Thermo King

TriPac™
Hybrid Auxiliary Idle Reduction and Temperature Management System
The TriPac™ System: Nothing Compares

Since its introduction, the TriPac Hybrid Idle Reduction and Temperature Management System has become the number one Auxiliary Power Unit (APU) system in the industry for one major reason: it outperforms the competition.

Unmatched Service & Support. The TriPac system is backed by the Thermo King dealer network, which provides expert installation, factory-certified technicians and genuine OEM parts at over 200 locations across North America.

Fuel Savings. With over 60,000 units in service, the fuel-saving advantages of the TriPac design vs. generator-based designs has become even more apparent. The TriPac system runs only when you need it, saving you significantly more money on fuel than generator solutions.

Emissions Regulations/CARB compliance. As the expert in idle compliance, Thermo King designed the TriPac system to provide you with a solution for nationwide operation. The optional Diesel Particulate Filter (DPF) allows you to operate coast-to-coast and border-to-border while helping you stay compliant with the confusing variety of regulations regarding engine idling.

Preferred by Drivers. Drivers look for and stay with the TriPac system for what it provides (comfort, reliability, seamless operation, realized fuel savings) and what it does not (noise, uncertainty, limited service options).

With these New Features, the TriPac System does even more for you!

Greater Fuel Savings. Programmable settings within the controller means the TriPac system 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.

Closed Loop Cooling (CLC). If you frequently operate in warm climates or simply prefer that the TriPac system not tie into the tractor engine coolant, choose the CLC option. The TriPac will run independently of the tractor engine coolant and still provide the battery charging and cab comfort options you demand.

Stainless Steel Skins. Dress up your rig with our optional stainless covers. Polished to a high gloss, they look good for the long haul and can keep up with even the showiest of rigs.

Improved Performance. Our engineers are constantly working to improve the TriPac system, making the best even better.
Custom-Configure Your TriPac System with a Wide Array of Options

Base TriPac System (900217)

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-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-fired heater
- Single HVAC controller
- 65-amp alternator
- Thermo King DPF-compatible
120 amp Alternator (005033)
Provides quicker battery charging under heavy accessory loads. Ideal for supersized sleepers and drivers with heavy appliance usage during rest periods.

Stand-By Truck Integration (005013)
Provides seamless activation of the TriPac control system based on tractor engine off/on indication.

Stand-By Truck Integration with Dash-Mounted Selector Switch (005014)
Provides the driver the ability to place the TriPac in a non-start mode (used during tractor fueling, service situations or when exiting the tractor) from the driver’s seat.

Remote Hour Meter (005029)
Provides separate fuel-fired heater and TriPac engine time tracking for accurate and effective preventive maintenance. Allows technician to access and record hours of operation without entering tractor cab.

Inverter (005016)
1,800 watt modified sine wave inverter with a 3,600 watt surge rating. Includes two GFI receptacles. Typically mounts under bunk.

Closed Loop Cooling (005831)
Lets TriPac run independently of tractor coolant and allows “limp home” capability in case of tractor alternator failure.

High Output Heater (005018)
With 13,600 BTUs of fuel-fired output, 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.

High Altitude Compensation Kit (005548)
Advanced electronics and a barometric sensor allow the fuel-fired heater to adjust fuel flow to changing altitudes. Recommended for drivers taking rest periods at or above 4000’. Adjustments are automatic and continue to take place to an altitude of approximately 10,000’.

Diesel Particulate Filter (DPF) Options
Certified CARB-compliant for operation in the state of California.

(Standard Mount 005024)
Mounts to rear of base TriPac system in place of muffler

(Remote Mount)
See dealer for ordering information

Arctic Package (005015)
Monitors tractor engine coolant temperature and automatically starts the TriPac to heat the shared engine coolant. Reduces cold weather starting issues for the tractor even after extended periods of no operation in cold temperatures.

Extreme Arctic Package (005036) (requires 005015)
With the addition of a 800 watt coolant heater and a 300 watt oil heater powered by the TriPac, this package gets your tractor started in the coldest of environments with minimal wear and tear. 120 amp alternator included.

Stainless Steel Skins (005031)
The polished stainless steel skins dress up any rig, moving or standing still.

Brushed Stainless Steel Condenser Cover (005011)
Adds additional corrosion protection as well as that finishing touch.

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.
Expert Service and Support are as close as this sign.

Choose TriPac and enjoy the support of the Thermo King Dealer Network.

Over 200 factory-authorized service centers nationwide!

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**User-Friendly In-Cab Controller**

delivers precise temperature management

HMI controller is installed in the cab.

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**Main Power Key**
Turns TriPac APU system on and off.

**Fuel Saver Technology**
TriPac utilizes Thermo King’s Cycle Sentry technology to maximize fuel economy by starting and stopping the system based on customer requirements. This reduces overall engine run time and lowers fuel consumption.

