



M3 Series



MODULAR AIR HANDLERS



Features:

- 16,000-51,500 CFM
- Direct Expansion (DX) or Chilled Water Cooling
- Electric, Hot Water, or Steam Heating
- Rigid Double Wall Foam Insulated Panel Cabinet Construction with Less Than 1% Leakage at +/- 8" w.g and L/240 Deflection Capability
- Multiple Direct Drive Backward Curved, Energy Efficient, Plenum Blower Configurations
- Slide Out Coil Assemblies
- Access Doors with Stainless Steel Full Length Piano Hinges and Lockable Handles.
- Power Return, Power Exhaust, and Energy Recovery Wheel Options
- Visible and Accessible Stainless Steel IAQ Drain Pans

Application Flexibility
Minimizes Installation Time and Reduces Cost

○ *Make-up Air Applications
Up to 100% Outside Air*

○ *Modular Construction with a
Wide Variety of Features*

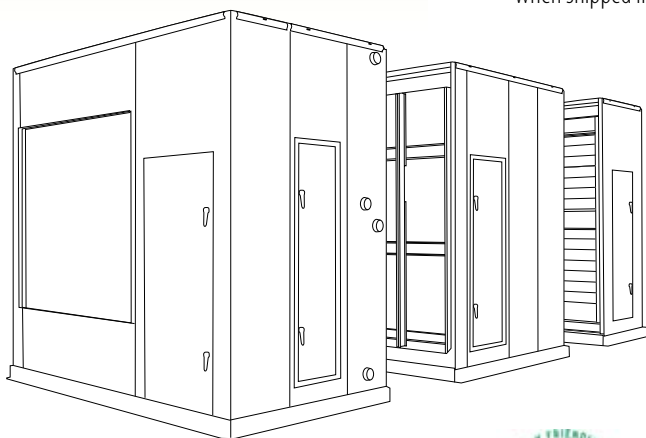
○ *Factory Installed or Customer
Specific Control Options*

M3 Series Modular Air Handlers

The M3 Series extends the AAON air handler line into the large commercial modular air handler market. The unit has been designed and engineered to be rigid, tightly sealed, and exceptionally quiet, while at the same time being easy to install and service. An extensive amount of features and options allow the units to be specified to meet your job requirements.

Superior Features

- Double wall, R-13 to R-19, foam insulated panel construction, with a thermal break, protects the insulation from moisture, increases sound dampening, and is easy to clean.
- Cabinet design provides L/240 deflection capability and limits air leakage to less than 1% at +/- 8" w.g. of static pressure, reducing infiltration of unfiltered air and exfiltration of conditioned air.
- Panels are symmetrically mounted - allowing for easy field modification, if unforeseen job conditions make it necessary to change a left-hand door to a right-hand door or move hinged access doors to the opposite side of the unit.
- Direct drive, backward curved, plenum blowers provide energy efficient air movement and reduce maintenance costs versus belt driven blowers.
- Multiple, spring isolated, blower configurations give the unit redundancy, lower sound and vibration levels, and the flexibility to meet job requirements.
- Blow-through and draw-through configurations with top, bottom, side, and end discharge locations are available for application flexibility.
- Lockable hinged service access doors are available on either side of the unit to provide quick access to areas subject to scheduled maintenance.
- Doors open against air pressure to provide a tight seal and are constructed with stainless steel hinges, perimeter gaskets, and zinc cast lockable handles that operate from a single point outside of the cabinet.
- Double sloped, stainless steel drain pans, with optional extended carry over protection, eliminate standing water that can support microbial growth and stainless steel construction ensures the pan itself will not corrode leading to contaminants in the air stream.
- I-beam raised coil construction allows the drain pans to be easily inspected and cleaned.
- Selection of base rail height allows for condensate trapping and eliminates the need for a costly housekeeping pad.
- Units can be shipped factory assembled or with shipping splits. The factory assembled option saves time at the job site, while shipping the unit in modules allows the equipment to pass through doorways or into elevators for new construction or retrofit applications. Modules include come-along winch attachment points along the roof and base for quick field assembly when shipped in modules.



