



# *Voyager™ 17-165 kW rooftop units*

*Plug and Play comfort in commercial applications*



# Top efficiency, flexibility, reliability

Recognized worldwide for their reliability and efficiency, the Trane Voyager rooftop units are self-contained packaged units that are the ideal, economical solution for a wide range of commercial applications – supermarkets, supermarkets, commercial buildings, warehouses and other industrial buildings – as well as residential use.

## **Low cost installation and serviceability for the most economical comfort solution**

The Trane Voyager comes as a packaged unit following the “plug and play” concept, with a single powerpoint connection. To ensure easy installation and commissioning, most specified options are factory installed and arrive on the jobsite already mounted in the unit, eliminating the need for time-consuming accessory field installation. Full access to all major components from one side of the unit ensures fast, simple service.

## **Ultimate versatility in a wide range of applications**

Developed by the world’s number one solutions provider, Voyager units are designed to meet the toughest job standards and to handle applications from the simplest to the most complex. Because of their ability to work with return air at temperatures down to 16°C, they are also particularly suitable for cold chain and a wide variety of storage applications, e.g. wine or chocolate, where such temperatures are necessary.



Eurovent certification for the Voyager range guarantees accurate performance data and common comparison criteria.



From a single unit you can experience the production of comfort cooling, heating, supply of an adjustable volume of fresh air, and even free-cooling.

When you turn to the Voyager rooftop range you’ll benefit from Trane’s dedication to constant development of the range in order to deliver the latest state-of-the-art rooftop solutions.

## **High efficiency ensures immediate energy savings**

The Trane Voyager rooftop units are designed and built for environmentally operation, featuring among the highest COP (Coefficient of Performance) and EER (Energy Efficiency Rating) in their class.

Tracking of operating costs is simplified thanks to the easy integration of intelligent Building Management Systems such as Tracer Summit™, Tracker™ or Varitrac™ CCP2. The Trane Voyager commercial units support standard open LonTalk® protocol and comply to Space Comfort Controller (SCC) profile.



They are also able to work in high ambient temperatures, making them suitable for applications in areas such as the Middle East.

Trane's unique expertise in the field means that we are always able to offer exactly the right unit for the job. This includes customized units, tailor-made on demand, to ensure an exact match between your requirements and the Voyager solution provided.

A large choice of cooling and heating technologies – cooling, gas, heat pump, dual fuel (heat pump plus gas burner as auxiliary heat) – adds to versatility. A number of options are also available for improved comfort, safety, reliability and energy.

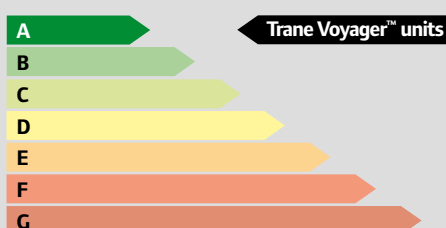
Whatever your application, Trane Voyager units always offer a high level of Indoor Air Quality (IAQ), ensuring the health and comfort of building occupants.

### **Reliability that keeps you working efficiently**

Tough design and construction makes Voyager units particularly suitable for use in high temperature, cold temperature and adverse environments, and their highly reliable compressors are designed specifically for the commercial air conditioning market.

All Voyager™ units are subjected to rigorous factory tests and procedures before being shipped to the job site, and all units comply with local regulations.

### **Trane leadership in efficiency**

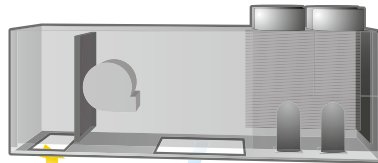


All Trane Voyager units benefit from our global testing capabilities. Our in-house laboratories allow us to test our complete range of rooftops for efficiency, cooling and heating capacity, airflow and other performance factors up to their maximum capacities.

# Voyager – a range for every application



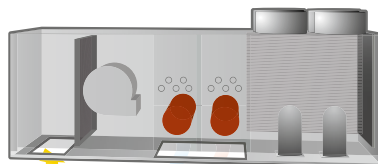
Cooling only



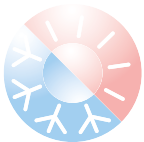
Cooling only



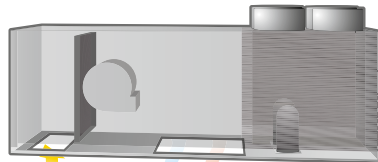
Gas fired



Gas fired



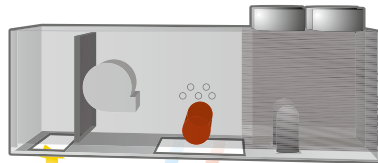
Heat pump



Heat pump



Dual Fuel



Dual Fuel



Heat recovery

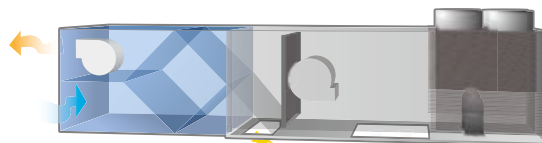
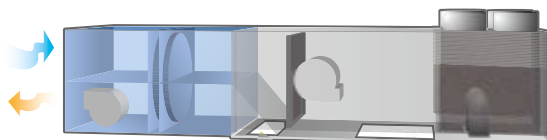


