

Cloud and large co-located data centers have multiple options for air handling units, including traditional computer room air handlers (CRAHs), full face discharge CRAHs and thermal array units.



Liebert® CWA Sustainability Characteristics

At Vertiv we believe that being mindful of product design, development, use, and disposal are important to the longevity of our industry.

Checkout these environmentally conscious features of the Vertiv™ Liebert® CWA:

- Liebert CWA coil design is optimized for higher entering fluid temperature resulting in lower chiller power consumption
- Low Fan Power (High Airflow/High Efficiency Fan)
 - Lower internal airflow pressure drop, typically, up to 45% less than a downflow front discharge CRAH
- High Efficiency (High Airflow/High Efficiency Fan)
 - Less fan power means less load resulting in reduced energy costs
- No raised floor reduces the steel and components in data site

Ensure optimal temperature and operations

Liebert CWA produces positive pressures at rack fronts, helps minimize hot spots and evenly distribute airflow across server rows.

Reduced floor space

Use minimal floor space for units, allowing a maximum of around 400 W/ft² data hall density, as opposed to around 150 W/ft² for traditional CRAH and around 250 W/ft² for full face discharge CRAH.

Improve protection

Advanced Liebert® iCOM™ Controls deliver the highest protection, while optimizing cooling system performance for maximum efficiency and energy savings

Simplify deployment

Pre-configured controls include BMS capability and unit-to-unit communications to reduce field wiring and costly control solutions.

Vertiv™ Liebert® CWA is designed to help cloud and large co-located data centers achieve goals of reducing first cost, increasing speed-to-market, and sustainability.



Vertiv™ Liebert® CWA helps you move faster, with standard configurations, fast commissioning, and optional features to meet your business needs.

- Standard features include
 - Factory installed chilled water control valves with choice of customer connection type to ease installation
 - Unit electrical panel has 65K AMP short circuit current rating protecting the unit
 - Liebert® iCOM™ factory installed and tested controls, for fast start-up, commissioning,
 - Liebert® iCOM™ Auto-Tuning Feature which optimizes valve operation to extend valve life
- Options to meet specific regional needs
 - Fan Type: for desired site air temperature and ΔT 4, 6, or 8 rows of coil: for desired site fluid temperature and water side ΔT
 - IBC Seismic Certification: includes bracing for units installed in seismic zones
 - THD Transformer meets IEEE Standard 519-2014 Harmonic Distortion (ideal for use when fan load is large percentage of generator or UPS load, or when utility power is weak)
- Ensure business continuity with these options
 - Quick restart enabled with CW valve fail in last position
 - ATS Control with Dual Disconnect Switches allows power connection to primary & secondary sources
 - Capacitive Buffer provides 3 minutes of continuous power to the unit control (& continuous BMS communication)
- Reduce First Cost
 - Minimize total spend on thermal management solutions and installation
 - Standardization drives down \$/CFM (\$/CMH) vs custom solution
 - Modular sections reduce shipping costs and improve the ease of installation
- Responsiveness
 - Liebert CWA performance and fan data is available quickly for specific data points
 - REVIT drawings simplify design stage layout
- Increase speed to market
 - Reduce lead times with common components and configurations, enabling you to capture more business.
 - Support – Harness our global network of locally based factory-trained technicians to get support when and where you need it, increasing unit availability and throughput.

