CHILLDYNE

COOLING DISTRIBUTION UNIT
CF-CDU300

LEAK-FREE DIRECT LIQUID COOLING

Chilldyne's flagship CDU cools up to a 300 kW load in high density data centers with efficient, leak-free liquid cooling. Its negative pressure technology eliminates downtime from leaks by using vacuum circulation instead of pumps. Intelligent controls fully automate coolant management while seamless software integration enables remote monitoring and control.

KEY FEATURES

- Eliminates leaks by circulating coolant under negative pressure
- Automatically monitors and optimizes coolant quality and temperature
- Easy-to-use interface with detailed logging and analytics
- Real-time performance tracking via touchscreen and networks
- Flexible under-floor or overhead installation
- Rack-sized chassis fits anywhere in the data center
- N+1 redundant configurations available to maximize uptime
- DCIM and BMS integrations support SNMP, Modbus, Syslog, Web API, and more

Zero-leak liquid cooling
Negative pressure technology

700% more efficient
Compared to air cooling

Up to 40% energy savings
Peak thermal performance

450 tons of CO2 reduction annually
Based on 960kW OCP cluster

info@chilldyne.com | chilldyne.com | +1 (760) 476-3419

CHILLDYNE

TECHNICAL SPECIFICATIONS
CF-CDU300

DEVICE SPECIFICATIONS

- **Product:** CF-CDU300
- **CDU Dimensions:** 24" x 80" x 45"
- **Cooling Performance:** 300 kW at 15°C rise with 350 lpm primary flow (3°C approach); 200 kW at 10°C rise with 350 lpm primary flow (2°C approach)
- **Primary Coolant Fluid:** Water, water/glycol
- **Secondary Coolant Fluid:** Water, water/glycol
- **Primary Supply Temperature:** 2°C to 45°C
- **Primary Return Temperature:** Up to 60°C
- **Maximum Primary Loop Pressure Drop:** 20 PSI (140 kPA) at 350 lpm
- **Primary Connection Size:** 2" stainless tri-clamp
- **Primary Connection Location:** Bottom/Top
- **Primary Maximum Pressure:** 100 PSI
- **Primary Filtration:** 100 micron required
- **Maximum Secondary Flow Rate:** 300 liters per minute
- **Secondary Supply Temperature:** Up to 45°C; dew point control included
- **Secondary Return Temperature:** Up to 60°C
- **Secondary Connection Size:** 1-1/4" in barbed standard; other configurations available
- **Secondary Connection Location:** Bottom/Top
- **Secondary Filtration:** 12 lpm side-stream filtration (5 micron) with bypass to enable filer replacement without downtime
- **Flow Meters:** Secondary, Primary
- **Pressure Sensors:** Reservoir chamber (supply), main and auxiliary chambers (return)
- **Temperature Sensors:** Primary supply, primary return, secondary supply, secondary return, ambient
- **Other Sensors:** Ambient RH, water quality
- **Fill Pump and Air Vents:** Automatic fill, automatic drain, automatic air purge
- **Maximum Secondary Loop Pressure Drop:** 22 inHg
- **Pump Motor Power:** 3 HP (liquid ring pump)
- **Power Supply, 60 Hz, 3-phase:** 208 V, 480 V
- **Power Supply, 50 Hz, 3-phase:** 380 V
- **Power Supply, Max Current (A):** 5 A (9 LRA) (480 V); 10 A (17 LRA) (208 V); 7 A (12 LRA) (380 V)
- **Ambient Temperature, as an Average of Hot and Cold Aisles:** 5°C to 40°C
- **Max Altitude:** 7,500 ft (2,300 m)
- **Max Ambient Temperature if Secondary Flow Return is hotter than 50°C or Altitude is >4,000 ft (1,200):** 30°C
- **Communication:** RS-232 Serial CLI, Telnet CLI, Web GUI, Web API, SNMP, Modbus TCP/IP, Syslog UDP, FTP

SCAN FOR MORE INFO

info@chilldyne.com | chilldyne.com | +1 (760) 476-3419