Plate heat exchanger



Heat wheel

## Differential enthalpy economizer

The Trane “differential enthalpy” economizer allows greater energy savings than a conventional “reference enthalpy” system or a “dry bulb” economizer. It takes advantage of cooler outdoor air to satisfy a cooling load in a conditioned space, minimizing the need for mechanical cooling and providing savings via free cooling.

## Variable frequency inverter

A variable frequency inverter on the supply fan reduces fan speed during part load operation and achieves a progressive supply fan start:

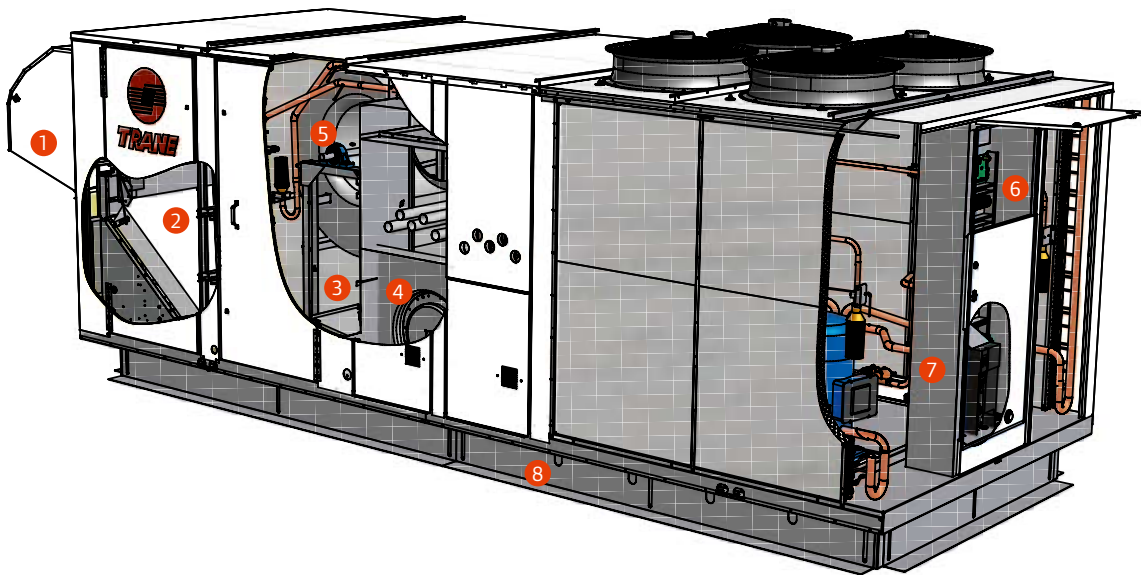
- Absence of strong mechanical constraints on the duct when the unit starts
- 20% reduction in fan speed provides a 50% reduction in energy consumption
- Reduced maintenance cost: longer belt drive life, lower bearing wear, and longer intervals between air filter changes.

## Heat recovery

Two alternative heat recovery systems are offered with free-cooling capability and exhaust fan:

- Plate heat exchanger solution
- Enthalpic wheel solution
- Options such as defrost dampers, sensible heat wheel.





#### 1 Economizer and fresh air options

- Comparative enthalpy economizer
- Fresh air hood

#### 2 3 Filtration and Indoor Air Quality (IAQ)

- CO<sub>2</sub> controls bring in more outside air when occupancy levels are high
- EU4 filters reduce the amount of particles in the air
- Sloped drain pan for better drainage and prevention of microbial growth.

#### 4 Heating solutions

- Standard gas burner (low heat / high heat)
- Modulating and condensing gas burner for optimized heating and efficiencies exceeding 100%
- Heat pump operation (with alternate defrost for improved comfort)
- Dual fuel (gas + heat pump)
- Hot water coil
- Electrical heating

#### 5 Airflow

- Downflow/horizontal flow
- Barometric relief and exhaust fan, to minimize overpressure in the building caused by the introduction of fresh air
- Variable speed inverter to reduce indoor fan speed at part load, providing energy savings
- Progressive fan starter for textile duct inflation

#### 6 Control platform ensures connectivity to network – LON compatible, communication with Trane integrated comfort system

#### 7 Accessibility for improved servicing and safety

Electrical panel, compressors...

