



Liebert®

PDX Constant  
up to 31 kW

The Thermal Management  
Solution Ensuring Precise and  
Constant Temperature and  
Humidity Control



## **Vertiv™**

Vertiv designs, builds and services mission critical technologies that enable the vital applications for data centers, communication networks, and commercial and industrial environments. We support today's growing mobile and cloud computing markets with our portfolio of power, thermal, infrastructure management products, software and solutions, all complemented by our global service network. Bringing together global reach and local knowledge, and our decades-long heritage including brands like ASCO®, Chloride®, Liebert®, NetSure™ and *Trellis*™, our team of experts is ready to take on your most complex challenges, creating solutions that keep your systems running—and your business moving. Together, we're building the future of a world where critical technologies always work.

*YOUR VISION, OUR PASSION.*

**VertivCo.com**

## **Liebert® PDX Constant Granting Utmost Reliability for Your Application**

The Liebert® PDX constant is a direct expansion cooling unit equipped with the most advanced industry technology, which guarantees precise temperature and humidity control of laboratories, high precision manufacturing, archives and museums.

It comes complete with R410A refrigerant and includes Liebert® EC Fans 2.0, thus ensuring top energy

efficiency. The complete unit design has furthermore been optimized with enhanced heat exchangers, thus delivering advantageous energy savings.





*The ideal thermal management unit for laboratories, high precision manufacturing, archives and museums.*

## Key Features



### Precise Temperature and Humidity Control

Close monitoring and control of room temperature and humidity for constant conditions all year round.



### R410A Refrigerant

Designed for R410A Refrigerant.



### Vertiv™ ICOM™ Control

The integrated iCOM™ Control in the Liebert® PDX units allows for direct communication with the external Liebert MC microchannel condensers, providing complete coordination of unit and condenser settings status and alarm conditions, further ensuring full operating flexibility.



### Liebert® EC Fan 2.0

The Liebert® EC Fan 2.0 is the core of the Liebert PDX, significantly minimizing noise levels and increasing the efficiency of the unit.



### Energy Efficiency

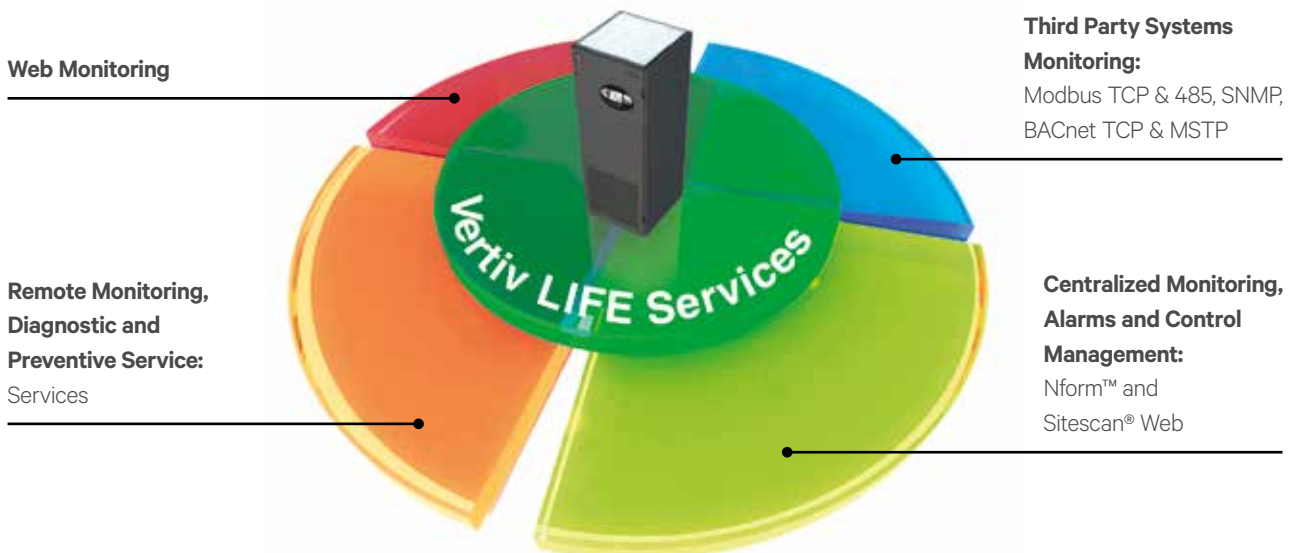
First-class energy efficiency achieved through the combination of market leading technologies.



### 24x7 Service Offering

Vertiv supports customers with an extensive service offering, guaranteeing availability and total peace of mind 24/7.

## Vertiv™ LIFE™ Services Remote Diagnostic and Preventive Monitoring



## Precise Temperature and Humidity Control for the Most Stringent Standards

Liebert® PDX constant is the solution for systems requiring extremely precise control of temperature and humidity for the most demanding installations and stringent standards. Typical installations are metrological rooms, laboratories, tobacco, paper and precision mechanical industries.

