

Carrier  
Transicold

GENESIS



MAXIMUM  
*performance*  
and PROTECTION  
in multi-temperature  
trailers.



# GENESIS.

*Nothing* PROTECTS  
*your* multi-temp  
*cargoes* BETTER.



The growing complexity of the grocery business has increased demands on warehouse, distributors, and grocery fleets for shorter loading times and faster delivery of a wider variety of temperature-sensitive foods.

Enter Genesis,<sup>™</sup> multi-compartment refrigeration specially designed for today's multi-temperature fleets. Available in two models, TM1000 and TM900, to suit trailers up to 53 feet, Genesis systems consist of a host refrigeration system and your choice of individually controlled remote evaporators. Each gives you maximum capacity and airflow in every compartment. So no matter how you configure your trailers, or how many times you change compartment configurations, you can load each compartment and be confident you're getting the best protection.

The powerful Genesis remote evaporators more than compensate for variations in ambient temperatures, multiple door openings, and leaky moveable bulkheads. Overall, Genesis combines exceptional quality with unmatched operating efficiency and superior reliability to maximize profitability throughout your multi-temp operation. In today's competitive food distribution business, Genesis will keep you on schedule. And ahead of your competition.

So if you're hauling multiple products to many locations every day, insist on Genesis from Carrier Transicold.



*Genesis flexibility meets increasing demand for fresh prepared food delivery.*





Deliver the HIGHEST QUALITY at the lowest cost. In other words, make MORE money.

Genesis TM1000 and TM900 remote evaporators ensure maximum product quality. It's no secret how they do it. The fan and coil are considerably larger, producing the highest capacity and airflow available

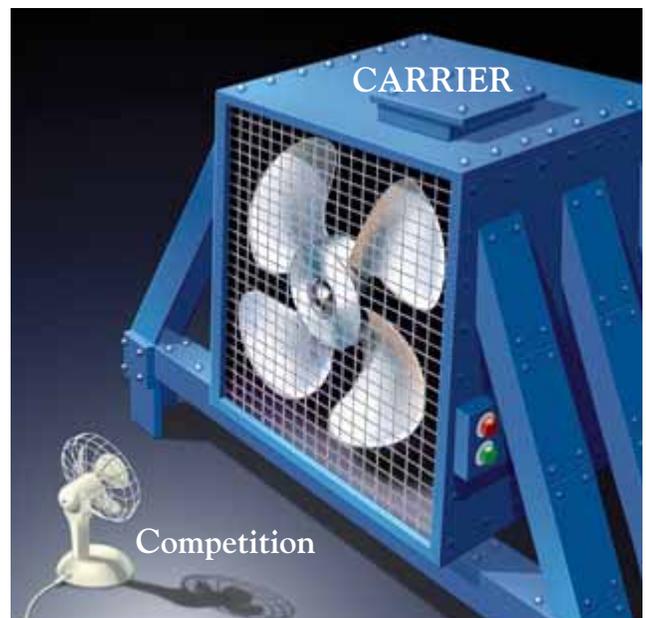
today. Overall, Genesis helps you provide quick response, meet regulatory requirements, and improve shelf life for your customers. Ultimately, that means more profit for you.

High capacity and airflow are the keys to product quality for multi-product shippers, especially when distributing highly perishable products like lettuce or deep-frozen products like ice cream. Genesis remote evaporators deliver all the capacity you need, everywhere you need it. In fact, they generate up to 90% more capacity than competitive units at 35°F (2°C).



110% MORE AIRFLOW.

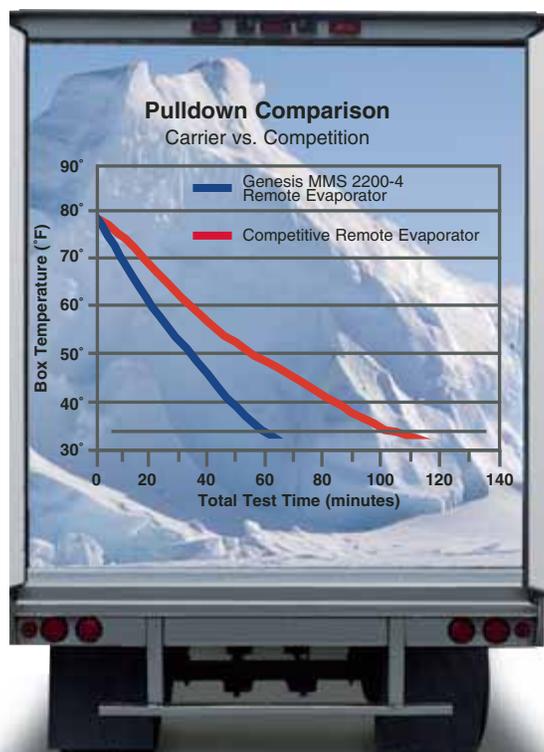
With up to 54,000 Btuh of host cooling capacity at 35°F (2°C) and the industry's highest airflow rating, Genesis is the most powerful multi-temp reefer there is. That power gives you everything you need to ensure consistent quality in every compartment: faster temperature recovery, precise setpoint control, and even temperature distribution. And when you have everything you need, you have nothing to worry about.



