



# M3 series



## MODULAR AIR HANDLING UNITS



*Available to ship in individual modules or fully assembled*



### Features:

- 6,400–52,000 cfm
- Chilled water or direct expansion (DX) cooling
- Hot water, steam, and direct fired gas heating
- Double wall rigid polyurethane foam insulated panel cabinet construction with less than 1% air leakage at +/- 8" w.g and L/240 deflection capability
- Array of direct drive backward curved plenum fans
- Power return, power exhaust, and energy recovery wheel configurations
- Slide-out coil assemblies
- Service access doors with full length stainless steel piano hinges and lockable handles
- Service accessible stainless steel drain pans
- Matching AAON condensing units available for a complete split system solution
- Matching AAON chillers and outdoor mechanical rooms available for a complete hydronic system solution

Application Flexibility  
Minimizes Installation Time and Reduces Cost

○ *Makeup Air Applications  
Up to 100% Outside Air*

○ *Dehumidification and  
Premium Filtration Capabilities*

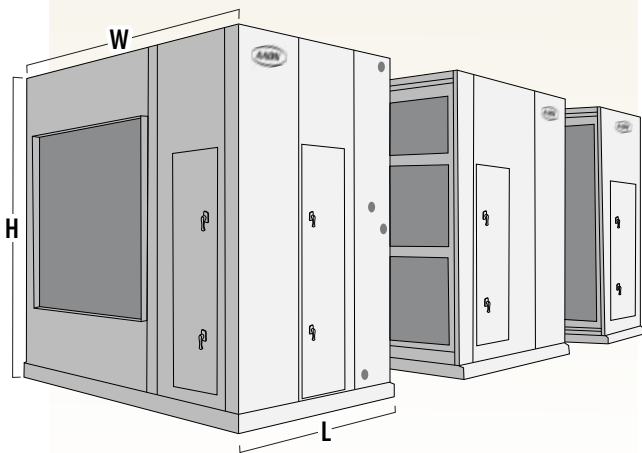
○ *Modular Construction with a  
Wide Variety of Features*

○ *Factory Installed or Customer  
Supplied Control Options*

# M3 Series

## Modular Air Handlers

*The M3 Series extends the AAON modular air handling unit line into the large commercial air handling unit 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 selectable features and options allow the units to be configured to meet your job requirements.*



### Superior Features

- Double wall R-13 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 fans 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	12,800	96	74	* Length will vary depending on options selected	
039	15,600		87		
045	18,000		97		
054	21,600	112	107		
060	24,000		104		
067	26,800	126	115		
074	39,600	138			127
083	33,200				
094	37,600				

All dimensions are in inches • Design cfm may be 30% - 50% greater or less than nominal cfm.

## Premier Options

- DX and chilled water cooling options and hot water, steam, and direct fired gas heating options allow unit flexibility to meet job requirements.
- Factory mounted and fully integrated total and sensible AAONAIRE® energy recovery wheels, rated to AHRI Standard 1060 and bearing the AHRI Certification symbol, provide high efficiency and lower operating costs.
- 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 installed controls options allow unit to meet existing controls architecture or to meet the job needs for new construction.
- Interior and exterior paint option with a corrosion resistant coating that surpasses a 2,500 hour salt spray test. Unit is available with stainless steel panel construction for additional protection in corrosive environments.
- Coil corrosion protection polymer e-coating surpasses a 6,000 hour salt spray test and 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, and bag filters up to 95% efficient (MERV 14) are available to provide the needed amount of air filtration.
- Factory installed power exhaust and power return fans for application flexibility and building pressure control.
- Hot water or steam preheat to prevent hydronic coils from freezing.
- UV-C lights can be mounted within the unit to reduce or eliminate coil and drain pan microbial growth that can degrade system efficiency and lead to possible health and odor problems.
- Factory installed convenience outlet enhances serviceability.
- Unit shrink wrapping is available to prevent shipping and job site storage.



*M3 Series air handling unit with chilled water cooling, hot water heating, and factory installed inspection windows.*



*M3 Series Energy Recovery Unit with interior and exterior corrosion protection paint.*

## 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





# AAON Environmentally Friendly HVAC Product Family

<p><b>ROOFTOP UNITS</b> (2-240 tons)</p> <p>RN SERIES RQ SERIES RZ/RL SERIES</p>	<p><b>WATER-SOURCE HEAT PUMPS</b> (½ - 230 tons)</p> <p>RQ SERIES RZ/RL SERIES RN SERIES M2 SERIES SA SERIES SB SERIES VERTICAL &amp; HORIZONTAL WSHP</p>	<p><b>PACKAGED OUTDOOR MECHANICAL ROOMS</b> (4-540 tons)</p> <p>BOILER MECHANICAL ROOM LF SERIES LN SERIES FLUID COOLER LZ SERIES</p>
<p><b>INDOOR AIR HANDLING UNITS</b> (800 - 100,000 + cfm)</p> <p>F1 SERIES H3 SERIES V3 SERIES SA SERIES M2 SERIES M3 SERIES</p>	<p><b>SELF-CONTAINED UNITS</b> (3-70 tons)</p> <p>SB SERIES SA SERIES M2 SERIES</p>	<p><b>CONDENSING UNITS</b> (2-230 tons)</p> <p>CB SERIES CF SERIES CN SERIES CL SERIES</p>
<p><b>OUTDOOR AIR HANDLING UNITS</b> (800 - 100,000 + cfm)</p> <p>RZ/RL SERIES RN SERIES RQ SERIES</p>	<p><b>COILS</b> BOOSTER, HYDRONIC, &amp; DX</p>	<p><b>CONTROLS</b> (WSHP, RTU, SELF-CONTAINED, &amp; SPLIT SYSTEM)</p> <p>Touchscreen Contoller Pioneer Gold Pioneer Silver</p>

## HEATING AND COOLING FOR...

- Auditoriums
- Convenience Stores
- Health Clubs
- Health Care Facilities
- Homes
- Lodgings
- Manufacturing
- Museums & Libraries
- Natatoriums
- Office Buildings
- Restaurants
- Retail Store
- Schools
- Supermarkets

★ Manufactured  
★ Engineered  
★ Headquartered  
★ Owned (NASDAQ: AAON)

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