

Benefits

Low Operational Cost

Reduce your total cost of ownership with the Liebert DCD:

- No energy consumption of the Liebert DCD passive unit.
- Active model uses highly efficient EC fans.
- 0-100% capacity modulation to match cooling demands.
- Utilizes existing building chilled water.
- Total energy savings potential of up to 70% over traditional cooling.

High Cooling Availability

Ensure your critical IT equipment stays cool with advanced control options and system redundancy:

- Optional flow control valve delivers high cooling availability and control.
- Optional monitoring package allows for remote control capabilities to increase system efficiency.
- Optional A/B transfer switch with automatic changeover ensures no downtime.
- Seamless integration with Vertiv™ chilled water pumping systems.

Eliminate heat at the source with space-saving, efficient, and reliable cooling with the Liebert® DCD, designed to provide a room-neutral cooling solution to high-density IT applications from 5kW to 50kW per rack.

Data center managers are constantly faced with the challenge of reducing energy consumption and increasing processing capability without compromising daily business activities. The Liebert® DCD rear door heat exchanger provides a simple, low-cost solution to high density applications while offering scalability and control. When paired with a Vertiv™ Coolant Distribution Unit (such as the Liebert® XDU), the Liebert DCD can offer up to a 70% reduction in operational cost over traditional cooling. By utilizing the IT equipment for air flow and by addressing the heat directly at the source, the Liebert DCD delivers the highest cooling efficiency at the lowest cost that Vertiv can offer.

Effective solutions need to be flexible and scalable.

As your business grows and the cooling demands increase, the Liebert DCD can be added to each rack, providing simple and effective scalability to meet your needs. When heat loads vary throughout the day, it can be difficult to provide proper and efficient cooling to match the demand. The Liebert DCD's wide modulation range allows your facility to quickly adapt to those changing conditions, no matter how frequently they vary throughout the day, providing peace of mind to the end user.



Vertiv™ Liebert® DCD Passive



Vertiv™ Liebert® DCD with Active Module

Technical Specifications

	Liebert® DCD35	Liebert® DCD47*	Liebert® DCD50
Rated Capacity* (kW)	35	47	50
Capacity Modulation Range	0 - 100%	0 - 100%	0 - 100%
Active Module Specifications			
Nominal Airflow m³/h (cfm)	6300 (3700) (n+1 fan) 9000 (5300) (no redundancy)	6300 (3700) (n+1 fan) 9000 (5300) (no redundancy)	7400 (4350) (n+1 fan) 10800 (6350) (no redundancy)
Power Consumption	980 W	980 W	1185 W
Dimensions, mm (in)			
Unit W x D x H	600 x 120*** x 1954 (23.5 x 6.0 x 76.9)	600 x 300 x 1954 (23.5 x 8.7 x 76.9)	800 x 120*** x 1954 (31.5 x 6.0 x 76.9)
Active Module, W x D x H	420 x 125 x 1954 (16.5 x 4.9 x 76.9)		420 x 125 x 1954 (23.0 x 4.9 x 76.9)
Compatible Rack Heights	2000mm, 2200mm	2000mm, 2200mm	2000mm, 2200mm
Compatible Rack Widths	600mm, 800mm	600mm, 800mm	800mm
Weight, kg (lbs)			
Passive Unit, dry	73 (160)	106 (233)	93 (205)
Passive Unit, wet	88 (194)	128 (282)	111 (245)
Active Module	35 (77)	35 (77)	40 (88)
Environmental Requirements			
Operating Air Inlet Temperature °C (F)	10 to 35 (50 to 95)	10 to 35 (50 to 95)	10 to 35 (50 to 95)
Storage Temperatures, °C (F)	-30 to +50 (-22 to +122)	-30 to +50 (-22 to +122)	-30 to +50 (-22 to +122)
Audible Noise	73 dBA	73 dBA	77 dBA
Operating Pressure (Max), bar (psi)	10 (145)	10 (145)	10 (145)
Maximum CW Flow Rate, l/s (gpm)	1.5 (23.8)	2.0 (31.7)	2.0 (31.7)

* Liebert® DCD47 is only available as an Active Model.

† Test conditions for rated capacity: 21C (69F) ambient air temperature, 12C (53F) entering water temperature, 50% RH.

