



CDU50 IN-RACK 5U/50 kW COOLING DISTRIBUTION UNIT

DCX direct liquid cooling system



OVERVIEW

The 5U CDU50 Cooling Distribution Unit (CDU) is a compact version of cooling distribution unit designed to fit in the rack and provide 50kW of cooling capacity. It is designed to provide cooling water for secondary loop devices such as rear door heat exchangers, cold plates and other HPC water cooled devices requiring a secure, clean, filtered water supply, closely controlled and above dew-point. It is capable of 50kW cooling capacity with supply water anywhere between 15°C (59°F) to 45°C (113°F).

The CDU50 offers many of the same advantages of the CD300 Cooling Distribution Unit. On the front face of the 5U Unit is the touch screen operator interface for ease of operation and monitoring. The unit controller of the 5U module offers RS 485 communication for BMS and TCP/IP communication for SNMP, web server, FTP, Telnet, SSH, Modbus, etc.

PHYSICAL DATA

	Shipping data	Installed on 19" rack
Unit dimensions	600mm x 435mm x 960mm 23.6" x 17.1" x 37.8"	23.6" x 17.1" x 37.8" 17.5" x 8.6" x 31.0"
Weight	62 kg (136.7 lb)	Dry 36.7 kg (80.7 lb); Wet 41.5 kg (91.3 lb)
Pipe connections	Secondary circuit: 1" BSP male thread connectors Primary circuit: 1" BSP male thread connectors	

- Cooling capacities ranging from 20kw to 50kw** - real efficiency for real applications with warm/hot water in closed loop. Ensures 100% sensible cooling reducing the need for humidication and saving energy.
- Full run/standby capability with redundant pumps** - enables system redundancy and high availability for critical system components.
- Dew point temperature control** - Coolant temperature controlled at above dew point to maximise cooling and ensure condensate-free, optimum operation and minimise energy use.
- Auto fill and bleed of coolant** - autonomous system providing self maintenance in low pressure & low volume secondary loop.
- Full alarm monitoring and connectivity** - Provides essential monitoring of the racks being cooled and system status with RS485 communication for BMS and TCP/IP communication for SNMP, Web server, FTP, Telnet, SSH, Modbus, etc.



ELECTRICAL DATA

Power Supply 110 V – 240 V 50 Hz / 60 Hz; single phase + ground (earth)

Full load current 5.2A on 110V ; 2.4A on 240V

Typical nominal power and installed load 600 W (maximum) 1.45kVA (maximum)

Electrical connection **IEC connector C13 or C14 ; 10A MCB or fuse must be provided on site**

Communication Ethernet RJ45 for RS485 communication (BMS); TCP/IP communication for SNMP, FTP, Telnet, Modbus

PERFORMANCE

Pumps setup Dual 48VDC pumps; tandem or standby operation

Nominal Flow rate 54L/M (14.3 USgpm)

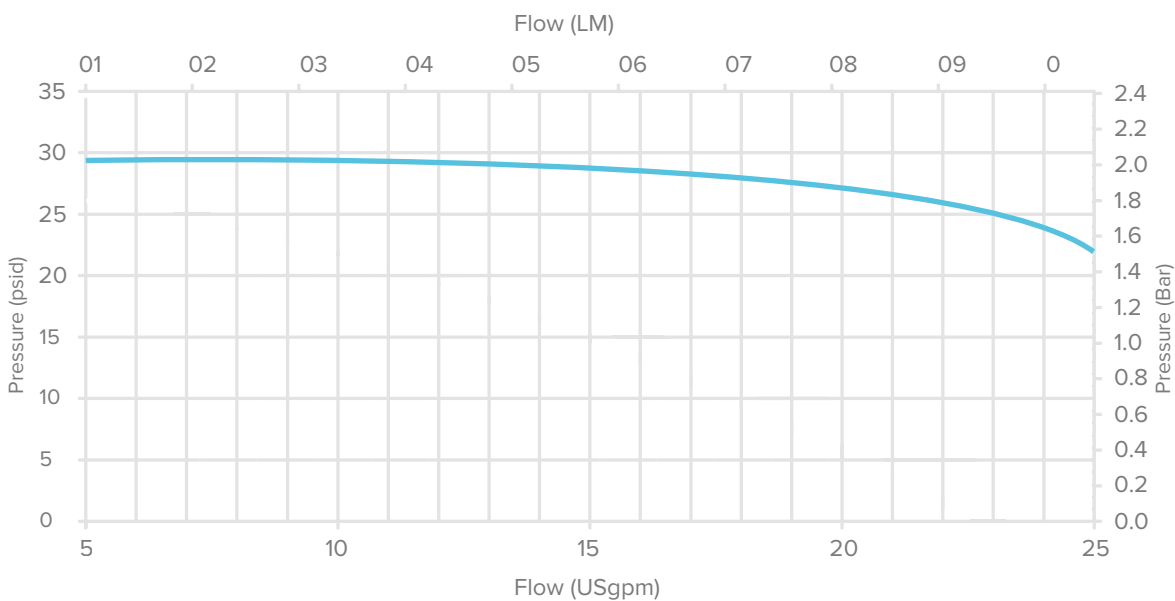
Cooling capacity 50kW with 10°C primary ; 45°C secondary

Minimum approach temperature (primary flow of 30L/M) 5°C at 20% full load 25°C at 100% full load

Primary temperature ASHRAE W1 to ASHRAE W4

Secondary temperature Up to 55°C

FLOW RATE



OEM system manufactured for DCX by Nortek / Servercool



DISCLAIMER:

Maximum performance specifications can be achieved only in certain operating conditions. Performance will vary depending on the installation. These specifications should not be taken as a warranty. In the interest of product improvement, these specifications may be subject to change from time to time without notice. Please consult your sales representative for details.

DCX - Next Gen Direct Liquid Cooling System. Made in EU. www.dcx.eu | www.liquidcooling.eu

