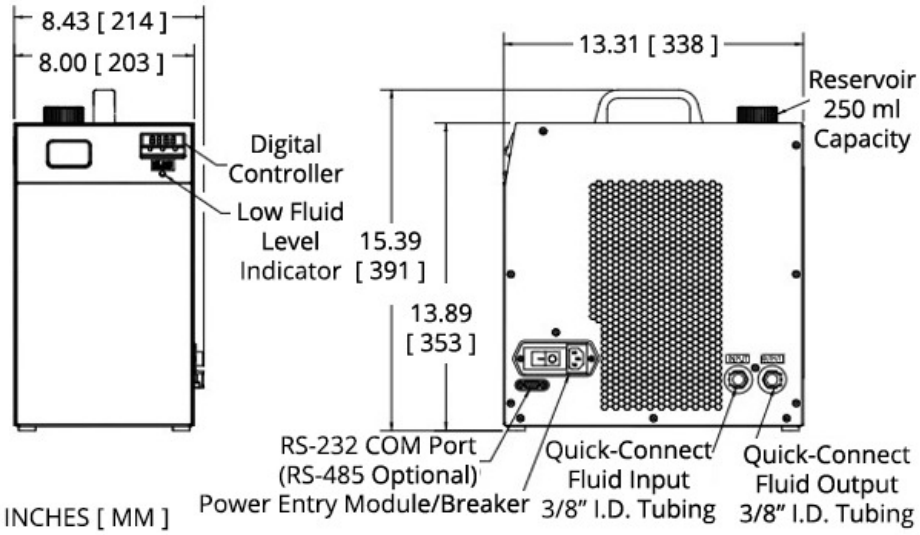
The MRC300-DH2-HT-DV is a bench top re-circulating chiller that offers dependable, compact performance by controlling the temperature of a coolant in a liquid circuit. The coolant is re-circulated using a pump with high MTBF. Heat from coolant is absorbed by a heat exchanger and dissipated thru high density heat sinks equipped with brand name fans. The thermoelectric modules are custom designed to achieve long life operation. The unit is regulated with an easy to use digital temperature controller with push button interface. The controller can control temperature of liquid circuit at outlet from -12ºC to 40ºC. The unit is housed inside an a sheet metal casing, operates on universal input 115/230 VAC and is UL/IEC rated. Custom configurations are available, however, MOQ applies.

Features

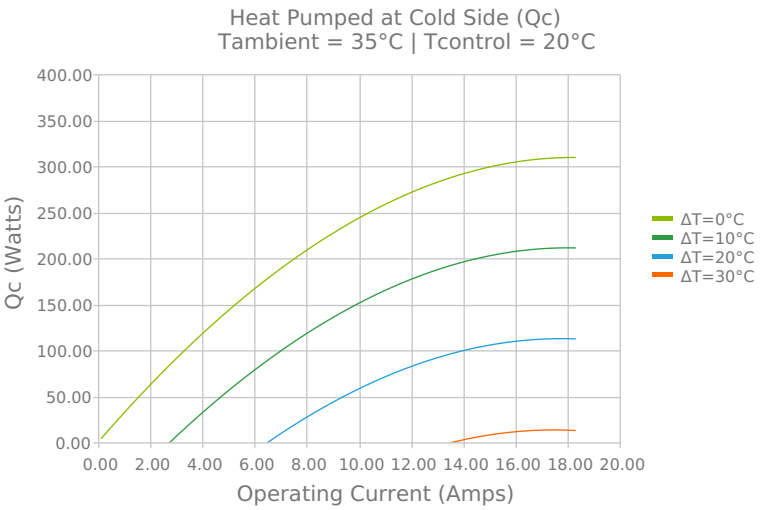
- Compact design
- Precise temperature control
- Reliable solid-state operation
- Low noise
- RoHS-compliant

