



Features and Benefits

Here are some of the features that give Voyager its reputation for quality.

Trane Built Climatuff™ and Model H and L Compressors

- Compressor designs are tested in Trane's SEET (System Extreme Environmental Test) facility in Tyler, Texas. Five years of operation are simulated in a sixteen week test.
- Each compressor has internal overload protection, high and low pressure relief.
- The dual compressors in the 100-200 units provide system back-up.



Micro Controls

- For many years Trane has worked with micro-processor controls in the applied equipment markets. These designs provided the technology for Voyager™ units with micro-processor controls.
- The Micro provides unit control for heating, cooling, and ventilating utilizing input from sensors that measure outdoor and indoor temperatures.
- The Micro improves quality and reliability through the use of time-tested micro-processor controls and logic. The Micro now:
 - prevents the unit from short-cycling, considerably improving compressor life.
 - ensures that the compressor will run for a specific amount of time that allows oil to return for better lubrication, enhancing the reliability of the compressor.
- The Voyager with the Micro reduces the number of components required to operate the unit, thereby reducing possibilities for component failure.

Weathertight Top and Cabinet

- Voyager units incorporate either a one piece top or the Trane-Tite-Top (T³). Each part of the top (either two or three pieces) overlaps in such a way that water cannot leak into the unit. These overlapped edges are gasketed and sealed to ensure superior water integrity.
- Quick-Access panels reduce the number of possible water entry points.
- For added water integrity, Voyager has a raised 29 mm (1.18 inch) lip around the supply and return of the downflow units to prevent water blowing into the ductwork, in the event water should get into the unit.

Quality and Reliability Testing

- The fan and idler arm assembly designs have been tested to over 300,000 cycles each. Our combined cycle testing is now over 7,000,000 cycles.
- All of Voyager's designs were rigorously rain tested at the factory to ensure water integrity.
- Actual shipping tests were performed to determine packaging requirements. Units were test shipped around the country to determine the best packaging.
- Factory shake and drop tests are used as part of the packaged unit design process to help assure that the unit will arrive at your jobsite in top condition.
- Rigging tests include lifting a unit into the air and letting it drop one foot, assuring that the lifting lugs and rails hold up under stress.
- All parts are inspected at the point of final assembly. Substandard parts are identified and rejected immediately.
- We perform a 100% coil leak test at the factory. The evaporator and condenser coils are leak tested to 1.4 MPa (200 psig) and pressure tested to 3.1 MPa (450 psig).
- Every unit receives a 100 percent unit run test before leaving the production line to make sure it lives up to rigorous Trane requirements.

We test designs at our factory not on our customers!

Ease Of Installation

Contractors look for lower installation (jobsite) costs. Voyager's conversionless units provide many time and money saving features.

Conversionless Units

- The dedicated design units (either downflow or horizontal) require no panel removal or alteration time to convert in the field – a major cost savings during installation.
- Horizontal units come complete with duct flanges so the contractor doesn't have to field fabricate them. These duct flanges are a time and cost saver.

Improved Airflow

U-shaped airflow allows for improved static capabilities. The need for high static motor conversion is minimized and time isn't spent changing to high static oversized motors.

Single-Side Access

Access to all of Voyager's components is accomplished through the Quick-access panels. No more than three screws must be removed to access all components.

Micro

- The function of the Micro replaces the need for field installed anti-short-cycle timers and time delay relays. The Micro provides these controls as a function of the unit. The contractor no longer has to purchase these controls as options and pay to install them.
- The wiring of the low voltage connections to the unit and the zone sensors is as easy as 1-1, 2-2, and 3-3. This simplified system makes it easier for the installer to wire.

Features and Benefits

Easy Access Low Voltage Terminal Board
 Voyager's low voltage terminal board is external to the electrical control cabinet. It is extremely easy to locate and attach the thermostat wire. This is another cost and timesaving installation feature.

Trane's Idler Arm Assembly
 Our idler pulley provides quick adjustment for belt or motor sheaves. No longer does the contractor have to adjust the motor to tighten the belt or change the motor sheave setting. A real time-saver in servicing and installing.

Single-Point Power
 A single electrical connection powers the unit.

Serviceability
 Today's owners are more conscious of the cost of service and maintenance. Voyager was designed with input from service contractors. Their information helped us design a unit that would get the serviceman off the job quicker and save the owner money. Here is why Voyager can save money in service.

Voyager's Simpler Design
 The Voyager design uses 42% fewer parts than previous units. Since it is simpler in design, it is easier to diagnose.

Micro

- The Micro requires no special tools to run the Voyager unit through its paces. Simply place a jumper wire between Test 1 and Test 2 on the Low Voltage Terminal Board and the unit will walk through its operational steps automatically.
- The unit automatically returns control to the zone sensor after stepping through

the test mode a single time, even if the jumper is left on the unit.

