

# Datasheet - MCS50

## Modular Cooling System



Ambient Cooling System with Cooling Capacities up to 3.5 kW



A Modular Cooling System (MCS) is a cost-effective and reliable alternative to refrigerated chillers for applications where precise temperature control and cooling below ambient temperature are not required. It consists of a high performance Boyd heat exchanger integrated with a fan, pump, and tank in a durable metal chassis.

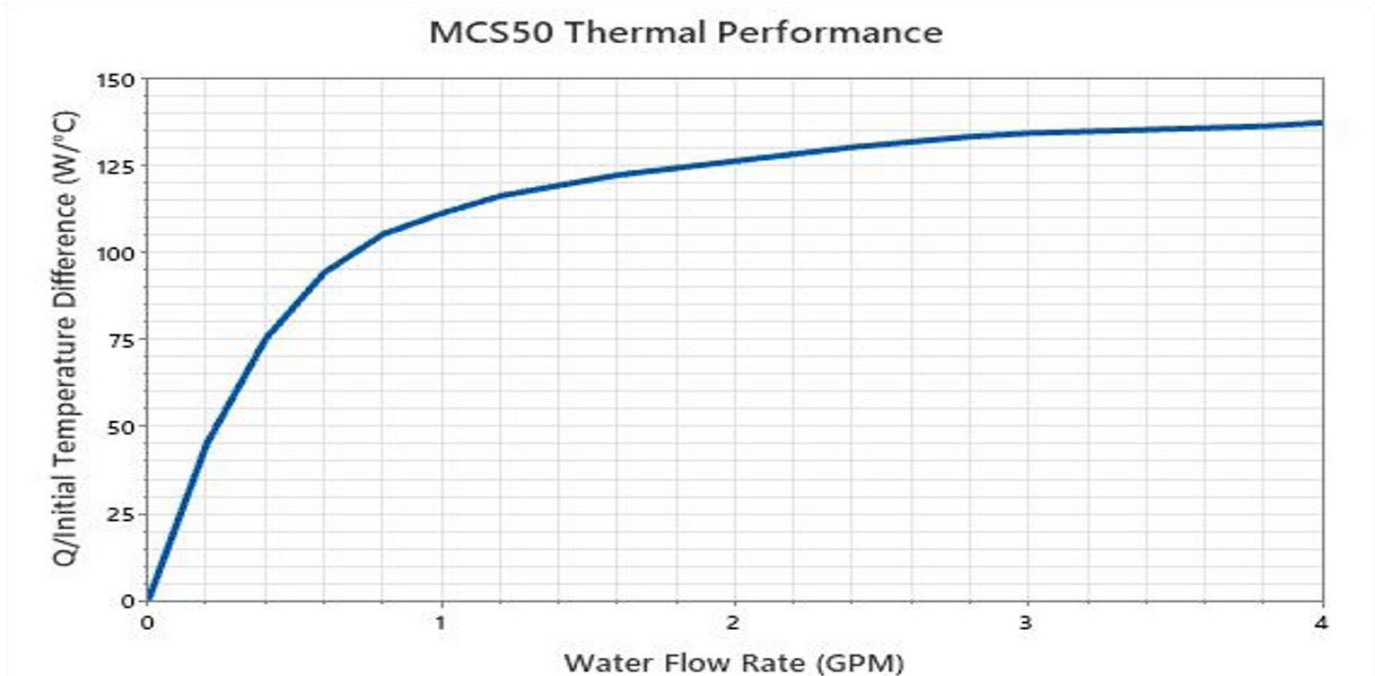
- **Extremely efficient:** All components are performance-matched for maximum cooling capacity. Boyd has more than 50 years of experience in thermal design, so you can be sure that the most critical component of the MCS, the heat exchanger, is designed for optimum performance.
- **Easy-to-operate:** This easy-to-use, turnkey cooling package takes the guesswork and effort out of building a cooling loop. All you need to do is fill the tank and flip the switch.
- **Extremely reliable:** All components in the MCS have been designed for long life and high reliability-a Boyd MCS will provide years of trouble-free operation.
- ITSNA tested to UL 61010A-1 and CE certified

