

Trane Unit Ventilator

Single Zone VAV Solution



A New Take on Classic Technology

Trane® Unit Ventilator was carefully designed to perform in a demanding educational environment. The ideal solution for school renovation projects, our unit ventilators now feature standard ECM, advanced controls and the VelociTach™ motor control board. This gives you a factory commissioned, Single Zone VAV system with plug and play convenience and up to 66% energy savings.

Unit Ventilator Flexibility

Trane Unit Ventilator heating and cooling unit options let you configure device specifications to suit every building.

- Unit sizes from 750 cfm to 2000 cfm
- Chilled water, hot water, DX and steam coils
- Single point power electric heat
- 1" throwaway, MERV 8 or MERV 13 filter
- Piping packages in a variety of configurations
- Touch safe control box
- Face and bypass damper actuator
- Economizer cycle

End Devices

A variety of end device options provide even more flexibility when configuring your system.

- Condensate Overflow Detection
- Low Temperature Detection (FreezeStat)
- Modulating and Two-Position Control Valves
- Economizer and Two-Position Fresh Air Damper Actuator

Raising the Bar

We used the implementation of leading-edge components with advanced capabilities as a springboard to develop a suite of features focused on what you need.

Streamlined Installation

Piping and controls are factory installed, configured and tested to your specifications. This makes job site installation a streamlined plug and play process, ensuring faster setup, increased reliability and optimal system performance.

Simplified Maintenance

The new VelociTach™ motor control board features an LED display and manual controls. This provides real time feedback without the inconvenience of needing a remote service tool.

Quiet Operation

Variable speed technology slowly adjusts the fan speed to meet a space's changing needs. This soft ramp technology maintains low fan speed and moderated air flow, delivering system performance 5 - 8 decibels quieter than 3 speed models.

Continuous Comfort

Innovative discharge air temperature control algorithms mean a space reaches the desired set point faster and occupants enjoy a more stable environment.

Lighten Your Load

Trane offers an exclusive option to reduce the nameplate Full Load Amps (FLA) on Vertical Unit Ventilators, eliminating the need for rewiring and bringing the benefits of Single Zone VAV systems to retrofit and renovation projects.

Breathe Easier

Indoor air quality is a crucial consideration for an educational environment. Viruses, volatile toxins, molds and excess humidity measurably impact occupant health and academic outcomes. Trane Unit Ventilator units were designed with IAQ conscious features that facilitate a healthier indoor environment.

Design Element	IAQ Impact
MERV 13 filter option (LEED®)	MERV 13 filters capture particles as small as 0.3–1.0 µm – this includes bacteria, smoke and dust – and can help earn a point toward a LEED certification.
Removable, sloped drain pan	Sloped drain pans eliminate water accumulation and associated mold growth. Removable drain pans are easily cleaned during routine maintenance.
Non-corrosive drain pan	Drain pan will not rust and minimizes the possibility of drain clogs, preventing water accumulation.
OA/RA damper	Damper introduces fresh air to enhance air quality, manage comfort and save energy.
Fan and coil accessibility	Easily accessible components facilitate routine cleaning.
EC Motor	Variable speed ECM technology means units operate at low speeds for more time. This improves dehumidification, a key factor for IAQ and comfort.

Improved IAQ Impact

Teacher absenteeism	▼
Teacher turnover	▼
Student attendance	▲
Student test scores	▲

Acoustic Imperative

As many as 1/3 of all students do not hear as much as 33% of auditory classroom communication, and children under 16 lack the ability to correctly infer what they missed or misheard.¹ Poor classroom acoustics pose a further challenge for special needs students, including those with autism, hearing impairment, learning disabilities or an alternate native language.²

Trane Unit Ventilators feature soft ramp technology, which eliminates the distracting noise associated with units turning on and off, and with abrupt changes in fan speed. And because Single Zone VAV systems are designed to run at the lowest speed necessary to meet the space load, they eliminate the noise of excessive air flow.

1. M. Nixon. "Acoustical Standards Begin to Reverberate." School Construction News December 2005. Web.

2. P. Nelson. "Sound in the Classroom: Why Children Need Quiet." ASHRAE Journal February 2003: 22-25. Print.

Improved Acoustics Impact

Auditory Comprehension	▲
Academic performance	▲
Performance based funding	▲
Social/behavioral outcomes	▲

Trane Unit Ventilator Models



Vertical VUVE
Horizontal HUVU model also available

Building Information Modeling (BIM)

Trane has the BIM objects to support your building design. Pre-populated physical and performance data unique to each product configuration save time, increase accuracy and simplify the construction process.

Learn more at trane.com



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.