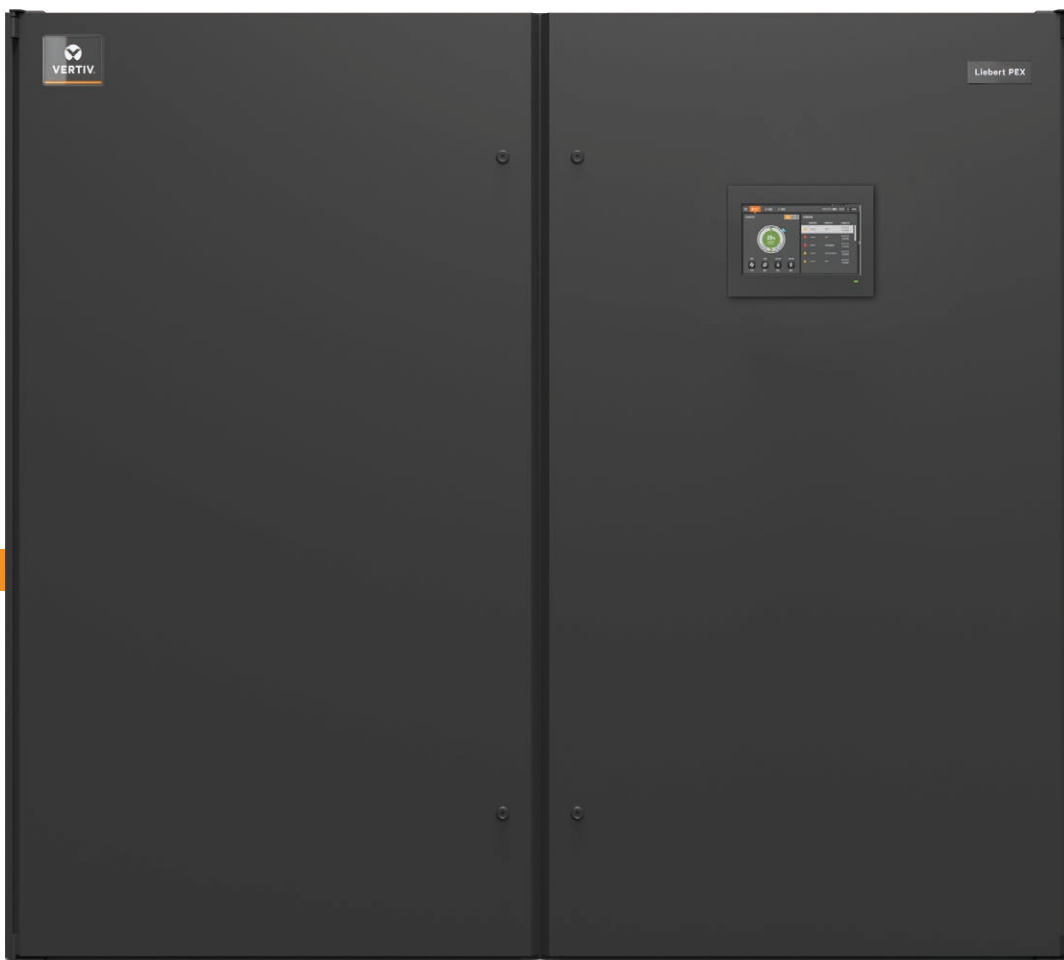




# Vertiv™ Liebert® PEX3

30-100kW

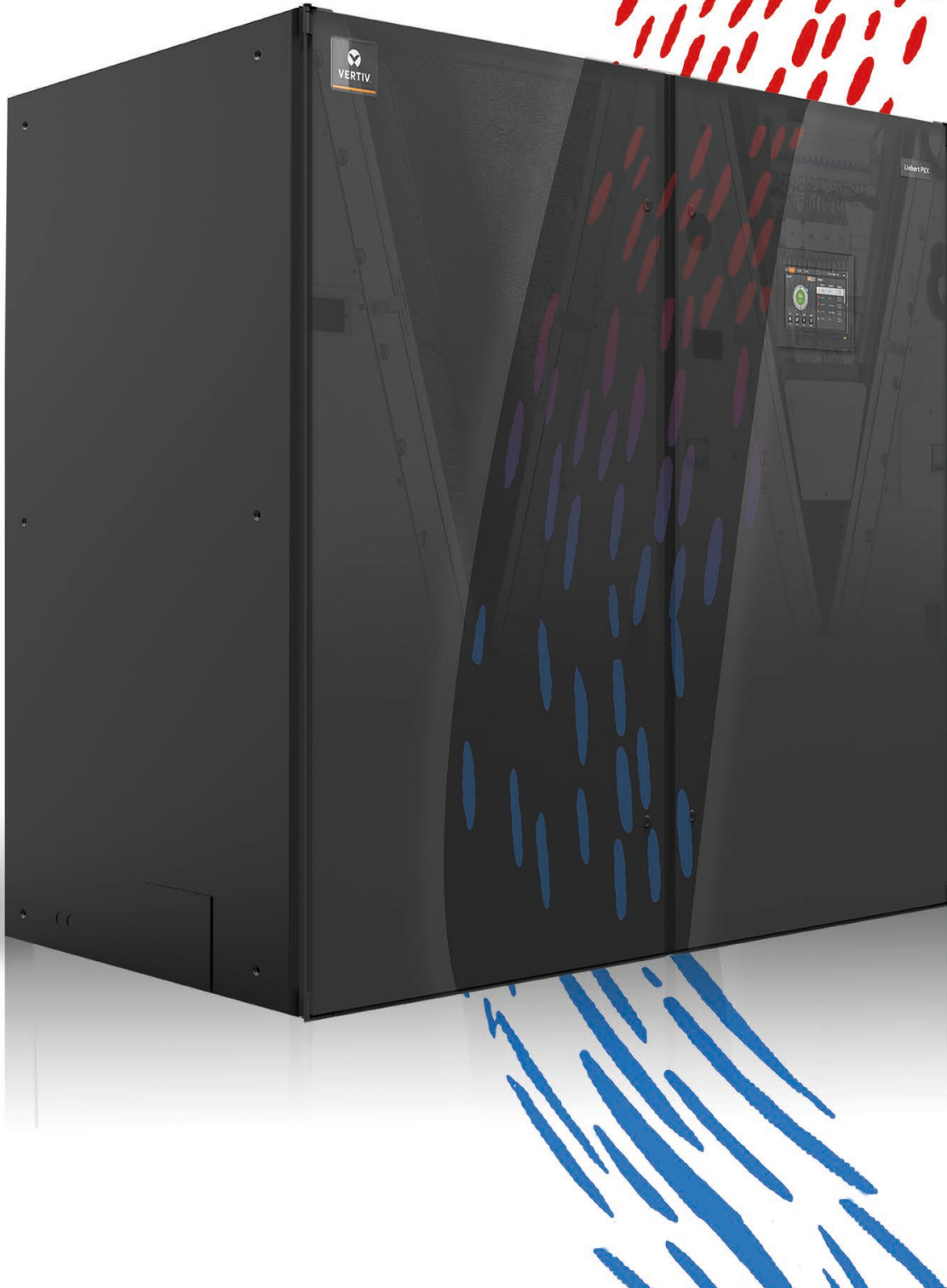
Economical Precision Solution  
in Compact Footprint



# Vertiv™ Liebert® PEX3 30-100kW

*Unparalleled efficiency and precision cooling for your mission-critical loads*

Vertiv™ Liebert® PEX3



## Introducing Vertiv™ Liebert® PEX3 Reliable & Efficient Precision Cooling Solution

At Vertiv, we understand the evolving nature of your business, so is our products which supports your business continuity. Our latest thermal management solution, the Liebert® PEX3, features advance technologies that gives to mission critical loads the highest levels of efficiency, utmost reliability within the most compact footprint.

The Liebert® PEX3 direct expansion cooling unit is equipped with the advanced industry technology, guaranteeing precise cooling of data centers and server rooms. It comes complete with R410A refrigerant, enabling the unit to achieve significant efficiency levels.

Liebert PEX3 is equipped with the most advanced heat exchanger (evaporator coil) technology, it uses microchannel coil that truly enhances unit efficiency. The Liebert PEX3 range is also embedded with new generation Liebert EC Fans 2.0, thereby taking efficiency measures to new heights.

Liebert PEX3 ranges from 30 to 100kW, each 10kW interval comes with single & multiple compressor options. In fact, 50 kW model has both.

