Liebert® DCD™ RACK DOOR COOLING MODULE

Chilled Water-based, Fanless Rack Door Cooling Module

BENEFITS

Flexibility

- Replaces the existing back door on IT racks from Knurr and other major manufacturers
- Requires minimal floor space
- Door allows for full access to the servers and equipment by opening 180 degrees
- Supports both hot aisle/cold aisle configurations and irregular configurations
- Allows adaptive and scalable expansion without interruption of cooling operations

Higher Availability:

- Ensures continuous operation of critical IT systems under extreme heat conditions

Lowest Total Cost Of Ownership:

- Operates with high energy efficiency – no fans or moving parts requiring electricity
- Fanless cooling module requires no maintenance

Ideally Suited For:

- Rack heat loads up to 35kW
- Knurr IT Racks 600mm x 2000mm (w x h)
- Adapter kits available for:
  - Other rack dimensions
  - Other rack manufacturer designs

The Liebert® DCD™ is a fanless heat exchanger module that installs as the rear door of an equipment rack. This chilled water-based system provides up to 35kW of room-neutral cooling.

The Liebert DCD uses the server fans within the protected rack to provide airflow through the unit, pushing hot air through the door-based coil that cools the air and returns it to the room at close to the same temperature as the air entering the rack. And since the module always provides100% sensible capacity, the need for computer room air conditioners to provide humidification is significantly reduced, resulting in lower energy usage.

As many as ten Liebert DCD modules are connected to a single Liebert DCP coolant pumping unit, which acts as an isolating heat exchanger between the building chilled water source and the circulating cooling water.

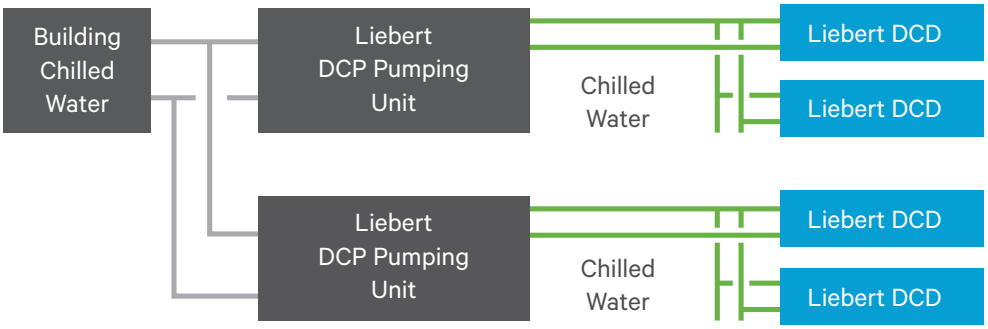
Liebert DCD Rack Door Cooling Module

Bottom or overhead connections are completely static – no moving components will interfere with opening or closing the door.

TECHNICAL DATA	
Nominal Capacity, 60 Hz	20.5 kW / 5.8 Ton
Nominal Capacity, 50 Hz	20.5 kW / 5.8 Ton
Physical *Depth without Rack Adapter Kit	
Height :	78.4" (2000 mm)
Width :	23.5" (600 mm)
*Depth :	5.9" (150 mm)
Weight (empty) :	220 lbs (100 kg)
Rack Compatibility	24" x 42U (600mm x 42U) rack enclosure

Nominal Capacity Rating is @ 54°F (12°C) Entering Fluid Temperatureand 22.9 GPM (5.2 m3/h) fluid flow rate and 111°F (40°C) Entering Coil Air Temperature, 3355 CFM (5700 m3/h) provided by servers.

Building Chilled Water



The Liebert® DCP™ coolant pumping unit creates an isolated secondary loop for the chilled water fed Liebert DCD rear door cooling units. Liebert DCP may also be used with other brands of rack cooling equipment.

The Liebert DCW Chilled Water-based Cooling System

The Liebert DCP coolant pumping unit is a part of the highly energy-efficient, high heat density Liebert DCW chilled water-based cooling system. Designed to support Liebert DCD rack door and Liebert XDK-W rack enclosure, Liebert DCP is an isolating interface between the pumped water and the building chilled water system. The advantages of creating this isolated secondary loop include:

- Control of the secondary loop water temperature to always be above the room dewpoint, thus eliminating the possibility of condensation. There is no need to insulate the piping
- Water quality control because this is a closed loop
- Minimizes the impact of a water leak to the gallons in the circuit vs. the entire building chilled water system

VertivCo.com | **Vertiv Headquarters,** 1050 Dearborn Drive, Columbus, OH, 43085, USA