STEP INSIDE FOR A BREATH OF FRESH AIR

Want to see the Atherion in action and earn free CEUs? Stop by Modine’s Innovation Tour. To RSVP, talk to your Modine representative, local distributor, or register at ModineInnovationTour.com

To learn more, visit www.modinehvac.com/atherion or call 800-828-HEAT

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COMMERCIAL SOLUTIONS
INTRODUCING AHERION

In mythology, the name refers to the purified air only the gods could breathe. In reality, it’s the way Modine efficiently brings fresh, outside air into your school, hotel, office, warehouse or church.

The Atherion is the ideal solution to bring fresh, tempered outside air into your facility, regardless of your geographic location.

Whether you are in the humidity-soaked air of the Southeastern United States, in the drier, milder air of the West, or the four-season-friendly confines of the upper Midwest and Northeast, the Atherion can be customized to meet your outside ventilation air requirements. And by including the advanced Energy Recovery Module option, your system becomes a high efficiency, 100% dedicated outside air unit, potentially saving you thousands in annual energy costs.

HISTORY

A.B. Modine founded Modine Manufacturing Company in 1916 as a one-room office adjacent to a small workshop in Racine, WI. Today, Modine is an integral part of the world marketplace with sales approaching $1.5 billion. We specialize in products used in commercial, educational, and residential heating, ventilation and air conditioning equipment; light, medium and heavy-duty vehicles; off-highway and industrial equipment; and refrigeration systems.

From the beginning, Modine has applied innovative thermal technology to meet customers’ needs, with breakthroughs yielding state-of-the-art customized heating and cooling solutions.

“We are building our factory around our laboratory—an unusual procedure for a tractor radiator manufacturer.”

A.B. Modine

MODINE RAISES THE BAR

For nearly 100 years, Modine has been the leader in technology and engineering in the HVAC industry. Responding to customer demands and the changing needs of the market, Modine is proud to introduce the Atherion, our new commercial packaged ventilation system with optional energy recovery.

Designed for ease of installation, energy efficiency and durability, the Atherion provides a state-of-the-art solution for dehumidification and ventilation needs.

Designed to meet the latest ASHRAE 189.1 and 62.1 standards for efficiency and indoor air quality.
## SPECIFICATIONS

### Basic Unit Capabilities

<table>
<thead>
<tr>
<th>Feature</th>
<th>Cabinet Size</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Size (Nominal Tons)</td>
<td>B</td>
<td>7, 10, 15, 20, 25, 30</td>
</tr>
<tr>
<td>Airflow Range (CFM)</td>
<td>B</td>
<td>11,000 to 12,000</td>
</tr>
<tr>
<td>Voltage Available (60Hz)</td>
<td>B &amp; C</td>
<td>208V/1ph, 230V/1ph, 460V/3ph, 575V/1ph</td>
</tr>
</tbody>
</table>

### Controls

- **Compressor**: B & C Modulating Tandem Digital Scroll
- **Modulating Range**: B & C 10-100%
- **Exchanger Coil**: B & C High-Capacity A-Row, 14 FPI
- **EER Part Load Efficiency**: B & C MERV 11 or 16

### Heating Section (Optional)

- **Heat Exchanger Type**: Tubular 409 Stainless Steel with Inshot Burners
- **Modulating Range**: B & C 30 to 100%
- **Auxiliary Electric**: B & C Optional, 20kW SCR Controlled
- **Maximum Temp Rise**: B & C 10°F
- **Electric Hot Water**: B & C 1-Row, 2-Circuit (patent pending), 14 FPI

### Hot Gas Reheat (Optional)

- **Hot Gas Reheat Coil**: B & C 1-Row, 2-Circuit (patent pending), 14 FPI
- **Modulating Range**: B & C 0-100%
- **Natural Gas Heat Options**: B & C 150, 200, 250, 300 or 400MBH (80%), 175, 225 or 275MBH (90%)
- **Efficiency**: B & C 80% or 90%+ (Condensing)
- **Heat Exchanger Type**: Tubular 409 Stainless Steel with Inshot Burners
- **Modulating**: B & C 20 to 100%
- **Staging**: B & C Modulating, 30 to 100%
- **Maximum Temp Rise**: B & C 10°F
- **Evaporator Coil**: B & C High-Capacity 4-Row, 14 FPI
- **Compressor**: B & C Modulating Tandem Digital Scroll
- **Condenser Coil**: B & C PF™ Aluminum Microchannel from Modine
- **Condenser Fan Qty**: B & C (2) for 7- to 15-Ton Units, (3) for 20- to 30-Ton Units
- **Condenser Fan Motors**: B & C Variable Speed for Head Pressure Control
- **IEER Part Load Efficiency**: B & C Meets or Exceeds ASHRAE 189.1

### Cooling System

- **Blower Motor Range (HP)**: B & C 1-10HP, NEMA Premium Efficiency ODP and TE
- **Drive**: B & C Belt Drive with Auto Tensioner
- **Filter (Qty) - Size**: B (6) - 16” x 25” x 2”
- **Filter MERV Ratings**: B & C 8, 11, 13, 16, 20, 25, 30, 40, 50, 60, 80, 95, 98
- **Blower Type**: B & C High-Efficiency, Backward-Inclined, Flat Curved Blade Plenum Fan
- **Blower Qty**: B & C 1
- **Blower Sizes (Diameter)**: B 11”, 16” or 20”
- **Wheel Effectiveness**: B & C Minimum 60% to Meet ASHRAE 189.1
- **Wheel Type**: B & C Total Energy Recovery, 4A Zeolite over Aluminum
- **Wheel Diameter**: B & C 25”, 30”, 48”
- **Energy Recovery (Optional)**: B & C Total Energy Recovery, 4A Zeolite over Aluminum

### Third-Party Certified Labs

With certified labs on-site, customers can trust that our results meet today’s rigorous standards.