The complete unit design makes Liebert PEX3 an ideal, scalable cooling system that is able to expand with your evolving business needs.

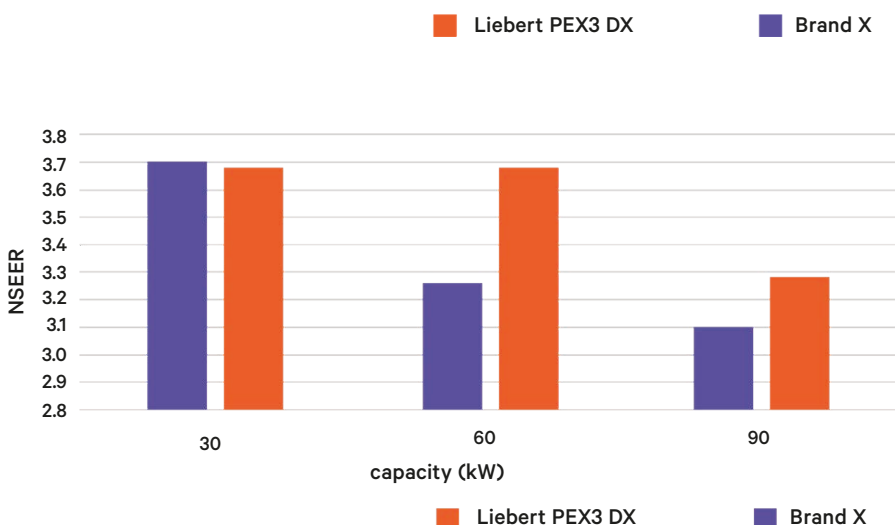
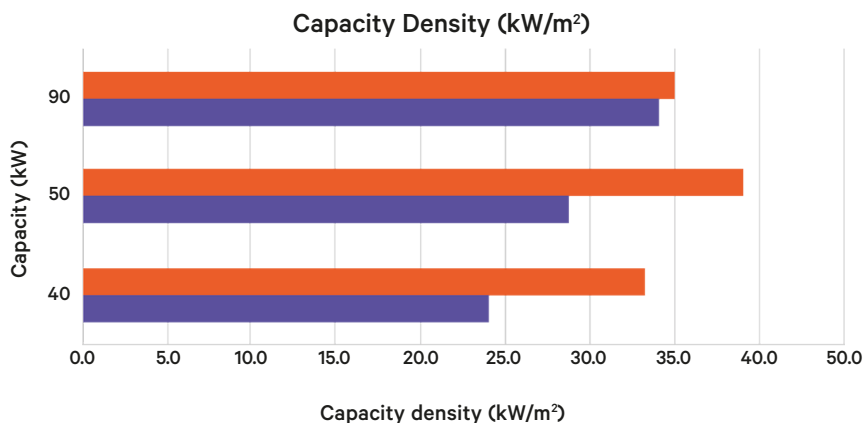
Graph (at right side) reflects Liebert PEX3 DX features 10%-25% more compact & 5-10% more efficient than other in market.



Vertiv™ Liebert® PEX3 Down flow



Vertiv™ Liebert® PEX3 Up flow



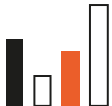
Above values have been calculated based on return air condition of 24°C, 50%RH and condensing temperature of 45°C, excluding condenser power consumption.

*Enhanced efficiency through evaporator coil powered by Microchannel Aluminium coils - first ever deployed in Vertiv™ Liebert® PEX series.*



## Evaporator Coil - Microchannel

- Microchannel coils are 40% smaller, 40% more efficient, and use 50% less refrigerant than standard tube and fin coils.
- Multiple micro channels improve heat transfer.
- Flat tube results in lesser air side pressure drop, less power consumption.
- Compact design & less also resulting in reduced unit weight.



