



# VECTOR 8600MT

High capacity and reliability.  
Low fuel consumption and noise.  
Let Vector units energize your bottom line.



# TURNING TIER 4 COMPLIANCE INTO A BETTER MULTI-COMPARTMENT MODEL.



Carrier first broke the performance barrier in 2006 with the introduction of the Vector™ platform, the first and only multi-temp trailer refrigeration system to feature true hybrid architecture.

Featuring patented E-Drive™ all-electric technology, the innovative Vector series offers even more advances in the key categories that affect your business and transforms Tier 4 emissions compliance into a comprehensive strategy for refrigerated fleets, with unique benefits for those in food distribution.

Looking for advanced multi-temp performance? The innovative Vector 8600MT unit delivers. Simply smarter thinking. Simply smarter decision.



## LOWER FUEL CONSUMPTION.

In many operating modes, the Vector unit's all-electric architecture can turn components on independently, when they're needed. And off when they're not.



## REDUCED MAINTENANCE COST.

The Vector system eliminates many maintenance items such as alternators, drive belts, idlers, vibrasorbers, compressor shaft seals, and clutches.



## CLEANER EMISSIONS.

The latest in Tier 4-compliant engines far exceeds U.S. EPA and CARB specifications. Emissions are further reduced when the Vector unit is operated in electric standby or when equipped with the optional Engine Emissions System (EES).



## LOWER NOISE.

Far lower than conventional reefers because many sources of mechanical noise have been eliminated. In addition, electric standby is extremely quiet and ideal for particularly noise-sensitive neighbors.



## TOTAL LOWER COST OF OWNERSHIP.

Bottom line, Vector 8600MT improves *your* bottom line. Over the life of the system, the Vector unit's all-electric design means components run fewer hours and last longer, which creates a unit with more longevity that costs less to operate and maintain over its life.



# ALL-ELECTRIC EFFICIENCY DEFINED. NOW REFINED.



You don't turn on every light in your house with one switch. That would waste energy. That's no way to run your reefer system either.

With E-Drive™ all-electric technology, the Vector system has the unique ability to turn individual components on and off as needed. It's a system that defines efficiency to the letter.

## HOW DO VECTOR UNITS WORK?

The Vector system's exclusive architecture uses a high-output generator to power all-electric components. The system can turn individual components—such as the compressor and fans—on and off. It runs only what it needs to run, only when it needs to, so components run fewer hours and last longer.

# DEPENDABILITY IS BUILT IN BECAUSE OF WHAT IT'S BUILT ON.



The Vector platform's unique all-electric architecture eliminates most maintenance items that can nickel-and-dime a fleet, or worse, cause extended downtime and expensive repairs.

Put another way, if a part isn't there, it can't break. And if it can't break, you never have to fix it.



# REDUCED HORSEPOWER. UNBRIDLED COOLING PERFORMANCE.

The Vector series is designed to surpass other platforms while using less engine power. In fact, it is the first Tier 4-compliant ultra-high-efficiency multi-temp platform that generates higher performance while requiring 20% less peak engine power.

Its all-electric architecture means every unit comes standard with electric standby. Combined with the unique capability to turn individual components on and off—including the compressor—the Vector 8600MT platform delivers enhanced performance and greater fuel efficiency.

## USES SIGNIFICANTLY LESS FUEL.

The ability to turn the compressor off eliminates the biggest power draw on the engine while it is running, significantly reducing the horsepower load and saving fuel. For example, the Vector unit can uniquely save up to 15% on fuel over other platforms by periodically shutting off the compressor during continuous-run operation.

And because the Vector uses efficient electric heat, it can shut down the compressor to save 25% to 40% on fuel in heat mode compared to other platforms.

## UP TO 70% LOWER OPERATING COST.

All-electric architecture delivers savings on both diesel and electric standby operation. Electric standby can save up to 70% on operational costs versus diesel operation.

## UP TO 50% MORE EFFICIENT.

Unlike competitive units with adapted, add-on electric standby options, the Vector unit's all-electric architecture is specifically designed to operate on electric power.

In fact, the Vector platform provides best-in-class electric standby performance and efficiency, delivering up to twice as much cooling capacity and up to 50% higher BTU-per-watt\* than competitive offerings.

Performance data compared to the Carrier Transicold models they replace and dependent on a range of operational settings, environmental conditions, and model type.

\*Based on Carrier Transicold laboratory testing of representative host units at typical rating conditions in 100°F ambient temperature.



# GREEN TECHNOLOGY TO KEEP FLEETS IN THE BLACK.

Carrier believes industry leadership and environmental leadership go hand-in-hand. Sustainability is a focal point of our culture. Carrier is proud to help integrate sustainable practices into your operation by continuing to apply ecoForward™ technologies to develop cleaner, higher-performing platforms that take a practical approach to compliance.

## LOWER NOISE MEANS FEWER COMPLAINTS.

The Vector 8600MT unit cuts down on noise pollution by eliminating key sources of mechanical noise, such as belts, idlers, alternators, and other sources of bearing noise. And you should hear it run on electric standby; it's remarkably quiet. Imagine your neighbors calling again. This time to thank you.