**Ventilation Test Cell** – Capable of temperatures from -40°F to 140°F and relative humidity of 10-90%, this cell is used for testing packaged rooftop equipment like Atherion. Meets AHRI 340/360 and CSA C747-06 standards.

**Wind Tunnel** – Capable of duplicating almost any location on Earth: up to 520 tons of cooling capacity; replicates 96% of the sun’s UV rays; and generates temperatures ranging from -20°F to 131°F. Another lab used for testing Atherion. Meets AHRI 340/360 and CSA C746-06 standards.

**Refrigeration Lab** – Modine makes its own coils, including the PF™ and CF™ coil. These groundbreaking technologies are invented and proven here.

**Heating Lab** – Unitary heating products are validated here. Meets ANSI Z83.8/CSA 2.6, ANSI Z21.47/CSA 2.3 and ANSI Z83.20/CSA 2.34 standards.


**Split Room Climate Chambers** – Dedicated air-to-air split rooms for testing DX products like the award-winning Aireclass ClassMate®. Meets AHRI 210/240 and 390 standards.

**Semi-Anechoic Sound Room** – Sound is a major issue for many end-users. We now have the capability to provide reliable data from our world-class sound testing laboratory.
CONSTRUCTION
- Robust 2” Double-Wall Construction
  a. 2” double wall, and weatherproof roof, floor and wall construction provides up to R8 insulation for energy efficiency and I&IQ
  b. Standing roof seam for strength and durability
  c. Aluminized steel cabinet construction
- Baked-On, Post-Fabrication, Pre-Assembly, Polyester-Powder Paint
  a. Pre-painted G90 galvanized steel cabinet construction
  b. Provides superior corrosion resistance
  c. Tested to meet ASTM spec for 2,500 hr. salt spray test
  d. Available with optional corrosion protection; meets ASTM spec for 5,000 hr. salt spray test
- Full-Length, Piano-Hinged Access Doors for Easy Access
  a. Easy to open quarter turn latches
  b. Double-wall construction protects insulation and ensures durability during maintenance
- Stainless Steel, Double-Sloped Drain Pan
  a. Prevents corrosion
  b. Avoids standing water for high IAQ
- Low Leak Air Dampers
  a. 2” pre-filters up to MERV 15
  b. 4” final filters up to MERV 16
- Best-In-Class MERV 16 Filtration
  a. 3cfm/ft² to meet the latest ASHRAE Standards
  b. 189.1 and 90.1
- Air foil blades
- Blade edge and jamb seals
- Provides energy savings when the fans are running
- Provides enhanced supply air temperature control
- Modulating Hot Gas Reheat
- Provides superior superheat control and energy savings
- Modulating Tandem Digital Scroll Compressors are Standard
- Fully modulating tandem digital scroll compressor, down to 15% capacity, for maximum efficiency at turndown conditions and high part load efficiency*
- Modulating tandem digital scroll compressor for easy integration into building automation systems
- Modulating Variable Speed Head Pressure Control
- Regulates refrigerant pressure for use in low ambient temperatures
- Provides energy savings when the fans are running at reduced speeds with variable frequency drive
- Electronic Expansion Valve
- Ensures long life with stainless steel tubular heat exchanger for maximum heat transfer – up to 100°F temperature rise
- Modulating capacity turndown ratio – as low as 15% of full capacity
- Gas heat also available with supplemental electric heat for enhanced discharge air temperature control
- Optional High Efficiency Gas Heating Option
  a. Up to 94% efficiency with Modine’s proven Conservicore® technology, up to 100°F temperature rise
  b. SCR control (up to 100kW)
- Optional Electric or Hot Water Heat
- Serviceability and Maintenance
  a. Slide-out energy wheel and exhaust blower/motor access panel
  b. Access panels at reduced depth for lower air side static pressure
  c. Higher efficiency and IAQ
- Energy Recovery Module
  a. Maximum of 8,700 CFM Outdoor Air
  b. Standard Built-In Bypass for Efficient Economizer Operation
  c. MERV 10 Fresh Air Filters
  d. Low Static Pressure with Higher Efficiency
  e. Optional Pre-Heat for Frost Control
  f. 4Å Zeolite-Coated Aluminum Wheel
- Serviceability
  a. Unlike silica-based desiccants on polymer substrates, this wheel absorbs no odors while providing outstanding heat transfer
  b. Provides superior corrosion and enhanced discharge air temperature control
- Controls engineered around the unit vs. equipment designed around the controls
- More efficient sequencing and programming
- Designed for robust conditions
- End users get everything from one company in one box
- Modine "controls" the controls
- Compatible with all major building management systems such as BacNET® and LonWorks®
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- Compatible with all major building management systems such as BacNET® and LonWorks®
- WE FOUND THE MODINE CONTROLS SYSTEM INTUITIVE AND STRAIGHT-FORWARD. IT’S COMFORTING TO POWER-UP ‘STATE-OF-THE-ART’ EQUIPMENT AND HAVE IT PERFORM AS IT WAS INTENDED.”

Tom Hattaway
Controls Engineer, CMH Solutions
West Palm Beach, FL