



VERTIV™

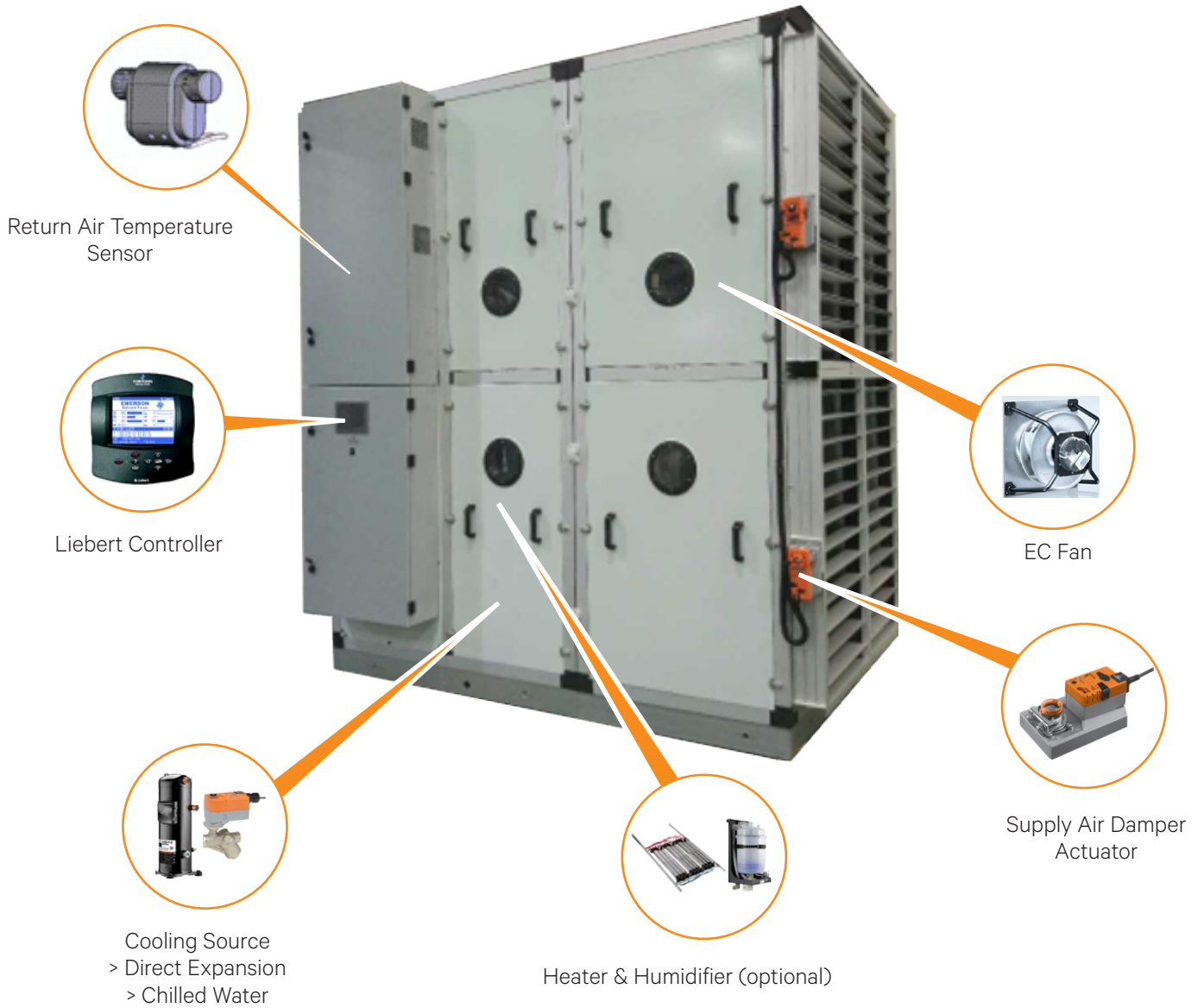
Liebert®

Air Handling Unit (AHU)
More Efficiency,
More Choices, More Experience



Liebert® Air Handling Unit (AHU)

Introducing Liebert Air Handling Unit (AHU) - Vertiv thermal management solution for large data centers with more capacity & better efficiency



Additional Options



Liebert Chilled Water Air Handling Unit

Our mission-critical AHU with Liebert controls deliver efficient, reliable and cost-effective management of heat in large data centers.

We offer the largest selection of CRAH solutions, combined with the expert guidance to help you select, implement and maintain the right technology to ensure delivered performance for the lifetime of your data center.