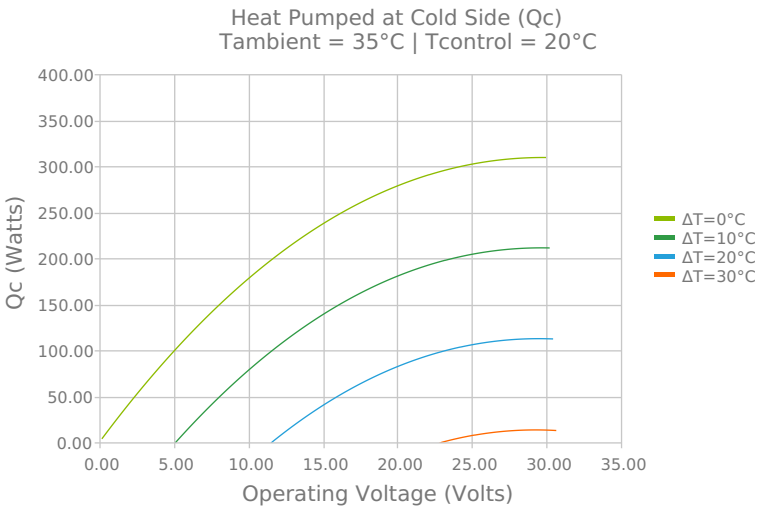
Applications

- Liquid Cooling Options for PET and SPECT Scanners
- Cooling Particle Accelerators: Linear Accelerators and Cyclotrons
- Spindle Screw Pump Technology for Medical Cooling
- Semiconductor Fabrication Equipment Cooling
- X-ray Cooling in Industrial Scanners

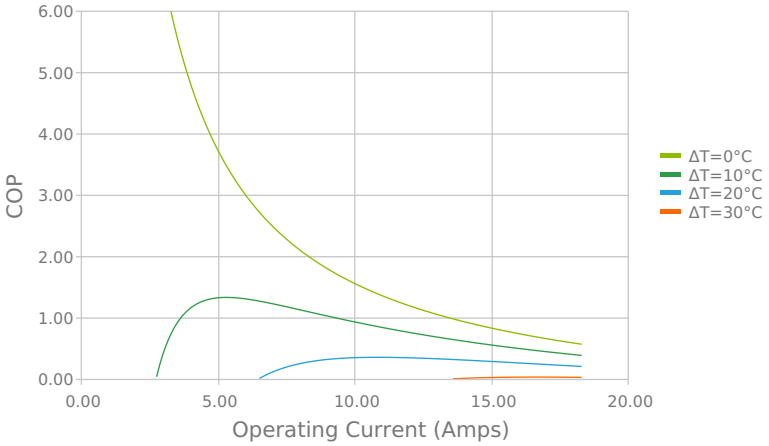


ELECTRICAL AND THERMAL PERFORMANCE





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



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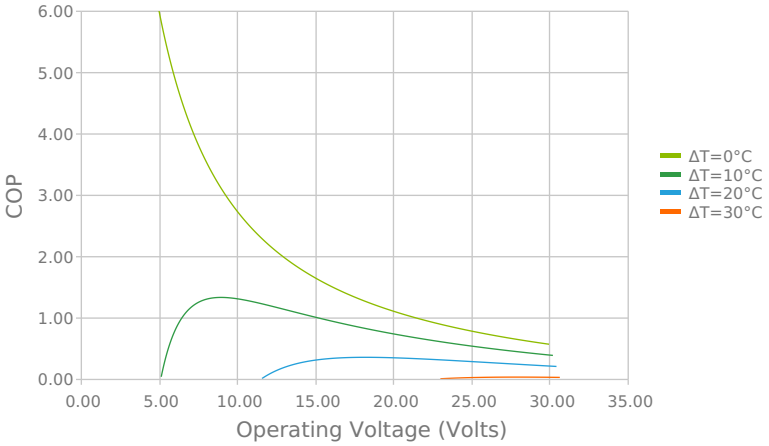
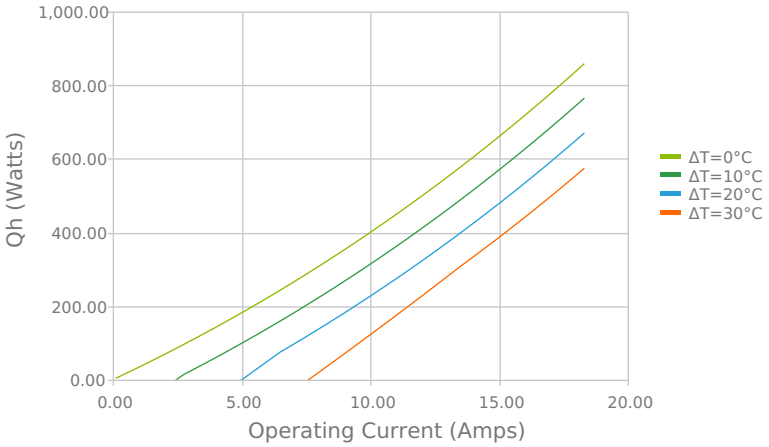


Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Tambient = 35°C | Tcontrol = 20°C



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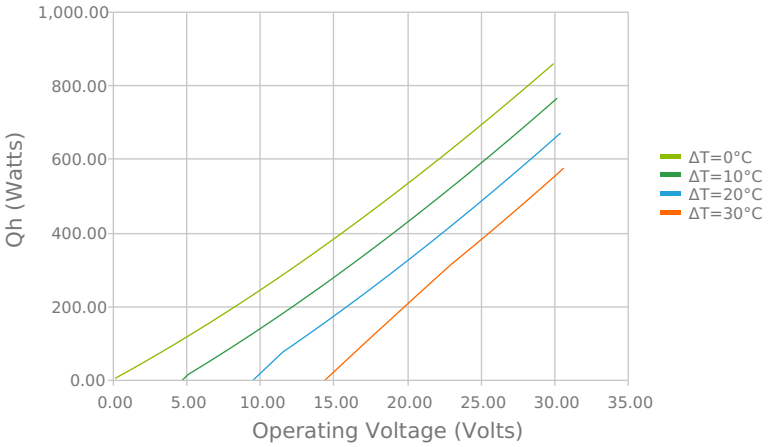
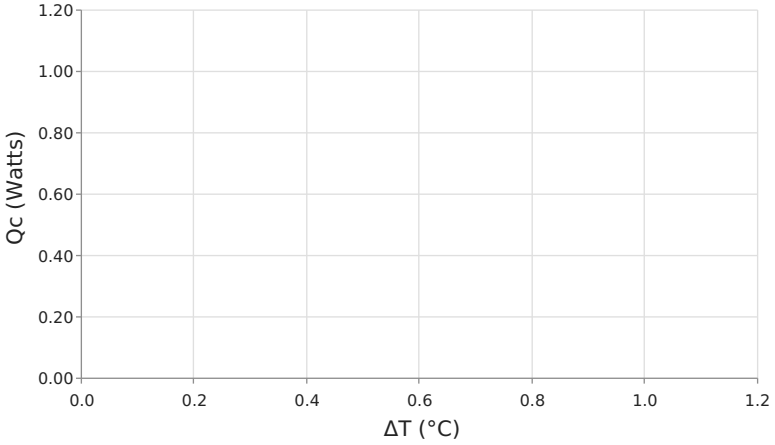


Heat Pumped at Cold Side (Qc)
Voperating = 24 Volts | Ioperating = 15 Amps



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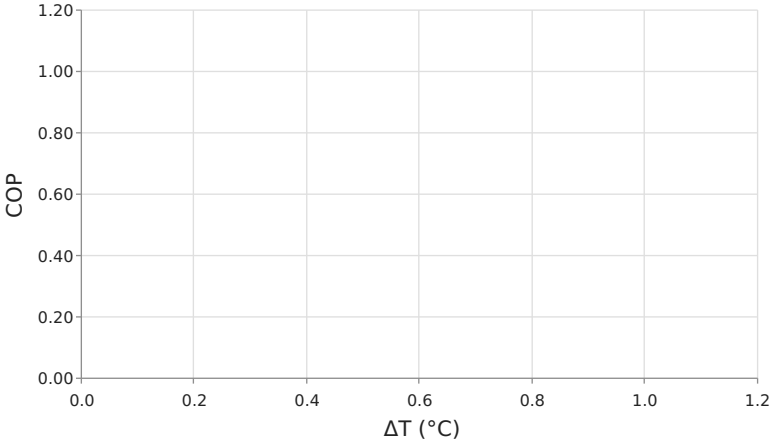

SPECIFICATIONS

Operating Environment Temperature Range	4 °C to 45°C
Control Temperature Range (70/30 Water/Glycol)	-12 °C to 40°C
Supply Voltage	115 VAC to 230 VAC
Current 115 VAC (230 VAC)	8.5 Amps (4.3 Amps)
Power Supply	507.0 Watts
Performance Tolerance	10%
Fluid Capacity	450 mL
Maximum Flow Rate	3.3 L/min
Weight	13.60 kg

NOTES

[1]Use distilled water as coolant for control temperatures above 5°C
[2]To prevent freezing, use coolant with 70/30 distilled water/ethylene glycol
[3]Unit comes with a 115 VAC North American cord and a 230 VAC European cord
[4]UL Rating: UL61010 – 1/IEC61010-1

Date: 06/01/2020