

AERO® Air-Handling Units



Experience the Art of Air Handling.





AERO® Air-Handling Units. Redefining Flexibility, Performance and Comfort.

With Aero® air-handling units (AHUs), Carrier dynamically unites form and function, offers an extensive range of product size configurations as standard and integrates advanced structural and operational technologies. The perfect solution for either indoor or outdoor applications, the Aero 39M unit installs easily, performs in the most demanding environments and its revolutionary casing delivers numerous indoor air quality (IAQ) benefits.

To meet the trend of downsized mechanical rooms and the need for economical location options, the Aero 39M's multiple aspect ratios occupy a smaller footprint with shorter airway lengths. Additionally, access is now easily achieved from only one side of the unit.

Advanced, Flexible and Versatile AHU Solutions.

To reflect industry demands, Carrier's reinvented Aero 39M air handlers offer more sizes, more configurations and more features.

- Aero AHU's double-wall casing allows panels to be easily cleaned without damaging insulation.
- Various fan options include direct-drive plenum with traditional or electronically commutated motors (ECM).
- The Aero 39M panels rest against ultratight seals and Carrier's patented "no through-metal thermal break" feature with no metal-to-metal conduction path, reduces the likelihood of condensate forming on the outside of the unit.
- Filter options include MERV 8 flat filters for the most basic of needs to MERV 18 HEPA filtration for hospital and clean room applications.

IAQ - ANTIMICROBIAL COATING

Agion® technology uses the controlled release of silver ions to provide continuous suppression of microbial growth on the interior surface of Aero 39M units. This ensures long-term protection over the product's lifetime.

This feature also makes them ideal for even the most demanding precision environments, including clean rooms and high-tech processing areas.













Bacteria

Reinvented and Engineered... for You.

Carrier has, as a direct result of listening to what our customers wanted, created a more capable and versatile 39M air-handling unit that builds on the success of our existing air-handling technology. Its new design and construction features and benefits deliver increased value with lower operating and installation costs.

Since 2001, the Aero 39M was one of the first units offered in North America with foam-filled, double-wall construction resulting in panels with a R-13 insulating value. It's offered today with more unit sizes, features and options including greater motor speed control selections, direct-drive plenum fans and LED marine lights. New filter kits in a wide variety of types and efficiencies will satisfy an even greater breadth of applications.

CONSTRUCTION HIGHLIGHTS

The Aero 39M's robust casing is comprised of two-inch post and panelized construction, which allows panels to be easily removed for cleaning while always maintaining structural integrity. This rigid design and weld-free panel construction also maintains an industry-leading linear deflection ratio of L/240 at ± 8 in. wg. Additionally, its leak tight casing construction saves energy and has a proven one percent at 8 in. wg. leak rate due to the structural frame and panel design.

For ease of installation, the Aero AHU's frames, corners and base rails are all easily disassembled and reassembled in minutes with as little as 3 standard tools. Units can be ordered with shipping splits which speeds section-to-section assembly.

VFDs

A variety of factoryinstalled variable frequency drive options are available. Parameters are programmed into the controller and removable keypad prior to shipment.



FACTORY-INSTALLED TXVs

The Aero 39M's thermal expansion valves provide both peace of mind to consulting/specifying engineers and time savings to the field installing contractor.



TREAD PLATE FLOORING

For enhanced working surface



safety, Aero AHUs offer optional tread (diamond) plates. Like all other Aero 39M components, these are designed for easy cleaning.

Precise Control and Quiet Operation.

Aero 39M air-handling units offer many control options, from factory-mounted sensors and actuators to the most flexible system on the market today — the i-Vu® UC Open XP controller.

The i-Vu Open control system combines state-of-the-art Carrier equipment, plug-and-play controllers, and the powerful, web-based i-Vu user interface for a cohesive, intuitive, and fully-integrated native BACnet®2 building automation system (BAS).

The UC Open XP controller and expansion module provide auxiliary building control to interface with air handlers, chiller plants, hot water systems, lighting, and other HVAC equipment. Pre-wired quick connects allow for easy field assembly and disassembly of air handlers with controls.

Aero AHU's patented-sealed double-wall insulation not only provides superior thermal performance, it

provides the added benefit of outstanding acoustics.

For sound-sensitive applications, plenum fans are available. This extra-quiet operation enhances the comfort of your building's occupants and the overall quality of their indoor environment.













AHUBuilder®. More Options. More Configurations.

The Carrier AHUBuilder® software makes selecting and optimizing the Aero 39M air handler easy, allowing HVAC engineers to model refrigerant-based cooling systems with confidence, generating a cross-plot to help determine the most efficient system possible. AHUBuilder software also enables the user to select fan systems at full-and part-load for performance and sound. This feature allows the selection of the most stable, most efficient and most quiet fan within our product offerings.

To ensure onsite performance, each Aero AHU's entire operational functions are tested at the factory. All structural and operational components undergo rigorous testing protocols, including rain-testing of all outdoor units.





















AERO® 39M Benefits at a Glance

For Building Owners and Managers

- Easy to maintain
- Reliable performance
- Outstanding life cycle cost
- Advanced IAO solutions

For Consulting Engineers

- AHRI certified performance
- ASHRAE 62 compliant
- Simple to specify
- Agion[®] antimicrobial coating
- System-integrated controls

For Contractors

- Easy to break down
- · Reduced installation time
- Easy to service
- · Ideal for replacement



