VERTIV.

Liebert® PEX3™

30-100kW

Economical Precision Solution in Compact Footprint

Liebert® PEX3™ 30-100kW

Unparalleled efficiency and precision cooling for your mission-critical loads

Liebert® PEX3™

Introducing 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.

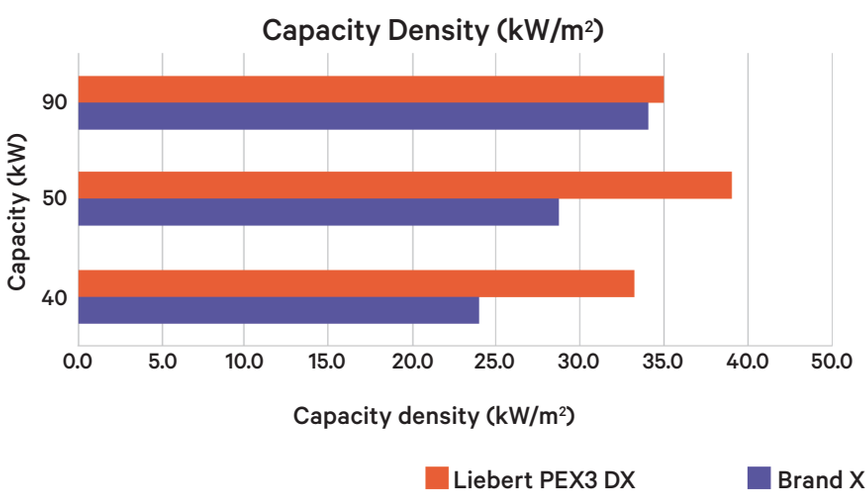
Liebert® PEX3™ ranges from 30 to 100kW, each 10kW interval comes with single & multiple compressor options. In fact, 50 kW model has both.

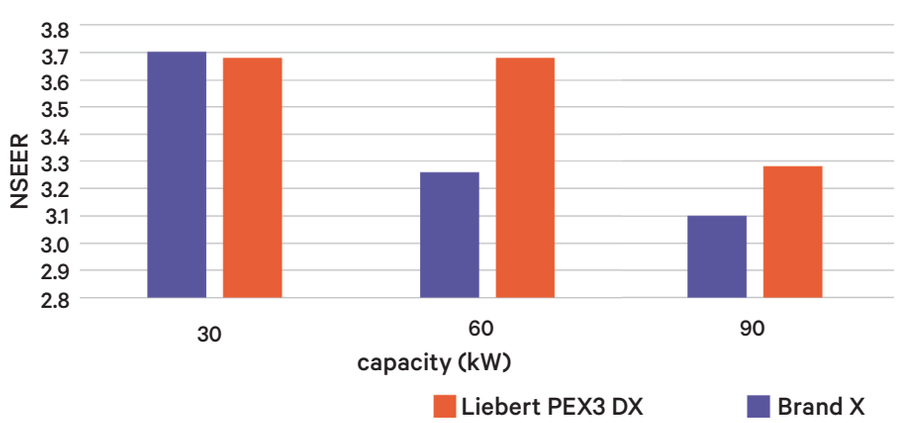
The complete unit design makes PEX3 an ideal, scalable cooling system that is able to expand with your evolving business needs.