## GENESIS gives you PRECISE CONTROL.

Whether you're refrigerating one or multiple compartments, the control requirements are the same. The refrigeration system must generate enough capacity and airflow to pull cargo down to setpoint – and hold it there. In multi-temp applications, the reefer not only has to hold cargo temperature in thinwall trailers in high ambients. It also has to overcome leaky bulkheads and multiple door openings.

Genesis remote evaporators deliver more than double the capacity and airflow of competitive units. More than enough to compensate for the most adverse conditions inside the trailer. And that means unmatched temperature control for unmatched product quality on delivery.



## GENESIS gives you FASTER PULLDOWN.

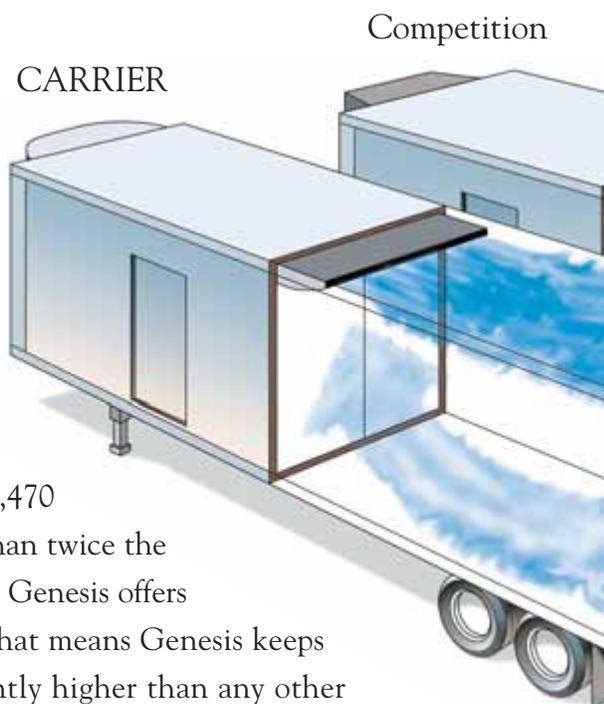
Multi-temp delivery means multiple stops and multiple door openings all day, every day. The key to box temperature recovery is pulldown. And the key to pulldown is capacity.

At 0°F (-18°C), Genesis delivers up to 32,000 Btuh capacity to the host system compartment, and 21,330 Btuh in remote compartments – nearly double the capacity of competitive units. In fact, in identical 24-foot rear compartments, the single-discharge Genesis MMS 2200-4 remote evaporator pulled down from 80°F (27°C) to 35°F (2°C) in less than 70 minutes. That's over 40% faster than the competitive remote ceiling-mount evaporator.

## GENESIS gives you better temperature distribution and cargo QUALITY.

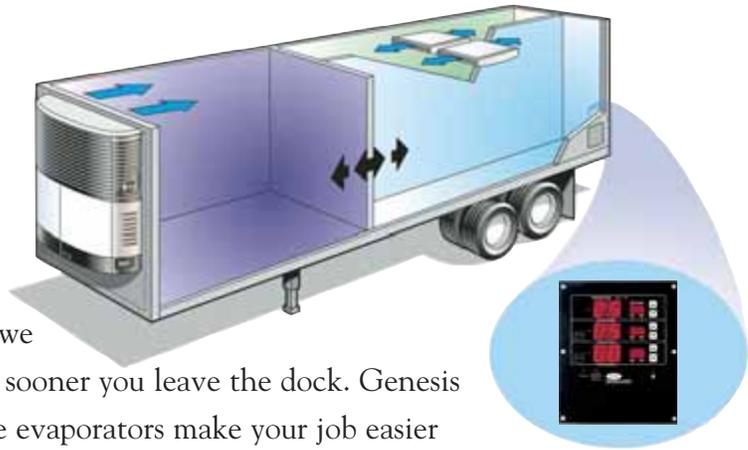
Keeping uniform air temperature distribution across each load is critical in multi-temp applications, especially in remote compartments. The key to uniform temperature distribution is airflow and velocity.

