

# Chilled Water Computer Room Air Handler CRAH

# Nortek Data Center Cooling Expertise.

Nortek Data Center Cooling delivers efficient and sustainable cooling solutions that meet the specific requirements of data center applications. Our expertise in custom data center solutions, from individual chip cooling to the largest custom air handlers, enables us to provide a system that fits the exact needs of any application, thereby affording the best and most economical solution for the entire life cycle of your data center.

### **Computer Room Air Handler**

High Efficiency Cooling for High Density Loads

The Nortek Computer Room Air Handler (CRAH) is designed for high-density load areas where a large cooling capacity is required from a compact footprint, and provides the reliability and redundancy required for data center cooling.

The unique design provides the flexibility to reduce the number of units and indoor footprint requirements devoted to computer room cooling.

The CRAH is designed to make operation and routine maintenance quick and easy.

### OPERATIONAL BENEFITS



flexibility to design a system with the lowest possible footprint

Close match of operating capacity requirements to avoid inefficiencies and added electrical demands of oversized equipment

Robust equipment with low maintenance requirements and easy access to components to avoid downtime



### PRECISE TEMPERATURE CONTROLLER



fitted with a customized industrial DDC controller complete with display/user interface



Activates cooling to provide precise and efficient cooling of the supply air



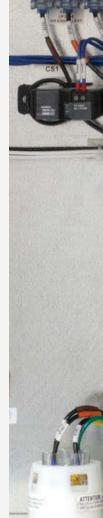
Constant monitoring of built-in safety devices of the unit for healthy state of key components (locally or remotely)

### DOWNFLOW MODELS



### CRAH Options

- Standard and high efficiency fans
- Multiple height unit stand option
- Additional sensor options
- Dual power service option
- Automatic transfer switch
- Control power battery back-up
- Quick start relay
- Humidifier
- Optional features: smoke alarm, fire stat, condensate pump





## CRAH components.

### CABINET

- Sheet steel panels with 1-inch thick insulation
- Cabinet construction using a welded structural steel tube base design
- All service and maintenance activities are designed to be performed either from the front of the unit or by side access

### FAN SYSTEM

- Direct-driven, ECM fans with air foil blades mounted in the CRAH fan base section
- Steel frame and panel construction

### COOLING COILS

- Units use dual cooling coils arranged in an "A" formation
- Copper tubes mechanically bonded to aluminum fins

### CONTROL VALVE AND CONTROL PANEL

- ☑ Two- or three-way chilled water control valve
- Proportional type actuators with an operating voltage of 24v

### FILTER SECTION

- ☑ 2" and 4" optional filters
- MERV 8 & MERV 13 filters are available

Integrated control panel

Control panel houses a main

interface device (HMI)

input fused disconnect, DDC

controller and human mechanical

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- All external frames and panels coated with a dry powder-baked polyester coating
- Fans mount in stands to provide higher efficiency performance for under-the-floor cooling system configurations
- Fans mounted vertically to maximize mechanical and static efficiency
- All configurations have high efficient fan options
- Stainless steel drain pans with solid welded seams



BUILT BY NORTEK DATA CENTER COOLING

# You're creating the next big thing in your field. We're building the latest innovation in ours.

Nortek builds data center cooling solutions for companies moving the world forward. Our end-to-end systems keep up with the biggest names in technology, and reduce water and power usage.

Our world-class team of engineers and designers develop technology that is effective, sustainable, efficient and adaptive to many challenging cooling environments. Patented innovations by StatePoint<sup>®</sup>, including its membrane heat exchanger and FANWALL TECHNOLOGY<sup>®</sup>, can be found in some of the most prestigious data center storage facilities on the planet.

Together, we can create data center cooling solutions that save energy and empower change.

Visit nortekdatacenter.com to become a partner.



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