MRC Series MRC150-DH2-HT-DV
MFG Part Number: 385737-001

MRC Series Thermoelectric Cooler Assembly

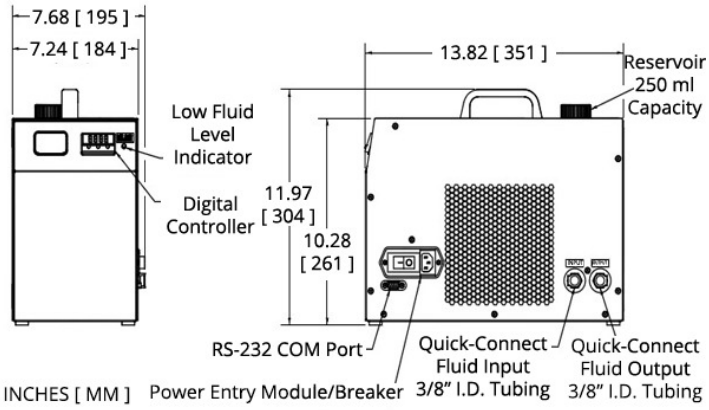
The MRC150-DH2-HT-DV is a bench top re-circulating chiller that offers dependable, compact performance by controlling the temperature of a coolant in a liquid circuit. The coolant is re-circulated using a pump with high MTBF. Heat from coolant is absorbed by a heat exchanger and dissipated thru high 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.

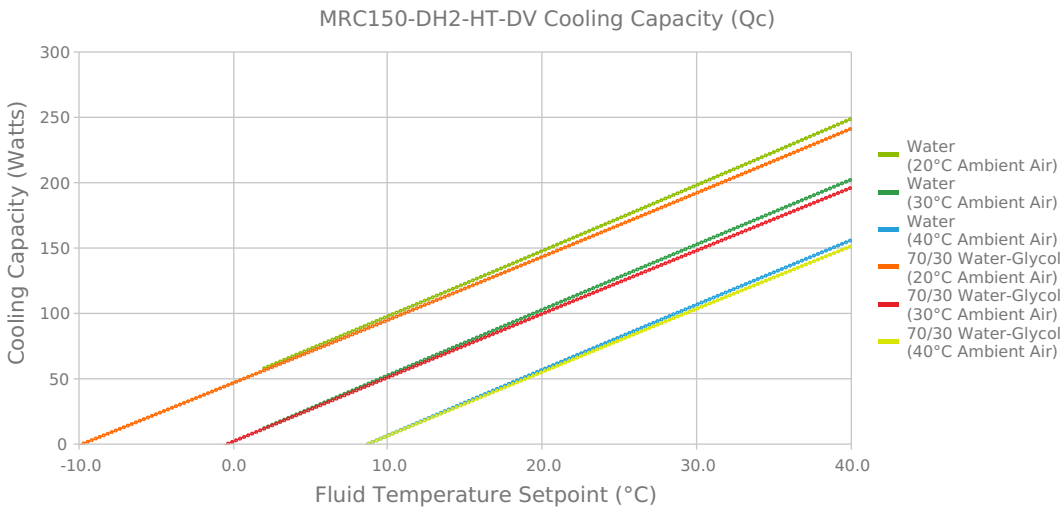
Features

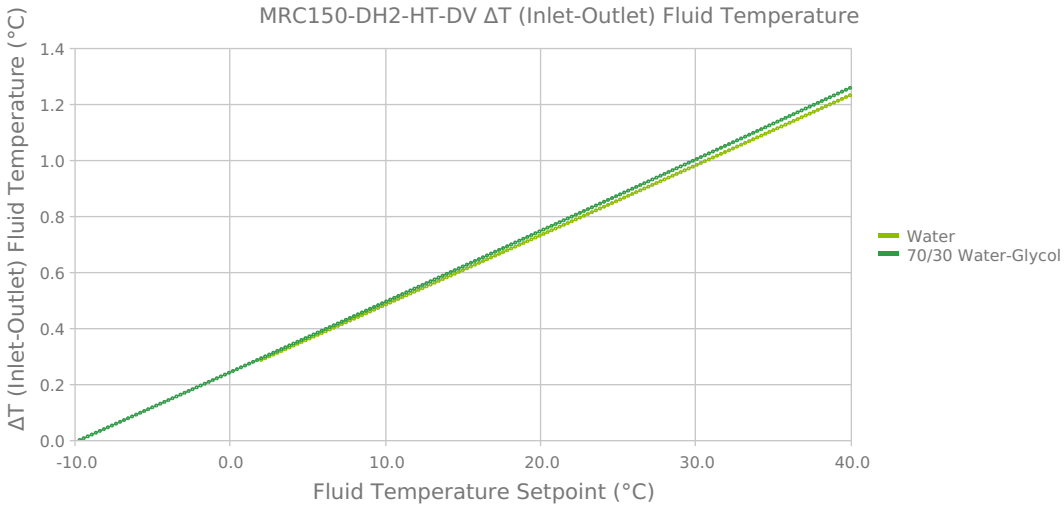
- Compact design
- Precise temperature control
- Reliable solid-state operation
- Low noise
- RoHS-compliant

