Trane® eFlex™
For 3–17.5 Ton Light Commercial Applications
Variable Speed vs. Fixed Speed

Benefits of Variable Speed

<table>
<thead>
<tr>
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<th>Variable Speed</th>
<th>Fixed Speed</th>
<th>Benefit of Variable Speed</th>
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<tbody>
<tr>
<td>Compressor Cycling</td>
<td>Reduced</td>
<td>Increased</td>
<td>Reduced compressor cycling leads to increased compressor extended life</td>
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<tr>
<td>Energy Efficiency</td>
<td></td>
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<td>VFDs and ECMs match the compressor and fan speed to the specific demands of the work being performed</td>
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<tr>
<td>Space Temperature Control</td>
<td>Best</td>
<td>Good</td>
<td>By matching the load needs of the zone being cooled, space temperature variation is reduced</td>
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<tr>
<td>Dehumidification Capabilities</td>
<td></td>
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<td>When properly sized, compressors and indoor fans run longer (at reduced speeds) improving latent work in many applications where active dehumidification is not required</td>
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Trane® light commercial roof top units that incorporate eFlex™ technology precisely match output to the cooling demands of the space. They operate at their fastest levels when demand is high; they modulate to slower levels when demand is low. This delivers industry-leading part-load efficiencies (IEER) and is accomplished via variable speed indoor and outdoor fans as well as variable speed compressors controlled by ReliaTel™ Microprocessors.

Smart Savings
Adding eFlex technology adds up to huge savings. Trane variable speed compressors produce superior results with less energy. After implementing eFlex technology, many businesses see a 30%-40% reduction in their energy use when compared to similar constant air volume products.
Part of the Package: Comfort and Reliability
With the flexibility to adjust speed based on demand, Trane® variable speed roof top units run more effectively than traditional constant volume units. This, in addition to varying the indoor fan speed, has the beneficial side-effect of providing ancillary humidity control without equipment add-ons or additional expense. Minimized compressor cycling means less wear-and-tear on the unit.

Industry-Leading Expertise
Trane engineers remain on the cutting edge of the industry. Trane is the first leading brand to offer variable speed compressors combined with variable speed indoor and outdoor fans for light commercial applications. Our products perform above and beyond future regulatory requirements for part load efficiency (IEER). Our sales team provides expert guidance, helping customers match the right equipment with the right specification, sizing and the right installation plan.
eFlex™ technology

- Trane® light commercial roof top units that incorporate eFlex™ technology deliver industry-leading part-load efficiencies (IEER), which is accomplished via variable speed indoor and outdoor fans as well as variable speed compressors controlled by ReliaTel™ Microprocessors.
- Common components within the platform allow for ease of serviceability and troubleshooting. Precedent™ and Voyager™ units can be integrated with single or multi-space Variable Air Volume Systems and are designed to optimize load matching and part load efficiency along with comfort.

Payback

- Rooftops with eFlex technology offer solutions with efficiencies up to 80% higher than standards established by the Department of Energy and ASHRAE®.
- Provides stable discharge air temperatures over a wide range of operating conditions to deliver superior comfort levels to building occupants.
- With the widest variety of factory installed options in the industry, Precedent and Voyager units can be configured to specifications before delivery, saving the expense of costly site-installed options.
Easy Maintenance for Optimal Performance
- Optional high efficiency MERV 8 & MERV 13 filters enhance overall indoor air quality.
- Hinged access doors are also optional and provide easy entry to the unit’s service access areas. This reduces maintenance time and prevents roof damage.
- Color-coded, numbered wiring allows for faster identification of wires, saving time and money when diagnosing and servicing the unit.

Lightning Fast Delivery
From order to ship, Trane® continues to deliver the industry’s fastest configured product lead times.

Control Your Site. Control Your Costs.
Run your site as efficiently as your system with Trane controls.

On Your Desktop. On the Go. Everything You Need to Know.
The Trane® Mobile TOPSS™ app and the Trane 360™ desktop app provide in-depth information on eFlex technology options for Trane products. Use this application suite to check inventory, identify parts, select, price, and order Trane products.