**Mode Key**
Ability to select operating modes of air conditioning, heating or fan only.

**Fan Speed Key**
Allows selection of fan speed.

**Up and Down Keys**
Used to raise and lower temperature setpoint.

**Display**
Provides temperature setpoint, hourmeter reading and alarm codes.

**System Fault Indicator**
Red indicator illuminates when an alarm condition occurs and an alarm code is displayed.

**APU System Key**
Enables the APU to run to provide sleeper compartment air conditioning, air circulation, truck battery voltage sensing and engine coolant temperature sensing. Note that the APU does not have to be On to operate the TriPac sleeper compartment heater.
Specifications

**Description**
The TriPac System provides truck engine preheating, battery charging, truck cab sleeper compartment climate control and electric power.

**Engine**
Tier IV-compliant Thermo King 2-cylinder diesel

**Evaporator Airflow**
250 ft³/min

**Alternator**
65 amp
120 amp (optional)

**Refrigerant**
HFC R-134a

**Compressor**
Thermo King TM-15
Air Conditioning Compressor

**Air Conditioning Capacity**

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<th>BTU/hr</th>
<th>Watts</th>
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<tr>
<td>13,000</td>
<td>3,810</td>
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</table>

**Heating Capacity**

<table>
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<tr>
<th>BTU/hr</th>
<th>Watts</th>
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<tbody>
<tr>
<td>7,500</td>
<td>2,200</td>
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<tr>
<td>13,600</td>
<td>3,986 (optional)</td>
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**System Weight (approx.)**
APU Unit: 430 lbs (195 kg)
HVAC System: 70 lbs (32 kg)

**Worldwide Service Organization**
Thermo King backs its equipment and customers with a highly-trained, worldwide service organization. This assures you the support of factory authorized service facilities and a stock of factory parts as well as factory trained mechanics.

**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.

**Dimensions (inches)**

- **Height**: 27.2 in
- **Width**: 25.0 in
- **Depth**: 18.6 in

**Contact Your Local Thermo King Dealer:**

Consult the TriPac ROI Calculator at [www.thermoking.com](http://www.thermoking.com) to determine your potential savings with TriPac!
Fuel represents a significant portion of your operational costs, and the frequent fluctuations in price can be worrisome and costly. The fact is, fuel prices have risen significantly over the last decade. Investing in the TriPac system today means less stress next time fuel prices spike. Waiting until fuel costs reach a specific point to get your TriPac means waiting to take advantage of the savings and not being ready for the inevitable future fuel cost increases.

**Stress Less over Fluctuating Fuel Costs**

Fuel represents a significant portion of your operational costs, and the frequent fluctuations in price can be worrisome and costly. The fact is, fuel prices have risen significantly over the last decade. Investing in the TriPac system today means less stress next time fuel prices spike. Waiting until fuel costs reach a specific point to get your TriPac means waiting to take advantage of the savings and not being ready for the inevitable future fuel cost increases.

**1000-Hour Maintenance Interval**

TriPac was designed with (and has led the industry to) a 1000-hour maintenance interval, allowing maintenance to be performed at the same time as maintenance on the tractor, saving time and eliminating additional downtime for APU maintenance. Actual maintenance intervals on the TriPac are even further extended when the auto start/stop function is taken into account. This feature turns the TriPac on only when needed, saving fuel and reducing the number of hours the unit runs compared to the competition.

**EXAMPLE:** If you idle 2500 hours per year with a fuel price of $3.00 per gallon, you can save up to 6.4 cents per mile based on fuel costs alone with TriPac!
Providing equipment and services to manage controlled-temperature environments for food and other temperature-sensitive products, our Climate Control Technologies sector encompasses both transport and stationary refrigeration solutions. Our product brands include Thermo King®, a world leader in transport temperature control systems, and Hussmann®, a manufacturer of refrigeration and food merchandising equipment.
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.

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

**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.

**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!
**HMI controller is installed in the cab.**

**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.

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

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

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

<table>
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<th>Your Idling Hours Annually</th>
<th>Tractor Idling</th>
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<th>Savings Per Month</th>
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$2.00 A GALLON

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<th>TriPac Evolution</th>
<th>Savings Per Month</th>
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DIESEL-FIRED HEATER
The TriPac Evolution is paired with a diesel fired heater making the Evolution the most operationally efficient APU on the market.

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!

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

TriPac EVOLUTION ASSUMPTIONS

<table>
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<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>
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</tr>
<tr>
<td>Heating</td>
<td>40%</td>
<td>0.06*</td>
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</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
OPTION ORDERING GUIDE

☐ 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

**COMPRRESSOR**
Thermo King QP15HD Air Conditioning Compressor

**AIR CONDITIONING CAPACITY** *

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<th>BTU/hr</th>
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<td>13,000</td>
<td>3,810</td>
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**CONTROLS**
The TriPac HMI Controller features a simple three-knob design for easy operation.

**HEATING CAPACITY**

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<thead>
<tr>
<th>BTU/hr</th>
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<td>2,200</td>
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<tr>
<td>13,600</td>
<td>3,986 (optional)</td>
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**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.

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**Thermo Gard® Assurance**

**CUSTOMIZABLE FLEET MANAGEMENT OPTIONS FOR YOUR BUSINESS ARE NOW MORE AFFORDABLE THAN EVER BEFORE** *

*Compared to similar guaranteed maintenance program costs for TriPac APUs.*
Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a $13 billion global business committed to a world of sustainable progress and enduring results.