- As long as the unit has power and the LED is lit, the Micro is operational. The light indicates that the Micro is functioning properly.
- The Micro features expanded diagnostic capabilities when utilized with Trane's Integrated Comfort™ Systems.
- One Zone Sensor option has central control panel lights which indicate the mode the unit is in and possible diagnostic information (dirty filters for example).

Standardized Components

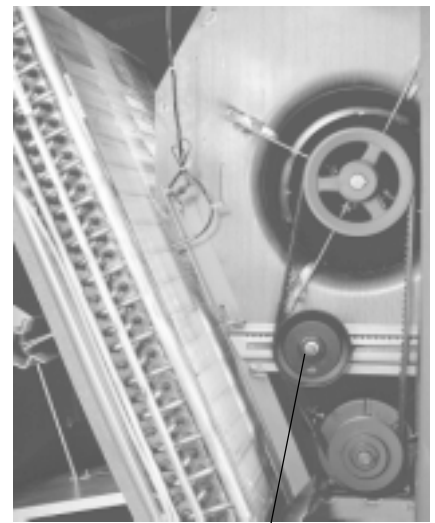
- Components are placed in the same location for all Voyager units. Familiarize yourself with one Voyager and you are familiar with all Voyager units.
- One single Micro can fit all Voyager Packaged Gas/Electrics, Cooling with Electric Heat, and Heat Pump models. This provides standardization of parts for the contractors. Less money is tied up in inventory using the Micro.
- Contractors/owners can stock fewer parts due to standardized components throughout Voyager units.

Single-Side Service
 Single-side service is standard on all Voyager units.

Quick-Access Panels
 Remove three or fewer screws for access to the standardized internal components and wiring.

Colored And Numbered Wiring
 You save time and money tracing wires and diagnosing the unit.

Quick-Adjust Idler Arm
 On most units, the belt and sheaves can be quickly adjusted without moving the mounted fan motor. This is done with our



idler arm pulley. The Quick-Adjust Idler Arm is a major savings of time and money.

Standardized Components

Colored and Numbered Wiring

Easy Access Low Voltage Terminal Board





Features and Benefits

Voyager Helps Win Jobs and Engineer Specifications

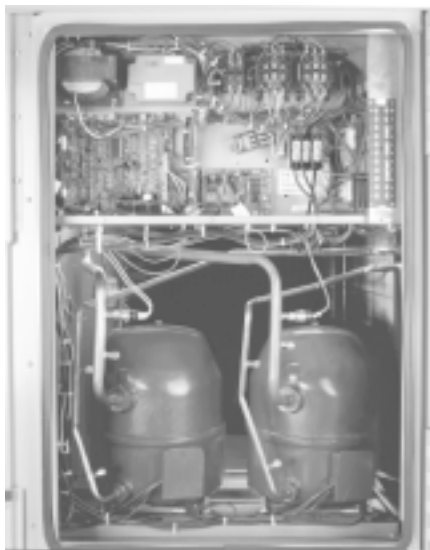
The Voyager units were built utilizing important input from our consulting engineers. Engineers wanted a unit that would perform up to their rigorous standards in a variety of applications. They wanted a unit that would live up to their customers' expectations after they gave their stamp of approval. Here is how Voyager performs up to that standard.

Capacity Modulation

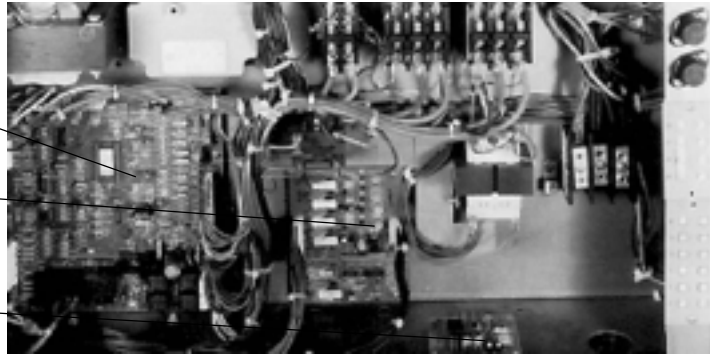
100 through 200 units have dual compressors. The dual compressor models are outstanding for humidity control, light load cooling conditions and system back-up applications.

Flexible Applications

Airflow is outstanding. The new Voyager can replace an older machine with older ductwork and, in some cases, improve the comfort through better air distribution.



