

L1000 Liquid Cooling Distribution Unit

The ThermalWorks L1000 Cooling Distribution Unit (CDU) efficiently and effectively cools a wide range of devices, including Rear Door Heat Exchangers, In-row Coolers, and Direct-to-Chip cooling systems. This unit provides full segregation of the primary hydronic circuit from the secondary data hall circuit through a highly efficient heat exchanger.



Standard Features

- **Dual power feeds** eliminate the need for external Automatic Transfer Switch (ATS).
- **Three pumps** for secondary fluid are hot-swappable (concurrently maintainable) for added redundancy.
- **Programmable Logic Controller (PLC)** in each CDU provides integrated controls, which reduces the need for field integration. 7" Display included, with support for BACNet, Modbus, etc.
- **Brazed Plate Heat Exchanger** provides high surface area for enhanced efficiency and reduced pressure drop.
- **Integrated fluid filtration** enables filter replacement without interrupting operations.
 - Primary Fluid – 250 microns
 - Secondary Fluid – 50 micron (25 micron option)
- **Primary Fluid Piping** is non-corrosive Aquatherm SDR11 with all thermally fused connections.
- **Secondary Fluid Piping** is 316 grade stainless steel (Schedule 10). Alternate specifications for secondary piping are available upon request.
- **Flow monitoring** for primary and secondary circuits included.
- **Additional remote central monitoring** points available upon request.

Optional Features

- Leak detection. Drip pan and berm recommended (to be installed by contractor).
- Secondary system fluid can be water or glycol/water
- Master Control Panel
- Thermal Buffer Tank
- Designed to withstand seismic Zone #4 with ground acceleration of 0.40g. Additional seismic requirements available upon request.

Approvals/Certifications

- ETL/UL
- cUL
- CE

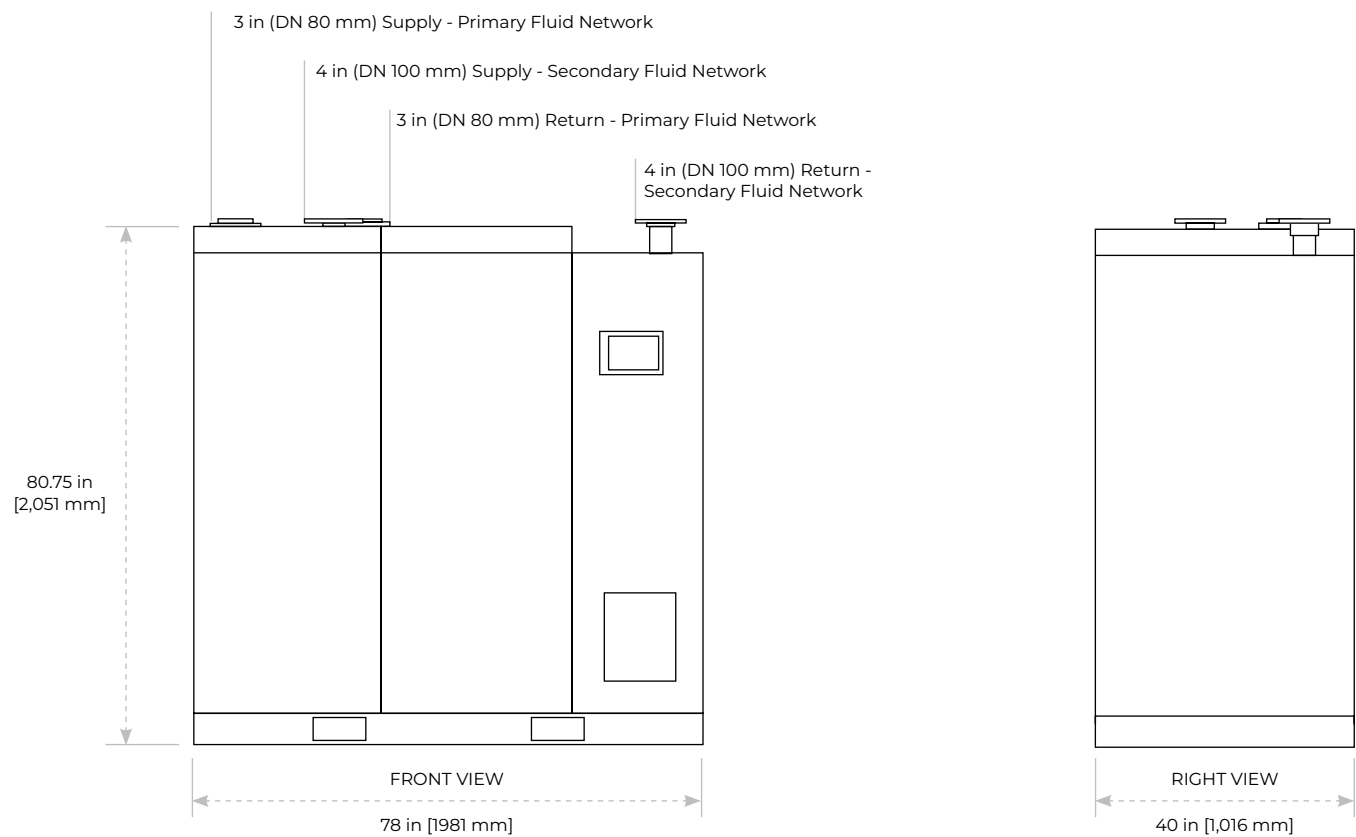
Recommended Operating Conditions

(Alternate operating conditions available upon request)

PERFORMANCE	Cooling Capacity	1 MW
	Primary Circuit (30% Glycol)	Fluid Inlet 65 °F [18.3 °C] Fluid Outlet 101.2 °F [38.5 °C] Flow Rate 197.3 gpm [747 Lpm] Pressure Drop 5 psi [34.5 kPa]
	Secondary Circuit (25% Glycol)	Fluid Inlet 107.6 °F [42 °C] Fluid Outlet 89.6 °F [32 °C] Flow Rate 388 gpm [1469 Lpm] Pressure Drop 15 psi [103.4 kPa]
WORKING PRESSURE	Primary Circuit	150 psi [1034 kPa]
	Secondary Circuit	125 psi [862 kPa]
ELECTRICAL DATA	FLA	38A @ 460V 42A @ 400V
	Volts/Ph/Hz	460V, 3 Ph, 60 Hz or 400V, 3 Ph, 50 Hz
COMMUNICATION	Protocols	BACnet, Modbus, etc.
PHYSICAL DATA	Length x Width x Height	78 X 40 x 80.75 in [1,981 X 1,016 X 2,051 mm]
	Shipping Weight	3,300 lb [1,500 kg]
	Operating Weight	3,550 lb [1,610 kg]

*Not to be used for engineering. Performance will vary under different operating conditions and specifications are subject to change without notice. Please consult with ThermalWorks for engineering support.

Dimensional Drawings



Service Clearances

These clearances can be shared with adjacent CDUs.
Unit should be at least two inches from back of the wall for exhaust air.

