



Coolant Distribution Units

The World's Most Energy Efficient and Space Efficient Cooling Solutions for Data Centers

The Coolant Distribution Unit (CDU) provides close controlled cooling water for a variety of heat exchanger devices such as the Coolcentric® Rear Door Heat Exchangers (RDHx). The CDU creates an isolated secondary loop, separate from the chilled water supply (building chilled water, dedicated chiller etc.), enabling strict containment and precise control of the liquid cooling system. Heat removed by connected heat exchanger devices is transferred to the chilled water supply by means of a stainless steel plate within the CDU. The CDU maintains the secondary loop supply temperature above the dew point of the data center, preventing and ensuring 100% sensible cooling. The CDU controller provides intelligent monitoring and interfaces with building management systems and web management tools for the highest reliability.



CDU Model CD020
20kW Rack-mount

Coolcentric's rack-mount CDU is a 6U high unit that mounts within a 19" EIA IT enclosure. Rated at 20kW, the CDU Model CD020 is a cost effective method to support one to two RDHx in a data center or wiring closet.

The CDU Model CD6A is a floor mount CDU. It is a versatile unit designed with redundant variable speed pumps to maximize system availability. This CDU provides up to 260kW cooling capacity to support up to 26 RDHx, each with a 10kW load density. The CDU Model CD6A is very energy efficient providing up to 260kW of cooling while only consuming a maximum



CDU Model CD6A
260kW Floor-mount

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**CDU Model CD6A
eliminates
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of 3.7kW of energy at 480VAC. This represents nearly 80% reduction in energy consumption when compared to traditional indoor air conditioning units. The CDU Model CD6A is available with a variety of secondary loop distribution options offering maximum flexibility.

The small footprint (600mmx1000mm) and casters makes it easy to deploy and maintain whether the CDU Model CD6A is positioned next to IT enclosures or outside of the white space entirely.

Coolant Distribution Unit Advantages:

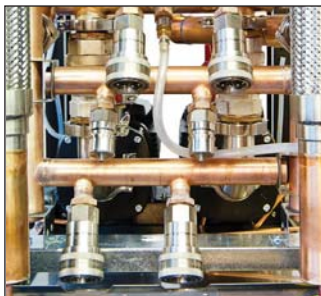
- Creates an isolated secondary cooling loop that minimizes liquid volume and pressure
- Maintains supply water above room dew point to ensure 100% sensible cooling and eliminates condensation (and condensate pumps and drains)
- CD6A controls water flow on a dynamic basis
- Allows quick and easy addition of Rear Door Heat Exchanger units such as Coolcentric RDHx
- CD6A intelligently monitors through SNMP or MODBUS
- Enables proper water treatment for long life, high performance and reliability

CDU Specifications:

	CDU Model CD020	CDU Model CD6A
Maximum Cooling Capacity	20kW	260kW
Coolant Type	Chilled Water	Chilled Water
Physical Configuration	Rack-mount	Floor-mount
Design Pump Capacity	40 L/min (10.6 GPM)	360 L/min (96 GPM)
Number of Pumps	1 Standard	2 Standard and 1 Optional
Available External Head	200kPa (29 psi)	197kPa (28.6 psi)
Primary Pressure Drop	50kPa (7.2 psi)	90kPa (16.0 psi)
Primary Coolant Temperature Range	4-10°C (39-50°F)	5-10°C (41-50°F)
Primary Connection	¾" BSP flat face	54mm/2" sweat Flex Tails
Primary Orientation	Rear Feed	Bottom or Top Feed
Secondary Connection	¾" Quick Connects	2" Flex Tails, ¾" QCs or 1" QCs
Secondary Orientation	Rear Feed	Bottom or Top Feed
Secondary Coolant Volume	1.5L (0.4 Gallons)	14.7L (5.1 Gallons)
Secondary Coolant Volume	3.5L (0.9 Gallons)	55.4L (14.7Gallons)
Approach Temperature @ 100% Load	7.3°C (13.1°F)	5.9°C (10.6°F)
Number of RDHx supported	1-2 RDHx	26 RDHx at 10kW load density
SNMP/Web/Modbus Communication	N/A	Optional
Flow Meter	No	Secondary (Primary optional)
Filtration	No	Primary & Secondary optional
Power Supply	208V, 1Ø, 60Hz or 230V, 1Ø, 50Hz	200V, 3Ø, 50Hz; 208V, 3Ø, 60Hz; or 480V, 3Ø, 60Hz; 400V, 3Ø, 50Hz
Maximum Power Consumption	690W at 230V	3.7kW at 480V
Dual Power Feeds	No	Optional
Noise level at 3 meters	<55dBA	<55dBA
Dimensions (HxWxD)	(6U) 27x48x73cm (6U) 10.5"x19"x29"	1885x600x1000mm 74"x23.6"x39"
Agency/Certification/Conformance	RoHS, CE	RoHS, CE and UL
Dry Weight	46kg (101lbs)	300kg (662lbs)

z: F = Flex Tails; M = Internal Manifold with Quick Connects, no Flow Regulators;

R = Internal Manifold with Quick Connects and Flow Regulators



Optional Internal Distribution Manifold



Redundant Pumps and Valves



CDU Model CD020 - 20kW



Control Panel



view the
CDU_{model}CD6A
online

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