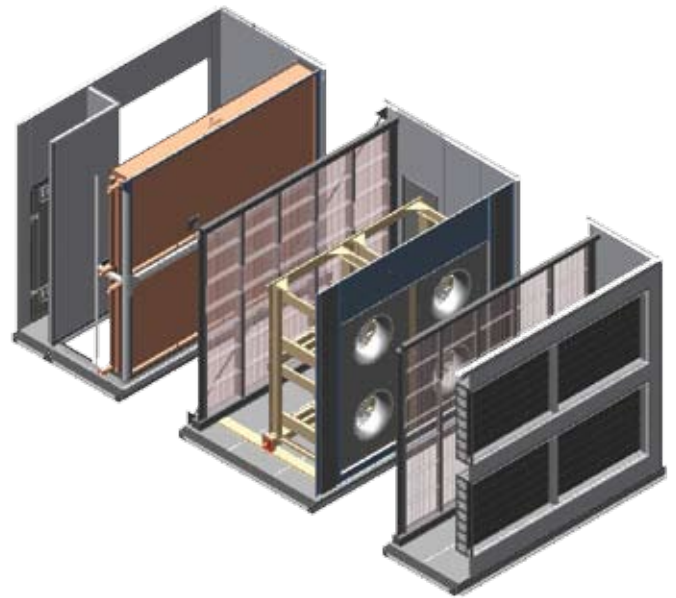
| M3 Model | Nominal CFM | Width | Height | Length* |
|----------|-------------|-------|--------|--|
| 032 | 17,500 | 96 | 74 | *Length varies depending on modules selected |
| 039 | 21,500 | | 87 | |
| 045 | 25,000 | | 97 | |
| 054 | 29,500 | 112 | 97 | |
| 060 | 33,000 | | 107 | |
| 067 | 37,000 | 126 | 104 | |
| 074 | 40,500 | 138 | 104 | |
| 083 | 45,500 | | 115 | |
| 094 | 51,500 | | 127 | |

All dimensions are in inches

Indoor or Outdoor Construction

Premier Options

- DX and chilled water cooling options and electric, hot water, and steam heating options allow unit flexibility to meet job requirements.
- Factory mounted and fully integrated total and sensible AAONAIRE® energy recovery wheels, rated to ARI Standard 1060 and bearing the ARI Certification symbol, provide higher efficiency and lower operating costs.
- Blower motors are available as oversized and/or premium efficiency.
- Double pane viewing windows can be installed on all doors to permit the viewing of operating equipment and the interior cabinet without opening the door.
- Factory or field mounted controls options allow unit to meet existing controls architecture or to meet the job needs for new construction.
- For corrosion protection the interior and/or exterior of the unit can be painted with a coating which surpasses a 2500 hour salt spray test or the unit can be constructed of stainless steel panels.
- For coil corrosion protection polymer e-coating which surpasses a 6000 hour salt spray test can be applied to the complete coil and coil casing.
- Aluminum tread plate floor covering, in designated service areas, improves unit durability and service personnel safety.
- Multiple filter options, including pleated filters, cartridge filters, bag filters up to 95% efficient (MERV 14) and HEPA filters up to 99.97% efficient, are available to provide the needed amount of air filtration.
- Factory installed power exhaust and power return fans for application flexibility.
- Electric and hot water preheat to prevent hydronic coils from freezing.
- UV-C lights can be strategically mounted within the unit to reduce or eliminate coil and drain pan microbial growth, which can degrade system efficiency and lead to possible health and odor problems.
- Factory installed 120V GFI convenience outlet enhances serviceability.
- Unit shrink wrapping is available to prevent shipping and job site storage damage.



Available Modules

Discharge Plenum Module

Heating Coil Module

Cooling/Preheat Coil Module

Supply Blower Module

Filter Module

Control Panel Module

Mixing Box/Economizer Module

Exhaust Fan Module

Energy Recovery Wheel Module

Return Fan Module

Blank Module



M3 Series Unit with top return, top discharge, hot water coils, and chilled water coils.

M3 Series
Modular Air Handlers

AAON Environmentally Friendly HVAC Product Family

Customer Commitment – AAON encourages environmentally responsible design by incorporating many energy saving features into our superior heating and cooling products. In addition to energy efficiency, AAON also offers environmentally friendly R-410A refrigerant capability in all our cooling and heat pump equipment. As countries throughout the world phase out CFC and HCFC refrigerants, R-410A is becoming the global standard and AAON is leading the way!



Rooftop Units



2 - 5 Tons



2 - 30 Tons



26 - 70 Tons



45 - 230 Tons

Condensing Units



2 - 5 Tons



8 - 40 Tons



45 - 230 Tons

Air-Cooled or Evaporative-Cooled Chiller



35 - 365 Tons

Boiler



500 - 6,000 MBH

Outdoor Air Handling Units



800 - 2,000 CFM



800 - 12,000 CFM



10,400 - 28,000 CFM



18,000 - 68,000 CFM

Indoor Air Handling Units



1,000 - 16,000 CFM



16,000 - 51,500 CFM



800 - 10,000 CFM



800 - 2,000 CFM

Custom Indoor or Outdoor Air Handling Units



Direct Fired
1,500 - 100,000+ CFM



1,500 - 218,000 CFM • Indirect Fired



1,500 - 120,000+ CFM



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