TTS
TARK THERMAL SOLUTIONS

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

## WL Series Liquid Cooling System

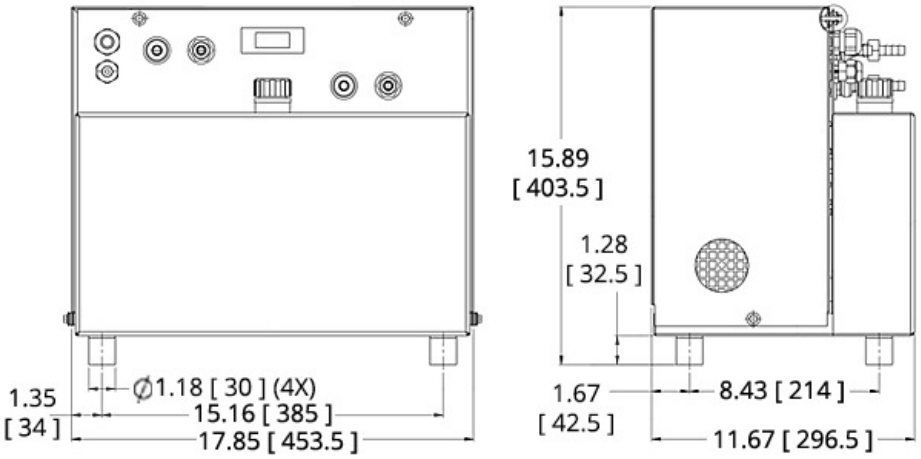
The WW3001 uses facility water as a hot side heat dissipation mechanism, which increases the cooling capacity while maintaining form factor. The WW Series system is designed to operate using water as coolant.

## Features

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

## Applications

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



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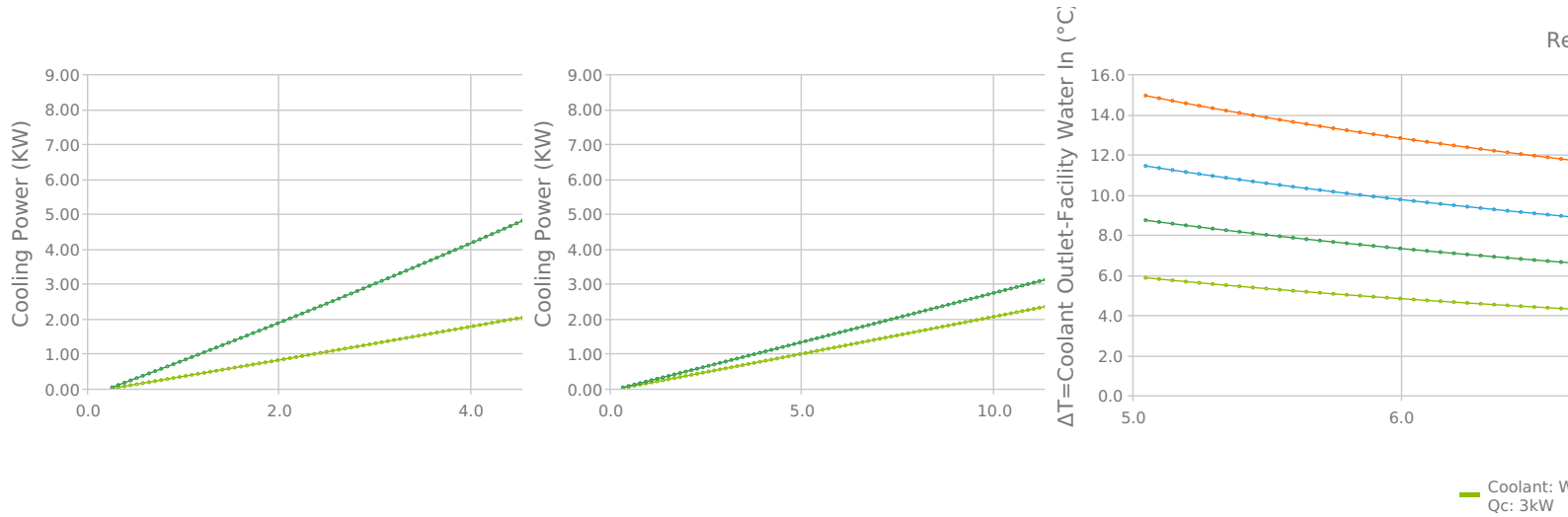


* ΔT (Coolant Outlet - Facility Water In) is the temperature difference between the facility water temperature and the coolant temperature that is at the outlet of the heat exchanger during steady-state operation. This temperature difference would initially be 0 and increase to the steady state value 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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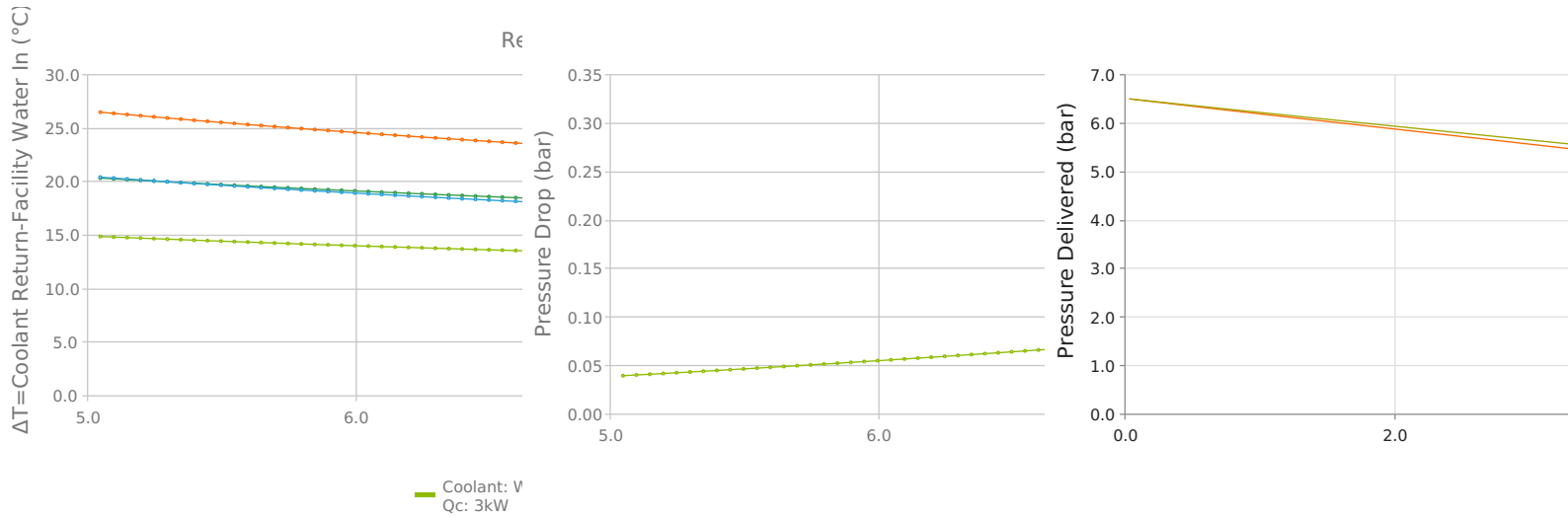


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# Technical Specifications

## Performance

| | |
|---|---|
| **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 |
| **Input Power Connection** | Terminal Block |
| **Maximum Forward Pressure** | 6.5 Bar |

## Physical

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

Revision: 01 Date: 06-29-2025

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