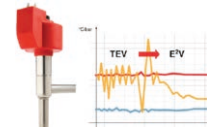
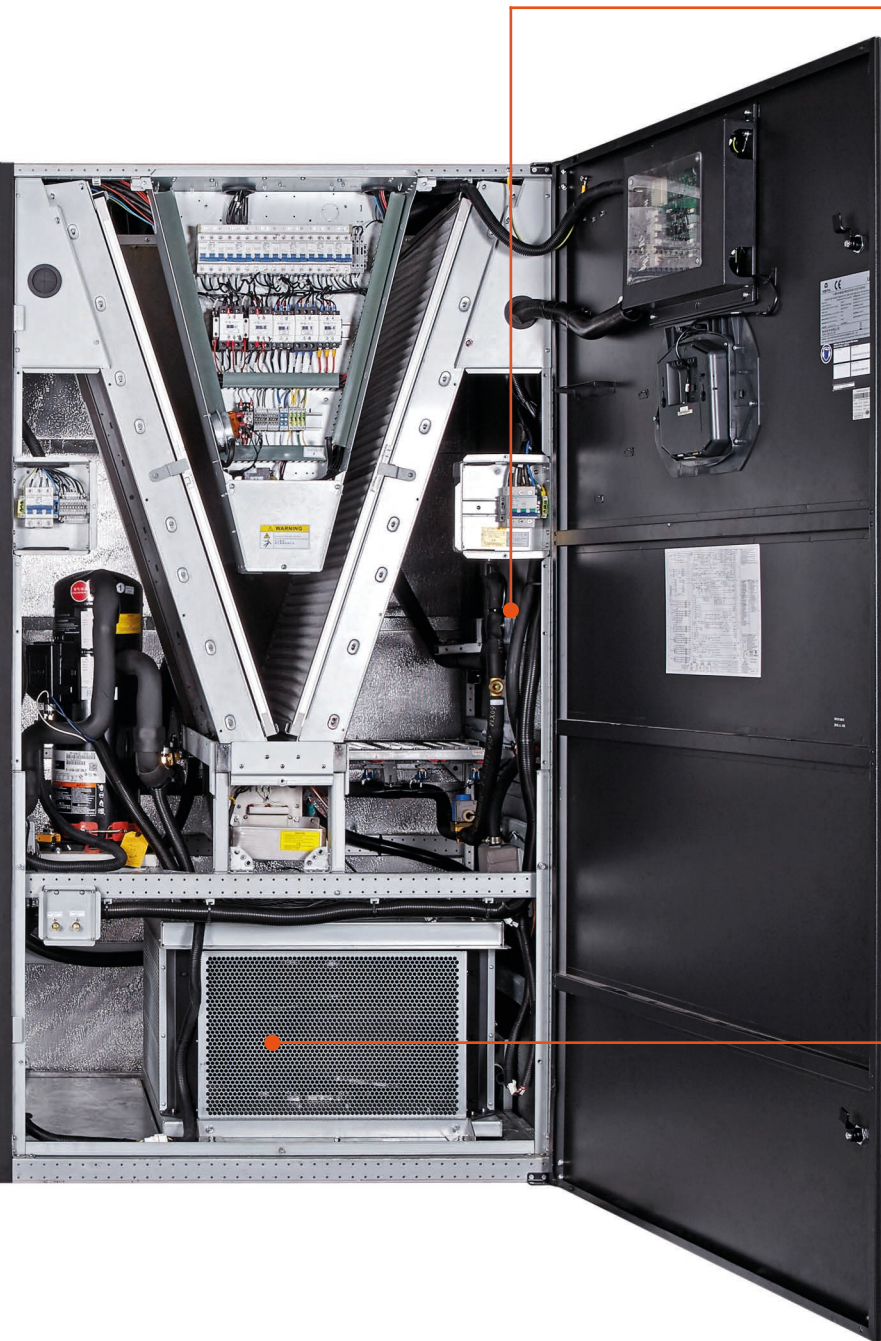
### Compact Design

Vertiv™ Liebert® PEX3 has a footprint nearly 15~30% lower than other brands, available in 4 frame sizes.



### Wide Capacity Range

Liebert® PEX3 DX is available from 30 to 100kW both in down flow and up flow configurations.



### Electronic Expansion Valve

- Necessary for integrated and optimal variable capacity control.
- Maintain constant superheat.
- EEV is standard feature in Vertiv™ Liebert® PEX3.



### EC Fan

- The unit is equipped with a direct, high efficiency, single inlet, reverse curved, centrifugal plug type innovative EC fan(s).
- The EC fan technology regulates airflow and reduces the fan input power. In-floor configuration further reduces energy consumption in downflow units.
- Vertiv™ Liebert® Liebert EC 2.0 fan modulates the fan speed according to load density; saving nearly 30% of energy consumption.