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

PEX3 Down flow

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 PEX series

EVAPORATOR COIL - MICROCHANNEL

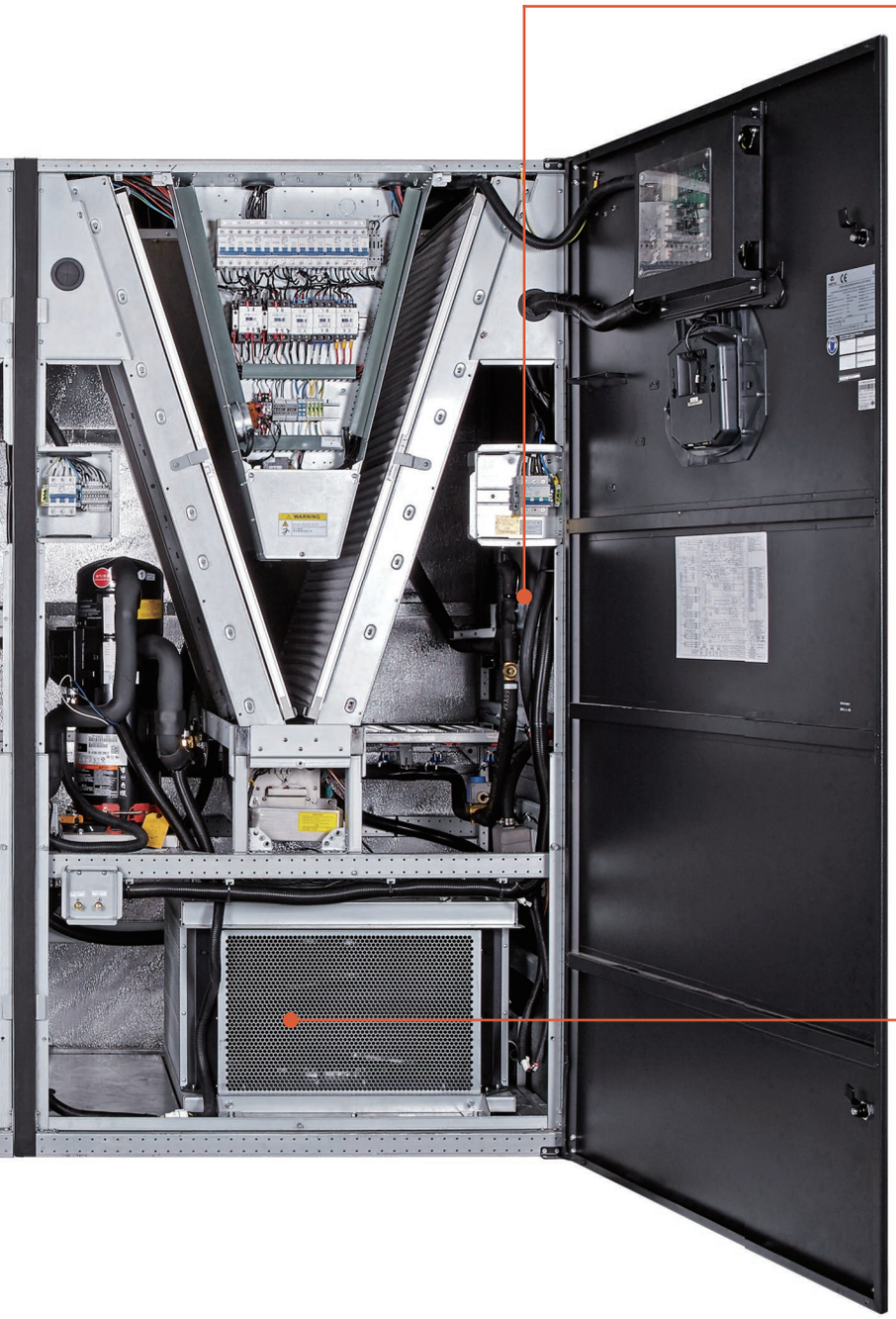
- Microchannel coils are 40% smaller, 40% more efficient, and use 50% less refrigerant than standard tube and fin coils.
- Multiple micro channels improve heat transfer.
- Flat tube results in lesser air side pressure drop, less power consumption.
- Compact design & less also resulting in reduced unit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

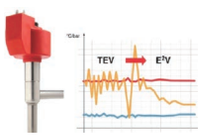
Compact Design

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

Wide Capacity Range

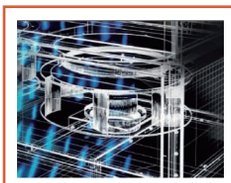
PEX3 DX is available from 30 to 100kW both in down flow and up flow configurations.





ELECTRONIC EXPANSION VALVE

- Necessary for integrated and optimal variable capacity control.
- Maintain constant superheat
- EEV is standard feature in 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.
- Liebert EC 2.0 fan modulates the fan speed according to load density; saving nearly 30% of energy consumption.

Precise Temperature & RH Control

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.