Genesis delivers up to 3,000 cfm of airflow to the host compartment and 2,470 cfm to remote compartments. In fact, at 2,470 cfm, the Genesis MMD 2200-4 remote evaporator delivers more than twice the air volume over cargo than the next best competitive option. Plus, Genesis offers remote evaporators in single- and dual-discharge configurations. That means Genesis keeps product temperature more uniform and product quality consistently higher than any other multi-temp system. Which makes your choice simple.



# Want to SAVE TIME and CUT labor COSTS? GENESIS is the answer.

Genesis is designed with your operation in mind. Because the easier we make loading a multi-temp trailer, the sooner you leave the dock. Genesis remote controls and SlimLine™ remote evaporators make your job easier because they make loading faster. As you know, time is money.

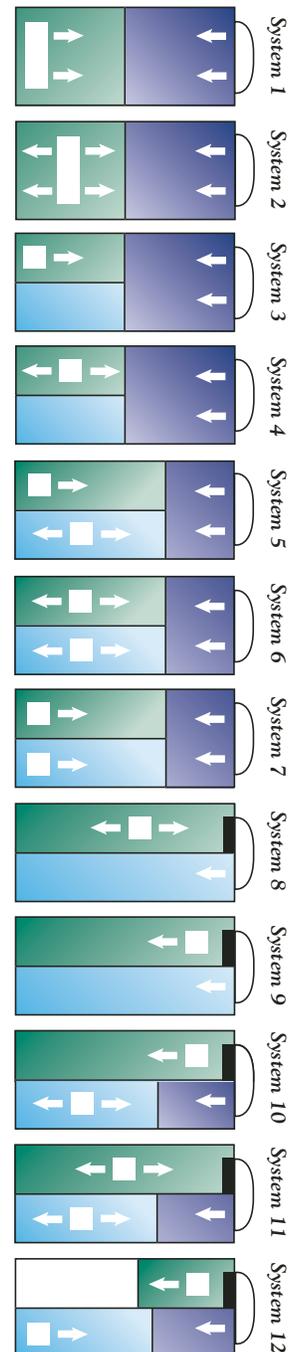
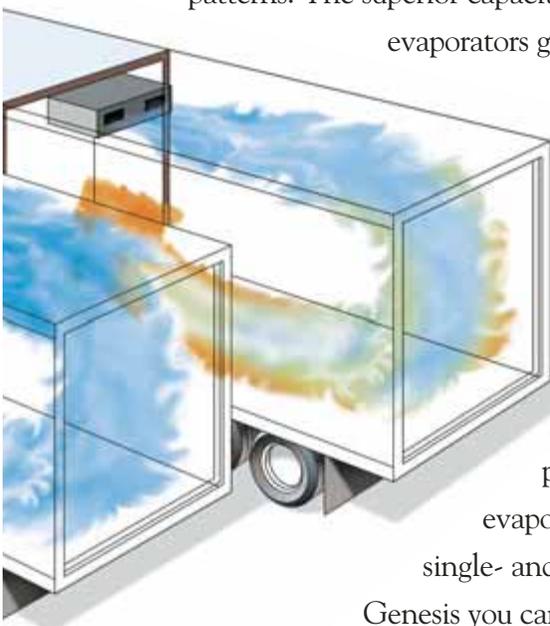


## Remote controls SAVE a lot of *running around*.

It wastes valuable time every time you stop loading, run to the front of the trailer, program setpoint, start the reefer, then run back to finish loading. If you load 20 trailers a day, lost manhours could add up to more than three 40-hour workweeks a year. That's why Genesis offers easy-to-use remote panels that provide individual control for up to three compartments. Panels are mounted inside the rear of the trailer, to easily adjust and monitor setpoint. Remote controls can be wall- or flush-mounted for protection.

