TriPac® Evolution

The industry-leading APU that delivers lower operating costs and superior driver comfort.
Built on the industry-leading TriPac auxiliary power unit (APU) and supported by the Thermo King dealer network, the TriPac Evolution raises the bar even higher with unrivaled performance, low operating costs, easy operation and true peace of mind.

The TriPac Evolution was not only designed to meet Tier IV EPA final regulation requirements; it was designed to respond to and anticipate evolving customer needs by leveraging new patented technologies that drive unit efficiency and user productivity. Its performance is uncompromised. The operational savings are real.
MAXIMUM DRIVER COMFORT
Drivers spend long days away from home on the road, and a comfortable sleeper is important for well-rested and safe drivers. The TriPac Evolution brings the comforts of home to wherever home is for the night: virtually unlimited cooling and heating and the power to run the appliances and devices drivers require.

For fleets, attracting and retaining the best drivers is a challenge, and offering TriPac Evolution APUs can be a key recruitment and retention tool. There’s a reason why drivers ask for TriPac Evolution by name!

SERIOUS FUEL SAVINGS
No matter the current price, fuel costs represent a significant portion of your operating expenses. Adding the TriPac Evolution will significantly reduce your fuel consumption - by up to 2,500 gallons per year.* The TriPac Evolution: cash flow positive from the beginning!

REDUCED TRACTOR IDLING
Idling the tractor engine to provide cab power causes excessive engine wear and run time, increases maintenance costs, may lower the residual value of the tractor, and releases unnecessary emissions into the environment. Adding an APU, like the TriPac Evolution, virtually eliminates tractor engine idling, putting more money back in your pocket.

* Based on actual customer experiences. Reduced costs experienced by individual customers will vary.
**APU**

The TriPac Evolution APU contains the diesel engine, air conditioning compressor, alternator and maintenance switch.

**CONDENSER**

The TriPac Evolution air conditioning condenser is typically mounted on the back of the truck cab to protect against road salt and debris.

**EVAPORATOR**

The TriPac Evolution air conditioning evaporator is typically installed under the bunk in the truck cab sleeper compartment. Air hoses from the evaporator carry conditioned air to the sleeper compartment.

**HEATER**

The TriPac Evolution heater is typically installed in the cargo compartment.

**CONTROLLER**

The Human Machine Interface (HMI) controller is installed in the truck cab, typically on a wall in the sleeper compartment.
UNRIVALED PERFORMANCE
With virtually unlimited heating and cooling and a new control system to accurately diagnose issues, the TriPac Evolution’s performance is industry-leading. The control system is flash-loadable and includes a data logger. Diagnostics are improved with 22 alarm codes, and the charging system has been enhanced with amperage-based decision making. The new system gives flexibility to users, allowing customers to focus on fuel consumption, driver comfort or battery life to enhance their needs as appropriate.

EASY OPERATION
Operating the TriPac Evolution is easy. By moving to a three-knob design that aligns with automotive architecture, the need for in-depth operator training has been eliminated.

PEACE OF MIND
Thermo King is the only APU manufacturer to offer nationwide 24/7 service through its world class dealer network. The TriPac Evolution unit’s reliability is built on over 160,000 units of experience. The peace of mind offered is priceless.

GREATER FUEL SAVINGS
Programmable settings within the controller means the TriPac Evolution doesn’t heat or cool the cab during out-of-service days; it simply monitors and maintains battery voltage and engine coolant temperatures so that the tractor starts dependably.

CHOOSE THE NUMBER ONE APU IN THE INDUSTRY
CONFIGURABLE, EASY-TO-USE IN-CAB CONTROLLER

DATA LOGGER
With 22 alarm codes for improved diagnostics and maintenance cost savings.

ADVANCED RANGE OF PROGRAMMABLE FEATURES
Optimize performance and driver comfort for your business needs.

SIMPLE HMI
Easy-to-use HMI reduces the need for driver training.

PROGRAMMABLE TEMPERATURE CONTROL
Set your desired temperature and the system will automatically maintain the desired setting.