### Precise Temperature & RH Control

Liebert® PEX3 technology enables close monitoring and control of room temperature, the standard version includes advanced controller, heater, humidifier and other components.



### Environment friendly option

The use of the eco-friendly refrigerant R410A (standard) is particularly advantageous: The best parameters in terms of heat exchange to improves greenhouse performance.

# Vertiv™ Liebert® PEX3 30-100kW

The Liebert® PEX3 is integrated with the Vertiv™ iCOM™ Controller, which drives efficiency by acting as the brains of the thermal management system. The iCOM Controller enables optimum performance even under varying load conditions, resulting in significant OPEX savings.



## Features

- 9-inch touch screen display.
- Allows central monitoring and management of the unit's performance.
- Capable of being grouped with other iCOM™ perimeter units for management of multiple units.

## Intelligent Thermal Controls for Smarter Management

Make smarter decisions in your critical infrastructure space with integrated intelligent controls for ease of management. The Liebert PEX3 is equipped with Intelligent Controls and the Vertiv™ Liebert® RDU, allowing users to easily manage multiple Liebert PEX3 units even 3rd party units (up to 32 units). The added intelligence gives a holistic view of the entire data center performance.

## Features

- Management environmental conditions i.e. temperature and humidity, leak, smoke, thermal group control, and digital inputs and outputs.
- Monitoring infrastructure and alarm management: Cooling unit, UPS, gensets, etc.
- Equipped with a built-in web server, eliminating the need to perform a software installation.
- Ability to network with other perimeter units, including 3rd party products

## Added intelligence and control with the Liebert® RDU monitoring solution

The Liebert RDU gives data center managers the ability to easily and conveniently monitor and control their critical infrastructure by having insight into overall environmental (temperature, humidity, leak and smoke, etc.) and equipment (UPS, thermal management units, etc.) performance. Through the Liebert RDU's advanced group control modes, data center managers can rest easy having additional security and control with their critical infrastructure. This prevents unexpected downtime or shutdowns caused by equipment failures or other causes.



## Technical Specifications

Parameters	P1030	P1040	P1050(S)*	P1050(D)**	P2060
Dimensions (W×D×H) (mm)	930 × 995 × 1975		1130 × 995 × 1975		1830 × 995 × 1975
Operational Weight (kg)	360	420	440	470	660
Test Condition : Return air temp at 24°C DB/17°C WB & condensing temperature : 45°C					
Net Cooling Capacity (kW) (downflow)	31.1	41.8	49.2	48.9	62.3
Net Cooling Capacity (kW) (upflow)	30.9	41.6	48.9	48.6	62.0
Air Flow (m <sup>3</sup> /h)	10100	12500	13600	13600	20200
No of Compressor***& Fan	1 & 1	1 & 1	1 & 1	2 & 1	2 & 2
Type of filter	Dry media type (G4 rating) - Standard				
Electrical Characteristics	400V (-15% ~+10%), 3Ph + N ~50Hz				

Parameters	P2070	P2080	P2090	P2100
Dimensions (W×D×H) (mm)	1830 × 995 × 1975		2230 × 995 × 1975	
Operational Weight (kg)	670	740	770	780
Test Condition : Return air temp at 24°C DB/17°C WB & condensing temperature : 45°C				
Net Cooling Capacity (kW) (downflow)	71.3	83.7	86.8	98.3
Net Cooling Capacity (kW) (upflow)	71.0	83.1	86.2	97.7
Air Flow (m <sup>3</sup> /h)	21200	25000	25600	27200
No of Compressor***& Fan	2 & 2	2 & 2	2 & 2	2 & 2
Type of filter	Dry media type (G4 rating) - Standard			
Electrical Characteristics	400V (-15% ~+10%), 3Ph + N ~50Hz			

### Notes:

\*50 kW model with single refrigerant circuit.

\*\*50 kW model with dual refrigerant circuits.

\*\*\*Hermetic fixed scroll compressor with R410A refrigerant.

- In Evaporator microchannel coil is used for better performance.

- Each coil module consists EEV as standard.

- Infrared humidifier & single stage heaters are standard.

- For details, please refer technical manual of Vertiv™ Liebert® PEX3.

- In P1030 U/D model water cooled version available.

- Specification are subject to change without any prior notice.



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