## REDUCED FUEL USE. ANOTHER WIN-WIN SOLUTION.

With electric standby, you have the ability to save fuel—and considerable fuel cost—while reducing your company's carbon footprint. Even if you only utilize electric standby 20% of the time running 2,000 engine hours a year, that's an annual savings of over \$1,200 per unit at \$4.00/gallon for diesel.

## OTHER VECTOR SUSTAINABILITY INITIATIVES INCLUDE:

- Zero Ozone Depletion Potential refrigerant.
- No compressor shaft seal.
- 5% to **30%** higher BTU-per-gallon efficiency.
- Equipped with **electric standby standard**, for lower emissions, noise, and operating cost.
- **98%** less particulate matter and **93%** less carbon monoxide and hydrocarbons when equipped with the Engine Emissions System option.



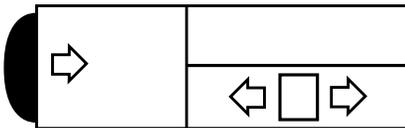
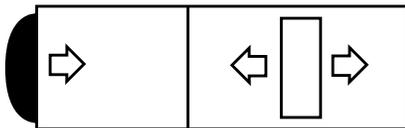
# HIGH-EFFICIENCY TECHNOLOGY SYNCHRONIZED BY POWERFUL CONTROL.



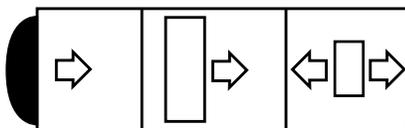
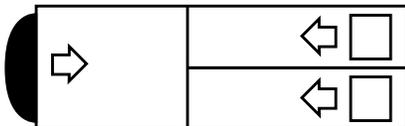
As technology becomes more powerful, it can become more complex. At a time when your business needs it to be faster and easier to use.

The Vector 8600MT unit, featuring the powerful Carrier APX™ Control System, helps you realize the ideal balance between technology and convenience. It combines future-forward technology with a people-friendly design. The result is remarkable control intelligence and system reliability with amazingly simple operation.

## Two Compartment (examples)



## Three Compartment (examples)



## LOAD UP ON TRAILER FLEXIBILITY.

The Vector 8600MT unit allows you to configure up to three refrigerated compartments to meet your temperature requirements and delivery patterns. Now you can improve operational efficiency using smart evaporators for easier, more flexible installation.

Carrier Transcold remote evaporators are available in both single- and exclusive dual-discharge airflow, as well as half-width and full-width configurations. This allows you to optimize the system for your loading preference while still offering flexibility to configure larger compartments, so you can use your assets more efficiently.

With the Vector 8600MT unit, you can configure your trailers to your business rather than configure your business to your trailers.



**Half-Width  
Single-Discharge Evaporator**



**Full-Width  
Dual-Discharge Evaporator**

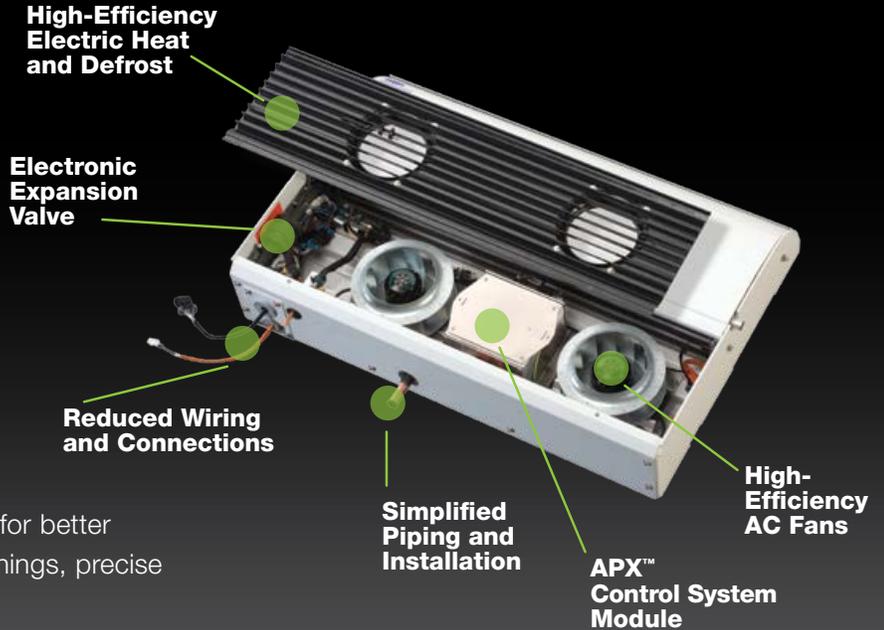
# WHAT MAKES VECTOR DIFFERENT MAKES A REAL DIFFERENCE.

## SMART REMOTE EVAPORATORS. SMARTER COOLING.

As part of the APX Control System's distributed electronics strategy, the control modules — the brain controlling each compartment — are now located in the remote evaporator. Not only does this eliminate complex wiring, it delivers ultra-high-efficiency performance in each compartment, for full application flexibility.