FLASH LOADABLE
Both controller and HMI are flash-loadable to allow for future upgrades without new hardware.

HMI controller is installed in the cab.
THE TriPac EVOLUTION: CASHFLOW-POSITIVE FROM MONTH ONE

<table>
<thead>
<tr>
<th>$2.00 A GALLON</th>
<th>$2.50 A GALLON</th>
<th>$3.00 A GALLON</th>
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<tbody>
<tr>
<td>Your Idling Hours Annually</td>
<td>Tractor Idling</td>
<td>TriPac Evolution</td>
</tr>
<tr>
<td>3,000</td>
<td>$500</td>
<td>$72</td>
</tr>
<tr>
<td>2,500</td>
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<tr>
<td>500</td>
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<td>12</td>
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EXAMPLE: If you idle 2,500 hours per year with a fuel price of $2.50 per gallon, you can save up to $446 per month on fuel alone with TriPac Evolution!

DIESEL-FIRED HEATER The TriPac Evolution is paired with a diesel fired heater making the Evolution the most operationally efficient APU on the market.

TRACTOR IDLING ASSUMPTIONS
- Annual Miles: 100,000
- Idling Fuel Cost: 1.0 gph

TriPac EVOLUTION ASSUMPTIONS

<table>
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<tr>
<th>% per year</th>
<th>gph</th>
<th>% per year</th>
<th>gph</th>
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</thead>
<tbody>
<tr>
<td>Cooling</td>
<td>60%</td>
<td>0.2*</td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>40%</td>
<td>0.06*</td>
<td></td>
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</tbody>
</table>

Find your cost per month savings with TriPac Evolution (based on fuel consumption only). Does not include fuel savings from start/stop off time.

*Fuel consumption will vary based on ambient temperature and tractor cab insulation characteristics.
CUSTOM CONFIGURE YOUR TriPac EVOLUTION WITH A WIDE ARRAY OF OPTIONS

BASE TriPac EVOLUTION
Provides sleeper and cab cooling/heating, battery charging with automatic voltage sensing and has auto start/stop for maximum fuel efficiency.

- 2-cylinder, Tier IV final-compliant diesel engine
- 13,000 BTU air conditioning system including compressor, evaporator, controller (system charged with R-134a at Thermo King dealership during installation)
- 7,500 BTU fuel-powered heater
- Single HVAC controller
- 65-amp alternator
- Thermo King DPF-compatible

ThermoLite® SOLAR PANELS
ThermoLite solar panels can deliver clean, reliable performance in a wide variety of applications, resulting in longer battery life, decreased waste, lower fuel consumption and reduced emissions. Given these potential benefits, ThermoLite solar panels can be an important part of a comprehensive sustainability program for your business.
¬ DRIVER CONVENIENCE PACKAGE (073035)
Includes 1,800 watt inverter and two receptacles. 120 amp alternator provides quicker battery charging under heavy accessory loads. Ideal for supersized sleepers and drivers with heavy appliance usage during rest periods.

¬ 1,000 WATT PACKAGE (073003)

¬ STAND-BY TRUCK INTEGRATION (073015)
Provides seamless activation of the TriPac Evolution control system based on tractor engine off/on indication.

¬ STAND-BY TRUCK INTEGRATION WITH DASH-MOUNTED SELECTOR SWITCH (073016)
Provides the driver the ability to place the TriPac Evolution in a non-start mode (used during tractor fueling, service situations or when exiting the tractor) from the driver’s seat.

¬ DUAL REMOTE HOUR METER (005029)
Provides separate heater and TriPac Evolution engine time tracking for accurate and effective preventive maintenance. Allows technician to access and record hours of operation without entering tractor cab.

¬ REMOTE ENGINE HOUR METER (073022)
Provides engine time tracking for accurate and effective preventive maintenance.

¬ CLOSED LOOP COOLING (073026)
Lets the TriPac Evolution run independently of tractor coolant and allows “limp home” capability in case of tractor alternator failure.

¬ DIESEL PARTICULATE FILTER (DPF) (073027)
Certified CARB-compliant for operation in the state of California. Standard mount.

