

#### WL Series Liquid Cooling System

The WW3001 uses facility water as a hot side heat dissipation mechanism, which increases the cooling capacity while maintaining form factor. The WW Series system is designed to operate using water as coolant.



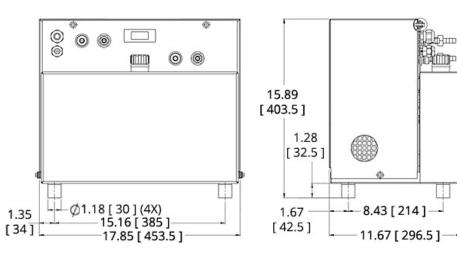
#### Features

- Cooling to ambient
- High heat pumping capacity
- Compact form factor
- Long life operation

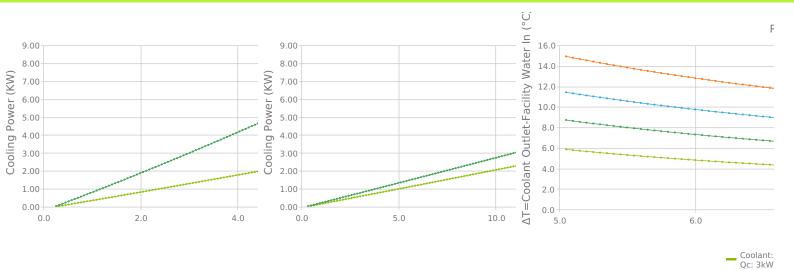
#### Liquid to Liquid Heat Exchanger WW3001 MFG Part Number: 1104.01

#### Applications

- Cooling Particle Accelerators: Linear Accelerators and Cyclotrons
- Semiconductor Fabrication Equipment Cooling
- X-ray Cooling in Industrial Scanners



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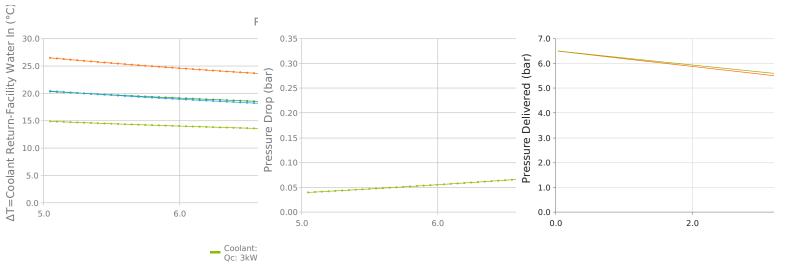
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\*  $\Delta T$  (Coolant Outlet - Facility Water In) is the temperature difference between the facility water temperature and the coolant temperature that is at the outlet of the heat exchanger during steady-state operation. This temperature difference would initially be 0 and increase to the steady state value under load. This would also be the temperature at the inlet to the application.

\*\* ΔT (Coolant Return - Facility Water In) is the temperature difference between the facility water temperature and the outlet temperature of the application at the nominal coolant flow. More flow (application pressure drop less than nominal) would necessarily mean a smaller ΔT.



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### **Technical Specifications**

### <u>Performance</u>

Nominal Cooling Capacity	3,000 W
Nominal Operating Flowrate (60 Hz)	5.4 L/min @ 4.0 Bar
Nominal Operating Flowrate (50 Hz)	5.4 L/min @ 4.0 Bar

## **Operation**

Coolant	Water
Operating Temperature	0°C to 40°C
Storage temperature range (w/o coolant)	-20°C to 70°C
Humidity range	10% to 90%
Storage Humidity range	5% to 95%, non-condensing
Input Voltage	230 VAC
Frequency	50/60 Hz
Current	< 1.8 Amps
Noise	< 47 dB(A)
Flow Switch Open	≤ 4 L/min
Maximum Forward Pressure	6.5 Bar

# <u>Physical</u>

Height	400 mm
Length	450 mm
Width	270 mm
Weight	27 kg
Coolant Capacity	8.5 Liters
Couplings	Press Fit (9 mm ID hose)



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