The Liebert Chilled Water AHU Unit is the industry's most advanced chilled water cooling system, providing you with maximum thermal control in your data center.

Economical Deployment

It maintains conditions at a wide range of return air temperatures and is easy to commission and service, helping to boost productivity and reduce installation and maintenance costs.

Industry-Leading Efficiency

The Liebert Chilled Water AHU Unit can deliver higher-than-average temperatures (22°C), with industry leading efficiency through the use of for water-or air-side economisations and high-efficiency EC fans.



Simplified Maintenance

Maintenance can be performed easily and quickly.

Intelligent Controls

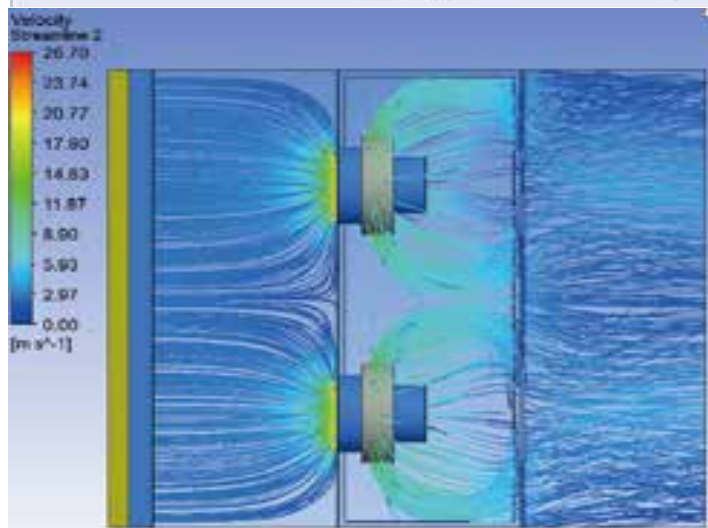
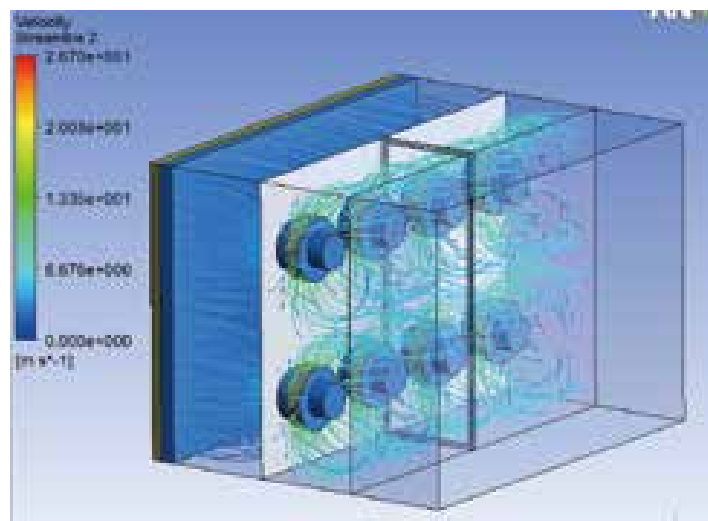
The Liebert Chilled Water AHU Unit features integrated Liebert controller to maximize data center protection, efficiency and insight.

The controls prevent over-cooling and under-cooling through machine-to-machine communications and advanced algorithms.

Teamwork modes harmonize the multiple cooling units for higher efficiency and protection.

Local Service and Support

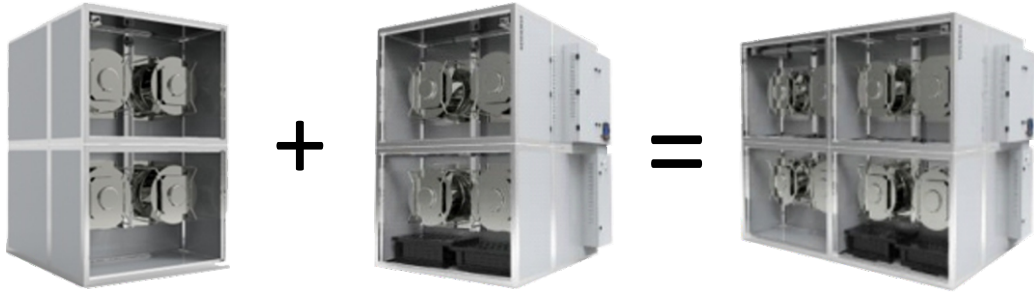
All of our solutions are backed by local customer engineers with decades of data center experience and a network of factory-trained service technicians.



FEATURES & BENEFITS

Modularity - Easy to move & Quick to Install

Liebert Air Handling Unit (AHU) units are customized to suit different room space and transportation.