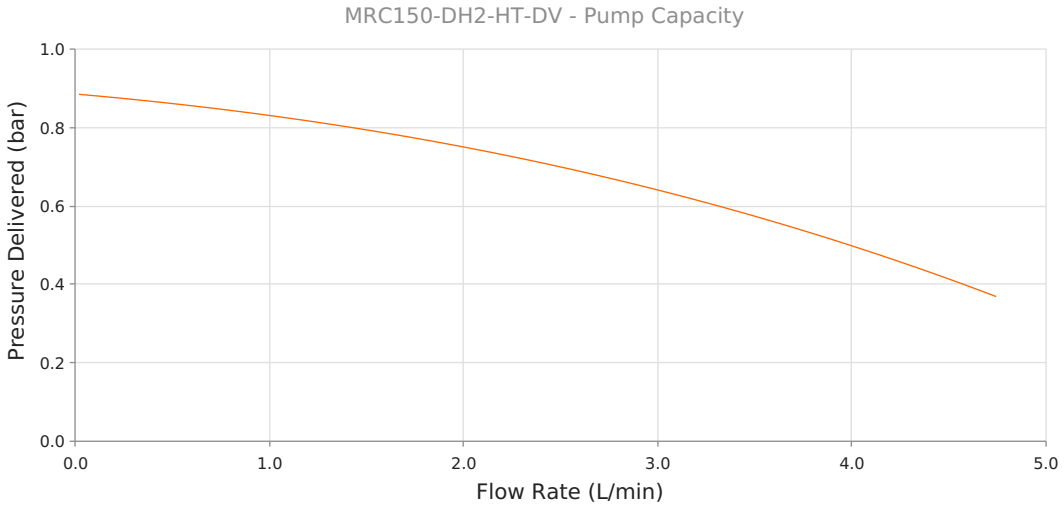
Applications

- Analytical Instrumentation
- Industrial Laser Cooling




MRC150-DH2-HT-DV Cooling Capacity (Qc)
Cooling Capacity (Watts)
300
250
200
150
100
50
0
-10.0
0.0
10.0
20.0
30.0
40.0
Fluid Temperature Setpoint (°C)
Water (20°C Ambient Air)
Water (30°C Ambient Air)
Water (40°C Ambient Air)
70/30 Water-Glycol (20°C Ambient Air)
70/30 Water-Glycol (30°C Ambient Air)
70/30 Water-Glycol (40°C Ambient Air)


MRC150-DH2-HT-DV ΔT (Inlet-Outlet) Fluid Temperature
ΔT (Inlet-Outlet) Fluid Temperature (°C)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
-10.0
0.0
10.0
20.0
30.0
40.0
Fluid Temperature Setpoint (°C)
Water
70/30 Water-Glycol


MRC150-DH2-HT-DV - Pump Capacity
Pressure Delivered (bar)
1.0
0.8
0.6
0.4
0.2
0.0
0.0
1.0
2.0
3.0
4.0
5.0
Flow Rate (L/min)

SPECIFICATIONS

Resistance Heater	125 Watts
Operating Environment Temperature Range	4°C to 45°C
Control Temperature Range (Water)	2°C to 40°C
Control Temperature Range (70/30 Water/Glycol)	-12°C to 40°C
Controller Accuracy	±0.16°C
Supply Voltage	115 VAC to 230 VAC
Current 115 VAC (230 VAC)	4.7 Amps (2.4 Amps)
Power Supply	294.0 Watts
Frequency	50/60 Hz
Performance Tolerance	10%
Fluid Capacity	250 mL
Maximum Flow Rate	2.9 L/min
Weight	10.90 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

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