RackChiller CDU100



COOLANT DISTRIBUTION UNIT

ADVANCED COOLING TECHNOLOGY FOR HIGH HEAT LOAD APPLICATIONS

The nVent HOFFMAN RackChiller CDU100 is a rack-based CDU, built for the needs of today's most demanding HPC requirements. Capable of managing 100kW+ of heat load in a remarkably small 4U of space, this system provides cooling for up to 200 servers. The RackChiller CDU100 is an extremely efficient heat exchanger that uses ASHRAE W4 warm water to manage processor and component heat. As a result, users can expect a significant reduction in data center OPEX.



FEATURES

- Manages 100kW+ of processor load per network
- Compatible with ASHRAE W4 warm water cooling
- N+1 redundant centralized pumps
- Dry-break quick disconnects
- 5" LCD screen with touch functionality
- Integrated Command2 control and monitoring system (Webserver, Modbus, SNMP)
- Internal and external leak detection system
- 4U rack-mount chassis

BENEFITS

- Warm water cooling reduces the need for chillers
- Manages up to 100 servers in multiple racks
- Quick and easy installation and service
- Consumes only 823W during normal operation
- Can be located anywhere in a rack
- Servers remain hot-swappable for service
- High temperature return water can be used for heat re-use

GENERAL SPECIFICATIONS

- Height 4U/6.97 in./177 mm
- Width 16.93 in./430 mm
- Depth 37.4 in./950 mm
- Weight dry 137 lb/62 kg
- Weight filled 167 lb/76 kg

OPERATIONAL AND PERFORMANCE

- Operating temperature (coolant) 10 °C to 70 °C
- Cooling capacity 125 kW at 6 °C approach
- Primary flow 100 LPM maximum
- Primary operating pressure 232 psi maximum
- Secondary flow 115 lpm/125 lpm maximum

- Volume capacity (secondary) 4.12 gallons/15.6 liters
- Pump redundancy: 2 pumps for n+1 redundancy
- Power requirement: 100V 240V 50/60 Hz
- Current consumption 15A 10A
- Power supply 2, N+1, 2500W each
- Secondary operating pressure (secondary bypass opens at 40 psi, over pressure valve opens at 50 psi) 40 psi
- Minimum approach temperature 4K
- Secondary coolant supply range ASHRAE W17 to W45 (previous W1 to W4)