Features include:

- A Carrier-exclusive electronic expansion valve for better capacity, temperature recovery after door openings, precise temperature control, and lower fuel use.
- Flexibility to easily add a second or third multi-temp compartment to an existing multi-temp host unit.



## THE VECTOR ALL-ELECTRIC SCROLL COMPRESSOR.

- 5 **Orbiting Scroll**
- 6 **Low-Vibration Counter-Weighting**
- 7 **Oil Sump**
- 8 **Straddle Bearing System**

The Vector unit is the first trailer refrigeration system to include a fully hermetic scroll compressor, an exclusive Carrier design proven over years of demanding use in Carrier's seagoing container refrigeration systems. Not only is the simplified scroll compressor measurably more efficient, it also has 70% fewer moving parts than conventional reciprocating compressors, making it more reliable, lighter weight, and virtually leak-free.

# PERFORMANCE SPECIFICATIONS

## VECTOR™ 8600MT



Model 8600MT shown with chrome grille/stainless latch option.

### Condenser Dimensions

76.4" x 85.7" x 22.8" (1,940 x 2,176 x 579 mm)

### Evaporator Dimensions

66.3" x 45.2" x 8.2" (1,684 x 1,149 x 280 mm)

### Body Opening

66.8" x 46.0" (1,696 x 1,168 mm)

### Approximate Weight

1,820 lb. (825 kg) including electric standby  
Remote 50-gallon aluminum fuel tank with mounting brackets: 65 lb. (29 kg)  
Battery: 50 lb. (23 kg)

### Cooling Capacity

Ambient at 100°F (38°C)

Evaporator Return Air Temp.	High Speed Diesel or Electric Standby Operation	
	Btuh	Watts
35°F ( 2°C)	60,000	17,585
0°F (-18°C)	35,000	10,260
-20°F (-29°C)	24,000	7,035

### Evaporator Airflow

Applied system performance: 3,100 cfm (5,270 m³/hr)

### Remote Evaporator Specifications

Remote Evaporator	Airflow (cfm)	Weight (lb/kg)
Half-width, dual air discharge	1,350	129 (58)
Full-width, dual air discharge	2,470	239 (108)
Half-width, single air discharge	1,200	115 (52)
Full-width, single air discharge	2,350	220 (100)

### Standard Features Include:

Tier 4 Final V2203L smart diesel engine  
4 cylinder 2.2 liter direct-injection  
24.8 hp (18.5kw) at 1,800 rpm high speed  
CAN-bus electronic interface  
15 qt. (14.2 liter) oil capacity  
Direct driven high output 21 kVA generator  
High-power 40-amp battery charger  
ESI™ (Extended Service Interval) package  
3,000 hour service interval  
Multistage, synthetic media oil filter  
Water-separating fuel filter  
Heavy-duty, low noise dry air cleaner  
Extended-life coolant  
Fully hermetic electric scroll compressor  
Refrigerant R-404A, 16 lb. (7.2 kg)  
TRU-Demand™ high energy efficiency  
Electronic expansion valve  
Compressor economizer system  
Electronic suction modulation  
Brazed plate heat exchanger  
Automatic start/stop fuel saver  
Electric heating and defrost system  
High efficiency microchannel condenser  
Maintenance-free AC fan motors  
V-Force™ vortex suppression fans  
Condenser coil hail/bug guard  
APX™ Control System  
IntelliSet™ with ProductShield™  
DataLink™ data recorder  
Information dashboard  
Multilingual graphical display  
Pretrip and Virtual Tech diagnostics  
Integrated USB port  
DataTrak™ remote communications  
Electric standby  
460V/3PH/60Hz  
Automatic phase reversal  
TurboAir™ evaporator management  
Durashell™ 2 composite doors  
Single latch release  
Stealth™ noise reduction package  
Installation package  
Screw-post battery terminals  
Remote aluminum fuel tank  
50-gal. single fill – 22"  
Remote light bar

### Accessories and Options:

Open trailer door indicator and shutdown switches  
Fuel heater  
Evaporator drain line extensions  
Premium ECR hoses  
Remote temperature probes  
Unit impact protection bumpers  
Microprocessor impact protection bumper  
40-amp auxiliary load battery charger  
Flex Power™ dual voltage standby  
Extra-heavy-duty suction side fuel filter  
Fuel tank level and shutdown sensor  
Door locks  
Chrome grille/stainless latch package  
Custom color paint  
AutoFresh™ air exchange  
Remote aluminum fuel tanks:  
30-gal. or 75-gal. single-fill – 22"  
100-gal. single- or double-fill – 22"  
120-gal. single- or double-fill – 22"



### DEALER SUPPORT, THE ESSENTIAL LINK IN THE COLD CHAIN.

A product is only as good as the people behind it. The industry-leading Vector series is backed by customer-focused dealer support. No other network is better trained or better equipped to provide the professional personnel and superior technical support that you depend on to keep the Carrier units in your fleet on the road, operating at peak efficiency.



Performance data compared to the Carrier Transicold models they replace and dependent on a range of operational settings, environmental conditions, and model type. Specifications are subject to change without notice. Form 62-11796 Rev. B

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