#### 8 Roofcurb, to allow connection of the rooftop unit to the roof.

- Standard roofcurb for flat roof
- Adjustable roofcurb, for sloping roof
- Ventilated roofcurb extension to comply with ERP regulation
- Adaptation roofcurb on special request for refurbishment/replacement.

# *The single source for all your building ne*



*When you specify a Trane rooftop unit, you don't just get a top-class product, you also get the expertise to optimize your whole HVAC system and keep your total building operating cost to a minimum while maintaining the utmost level of comfort.*

## **Heating, ventilating and air conditioning systems**

Our extended range of rooftop units brings a large selection of options to meet the demanding requirements of multiple building types. In addition to our high-quality, high-performance rooftop equipment, Trane provides precise air delivery management with VAV terminals. Depending on your building or process, you may need a rooftop, a chiller, an air handling unit or terminals.

And here Trane can help as well. As one of the world's leading HVAC systems providers, we can provide the exact solution, with all necessary components and controllers pre-mounted at the factory, ready for fast, cost-effective installation on site.

## **Building management systems**

The Tracer Summit™ building management system provides supervision and control through a single, integrated system. Its user-friendly graphical interface, associated with its pre-engineered functions, and standard communication protocols allows you to efficiently pilot your building performance.

Tracer Summit™ can help you meet your building's temperature, humidity, ventilation and energy management needs, no matter how challenging. High quality, easy-to-use, integrated and reliable controls are the key to maximizing efficiency and to prolonging the life of your building comfort system.

# *Peace of mind from total accountability*



## Your total building solutions

At Trane, we are committed to providing full service solutions that are efficient and reliable, just like our equipment.

### Elite Start™

Trane equipment is commissioned by technically competent factory trained technicians. Trane commissioning confirms that the system has been not only accurately installed, but also configured and fine-tuned to operate according to your requirements.

### Operate and Maintain

To keep your building operating at top efficiency, Trane Select Contracts and Trane Controls Services provide total building service

solutions. Trane offers technical expertise to maintain or repair your system and the spare parts that go with it. Our full range of HVAC spare parts, both Trane-specific and generic, coupled with our advanced logistics network ensures a quick and reliable service. The result? Even in the rare event of equipment failure, downtime is kept to an absolute minimum.

### Upgrade and Improve

To help you conserve energy while maximizing cost saving in your building systems and operations, Trane Care Services offer a wide range of upgrade products to answer your needs in terms of reliability, energy conservation, and respect of the environment.



*Make certain your HVAC systems are fully optimized and integrated – with our expert services.*



### How do you choose?

There are hundreds of possible system designs and configurations impacting system efficiency levels. How do you possibly narrow the choices and definitively determine the right HVAC system design for your needs? Amazingly, it's quite easy... with Trane's help.

Our System Analyzer™ helps estimate building loads and performs preliminary energy and cost analyses of virtually any building, system, and equipment combination.

For LEED certification, TRACE™ 700 (Trane Air Conditioning Economics) software helps analyze the energy and economic effects of virtually any system configuration. It allows you to manipulate a wide range of variables to create a detailed energy usage profile for your specific building. Unlike overly simplified spreadsheet-based energy analyses, TRACE 700 software

accurately compares the impact of building alternatives. You can test the effects and consequences of different architectural features, HVAC systems, building utilization or scheduling scenarios. And you can see the different economic options for each scenario. This enables you to make genuine life-cycle, cost-based system decisions with absolute confidence.

### Call on Trane

We can help you plan, install and manage your next HVAC system – so you can concentrate on your core business. Our experience and expertise in designing, commissioning and maintaining HVAC systems not only guarantees a solution that best answers your needs, it also gives you complete efficiency and peace of mind.

Call us, let's talk.



Trane optimizes the performance of homes and buildings around the world. A business of Ingersoll Rand, the leader in creating and sustaining safe, comfortable and energy efficient environments, Trane offers a broad portfolio of advanced controls and HVAC systems, comprehensive building services, and parts. For more information, visit [www.Trane.com](http://www.Trane.com).

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

Trane bvba, Lenneke Marelaan 6, 1932 Sint-Stevens-Woluwe, Belgium, ON 0888.048.262 - RPR Brussels

© 2010 Trane All rights reserved  
RT-SLB017-E4, February 2010

Produced on recyclable paper, using environmentally  
friendly print practices that reduce waste.

