Vertiv™ CoolPhase Perimeter

DA050-165, R-454B

Benefits

- **High-efficiency,** with a PUE under 1.2.
- **Low GWP refrigerant,** utilizing R-454B.
- **Advanced controls** for smooth economization transitions.
- **Complete separation** of data center and outdoor air, operating as a split system and allowing highly flexible installations.
- **Rapidly scalable** for faster deployment and time to market.
- **Low operating costs** for higher TCO and ROI.

The Vertiv™ CoolPhase Perimeter is a pumped refrigerant free cooling economization system for medium to large data centers. It leverages proven technology deployed across thousands of installations to deliver reliable efficiency.

High effieceny

- Mechanical PUE of 1.05 - 1.20
- Up to 75% more effcient than DX systems.
- 26-53% higher SCOP at full load v. ASHRAE 90.1 standard.
- Automated transitions capture every economization hour.
- Expansion valves increase DX efficiency at low ambient temperatures.

Easier servicing

- Rear-access servicing.
- No need to enter the data center.
- Refrigerant pump is virtually maintenance free.
- No dampers to service or outside air filters to replace.

Advanced control

- Vertiv™ Liebert® iCOM™ controls provide smooth economization transitions for more stable thermal management.
- Advanced, automated component protection routines.
- Multi-unit teamwork modes eliminate unit fighting and increases efficiency.
- Easy integration to BMS using onboard protocols.
- Lead / Lag setting for automated emergency rotation of operating and standby units.

Highly flexible design

- More than two dozen combinations of capacity, airflow and application.
- Available as split-systems for indoor perimeter and gallery configurations.

Vertiv™ CoolPhase Perimeter (DA125)

Technical specifications

Physical data	DA050	DA080	DA085	DA125	DA150	DA165
Unit dimensions (H x W x D), m (in)	1930 x 1930 x 889(76 x 76 x 35)	1930 x 2515 x 889(76 x 99 x 35)	1930 x 2515 x 889(76 x 99 x 35)	1930 x 3607 x 1194(76 x 142 x 47)	1930 x 3607 x 1194(76 x 142 x 47)	1930 x 3607 x 1194(76 x 142 x 47)
Dry weight, kg (lbs)	721 (1590)	1021 (2250)	1021 (2250)	1572 (3465)	1621 (3574)	1621 (3574)

Performance data						
Nominal cooling capacity, kW (kBTU/hr)*	49.1 (167,536)	78.9 (269,218)	87.7 (299,245)	134.6 (459,274)	158.1 (539,460)	168.0 (573,240)
Nominal air flow, m3/h (ACFM)	11,213 (6,600)	16,311 (9,600)	17,670 (10,400)	30,582 (18,000)	30,582 (18,000)	30,582 (18,000)
SCOP	3.22	3.20	3.27	3.31	3.25	3.06
Refrigerant	R-454B					

** 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*

Ambient conditions	
Operating conditions	0 to 49C (0 - 120F)
Storage conditions	-40 to 70C (-40 - 158F)

SL-80329 (11/25)