

LIEBERT® XDV™ VERTICAL TOP COOLING MODULE

Sensible Spot And Zone Cooling For High Heat Density Equipment



OVERVIEW

This flexible, scalable and space saving product mounts on top of the cabinet or suspended from the ceiling, requiring zero floor space. The modular and adaptive design of the Liebert® XDV™ unit also allows it to be easily added as the demand for cooling increases.

It can either draw in hot air directly from inside the cabinet or from the hot aisle, and discharge cool air down into the cold aisle where the electronic equipment air inlets are located.

The Liebert XDV is a part of our high heat-density cooling product family that utilizes pumped refrigerant technology. The pumped refrigerant operates at low pressure in the system and becomes a gas at room conditions, making it ideal for use around electronic equipment. Since the Liebert XD system always provides 100% sensible capacity, the need for humidification is significantly reduced, further reducing energy usage and maintenance.

The Liebert XDV top-mounted cooling module provides sensible spot and zone cooling for high heat density equipment.

Smart Module technology:

Liebert XDV Smart Modules include integrated control boards that provide the following capabilities:

- Save energy by shedding a fan, based on the supply and return air temperature at the module
- Monitor the status of individual fans on the module with an on-unit, red/green LED
- Be alerted to the presence of condensation
- Remotely shutdown the module via dry contact closures

Flexibility:

- Scalable.
- Can cool more than 10 kW per rack.
- Smart Module or Standard configurations available.
- No floor space required.
- Complements Liebert precision cooling units.
- Optional pre-charged flexible piping with threaded quick connect fitting allows adaptive and scalable expansion without interruption of cooling operations.

- Flexible installation — mounts on top of the cabinet or suspended from the ceiling.
- Excellent for spot and zone cooling.
- Compatible with Liebert XDP, Liebert XDP with iCOM and Liebert XDC systems.

Higher Availability:

- Uses pumped refrigerant, which is ideal for use around electronic equipment.
- Dual (A and B) detachable power cords for increased uptime.
- Complete packaged unit includes enclosure, coil, controls, fans and piping.

Lowest Total Cost Of Ownership:

- Highly Energy Efficient.
- Superior cost for cooling per high heat density rack.



Technical Data

	XDV8	XDV10
Nominal Capacity, 60 Hz ¹	8.8 kW / 2.5 Ton	10 kW / 2.8 Ton
Nominal Capacity, 50 Hz ¹	8 kW / 2.3 Ton	8 kW / 2.3 Ton
Nominal Airflow, 60 Hz	1000 CFM (1700 m ³ /h)	
Nominal Airflow, 50 Hz	830 CFM (1410 m ³ /h)	
Input Voltage	120 V, 1 ph, 60 Hz 230 V, 1 ph, 50/60 Hz	
Full load amps	2A @ 120V, 1ph, 60 Hz 1A @ 230V, 1ph, 50 Hz	
Audible Noise, 60 Hz / 50 Hz	78 dBa / 73 dBa Sound Power	
Height, module only	14" (355 mm)	
Width	23" (581 mm)	
Depth	29.5"-39.5" (749-1003 mm)	
Weight, empty	77 lbs (35 kg)	
Options	Quick Connect Couplings (for Flexible Piping) Smart Module Control Board (Includes Condensate Detection)	

¹ Nominal Capacity Rating is @ 55°F (13°C) Entering Fluid Temperature and 98°F (37°C) Entering Air Temperature.
 Max capacity 60Hz: XDV8 - 8.8kW @ 95 F (35 C), XDV10 - 11.8kW @ 106 F (41 C)
 Max capacity 50Hz: XDV8 - 8.8kW @ 103 F (39 C), XDV10 - 11.8kW @ 116 F (47 C)

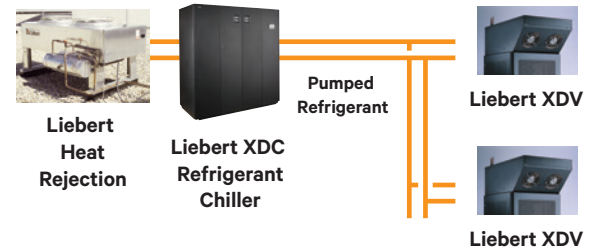
Liebert® XD™ Hydraulic System Schematic

The indoor Liebert XDC refrigerant chiller is specifically designed to support the Liebert XD cooling modules. The Liebert XDC connects directly to the XD modules.

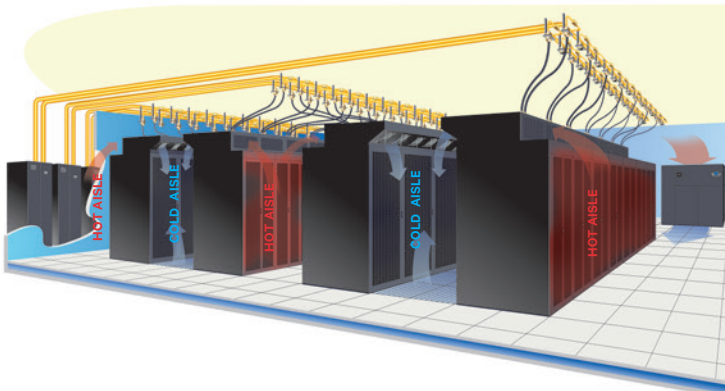
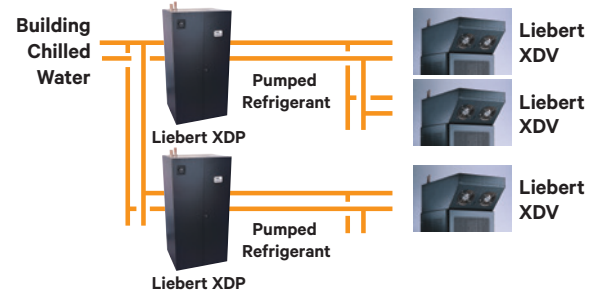
When a building chilled water system is available, the Liebert XDP pumping unit is utilized as an interface between the pumped refrigerant circuit and the chilled water system.

Both the Liebert XDC and the XDP units circulate the refrigerant to Liebert XD units, while maintaining the refrigerant at a temperature always above the actual dewpoint.

Direct System



Indirect System



The Liebert XDV works extremely well with the "hot aisle-cold aisle" approach.