## Twelve ways to LOAD exactly the way you want.

With Genesis remote evaporators you can configure up to three compartments to meet your loading and setpoint requirements and delivery patterns. The superior capacity and airflow of the Genesis remote evaporators give you full flexibility to move bulkheads as needed. You can configure larger compartments to hold more of the same products. You can load deep frozen in the rear, fresh in the front. And you can fully load each compartment and get uniform protection throughout the load. So, you can use your vehicles more efficiently and reduce your cost per mile, per load. Genesis remote evaporators are available in half- and full-width, single- and dual-discharge configurations. With Genesis you can configure your trailers to your business. Rather than configure your business to your trailers.



# Run FEWER hours. Save coming and going.

Genesis protects cargo quality more efficiently than any other system. With as much as 90% more capacity, Genesis remote evaporators recover temperature quickly, then shut off. The result is more efficient temperature control, better product quality on delivery, and 30% to 50% less run time. Less run time increases fuel savings, reduces maintenance, and extends component life.

Competitive host units deliver enough capacity to the front compartment, but their remote evaporators have far less capacity. So they struggle to hold setpoint in remote compartments. As a result, they often run continuously. Which costs you money.

Consider the fuel savings alone. Compared to competitive units, Genesis saves up to 4 gallons of fuel per day. At \$2.50 per gallon of fuel, that's \$10.00 saved per day, per system.

In a recent three-month field test by a major food-service fleet, Genesis systems operating in Auto Start/Stop consumed an average of .50 gal/hr less than competitive units, also operating in the start-stop mode. In this test, Genesis saved 40% on fuel.

Now think about the savings on parts and labor when you run fewer hours. There's less wear, so you extend maintenance intervals, which means fewer parts to replace and less labor. At 30% fewer run hours, you could save more than \$500 in maintenance costs alone over the life of the system.

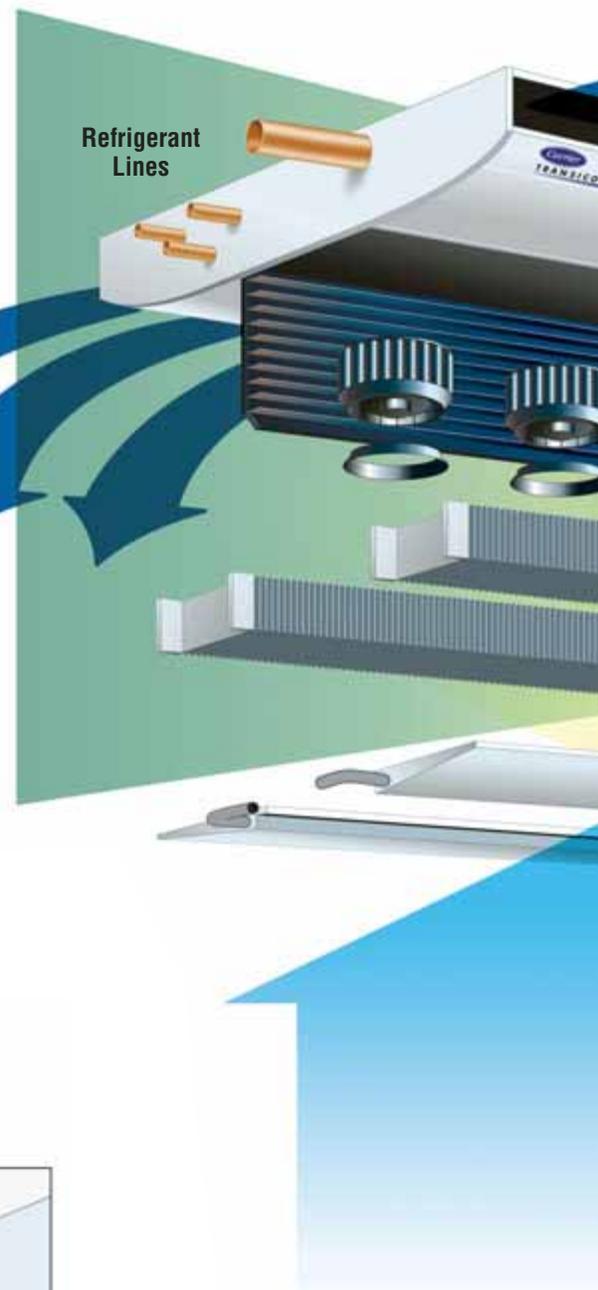


# PERFORMANCE and RELIABILITY, *all the components* of the IDEAL multi-temp SYSTEM.

To fully appreciate all the advantages of Genesis, look closer at its engineering. Inside and out, Genesis is a model of innovative thinking. Its innovative performance comes from simple, evolutionary advances to practical, industry-proven technology.

