

Vertiv™ CoolPhase Perimeter

PX011-029, R-454B



Benefits

- **Reduce operating costs** with a high-efficiency system. Standard EC fans, optimized heat exchangers, and industry-leading intelligent controls drive a PUE under 1.2
- **Reduce carbon footprint** with low GWP refrigerant, utilizing R-454B that meets environmental standards
- **Rapidly scalable** for faster deployments and time to market for mission-critical applications
- **Integrated, self-optimizing controls** with advanced algorithms for air temperature and fan speed coordination to automatically manage unit operation to maximize performance and deliver high efficiency
- **Complete separation** of data center and outdoor air, operating as a split system and allowing highly flexible installations

The latest compact perimeter cooling unit with low GWP refrigerant, ideal for small and medium IT applications.



Vertiv™ CoolPhase Perimeter (PX011)



Vertiv™ CoolPhase Perimeter (PX029)

The Vertiv™ CoolPhase Perimeter (PX011-029) is a compact direct expansion precision cooling system designed for mission-critical environments. As a new and improved version of the Vertiv™ Liebert® PDX, the Vertiv™ CoolPhase Perimeter now comes standard with R-454B refrigerant for low GWP regulatory compliance, delivering reliable, efficient cooling capacity that reduces environmental impact without compromising on performance.

Ideal applications

- Small and medium data centers
- Telecommunications switching offices
- Industrial process control
- Laboratories and medical imaging suites

Highly flexible design

- High-density design supports loads of more than 3.6kW per square foot
- Multiple system designs including air-cooled, water/glycol cooled, glycol free cooling, and dual cool modes
- Upflow, downflow, front or side air discharge configurations
- Split-system design allows high application flexibility



Technical specifications

Physical data

PX011

PX018

PX023

PX029

Unit Dimensions (H x W x D), m (in)

77.5 x 34.5 x 34.8 (1970 x 674 x 874)

Domestic Shipping Dimensions (H x W x D), m (in)

44 x 60 x 85.5 (1118 x 1524 x 2172)

Export Shipping Dimensions (H x W x D), m (in)

45 x 60 x 86 (1143 x 1524 x 2184)

Weight, kg (lbs)

For unit weights, please refer to the User Manual for your specific configuration.

Performance data

Nominal Cooling Capacity, kW (kBTU/hr)*

13.5 (46,064)

19.7 (67,219)

24.5 (83,598)

32.1 (109,530)

Nominal Air Flow, m3/h (ACFM)

3,060 (1,800)

4,757 (2,800)

5,946 (3,500)

7,305 (4,300)

Nominal SCOP

3.10

3.31

2.86

2.84

Maximum Dew Point,

59F (15C)

Minimum Return Air Temperature

68F (20C)

Maximum Return Air Temperature

100F (37.7C)

Refrigerant

R-454B

Air Filter

MERV 8 or MERV 11

Electric Reheat

Optional

Humidifier

Optional

* Nominal performance data calculated at unit inlet air temp 85°F, 0.2 inH₂O, dew point 52°F, outdoor temp 95°F, and airflow listed above. For performance data at different site conditions, contact local sales representative.

Electrical data

PX011

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	Voltage	208	230	460	575	208	230	460	575	208	230	460	575	208	230	460	575
No reheat	FLA	21.6	21.6	10.4	7.1	35.6	35.6	14	11.8	37.8	37.8	18.3	14.6	42.4	42.4	19.1	15.6
	WSA	26.3	26.3	12.5	8.5	42.2	42.2	16.5	14	45	45	21.9	17.5	50.7	50.7	22.9	18.7
	OPD	40	40	20	15	60	60	25	20	70	70	35	25	80	80	35	30
Electric reheat	FLA	38.3	36	17.6	13.1	68.9	64.5	28.4	23.8	71.1	66.7	32.7	26.6	75.7	71.3	33.5	27.6
	WSA	47.1	44.3	21.5	16	83.8	78.3	34.5	29	86.6	81.1	39.9	32.5	92.3	86.8	40.9	33.7
	OPD	60	50	25	20	100	90	40	30	100	100	50	40	100	100	50	40

Ambient conditions

Operating conditions

0 to 49C (0 - 120F), 10 to 90% RH (non-condensing)

Storage conditions

-40 to 70C (-40 - 158F)

Compliance

Safety compliance

cCSAus