Intelligent Variable Air Systems

An EarthWise™ System from Trane
Trane EarthWise Intelligent Variable Air Systems
Delivering 20 to 30 percent more efficiency

Are you getting enough performance from your HVAC system?
Efficiency improvements of 20 to 30 percent—plus higher indoor air quality, better comfort control and lower installation costs. These are the advantages offered by Trane EarthWise Intelligent Variable Air Systems.

Variable-air-volume (VAV) systems have a proven track record of reliable, efficient performance. Trane improves on that performance, using advanced technology, new design strategies and optimized controls to deliver lower energy costs, reduced installation costs and higher occupant satisfaction, building life into your property. Available for both chilled water and DX applications, these enhanced VAV systems are a key part of energy-saving building designs.

Upgrading to a Trane EarthWise Intelligent Variable Air System: the smart decision
If your current VAV system isn’t delivering the comfort or energy efficiency you desire, upgrading may improve efficiency by 20 to 30 percent—and it doesn’t have to be complicated or cost-prohibitive. Retrofit dampers, pre-packaged controls and Trane Wireless Comm technology allow for quicker project completion, reducing installation costs while also causing less disruption to building occupants.

Easy-to-read dashboards, supported by thorough documentation, take the mystery out of how your system is performing, so that you and Trane can keep it running optimally over the system’s lifetime — and give your operations team the essential information it needs to proactively solve problems before occupants are affected. Dashboards also include built-in calculations to help you see the cost savings your Trane EarthWise Intelligent Variable Air System provides. In addition, Trane Intelligent Services can help sustain the system’s high level of performance by warning the building operator of system malfunctions and translating data into actionable solutions for improving system performance.
A  **Trane air-handling unit** — High efficiency, low leakage; flexibility; and pre-packaged, factory-installed controls. Factory-installed options include exhaust air energy recovery, outdoor airflow measurement, direct-drive plenum fans and a variety of air-cleaning options, including catalytic air cleaning.

B  **Packaged rooftop air-conditioning unit** — High efficiency and cost effectiveness with pre-packaged, factory-installed controls. Factory-installed options include exhaust air energy recovery, outdoor airflow measurement, evaporative condensing, variable-speed compressors and fans, and a variety of filter options.

C  **VariTrane™ VAV terminal units** — Low leakage, rugged construction, accurate flow measurement and pre-packaged, factory-installed controls.

D  **Tracer™ SC system controller** — Turns a common VAV system into a Trane EarthWise Intelligent Variable Air System. Factory-installed programming, start-up and commissioning coordination, wired or Trane Wireless Comm, and dashboards lead to easy installation and operation.

E  **Zone temperature sensors** — Available as wired or wireless for great installation flexibility, faster project completion, increased reliability and reduced installation costs.

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**Intelligence from the inside out:**

The smart design of Trane EarthWise Intelligent Variable Air Systems

Trane EarthWise Intelligent Variable Air Systems use the BACnet™ communications protocol, allowing the system and equipment controllers to operate together as a high-performance system or integrate with an existing system using the same open protocol. The user interfaces for Tracer SC are optimized for the mobile world, so the intuitive and easy-to-use nature of the system adapts to the way you work and travels with you when necessary, from a PC to a tablet or smartphone.

**Tracer SC system controller**

- Standard, pre-packaged applications and optimized control sequences
- Easy-to-use, mobile interface
- Wired or Trane Wireless Comm
- Energy savings quantified on system dashboards
- Identify efficiency opportunities through Trane Intelligent Services
Trane EarthWise Intelligent Variable Air Systems

Engineered for easier, more-flexible installations — Controls are pre-packaged at the factory for smooth installation and commissioning, avoiding the inconsistencies of custom programming—but still providing on-site programming flexibility.

Optimized ventilation and free cooling — Efficiently incorporates dynamic ventilation control and economizer free cooling—capabilities not easily provided by a secondary ventilation system. Zone dampers and optimized ventilation sequences reduce the amount of outdoor air needed for ventilation, minimizing energy use while complying with mechanical codes.

Performance you can see, operation you can control — Trane® EarthWise™ Intelligent Variable Air Systems come with standard dashboards that allow quick visual inspection of system operation and efficiency. This takes the mystery out of how your system is performing, so that you and Trane can verify efficient performance throughout its service life. Local or remote adjustments are easy, so anyone with the proper credentials can make adjustments without the need for a programmer.

Fast, simple retrofits with wireless technology — Upgrading to a Trane EarthWise Intelligent Variable Air System can be fast, trouble-free and affordable. Retrofit dampers let you preserve most of your existing ductwork, and pre-packaged controls simplify the process. Reliable Trane Wireless Comm technology eliminates wiring between equipment, system controllers and temperature sensors, for quicker project completion with less disruption to building occupants.

Scan the code or go to Trane.com/iVAS to learn more about Trane EarthWise™ Intelligent Variable Air Systems.

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