*** 151mm incl. swivel joint

Electrical Requirements	Single Power 110/230V	A/B Transfer 230V	A/B Transfer 110V
Operating Voltage	95 - 264V	190 - 264 V	95 - 126V
Rated Current	5/11A (110/230V)	5 A	11 A
Fuses	10/12 A T	10 A T	12 A T
Supplied Connection Type	IEC 60320 C14	IEC 60320 C14	IEC 60320 C14

Options and Accessories

Active Module Options

Package Option	Description
Standard Package	The standard Active Fan Module. Provides additional airflow to relieve strain from server fans
Monitoring & Display Package	Adds a display unit, up to 4 temperature sensors, a door contact switch, and a leak detector to the standard package
A/B Transfer Switch	Provides automatic changeover in the case of power supply failure to ensure proper operation and cooling availability. 110V or 230V options available



Leak Detector



Door Contact Switch



SN-T Temperature Sensor

Accessories

Accessory	SKU Number	Description
NPT to BSP Adapter	080091650 (1") 080091690 (1 ¼")	This adapter allows conversion from BSP to NPT for CW connections
NPT to BSP Thread Adapter Kit	080091620	This thread adapter kit allows conversion from BSP to NPT for CW connections with a 300mm extension hose. Adapter not available for the Liebert DCD 47kW
Hose Kit (1.5m)	080090660 080090910 - Liebert DCD47 only	For use when connecting to the chilled water system on site during installation. Includes shut off and regulation valve, as well as locations for pressure, temperature, and flow rate measurements
Liebert® DCD Bleeding Set	080091640	The Liebert DCD bleeding set consists of a tool to open the bleeding valve and a hose with a ball valve to properly bleed all the air out of the unit before use
Water Flow Modulating Valve for Active Module	080091670	This valve kit consists of a 2-way ball valve that monitors the entering water temperature and controls the flow rate. This allows for connection to the Liebert DCD Active Module with Display
Water Flow Modulating Valve	080091660	This valve kit consists of a 2-way ball valve that monitors the entering water temperature and controls the flow rate

Build Your Total Infrastructure Solution with Vertiv

Discover expert designed IT infrastructure solutions with proven success in diverse environments and countless applications.

Vertiv™ Liebert® DCD

Provides energy-efficient cooling close to the IT equipment

Vertiv™ Rack

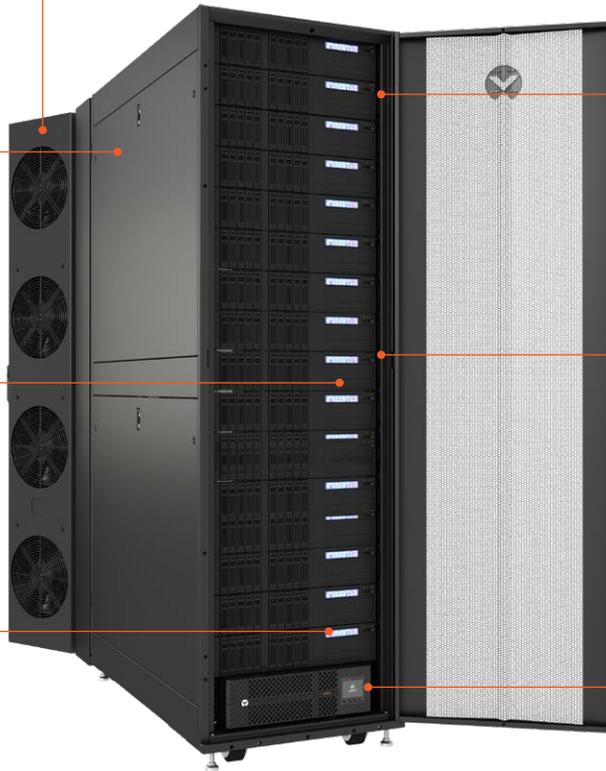
Supports a wide variety of equipment and gives you the flexibility you need with easy installation

Vertiv™ Geist™ rPDU

Reliably distributes power to the rack, supporting dynamic data center operations and DCIM

Vertiv™ SwitchAir™

Prevents overheating of network switches by directing cool air to switch intakes, keeping hot exhaust air out



Vertiv™ ACS Console

Enables integrated remote monitoring, out-of-band management, and IoT connectivity

Vertiv™ KVM Switch

Enables single-point access for switching between multiple computers

Vertiv™ Liebert® GXT5

Helps protect mission-critical equipment from all power disturbances due to blackouts, brownouts, sags, surges or noise interference

BEGIN WITH A RACK

Vertiv™ Racks

Server racks designed to simplify equipment installation and provide an additional 6cm of useable depth.

REGULATE THE FLOW

Vertiv™ Liebert® DCP

Isolate the chilled water loop and dial in temperature and flow rate to maximize the sensible cooling capacity of the units.

DISTRIBUTE THE POWER

Vertiv™ Geist™ Rack PDU

Reliable power distribution from basic to outlet level remote monitoring and management providing the highest level of power reliability, visibility, and control.

STAY COOL

Vertiv™ Liebert® DCD

With increasing heat densities, keeping the IT equipment running at optimal temperatures is more important than ever. Ensure peace of mind with highly efficient, room-neutral cooling.



Easy Integration



Fully Customizable for your IT Needs



Worry-Free Operation with Remote Monitoring

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