

# LIEBERT® XDH™ HORIZONTAL ROW COOLER

Cooling For High Heat Density Equipment



## BENEFITS

### Flexibility:

- Scalable.
- Can cool more than 30 kW per rack.
- Smart Module or Standard configurations available.
- Complements Liebert precision cooling units.
- Optional pre-charged flexible piping with threaded quick connect fittings allows adaptive and scalable expansion without interruption of cooling operations.
- Flexible installation.
- Complete packaged unit includes enclosure, coils, controls, fans and piping.
- Compatible with Liebert XDP, Liebert XDP with iCOM and Liebert XDC systems.

### Higher Availability:

- Dual (A and B) detachable power cords for increased uptime.
- Uses pumped refrigerant which is ideal for use around electronic equipment.
- Two pumped refrigerant circuits.

### Lowest Total Cost Of Ownership:

- Superior cost for cooling per high heat density rack.
- Highly energy efficient.

The modular, Liebert® XDH™ Horizontal Row Cooler provides efficient and economical cooling for high heat density equipment.

**The Liebert XDH is placed in line with rack enclosures and air from the hot aisle is drawn in through the rear of the unit, cooled, and discharged into the cold aisle where the electronic equipment air inlets are located. The Liebert XDH draws directly from the hot aisle, allowing the unit to take advantage of higher heat transfer efficiency.**

The Liebert XDH 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 modular and adaptive design of the Liebert XDH unit also allows it to be easily added as the demand for cooling increases.

### Smart Module technology:

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

- Save energy by shedding up to two fans –one on the top bank of fans, one on the lower bank of fans, 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



## Liebert® XDH™ Specifications

MODEL SIZE	XDH20	XDH32
Nominal Capacity, 60 Hz <sup>1</sup>	22 kW /6.3 Ton	30 kW / 8.5 Ton
Nominal Capacity, 50 Hz <sup>2</sup>	19 kW /5.4 Ton	27 kW / 7.7 Ton
Nominal Airflow, 60 Hz	2500 CFM (4200 m3/h)	4000 CFM (6800 m3/h)
Nominal Airflow, 50 Hz	2100 CFM (3500 m3/h)	3300 CFM (5600 m3/h)
Input Voltage	120 V, 1 ph, 60 Hz 230 V, 1 ph, 50 Hz	
Power Draw	500 W	1200 W
Full load amps	4.2 A @ 120V	10.5 A @ 120V
Number of Fans	6	
Sound Power Level	81 dBA	86 dBA
Height (unit only)	78" (1982 mm)	
Width	12" (300 mm)	
Depth	42" (1066 mm)	
Weight	246 lbs (112 kg)	
Options	Quick Connect Couplings (for Flexible Piping) Smart Module Control Board (Includes Condensate Detection) Diffuser for front air discharge to both sides or to one side.	

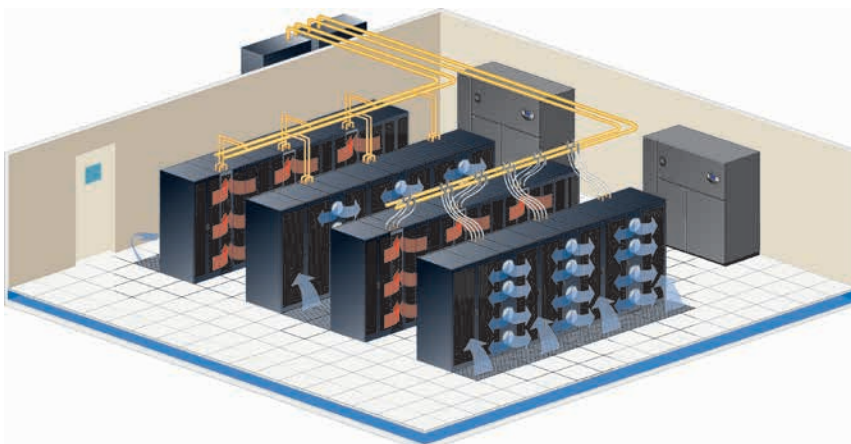
<sup>1</sup> Nominal Capacity Rating @ 55 °F (13 °C) Entering Fluid Temperature and 98 °F (37 °C) Entering Air Temperature. Max Capacity @ 55 °F (13 °C) EFT and 105 °F (40 °C) EAT is 25.5 kW and 34.5 kW, respectively.

<sup>2</sup> Nominal Capacity Rating @ 55 °F (13 °C) Entering Fluid Temperature and 98 °F (37 °C) Entering Air Temperature. Max Capacity @ 55 °F (13 °C) EFT and 116 °F (47 °C) EAT is 25.5 kW for XDH20 and 34.5 kW @ 108 °F (42 °C) EAT for XDH32.

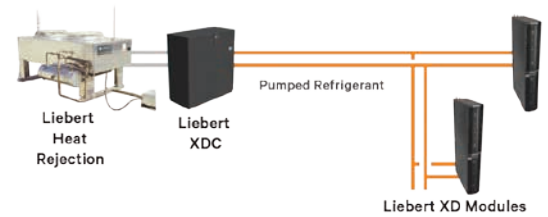
The indoor Liebert XDC Refrigerant Chiller is specifically designed to support Liebert XD cooling modules. The Liebert XDC connects directly to the XD Modules.

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