How Genesis remote evaporators achieve the highest capacity and airflow, 30% to 50% more efficiently:

- Up to 50% more coil surface area improves remote evaporator capacity to nearly twice that of the competitive model.
- Larger, more efficient, AC evaporator fans deliver up to 100% more airflow.
- 65% larger suction line improves system efficiency to maximize capacity, pulldown, and temperature recovery.

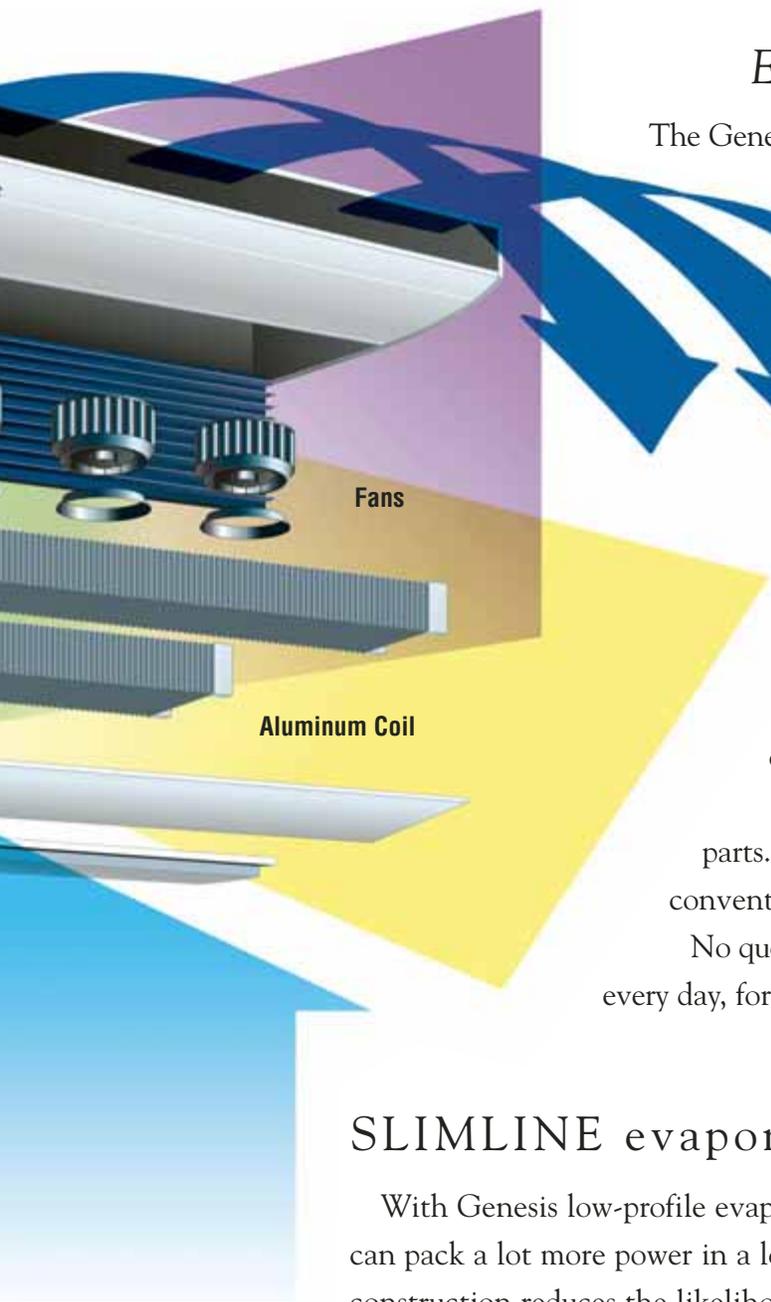


## AC evaporator fan motors last LONGER.

Genesis uses AC evaporator fan motors. Unlike conventional DC motors, which require brush replacement every 2,000 to 3,000 hours, brushless AC motors are virtually maintenance-free. Genesis AC fan motors supply twice the horsepower of DC fan motors.



AC fan motors last two to three times longer. Which stretches your maintenance budget.



