

Energy Savings and Quieter Classrooms with New Two-Stage, Self-Contained Unit Ventilators

New AAF-HermanNelson self-contained vertical unit ventilators with R-410A refrigerant feature two-stage compressors as standard. In most climates, units can run at lower fan speeds and lower stage compression up to 70% of the time—improving comfort through better humidity control and quieter operation. Issues typically associated with over-sizing are also minimized. In addition, higher part-load efficiencies, up to 12.6 EER, reduce annual energy usage, operating costs and the payback period for projects.

New Features

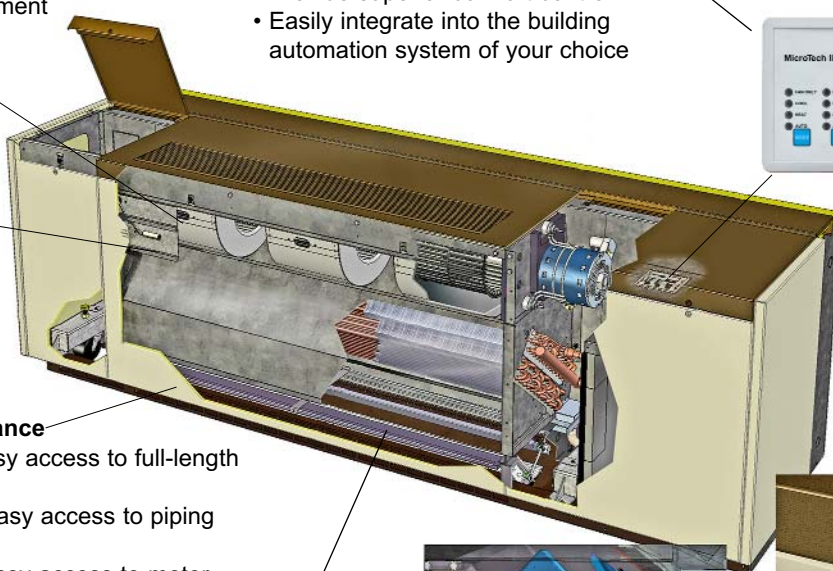
AAF-HermanNelson unit ventilators have long been the quietest, most durable and most popular unit ventilators available. Now Model AZ units provide the following additional features:

- Modular fan sections that improve balance, alignment and simplify maintenance.
- Corrosion-resistant, composite drain pan is easy to clean and helps maintain indoor air quality.
- Ventilation performance tested per AHRI-840. Model AZ unit ventilators are capable of providing ventilation air greater than 80% of the rated standard air flow.
- Certified and labeled compliant with the seismic design provisions of the International Building Code (IBC).
- Welded one-piece chassis for superior strength, durability and vibration reduction.

Ongoing Benefits

These new features strengthen the ongoing benefits AAF-HermanNelson unit ventilators offer you:

- **Quiet operation.** Our GentleFlo™ technology minimizes operating sound levels, even as demands for more fresh air require these units to work longer and harder.



Modular Fan Section

- Improved balance and alignment
- Easy accessibility
- Removable

MicroTech™II factory-integrated controls

- Provide superior comfort control
- Easily integrate into the building automation system of your choice

Superior Airflow

- Quiet, aerodynamic fans utilizing GentleFlo technology
- Unique Draw-Thru Design provides uniform air distribution across the coil for even discharge air temperatures.

Easy Installation and Maintenance

- Center front panel provides easy access to full-length air filter
- Side and end panels provide easy access to piping and drain pan
- Hinged doors on top provide easy access to motor, electrical and control components

Insulated, double-wall outdoor air damper

- Provides superior mixture of outdoor air and room air for precise temperature control.
- Seals tightly without twisting.

Tamper-resistant fasteners

New Two-Stage, Self-Contained Unit Ventilators

- **The right amount of fresh air and cooling.** Part-load variable-air options precisely match classroom comfort requirements for energy savings. Demand control ventilation measures CO₂ levels to deliver the required amount of fresh air based on actual room occupancy. The result is even lower energy costs.
- **Easy to integrate into your building automation system of choice.** Available with MicroTech II™ unit controllers which provide proven performance for all factory-installed options. Factory-integrated controls streamline installation, reduce startup risks and lower job costs.
- **Low installation costs.** Economical for new construction because these units avoid the added cost and space required for expensive ductwork. Economical for retrofit because new units fit the same space occupied by existing ones.
- **Low operating costs.** Maximum advantage is taken of “free” cooling to reduce operating costs. During unoccupied periods and at night, units operate sparingly for additional energy savings.
- **Low life-cycle costs.** Our proven institutional design withstands the rigors of the classroom environment. Features include an extra-sturdy chassis and double-wall damper on the inside; scuff-resistant finishes and tamper-resistant latches on the outside. In fact, many units installed over 30 years ago continue to provide quiet, reliable classroom comfort. To keep your AAF-HermanNelson unit ventilator operating at peak performance, we provide easy access to all serviceable components.

Creating an environment with comfortable, attentive students is our mission. You can be confident that AAF-HermanNelson unit ventilators will provide quiet, reliable comfort in your learning environment day-in and day-out, well into the future. To learn more about AAF-HermanNelson unit ventilators and warranty details, contact your local McQuay representative or visit www.mcquay.com.

Performance Summary

Ratings per AHRI 840 conditions: entering air 80°F/67°F, outdoor air 95°F.

	S024	S036	S044	S054
Standard cooling at high indoor fan speed				
Nominal airflow - high Indoor fan speed, CFM	1,000	1,250	1,500	1,500
Total cooling capacity, BTUH	22,100	36,800	44,000	52,100
Efficiency, EER	9.7	9.5	9.4	9.3
Partial load cooling at medium indoor fan speed				
Nominal airflow - medium Indoor fan speed, CFM	750	1,000	1,150	1,150
Total cooling capacity, BTUH	18,000	28,000	36,300	42,700
Efficiency, EER	12.6	12.4	11.8	11.8
Partial load cooling at low indoor fan speed				
Nominal airflow - medium indoor fan speed, CFM	650	800	950	950
Total cooling capacity, BTUH	18,000	28,000	34,200	40,200
Efficiency, EER	12.6	12.4	11.2	11.3