Highly Efficient

- Mechanical PUE less than 1.2 as part of a system
- Use of EC fans for lower motor power usage
- Self-optimizing controls reduce over-cooling and under-cooling
- Uniform airflow and temperature across the supply air side

Greater Protection

- Advanced monitoring and event notification
- Finely tuned & advanced controls for more consistent supply air temperature & eliminating hot spots through rack inlet temperature sensor
- Feasible with UPS to back up either to whole system or controller only

Lower Installation & Maintenance Costs

- Multiple section design minimizes shipping costs and speeds installation
- Less component to maintain and ease of access for better service and maintenance

Insight for Action

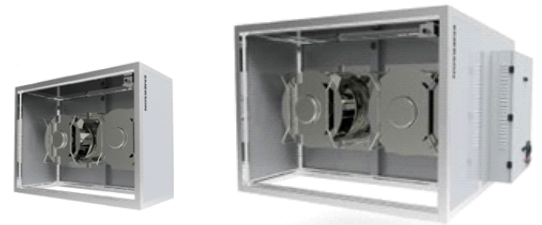
- Simplified access to realtime data and trending
- Quick diagnostics of potential critical events

Advanced Controls for Efficiency, Protection & Insight

Liebert Air Handling Units (AHU) are best used with Liebert intelligent controllers, wired or wireless rack sensors, and a Liebert central optimizing system control to ensure that the entire data center system is optimized with the other components of the chilled water system. Liebert intelligent control algorithms continuously process readings from the rack inlet sensors to ensure optimal air flow through the system while supply air sensors are used to control the unit cooling capacity.

Varies teamwork modes harmonize the operation of multiple air handling units to eliminate conflicts in temperature, airflow, and humidity.

Cooling Capacity



Small capacity from 200kW onwards

Large capacity upto 500kW

Customized design based on different cooling load requirement, airflow and other specific customer requirements. It does not require unit knock down on site for transportation, better quality control & less components to maintain and service.



Chilled Water Model (Standard)

Unit Model	FA200HC	FA300HC	FA400HC	FA500HC
Net sensible cooling capacity(kW)	200	300	400	500
Sensible cooling ratio	100%	100%	100%	100%
Unit airflow(m ³ /h)	46000	69000	92000	115000
ESP (Pa)	100	100	100	100
Unit inlet air temperature (°C)	38	38	38	38
Unit inlet air relative humidity (%)	35%	35%	35%	35%
Supply air temperature (°C)	25	25	25	25
Inlet water temperature (°C)	15	15	15	15
Outlet water temperature	22	22	22	22
Internal filter class	F6	F6	F6	F6
Unit power input (kW)	8.5	11.7	16.3	22.7
Unit fluid side pressure drop (kPa)	20	20	30	50
Unit fluid flow (L/s)	7.1	10.7	14.6	17.9
Unit width (mm)*	2200	2800	3600	4000
Unit depth (mm)	2200	2200	2200	2200
Unit height (mm)	3400	3400	3400	3400

* Unit depth is adjustable based on site design and configuration

Vertiv's AHUs are flexible, we do offer Slim Version (reduced depth) to suit the site condition

Chilled Water Model (Slim Version)

Unit Model	FA200HC	FA300HC	FA400HC	FA500HC
Net sensible cooling capacity(kW)	226	300	400	500
Unit airflow (m ³ /h)	50000	66000	90000	120000
Fan power (kW)	9.5	12.5	17.0	21.5
Unit Width (mm)	2170	2800	3600	4600
Unit Depth (mm)	1750	1750	1750	1750
Unit Height (mm)	3400	3400	3400	3400

*other parameters remain the same as standard units

Air Cooled Model

Unit Model	FA130HD			
Net sensible cooling capacity(kW)	85	100	130	143
Sensible cooling ratio	100%	99%	97%	100%
Unit airflow(m ³ /h)	27600	32700	32700	42000
ESP (Pa)	100	100	100	100
Unit inlet air temperature (°C)	22	24	35	35
Unit inlet air relative humidity (%)	50%	50%	26%	26%
Supply air temperature (°C)	13	14.9	22.9	24
Outdoor temperature (°C)	35	35	35	35
Internal filter class	G4	G4	G4	G4
Unit power input (kW)	25.3	32	34.1	38.2
Fan power (kW)	3.6	5.1	5.1	8.7
Fan Number	3	3	3	3
Unit EER	3.4	3.1	3.8	3.7
Unit width (mm)*	1400			
Unit depth (mm)	2500			
Unit height (mm)	2800			



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