## *Electric* heat means INSTANT heat.

The Genesis system uses electric heating strips to provide instant heat to the remote evaporators. So you can switch heat on as needed, regardless of the operating mode of the host system. The response is, literally, instant. Compared to competitive hot-gas systems, electric heat provides faster defrost and constant heating capacity, even in low ambients. This eliminates the need for supplemental heating systems in colder climates. It also allows the control system to switch back into the control mode quickly, keeping the load on setpoint.

Electric heat is also more reliable. It has fewer moving parts. In fact, it eliminates nine of the components used in a conventional hot-gas system.

No question, simpler operation passes on significant cost savings every day, for every Genesis system you have in service.

## SLIMLINE evaporators are ABOVE *harm's way*.

With Genesis low-profile evaporator fan motors, you can pack a lot more power in a lot less space. SlimLine construction reduces the likelihood of forklift damage during loading and unloading, which can lead to costly repairs and downtime. SlimLine design is 20% thinner than competitive models. This gives you the flexibility to place remote evaporators anywhere, even above rear roll-up doors.



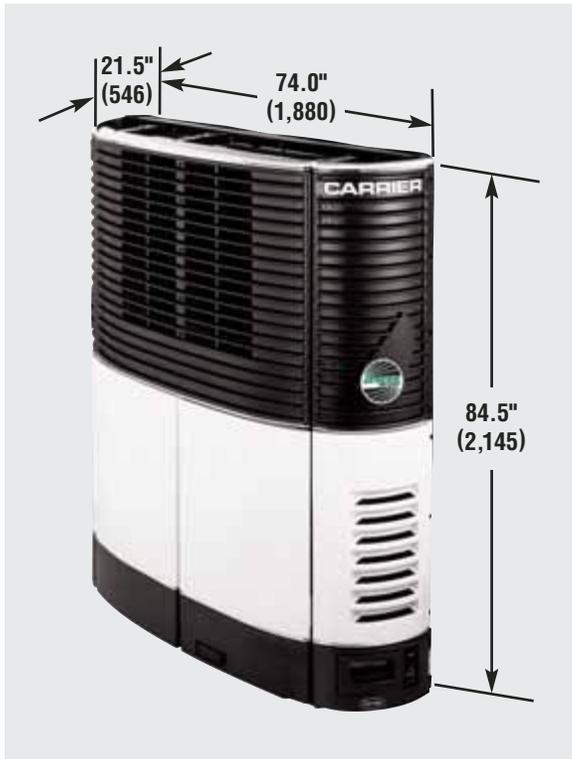
## The *POWER TRAIN* with *real* power.

The oversized Genesis generator features a larger copper-coil winding, increasing power to 6.0kW of raw output. Extra insulation prevents overheating and motor failure. What's more, we moved the generator into the engine compartment and increased the bearing size to virtually eliminate damage from road shock and vibration.

Carrier's 40-CID 6-cylinder workhorse compressor features the highest displacement in the industry. Superior unloading technology provides rapid pulldown and maintains precise temperature control at the lowest fuel consumption in the industry. And our CT4-134 engine is proven reliable in over two million hours of operation and 100 million miles on the road.

# PERFORMANCE Specifications

## GENESIS TM1000/900



**Standard Features Include (Host System):**  
 Engine: CT4-134TV, 4-cylinder, 2.2-liter TriVortex  
**TM1000 Compressor:** 05G41, 6-cylinder  
**TM900 Compressor:** 05G37, 6-cylinder  
 UltraFresh 2™ temperature control  
 DuraShell™ damage-resistant composite skins

**Accessories and Options (Host System):**  
 DataLink™ data recorder  
 DataTrak™ satellite communications  
 Door open shut-off switch  
 Low fuel shutdown  
 Fuel tanks (remote aluminum):  
 30 gal.  
 75 gal.  
 100 gal.  
 120 gal.  
 Antisiphon fuel fill  
 Fuel heater  
 Post-style battery terminals  
 Silicone hoses  
 Custom color paint  
 Remote light bar  
 Remote temperature probes (2)  
 Noise abatement kit  
 Impact protection bumper  
 RoadCare™ extended warranty coverage  
 Two-/three-compartment remote indicator panels (see below)