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High efficiency2018 DOE Minimum

<table>
<thead>
<tr>
<th>IEER</th>
<th>2018 DOE Minimum</th>
<th>High efficiency</th>
<th>High efficiency w/ Single Zone VAV</th>
<th>eFlex™</th>
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*IEERs as high as +23
Trane® light commercial roof top units that are controlled by ReliaTel™ outdoor fans as well as variable speed compressors deliver industry-leading part-load efficiencies (IEER) that modulate to slower levels when demand is low. This allows them to operate at their fastest levels when demand is high; they effectively respond to the cooling demands of the space. They operate at similar constant air volume products.

Adding eFlex technology adds up to huge savings. The flexible approach means less wear-and-tear on the unit. Minimized compressor cycling means less maintenance and fewer additional expense. Minimized compressor cycling reduces humidity control without equipment add-ons or additional expense. Minimized compressor cycling also reduces energy consumption. Part of the Package: Comfort and Reliability

With the flexibility to adjust speed based on demand, Trane® variable speed roof top units run more efficiently than traditional constant volume units. Our engineers remain on the cutting edge of the industry. Trane is the first leading brand to offer variable speed compressors combined with variable speed indoor fans.

Trane® variable speed roof top units have been an industry leader in rooftop VAV systems and are designed to optimize load matching and part load efficiency along with superior comfort levels to building occupants. With the widest variety of factory installed options and the most complete package of components and systems, Trane® has been an industry leader in rooftop VAV systems.

\**Multiple Zone VAV**

A multiple-zone VAV (MZVAV) system consists of a packaged rooftop unit that serves several individually controlled zones. Each zone is equipped with a VAV terminal unit that varies the quantity of air delivered to maintain the desired temperature in that zone. The rooftop unit controller varies the speed of the indoor fan to maintain the static pressure in the supply ductwork at a setpoint, ensuring that all zones receive the necessary quantity of air. In addition, cooling capacity is cycled to maintain the supply air temperature at the desired setpoint. For decades, Trane® has been an industry leader in rooftop VAV systems.

\**Trane Human Interface Panel**

The available factory-installed human interface panel is an easy-to-read color touch screen display that shows both real time and trending information about system operations. This enables more efficient commissioning of Precedent™ and Voyager™ units and allows technicians to easily configure, monitor, and adjust system setpoints for more precise, efficient operations.

- ReliaTel™ controls integration
- Large color touch screen display
- Data trending capability
- Component runtime

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Trane® Air-Fi® Wireless Systems
Trane® Air-Fi® wireless technology eliminates the need for wired components. No wired components means no-hassle installation; you can install Air-Fi wireless systems without disrupting your business. Air-Fi wireless systems provide secure, reliable operation, and include a maintenance-free lifetime battery.* The technology leverages open standard communication, which allows you to easily implement changes to meet future needs.

Trane Tracer® Ensemble™
The powerful Tracer Ensemble building management solution gives you an enterprise-wide view into all your building control systems—whether you have two buildings or hundreds. Manage and respond to alarms, change setpoints and modify schedules with just a few clicks from a single access point—an efficient solution that helps provide greater safety and comfort of building occupants. The Tracer Ensemble system is also easily customized to meet your specific facility management needs, and the wealth of information it provides can be tracked, stored and analyzed over years, to ensure building performance and efficiency.

Trane Tracer SC
The Trane Tracer® SC building automation system is a complete building control solution that delivers the reliability you expect from Trane. The Tracer SC system coordinates the equipment from your building’s HVAC and other systems. It offers control for facility managers and maintenance staff with a web-enabled user interface—so you get easy and convenient access to your system from virtually anywhere.

Trane Tracer BAS Operator Suite
Compatible with the Trane Tracer® SC system, this mobile app allows Facility Managers to monitor and control a facility from your mobile device. Check the HVAC system; set point changes; manage alarms; and respond to hot/cold calls. The Trane Tracer BAS Operator Suite puts your building at your fingertips.

*based on typical indoor operating conditions
Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a $14 billion global business committed to a world of sustainable progress and enduring results.

Visit Trane.com to learn more.