

LIEBERT® EFC INDIRECT EVAPORATIVE FREECOOLING SOLUTION 400KW



BENEFITS

Save Money

- Highly efficient heat exchanger with a mechanical PUE as low as 1.03
- Low heat exchanger air leakage to minimize need for additional makeup air capacity
- Low peak power to downsize generator capacity and free up IT power for sale
- Fast and simple deployment, with rooftop and outdoor perimeter configurations in a single footprint

Lower Risks

- Self-healing control routines that automatically manage operations and prevent the unit from exceeding operating thresholds

Manage More Easily

- Integrated Liebert® iCOM™ controls with advanced algorithms that automatically select the best combination of water and electricity usage based on input costs

The Liebert® EFC Indirect Evaporative Freecooling Solution is a highly reliable and efficient cooling system for colocation, cloud hosting and other data center applications. It combines an efficient heat exchanger with advanced controls to help customers save money, reduce risks and simplify thermal management.

High-Efficiency Heat Exchanger

- Average peak mechanical PUE as low as 1.03
- Lower air leakage and displacement than heat wheels, reducing need for additional makeup air capacity
- Cooling to within 3 degrees of wet bulb temperature

Integrated Advanced Controls

- Liebert iCOM controls with teamwork algorithms coordinate multiple units for maximum efficiency and protection
- Independent control of capacity and temperature to maximize efficiency
- Actionable insight into operating parameters for analysis and protection
- Self-healing control routines automatically avoid reaching dangerous thresholds

With the Liebert EFC, Vertiv has taken free cooling innovation to the highest level, providing a mechanical PUE as low as 1.03, a single footprint for rapid deployment and a highly scalable design.

Integrated Spray System

- Multiple variable speed EC fans
- Water spray branches for evaporative cooling, have quick-change, snap-on nozzles for easy maintenance

DX Trim

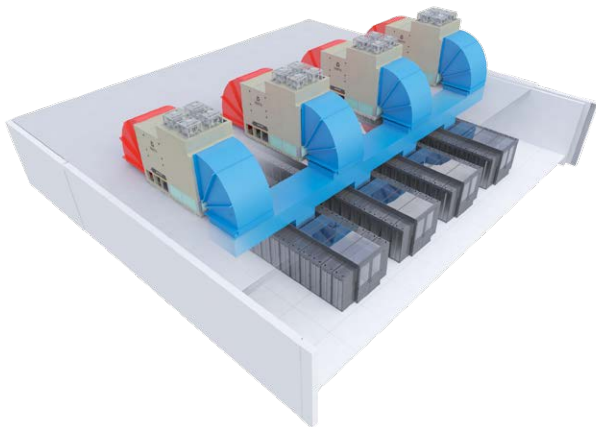
- Varying capacities to match load requirements
- Integrated condenser for DX cooling
- Pre-charged at factory



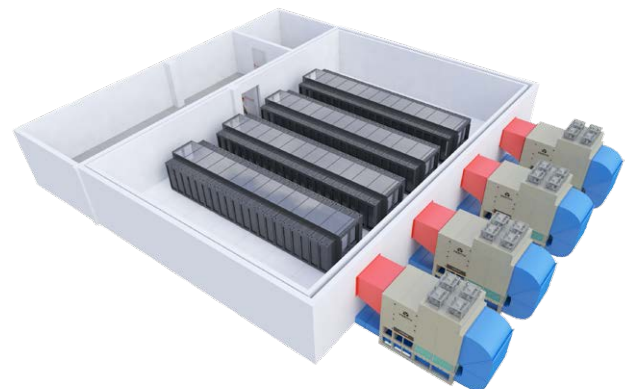
Liebert® EFC Key Features

- High-performance heat exchanger, providing cooling to within 3 degrees of wet bulb temperature for maximum economization hours
- Lower heat exchanger air leakage and displacement than heat wheels to reduce the need for additional makeup air capacity
- Low peak power, to reduce generator sizing or provide potential IT power to sell
- Mechanical peak PUE as low as 1.03
- Advanced Liebert iCOM™ controls for managing capacity and temperature for efficiency and providing automated protection routines
- Rapidly deployable architecture with 400kW units
- Robust design, field tested and proven

Rooftop Configuration



Perimeter Configuration



The Liebert EFC is a scalable solution in 400kW unit capacity, with both perimeter and rooftop configurations to support growing and changing data center loads and site requirements.