Refrigerant-22 or R-404A  
 Advanced microprocessor control system:  
 Automatic Start/Stop  
 Self diagnostics  
 Automatic pretrip  
 Timed defrost interval  
 Battery voltage monitor  
 Digital displays:  
 Engine hours  
 Standby hours  
 On-Time hours  
 Programmable maintenance hourmeters (2)  
 Control panel:  
 Stop/Run switch  
 Ammeter  
 Manual glow/manual start switch  
 DuraDrive heavy-duty belt-drive system  
 Taper roller bearing fan shaft  
 Fan drive clutch locking feature  
 High-power 65-amp alternator  
 Auto low-speed unloaded start  
 Heavy-duty dry-type air cleaner  
 Bypass oil filter  
 Mechanical fuel pump  
 50-gallon aluminum fuel tank  
 Screw-post battery terminals  
 High refrigerant pressure protection  
 Control circuit overload protection  
 Low oil pressure protection  
 High coolant temperature protection

**Remote Evaporators:**  
**Standard features include:**  
 Low profile aluminum skins  
 AC fan motors  
 Dripless defrost pan  
 Heating strips

**Options include:**  
 Single- and dual-discharge  
 Half- and full-trailer width  
 Wall-mount

**Weight:**  
 1,710 lb. (776kg)

### Remote Control Panels

#### Flush-Mount



#### Front-/Wall-Mount



**Dimensions:**  
 Parenthetical dimensions are metric (mm)

Genesis Remote Evaporators						
Evaporator Model**	Dimensions (mm)			Weight (kg)	Airflow cfm (m³/h)	Capacity*
	H	W	D			
MMS 1100-2†	7.9" (200)	41.1" (1,045)	30.0" (762)	106 lb. (48)	1,200 (2,050)	17,400 Btuh
MMD 1100-2†	7.0" (179)	(1,045)	34.7" (880)	117 lb. (53)	1,350 (2,300)	5,100 Watts
MMD 1100-3	7.0" (179)	41.1" (1,045)	34.7" (880)	119 lb. (54)	1,600 (2,710)	17,000 Btuh
						5,000 Watts
MMS 2200-4	7.9" (200)	86.6" (2,200)	27.6" (700)	207 lb. (94)	2,350 (4,000)	21,330 Btuh
MMD 2200-4	7.0" (179)	(2,200)	34.7" (880)	225 lb. (102)	2,470 (4,200)	6,250 Watts
MMW 09-238-4B3-0	25.4" (645)	36.0" (914)	9.0" (229)	78 lb. (35)	1,300 (2,200)	13,200 Btuh
						3,869 Watts

\* Evaporator capacities vary by application. Rated @ 0°F/100°F ambient.

\*\* Models MMS: S=Single Discharge † Models available for 2- and 3-compartment application.  
 Models MMD: D=Dual Discharge All others for use in 2-compartment applications only.

Genesis Capacities (Ambient at 100° F/38° C)	
<b>TM1000</b>	<b>Cooling Capacity:</b> 0°F (-18°C) Return Air Temp Up to 32,000 Btuh (9,400 Watts)
	<b>Heating (Host Unit):</b> Up to 40,000 Btuh (11,700 Watts)
	<b>Heating (Compartments 2 &amp; 3, Combined):</b> Up to 13,600 Btuh (4,000 Watts)
	<b>Airflow (Host Unit):</b> 3,000 cfm (5,330 m³/h)
<b>TM900</b>	<b>Cooling Capacity:</b> 0°F (-18°C) Return Air Temp Up to 30,000 Btuh (8,800 Watts)
	<b>Heating (Host Unit):</b> Up to 38,000 Btuh (11,000 Watts)
	<b>Heating (Compartments 2 &amp; 3, Combined):</b> Up to 13,600 Btuh (4,000 Watts)
	<b>Airflow (Host Unit):</b> 3,000 cfm (5,330 m³/h)

### Warranty:

Carrier Transcold's industry-leading warranty provides the following coverage: Engine (including fuel primer and transfer pump), compressor, microprocessor, condenser and evaporator coils, gearbox, fan-shaft assembly, and solenoid valves (less coils) carry a two-year parts and labor warranty. The entire unit is covered for one year, parts and labor. See manufacturer's warranty for full details. This warranty is applicable only in North America. Consult your Carrier Transcold representative for warranty coverage elsewhere.

Specifications are subject to change without notice.



**Full-Width  
Dual-Discharge Evaporator**



**Half-Width  
Single-Discharge Evaporator**

### Wall-Mount Evaporator



**Carrier**

A United Technologies Company

Carrier Transcold Division  
 Carrier Corporation  
 P.O. Box 4805  
 Syracuse, NY 13221 USA  
[www.trucktrailer.carrier.com](http://www.trucktrailer.carrier.com)

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