Micro
Trane
Communication
Interface
Defrost
Board



Micro Benefits

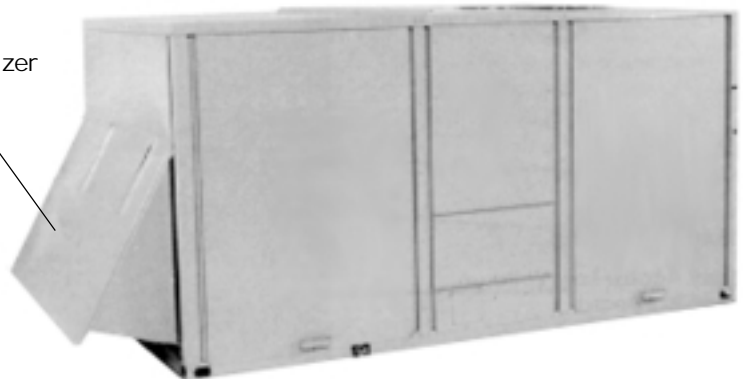
- The Micro has built-in anti-short-cycle timers, time delay relays, and minimum "on" time controls. These controls are functions of the Micro and are factory tested to assure proper operation.
- The Micro softens electrical "spikes" by staging on fans, compressors and heaters.
- The Intelligent Fallback or Adaptive Control is a benefit to the building occupant. If a component goes astray, the unit will continue to operate at a predetermined temperature set point.

- Intelligent Anticipation is a standard feature of the Micro. It functions constantly as the Micro and zone sensor work together in harmony to provide tighter comfort control than conventional electro-mechanical thermostats.
- A complete line of zone sensors is available with options ranging from manual changeover with single set point, to auto changeover with dual set point. There is also a 7 day programmable zone sensor with night setback. Optional remote sensing and status/service indication lights are also available.

Downflow And Horizontal Economizers

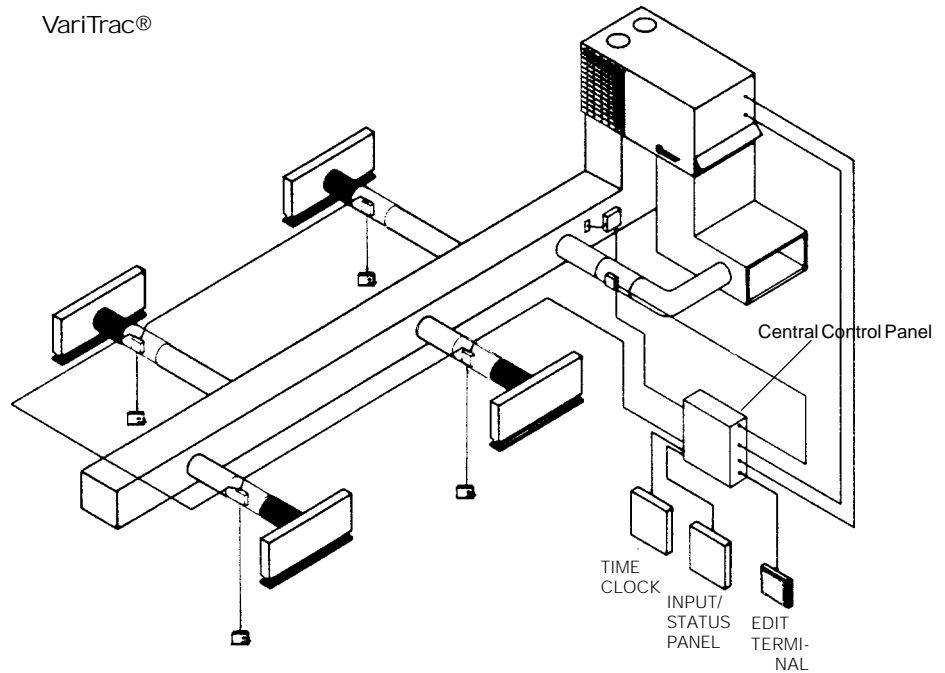
The economizers come with two options of control — dry bulb enthalpy is standard, and comparative enthalpy is optional.

New Voyager
With Economizer



Features and Benefits

VariTrac®



VariTrac

Trane's outstanding changeover VAV System for light commercial applications is now available. Coupled with Voyager, it provides the latest in technological advances in comfort management systems and can allow thermostat control in every zone served by VariTrac.

Low Ambient Cooling

All Voyager units have cooling capabilities down to -18°C (0°F) as standard.

Power Exhaust Option

This option offered by Trane is available on all downflow units. It provides exhaust of the return air when using a downflow economizer to maintain proper building pressurization. Great for relieving most building over-pressurization problems.

High Static Drive Accessory

Available for use on the 125 and 200 units, this high static drive accessory allows for the optimization of the standard

motor. Avoid expensive motors and operation costs by installing this optimized sheave accessory.

Trane Communication Interface or TCI is available factory or field installed. This module when applied with the Micro easily interfaces with Trane's Integrated Comfort™ System.

Trane factory built roof curbs are available for the downflow units.

The following options round-out the complete line of Voyager accessories:

- 0 - 25% manual outside air hood
- Motorized outside air inlet

One Of Our Finest Assets:

Trane Sales Representatives are a Support group that can assist you with:

- Product
- Application
- Service
- Training
- Special Applications
- Specifications
- Computer Programs and much more

Voyager has the features and benefits that make it second to none. It was designed with input from contractors and engineers in the field. The U-shaped airflow performance is outstanding.

If all of your customers knew about Voyager, all would insist on it.

**Voyager...
SIMPLY THE BEST VALUE!!!!**