SuperCDU-1200

Liquid-to-Liquid Coolant Distribution Unit

The increasing demand for high-performance computing and advanced GPUs highlights the limitations of air-cooling. Delta's SuperCDU offers a superior alternative, providing effective separation of facility and secondary circuits as well as precise control over flow, pressure, temperature, and coolant quality. It excels in managing high-density thermal load, maximizing computing power while minimizing data center PUE. The SuperCDU ensures operational reliability by preventing condensation and guarantees quality with its stainless steel plumbing and coolant filtration. Embrace the future of high-performance computing with Delta's SuperCDU!

Cost Effective

- Maximize energy saving: cuts power consumption, surpassing traditional air cooling
- Space optimization: compact design enables closer server placement further reducing Capex
- Flexible integration: supports direct-to-chip and Rear Door Heat Exchanger (RDHx) application, adapting to existing setups and blending air and liquid cooling for future upgrades

High Reliability

- Uninterrupted operation: dual power feed with ATS ensures continuous CDU operation
- Optimized redundancy design ensures no single point of failure in the system
- Leak detection: instant alarms with configurable response for efficient pumping action
- Durable construction: stainless steel plumbing with 50-micron filters for long-term coolant quality

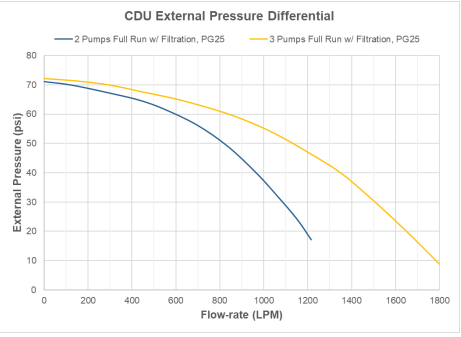
Easy Management

- Intuitive interface: 10-inch color touchscreen displays real-time system status
- Efficient control: group and manual control enhance system management and reliability

Technical Specifications

Model	SuperCDU-1200
Nominal Cooling Capacity	1200 kW @5°C approach, 1200 LPM secondary flow rate, 1160 LPM primary flow rate, 1.0 LPM/kW 1200 kW @4°C approach, 1200 LPM secondary flow rate, 1350 LPM primary flow rate, 1.0 LPM/kW 1000 kW @4°C approach, 1500 LPM secondary flow rate, 1350 LPM primary flow rate, 1.5 LPM/kW 1000 kW @4°C approach, 1000 LPM secondary flow rate, 1100 LPM primary flow rate, 1.0 LPM/kW
PRIMARY SIDE	
Coolant Type	Water
Nominal Coolant Flow Rate	1160 LPM, 27°C primary inlet temperature
Operating Pressure Drop	121.35 kPa @1160 LPM water flow rate
Coolant Filter	500µ with bypass to enable cleaning
SECONDARY SIDE	
Coolant Type	25%PG
Nominal Coolant Flow Rate	3x pumps: 1200 LPM @317.16 kPa external pressure differential 3x pumps: 1500 LPM @206.84 kPa external pressure differential 2x pumps: 1000 LPM @255.11 kPa external pressure differential
Approach Temperature	5°C
Coolant Filter	50µ redundant to enable cleaning
External Pressure Drop	317.16 kPa
POWER SUPPLY	
Nominal Power Supply Voltage	380/400/415/480 Vac, 3P3W+PE
Operating Voltage Range	374-528 Vac
Frequency	50/60 Hz
Maximum Over Current Protection (MOCP)	60 A
Full Load Ampere (FLA)	42 A
Dual Power Feed	Standard
Power Feed Location	Top
DEPLOYMENT	
Primary Connection	4 in. sanitary ferrule
Secondary Connection	4 in. sanitary ferrule
Primary and Secondary Connection Location	Top
PHYSICAL	
Dimensions (W x D x H)	900 x 1200 x 2300 mm (35.4 x 47.2 x 90.6 inch)
Net Weight With Coolant Without Coolant	1450kg (3197 lb) 1200kg (2646 lb)
COMMUNICATION INTERFACE	
Display	10'' color touchscreen
Protocols	SNMP, Modbus RTU, Modbus TCP, BACnet
Monitoring	Primary Side: Temp. (Inlet/Outlet), Flow, Pressure (Inlet, Filter ΔP) Secondary Side: Temp. (Supply/Return), Flow, Pressure (Supply, Return, Filter ΔP) Dew-point Temp.
CONFORMANCE	
Safety	CE, UL/CSA 60335
FEATURES	
Leak Detection	Standard
Pump Redundancy	2x pump (N+1), 3x pump (N) run modes
Temperature/Pressure Sensor Redundancy	Standard
Integrated Variable Frequency Drivers (VFD's)	Standard
Expansion Vessel Redundancy	3x redundant 8L expansion vessels
Auto-restart Function	Standard

All specifications are subject to change without prior notice.



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