A special hot gas coil and a modulating valve enable the reduction of cooling capacity. Liebert® PDX constant, with ducted air delivery, allows to **maintain temperature and humidity tolerances of +/-0.3°C and +/-2% R.H.** with respect to the set value.

## Customer Installation References

### The Nanotechnology and Microsystems Laboratory of the Institute of Nanoscience and Nanotechnology/NCSR “Demokritos” - Greece

Two Liebert PDX constant units have been installed in the Nanotechnology and Microsystems Laboratory of the Institute of Nanoscience and Nanotechnology/NCSR “Demokritos” located in Greece. The units are connected in back-up mode to precisely control the temperature and humidity of the class 1000 clean-room area where a modern electron-beam nano-lithography tool is operating.



### Palazzo Fava - Italy

Palazzo Fava is a Renaissance palace part of Bologna's museums, which has chosen Vertiv for the supply of Liebert PDX constant units in order to guarantee the highest precision on temperature and humidity control.



## Customer Experience Center Floor-Mount Validation Area

Vertiv's Customer Experience Center located in Tognana (Padova- Italy), gives our customers the unique opportunity to witness pre-installation demonstrations, covering technical performance, interoperability and efficiency of our solutions under a broad range of real field conditions. Our Customer Experience Center features a dedicated area to test our highly efficient floor-mount units, including our Liebert® PDX constant solution. Equipped with a highly automated testing chamber, this validation area can balance a thermal

load of up to 200 kW and can simulate a test environment within a temperature range of 0°C to 60°C.

Customers visiting the center may also benefit from a comprehensive consultation from our R&D, engineering and application specialists. The Customer Experience Center provides customers, consultants and data center specialists with the most complete testing area to experience the capabilities of our technologies at peak conditions. All our measuring tools are periodically tested to adhere to current

international quality procedures.

Every customer visit is accompanied by a complete final report which includes each and every tested parameter as well as the relevant outputs for the specific Thermal Management unit validated. With our constant focus on our customers' needs, we guide them through a first-hand experience with full transparency and flexibility, enabling them to achieve the highest standards of technical excellence.



## Technical Information

### Liebert® PDX Constant - Indoor Unit

MODEL		S0FKA	S0HKA	S1AKA	S1DKA	PX015KA	PX021KA	PX025KA	PX031KA
Total Gross Cooling Capacity	kW	5.6	7.2	10.8	12.9	12.6	17.6	22.3	26.8
Net Sensible Cooling Capacity	kW	4.7	6.5	9.5	10.6	12.2	16.6	21.1	24
Power input		1.71	2.13	2.87	3.62	3.01	4.79	6.44	8.03
Airflow	m <sup>3</sup> /h	1310	2040	2510	2600	3854	5580	5978	6661
Max. ESP	Pa	601	320	213	170	250	250	250	250
Dimensions (W x D)	mm	750 x 400	750 x 500	750 x 500	750 x 500	844 x 890	844 x 890	844 x 890	844 x 890
Height (H)	mm	1950	1950	1950	1950	1970	1970	1970	1970
Weight	kg	170	195	210	215	290	300	320	340
Number of Capacity Steps		1	1	1	1	1	1	1	1

\*All indoor units have a power supply of 400 V/3 ph/50 Hz (except S0FKA whose power supply is 230 V/1 ph/50 Hz)  
 Performances at 24°C, 50%, 35°C External temperature, Nominal ESP 20 Pa  
 The power supply of Liebert PDX is 400 V/3 ph/50 Hz

### Liebert® HCR - Condenser Outdoor Unit

MODEL		HCR14	HCR24	HCR24	HCR33	HCR33	HCR43	HCR51	HCR59
Power input	kW	0.1	0.12	0.22	0.21	0.18	0.31	0.41	0.42
Dimensions (W x D)	mm	1050 x 896	1340 x 1112	1340 x 1112	1340 x 1112	1340 x 1112	2340 x 1112	2340 x 1112	2340 x 1112
Height (H)	mm	980	910	910	910	910	910	910	910
Weight	kg	45	60	60	75	75	92	93	102

The power supply of Liebert HCR is 230 V/1 ph/50 Hz



**VertivCo.com** | Vertiv, George Curl Way, Southampton, SO18 2RY, VAT Number: GB188146827

© 2017 Vertiv Co. All rights reserved. Liebert® PDX, Liebert HCR, Vertiv Trellis™, Vertiv iCOM™, Vertiv Intellislot®, Vertiv Nform™, Vertiv SiteScan® and Vertiv LIFE™ Services are trademarks or registered trademarks of Vertiv Co. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness herein, Vertiv Co. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications are subject to change without notice.