Voyager Performance Upgrade

An Engineered Solution for your Voyager™ packaged rooftop unit

TRANE TECHNOLOGIES

Energy savings and comfort improvement

Voyager™ rooftops units are a great fit for light commercial applications. These units perform well in exposed, rooftop environments. ASHRAE reports the median life of packaged rooftop units to be 15 years. The Voyager Performance Upgrade allows those units with significant life remaining to be converted to fully modulating Variable Volume or Multi-speed. The end result is a unit the yields the same benefits that factory Single Zone VAV or Multi-speed options, including energy savings and improved comfort conditions.

To qualify for the program, a Voyager rooftop product must be in the size range of 12.5 – 20 tons and have ReliaTel™ controls (offered approximately since 2004).

Unlike third-party offers, this solution is a Trane OEM conversion, using the same parts and controls as the single zone or multi-speed factory options.

Voyager Performance Upgrade program objectives

Save Energy

As a result of the conversion, unit energy performance can improve by 25% or more. A variable frequency drive modulates the supply fan to match the building's conditioning needs. The optional demand control ventilation allows for optimized introduction of outdoor air while resulting in maximized energy savings. The result is an energy solution that can have a very quick payback.

Improved Comfort Conditions

Single zone VAV control keeps the mechanical cooling engaged more often and lowers the air speed across the cooling coil. This allows for more drying of the air and a more comfortable humidity in the space. In applications where the units were oversized, these improvements can be even more pronounced. The optional demand control ventilation can further reduce the amount of air that needs dehumidification by optimizing outdoor quantity.

Quiet Operation

Single zone VAV units have lower acoustic levels in the space when they are away from the design condition. Much of the unit's life is spent away from peak load; therefore, with lower fan speed and soft starting of the fan, the conversion offers a quieter and less noticeable packaged rooftop unit.

Application Considerations

Voyager Performance Upgrade is valuable in many applications. Buildings or spaces with variable loads, intermittent use, and unoccupied hours will benefit the most from the conversion kit. Some examples of this are:

- Retail
- Theaters
- Cafeterias
- Auditoriums
- Churches
- Schools, and more.

Another application where the conversion is beneficial is when the Voyager unit has been installed over-sized for the load. The Voyager Performance Upgrade allows the unit to better match the part load condition while maintaining temperature and humidity.

Benefits include: • Saves energy • Improves comfort conditions (humidity control) • Reduces fan sound levels • Latest control modules and ReliaTel version • Warranty

Voyager Performance Upgrade Program and Options

The unit needs to be shutdown during installation. Typical install time is 4-6 hours per Voyager unit.

Base Kit includes:

- Updated Control Modules (Latest Version of ReliaTel)
- Inverter Duty Supply Fan Motor
- Variable Frequency Drive
- Discharge Air Temperature Sensing Kit
- All Wires and Connections
- All Mounting Hardware
- New Wiring Diagrams for the Unit
- Exterior label indicating the conversion kit has been added to the unit
  - Label contains important information about the kit, such as serial number, needed to reference the order or process warranty claims
- 1 Year Parts Only Warranty
- Shaft Grounding Ring for Supply Fan Motor

Options include:

- Demand Control Ventilation Kit (Wall Mount or Duct Mount)
  - This is only available for those units that already have economizer
- Communications Module
- Zone Sensor
  - A zone sensor is required for the unit to operate as a fully modulating unit. Multispeed operation can be done using a standard thermostat.

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*.

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