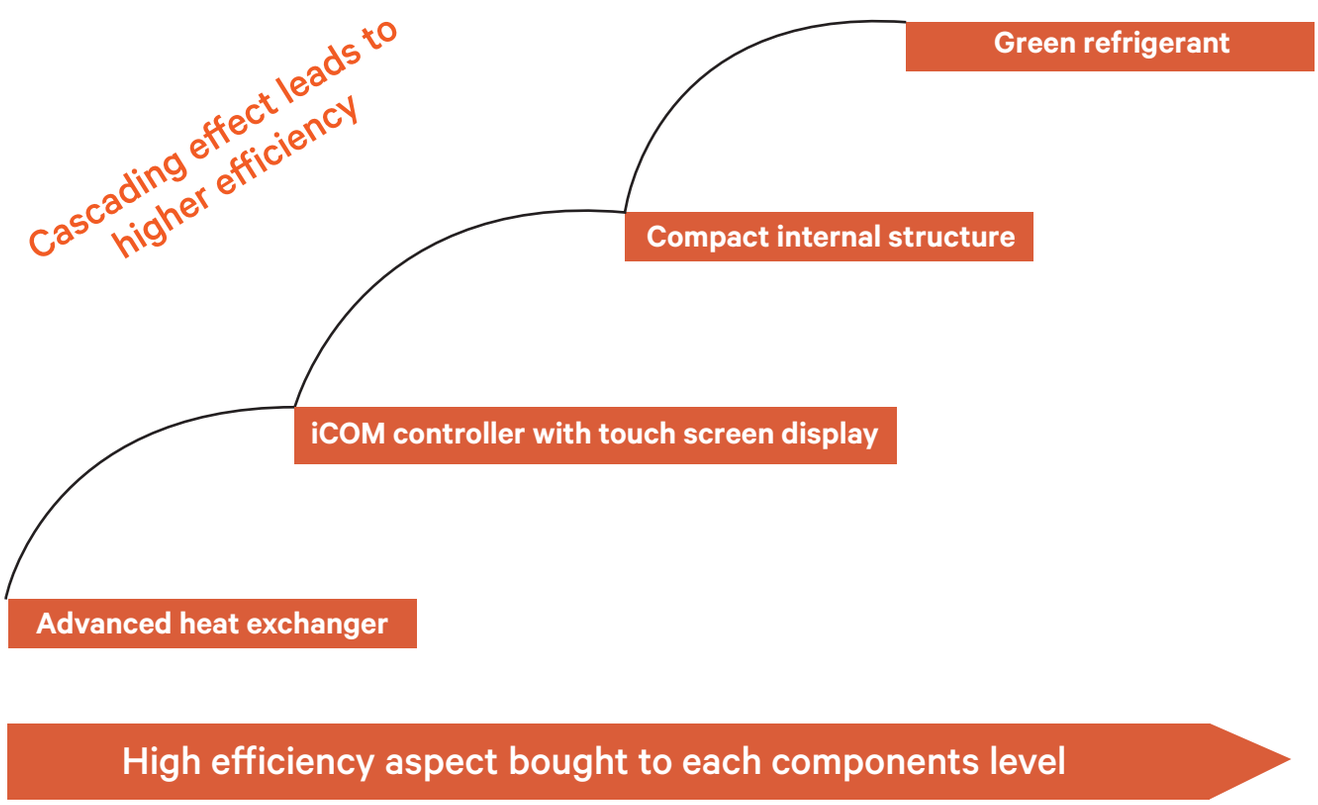
Vertiv™ iCOM™ Controller Drives Liebert® PEX3™ to the Highest Efficiency Levels

The Vertiv™ iCOM device features a unique control algorithm designed to manage the operation of the Liebert® PEX3™ units, ensuring top reliability under all conditions. With the optional wall-mounted display, Liebert PEX3 units with the Vertiv iCOM control graphic display can be centrally monitored and controlled.

PEX3 unit is available with 9-inch touch screen as a standard display, using multi-colour 800×480 dot-matrix liquid crystal touch screens with white backlight. The operation of the unit becomes simpler and more convenient, and the status view of the unit becomes more visualized.

The display allows access to the unit via the network as well. And facilitate coordination among Liebert PEX3 units within the same room by virtue of Integrated Ethernet Connection. The self monitoring of redundant units alternates standby positions and prioritize potential hot spots. The high-level supervision of multiple units allows them to work together as a single system strictly maintaining the room temperature and humidity level.

Advance technology based ® Liebert iCOM™ controller with touch screen display acts as the brain of the precision cooling system, providing the optimum performance under varying load conditions, resulting in huge savings in operating expenses.



PEX3 is designed considering the dynamic needs of the market, anticipating future requirements, and achieving the best energy efficiency scenario, which will be the perfect solution for you to save operating expenses.

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 (m³/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 (m³/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			

Note:

**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 PEX3
- Specification are subject to change without any prior notice.

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