



Vertiv™ Liebert® PKDX

Engineered Direct Expansion (DX)
Package Solution



Challenges In Pursuit of Uptime

The huge growth in the number of users connected to the internet and the adoption of hyper-converged infrastructure and deployment of computing-intensive workloads such as Artificial Intelligence (AI), Internet of Things (IoT), and Big Data applications have contributed to the growth of global data center markets. Unfortunately, every piece of this equipment your company possesses generates heat which can lead to problems if early measures to get rid of this heat are not taken.

Cooling represents the biggest slice of the total cost in a data center. And with more capacity and higher density, there is an increased need for energy-efficient cooling of IT equipment.

Every operation of your company depends upon the instant around-the-clock availability of computers, servers, and other electronic systems. If they aren't working, neither is your company.

Along with availability, reliability, and energy efficiency white space management is another key in the pursuit of uptime in mission-critical solutions. The ability to tailor an engineered solution is what sets Vertiv apart from other companies.



Introducing Vertiv™ Liebert® PKDX, the largest single DX unit configuration designed for the data center with/without a raised floor

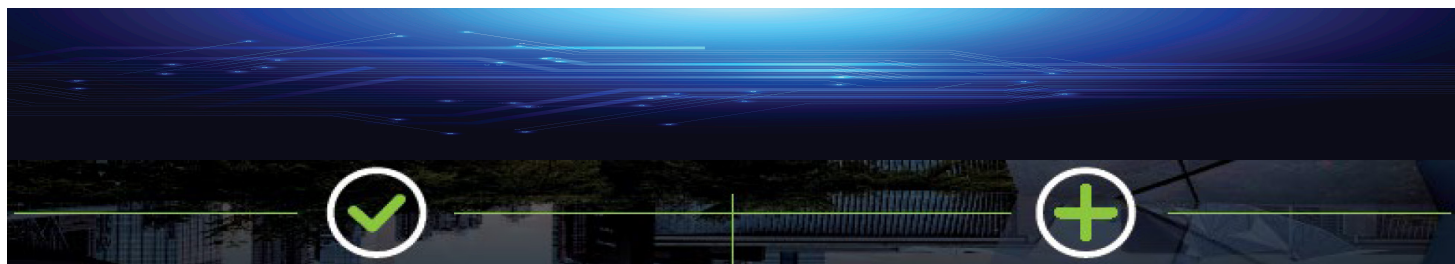
Attributes:

- Modular design-based largest DX Package solution.
- A standalone unit that can offer 280 kW net sensible capacity (at 36 °C, 26% RH) return air condition; it can handle high air volume to 74700 CMH and high External Static Pressure (ESP) to 300 Pa.
- Liebert® PKDX unit doesn't occupy white space in the data hall and is very easy to install (plug-and-play arrangement).
- Variable heat load is easily addressed by Liebert PKDX with digital and tandem arrangement and it operates with higher return air temperature.

Liebert® PKDX Principal Components:

- Fixed and Digital Scroll Compressor in tandem
- A single cabinet with evaporating and condensing unit
- Anticorrosive treated evaporator and condenser coil
- 4 sets of Electronic Expansion Valves (EEV)
- Intelligent Controller
- Dual power supply with Automatic Transfer Switch (ATS)
- Building management system (BMS) configuration enabled.

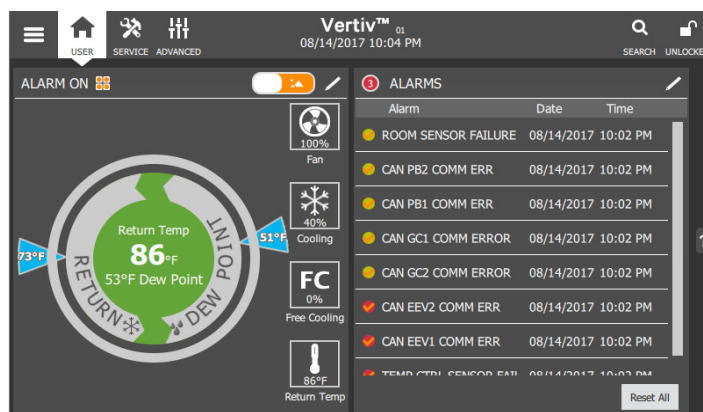




Features	Benefits
Single cabinet solution	Quick and easy deployment
Zero footprint in data hall	More white space available for IT equipment
Equipped with Digital and tandem compressor configuration	Improved variable load efficiency
Higher Air volume	More racks served in a single unit
Higher return air temp	Enhanced pPUE
300 kW capacity/Unit	Reduced number of cooling units required
Intelligent Control	Plug-and-play configuration
Hot Aisle Containment	Optimized thermal management

Advanced Controls for Efficiency, Protection, and Insight

Liebert® PKDX Units encompass intelligent controllers, wired or wireless rack sensors, and central optimizing system control to ensure that the entire data center system is optimized with the other components of the DX system. Various teamwork modes harmonize the operation of multiple PKDX units to eliminate conflicts in temperature, airflow, and humidity. The 7-inch colored display screen-based Vertiv™ Liebert® ICOM™ 3 controller is offered in the Liebert PKDX.



Technical Parameters

Parameter	Technical Details
Model	Vertiv™ Liebert® PKDX
Structure	GI frame and Insulated cabinet
Sensible Cooling Capacity (kW)*	280
Airflow Volume (CMH) and ESP (Pa)	74700 and 300
Compressor type and Qty**	Total - 8; Fixed Scroll type - 6; Digital Scroll type- 2
Fan Type, and Airflow Configuration	Centrifugal plug fans; Horizontal supply air and top return air
Filters	Metallic filter for condenser
Electrical Connection	380-415 V/3 ph/50 Hz + E + N
Dimension (LxWxH) (mm)	5340 x 2893 x 4012
Weight (kg)	4860 (Operating weight)
Refrigerant	R-410A

* Return Air Temp. 35 °C, 26% RH and Ambient Temp. 42.5 °C

**Energy Efficient refrigerant R410A is used



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