¬ HIGH OUTPUT ALTERNATOR (073023)
120 amp power for quicker battery charging.

¬ ARCTIC PACKAGE (073025)
Monitors tractor engine coolant temperature and automatically starts the TriPac Evolution to heat the shared engine coolant. Reduces cold weather starting issues for the tractor even after extended periods of no operation in cold temperatures.

¬ APPEARANCE PACKAGE (073036)
The diamond plate top cover dresses up any rig, moving or standing still.

¬ BRUSHED STAINLESS STEEL CONDENSER COVER (005011)
Adds additional corrosion protection as well as that finishing touch.

¬ EXHAUST TUBE EXTENSION (073030)
Extension for standard short tube exhaust pipe.

¬ FLUSH MOUNT KITS (SEE DEALER FOR ORDERING INFORMATION)
Special mounting kit which keeps the top of the unit flush with the top of the tractor frame rail.

¬ HIGH OUTPUT HEATER (005018)
With 13,600 BTUs of heat, this heater will keep you warm on the coldest of nights. With only slightly higher fuel consumption than the standard heater, this option is popular with drivers operating in the northern United States and in Canada.
EXPERT SERVICE AND SUPPORT ARE AS CLOSE AS THIS SIGN.

THE ONLY APU AVAILABLE WITH THE SUPPORT OF NEARLY 200 FACTORY-AUTHORIZED SERVICE CENTERS NATIONWIDE

CHOOSE TriPac EVOLUTION AND ENJOY THE SUPPORT OF THE THERMO KING DEALER NETWORK.

2,000-HOUR MAINTENANCE INTERVAL

TriPac Evolution was designed with an unequaled 2,000-hour maintenance interval, allowing for maintenance to be performed typically only once per year, aligning better to the tractor maintenance schedule, saving time and eliminating additional downtime for APU maintenance.

Actual maintenance intervals on the TriPac Evolution are even further extended when the auto start/stop function is taken into account. This feature turns the TriPac Evolution on only when needed, saving fuel and reducing the number of hours the unit runs compared to the competition.
DESCRIPTION
The TriPac Evolution provides truck engine preheating, battery charging, truck cab sleeper compartment climate control and electric power.

ENGINE
Thermo King Tier IV final-compliant 2-cylinder diesel engine

EVAPORATOR AIRFLOW
250 ft³/min

ALTERNATOR
14.5V, 65 amp
14.5V, 120 amp (optional)

REFRIGERANT
HFC R-134a

COMPRESSOR
Thermo King QP15HD
Air Conditioning Compressor

AIR CONDITIONING CAPACITY*
BTU/hr Watts
13,000 3,810

CONTROLS
The TriPac HMI Controller features a simple three-knob design for easy operation.

HEATING CAPACITY
BTU/hr Watts
7,500 2,200
13,600 3,986 (optional)

SYSTEM WEIGHT (APPROX.)
APU Unit: 345 lbs (156 kg)
HVAC System: 70 lbs (32 kg)

WARRANTY SUMMARY
Terms of the Thermo King Limited Express Warranty are available upon request.

EXTENDED WARRANTY
Several Extended Warranty options are available for your TriPac system. Choose a flexible program and select the warranty period, deductible and hours of operation that best meet your needs. Ask your local Thermo King dealer about nationwide coverage plans.

*ARI STD 310/380 - Standard for Packaged Terminal Air-Conditioners and Heat Pumps for the rating conditions of 80°F Box, 50% humidity, and 95°F ambient.

THERMO KING’S PERFORMANCE ADVANTAGE™ SERVICE OFFERINGS
Looking to cut costs and maximize your fleet uptime? Our range of service plans help you choose the right maintenance investment to keep you on the road and running strong. Tap in to the nation’s leading experts in transport refrigeration maintenance and experience the Performance Advantage.
Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport temperature control solutions. Thermo King has been providing transport temperature control solutions for a variety of applications, including trailers, truck bodies, buses, air, shipboard containers and railway cars since 1938. For more information, visit thermoking.com or tranetechnologies.com.