



Liebert® XDM

Modular Indoor Chiller
for High-Density Pods

Pumped Refrigerant
Economization (PRE)



Vertiv™ Liebert® XDM is a split indoor chiller with integrated pumped refrigerant economization (PRE) designed to bring high-density cooling to targeted areas of air-chilled data centers, without the need for chilled water on site. It works in tandem with the Vertiv™ Liebert® DCD chilled water rear door heat exchanger and can be mixed and matched with air-cooled Vertiv™ Liebert® DSE units, affording you the greatest flexibility in deploying your customized cooling strategy and helping you realize your reliability, availability, and efficiency goals.

Solve High-Density Challenges in Your Air-Cooled Environment

Data centers with air cooled architecture have long enjoyed the efficiency, scalability and flexibility inherent in their cooling strategies. However, deploying newer high-density equipment in these environments presents a formidable challenge: How do you effectively cool the equipment without access to chilled water on site? The new Liebert XDM resolves the issue, making it simple to integrate high-density cooling where needed, with no need to reengineer the entire data center environment.

Integrate liquid-cooled racks without chilled water onsite

The new Liebert XDM gives you a simple, cost-effective way to cool concentrated pods of high-density equipment in your air-cooled data center. The Liebert XDM uses integrated pumped refrigerant economization (PRE) to stand in for chilled water, increasing the efficiency and simplicity of the solution. Paired with Liebert® DCD chilled water rear door heat exchangers, the XDM provides the variable speed pumps and heat rejection solution you need to effectively handle the high heat output from racks of high-density equipment located in your data center.

Put high-density cooling wherever you need it

The Liebert XDM is engineered with the same footprint as the air-cooled Liebert DSE, the world's leading pumped refrigerant economization solution for data centers. The equal building blocks allow you to easily swap in Liebert XDM units where needed to address small pods of high-density equipment in existing data centers while future-proofing the planning and design of new data centers. Front and top service access eliminates the need to leave room for service clearance and allow units to be placed side by side, optimizing available floor space and further simplifying retrofits and planning.

Build redundancy into your cooling strategy with modular units

Liebert® XDM200 modules can be deployed separately or paired together to create the Liebert® XDM400. Each module operates independently to ensure complete redundancy for your cooling applications. Units can function in teamwork mode to adapt to changes in the facility and IT demand, improving energy efficiency and IT equipment availability while reducing system wear and tear, maximizing the useful life of the equipment, and further reducing the total cost of ownership.

Benefits

- Easily and cost-effectively incorporate liquid-cooling for small pods of high-density racks in your air-chilled environment
- Eliminate the need for onsite chilled water and simplify operations by leveraging efficient pumped refrigerant economization (PRE) in place of chilled water
- Add flexibility and redundancy with modular units that can function independently or in teamwork mode
- Add top or bottom liquid connection to device heat load
- Improve efficiency with variable speed pumps
- Mix and match air-cooled and liquid-cooled units to simplify retrofits and future-proof your data center design, thanks to standardized footprint and flexible service access
- Lower your total cost of ownership with an easy-to-deploy, efficient, and highly flexible high-density cooling solution

Vertiv™ Liebert® XDM Features

Pumped Refrigerant Economization (PRE) efficiently and reliably cools pods of high-density racks without the need for chilled water.

Variable Speed Pumps allow for variation in flow of PRE based on load demand, increasing efficiency and saving energy dollars.

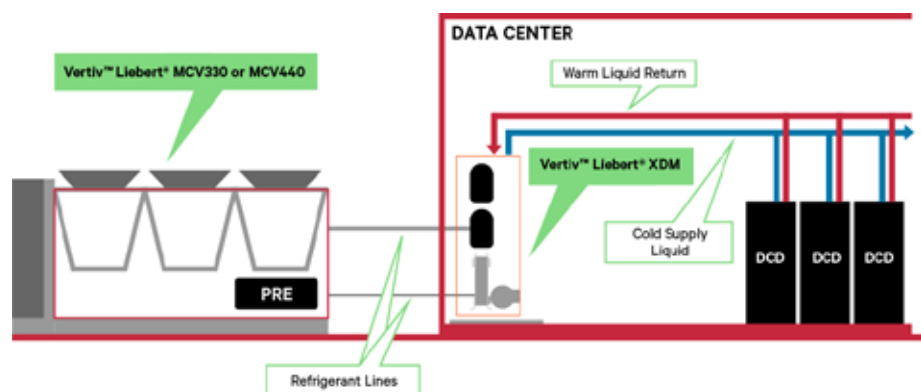
Modular Design supports efficiency and redundancy needs by allowing units to function independently or in teamwork mode, so you can add the cooling capacity and protection you need.

Standard Footprint that mirrors the size of air-cooled Vertiv™ Liebert® DSE units, simplifying retrofits, future proofing new data center designs, and allowing you to mix and match units to customize your cooling strategy.

Front and Top Service Access increases installation flexibility

Dual Power with Reversing Starter allows you to apply a backup generator in addition to the main power source and enables automatic switchover between the two, ensuring uninterrupted operation.

Supercap for quick start and fast restart after power loss.



Working in tandem rear door Vertiv™ Liebert® DCD, the Vertiv™ Liebert® XDM integrates pumped refrigerant economization (PRE) to eliminate the need for chilled water, allowing you to easily and efficiently cool pods of high-density racks in your air-cooled data center.

Technical Data

Dimensions

| Model | Vertiv™ Liebert® XDM 200 (Single Module) | Vertiv™ Liebert® XDM 400 (Dual Module) | |
|--|---|---|-----------|
| H x W x D mm(inch) | 1930mm x 1575mm x 1192mm (76" x 62" x 46 7/8") | 1930mm x 3096mm x 1192mm (76" x 121 7/8" x 46 7/8") | |
| Weight Dry +/- 5% kg (lbs.) | 1800 (816) | 3205(1454) | |
| Customer Connections (secondary loop to RDHX or liquid cooled server racks) | | Power Supply | |
| Chilled Water | 2-1/2" (150 lb) | Power Supply US | 460V/60Hz |
| | CL Steel Pipe Flange | Dual Power Feeds (ATS) | Optional |
| Chilled Water Valves | Manual isolation valves, Maximum design water pressure | Liebert® XDM (Single Module) | |
| | 400 PSI [2758 kPA] | FLA | 91.8 |
| Fluid type | Water / Water-glycol | WSA | 97 |
| Number of Pumps | 1 | OPD | 110 |
| Pump Redundancy | | Liebert® XDM + MCV330 + PRE | |
| Liebert XDM 200 (Single Module) | Single pump (N) | FLA | 108.6 |
| Liebert XDM 400 (Dual Module) | N+1 of 200 kW modules | WSA | 113.8 |
| | | OPD | 125 |
| Liebert XDM 200 & 400 | 25 ft (7.6 m) | Liebert® XDM + MCV440 + PRE | |
| Liebert® XDM water volume | | FLA | 114.2 |
| Liebert XDM 200 (Single Module) | 6.2 gallons | WSA | 119.4 |
| Liebert XDM 400 (Dual Module) | 12.4 gallons | OPD | 125 |
| The Liebert XDM 400 consists of two separate electrical circuit feeds | | | |



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

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