## Performance Specifications

Category	Value	MCS50
Cooling capacity using water, 25°C initial temperature difference	W BTU/ hr	3500 12,000
Fluid inlet connections	-	1/2" FNPT
Fluid outlet connections	-	1/2" FNPT
Reservoir capacity	-	0.75 gal / 2.8 liters
Maximum liquid temperature	-	131°F / 55°C
Dimensions (W x D x H)	inches mm	15 x 15 x 24 381 x 381 x 610
Weight - stand alone	lbs (kg)	65 (29)
Recommended coolant	-	Water
<b>Available electrical configurations and full load amperage</b>		
J02: 230V, 50/60 Hz, 1 ph	Amps	2.8
<b>Pump options</b>		
BE: PDP*, Brass, 2.3 gpm/ 8.7 lpm	-	●
<b>Package options</b>		
Package 1: Ambient package	-	●
<b>Features included</b>		
Air filter and 5 micron water filter	-	●

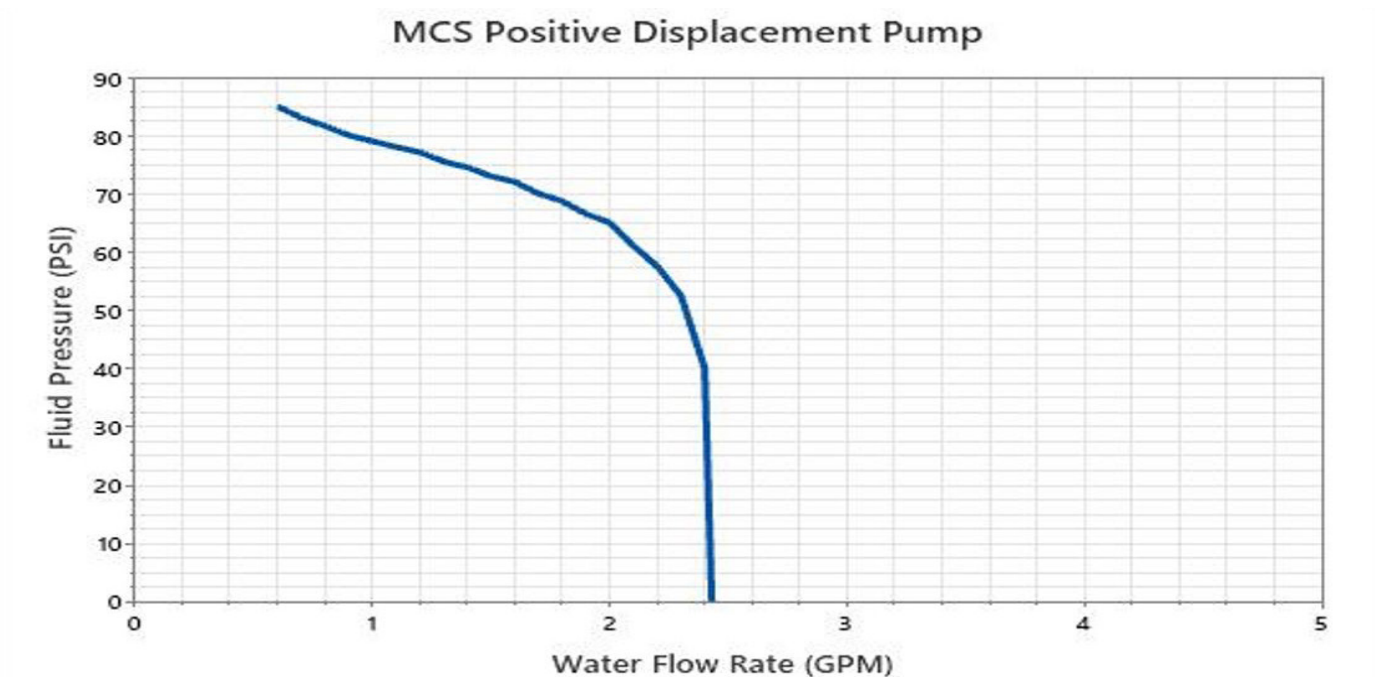
\*PDP = Positive Displacement Pump

Thermal Performance Graph



Disclaimer: Temperature represents output temperature of water assuming 20°C ambient air conditions. Performance subject to change due to variations such as fluid type or operating conditions.

System Pump Graph



Disclaimer: Includes pressure drop through MCS. Pressure relief is factory set at 90 psi (6.2 bar).

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