UT XTREME\textsuperscript{HIGH AMBIENT}
— efficiency, reliability and durability —

SINGLE TEMPERATURE SELF-POWERED REFRIGERATION SYSTEM FOR TRUCK AND HIGHLOADER UNDERMOUNT APPLICATIONS AT EXTREME AMBIENTS.
Why choose the UT XTREME HIGH Ambient?

The proven Thermo King UT range now has a new high-performance addition. Specifically developed and extensively tested for the most demanding high ambient conditions, the UT XTREME HIGH Ambient provides total protection for sensitive fresh goods. In addition, you get a unit with proven reliability, low operating and maintenance costs and low emissions. Once again Thermo King has set the industry benchmark for reliability, performance and efficiency.

Benefits to you
- Benchmark reliability in the high ambient environments
- Proven fresh performance at up to 55°C and beyond
- Faster full-down and temperature recovery
- Full two-year warranty
- Market leading service and accessibility
- Advanced TSR-3 controller
- Low fuel consumption

Benefits for the environment
- R-134a refrigerant delivering positive environmental impact increased over 60% with reduced GWP (Global Warming Potential)
- Low fuel consumption
- Low engine emissions with GreenTech™ engine
- Reduced R-134a refrigerant charge
- Whisper-quiet operation

Fastest temperature pull-down
- Fast, efficient temperature pull-down under extreme high ambient due to R-134a refrigerant
- Sensitive loads are better protected against temperature rise during delivery cycles
- Low fuel consumption

Lower fuel consumption
- Through extensive development and field experience, Thermo King have found the right balance between system efficiency, fuel consumption and performance
- Advanced fuel-saving control technology with the TSR-3 controller means greater fuel efficiency
- An innovative microchannel condenser coil helps to reduce fuel consumption by over 10% compared to a conventional tube and fin condenser coil

Lower life cycle costs
- The TSR-3 controller allows optimum management of all functions within the unit, helping you to lower costs with each load
- The extended maintenance interval EMI 2000, means that there is now up to 2000 hour intervals between engine oil and filter changes. This will help to lower maintenance costs significantly
- A 19cm reduction in length and a 20kg reduction in weight results in reduced vehicle weight, increased vehicle payload and further fuel efficiency
- The UT XTREME HIGH Ambient comes with a full 2-year warranty

Easy to use and service
- The TSR-3 controller, means error free operation is now simpler than ever. By simply using the symbolic display, errors can become a thing of the past
- Low level alerts for oil and coolant
- Easily programmable service intervals and scheduled maintenance reminders
- Easy service accessibility to electrical and engine components

Reduced emissions & waste
- With the GreenTech™ engine you can be assured that the UT XTREME HIGH Ambient is playing its part in keeping the environment safe. These engines are by far the cleanest on the market, significantly exceeding all EU requirements
- 99.7% of the unit material is recyclable
- The UT XTREME HIGH Ambient range is manufactured at Thermo King’s state-of-the-art facility in Galway, Ireland, which has held ISO 14001 certification for Environmental Management since 2000

PULLED-DOWN PERFORMANCE

Box temperature (start): +40°C
Ambient temperature: average +60°C

Reduced operational cost and risk of cargo loss

Faster pull-down and recovery
Proven fresh performance at up to 55°C and beyond
Low fuel consumption
Intuitive interface
Make operator errors a thing of the past with the TSR-3 in-cab display. This easy to use interface is the perfect solution, regardless of what language you speak. All information is displayed with easy to understand symbols and is effortless to navigate. For those who need that little bit extra, the graphic TSR-3 Premium in-cab display is also available. With 21 languages it is easy to navigate and to use, it couldn’t be simpler!

Fuel savings
The TSR-3 controller includes features that improve fuel savings such as:
• Cycle-Sentry™ mode
• Economy mode
• Electronic door switch input
• Improved diagnostics with ServiceWatch™
Clearer diagnostics with ServiceWatch™ make it a pleasure to use for service technicians. Potential problems become easier to understand and response times are shortened significantly. The built-in preventative maintenance logger is a recorder that provides improved diagnostics and keeps track of all system performance and functionality. By recording all operational parameters, service diagnostics are significantly improved, ensuring service technicians have reliable and valuable information to hand at all times.

Easy-to-read LED display
The LED display is bright and clear, providing better visibility in all light conditions. It also functions perfectly in all ambient temperatures.

Enhanced safety and security
At Thermo King, we understand the importance of transportation and protection of your consignment. With the TSR-3 controller on board, you can avail of the enhanced features that will ensure the safe passage of your goods:
• Keypad with lock-out
• Phase correction
• Diesel/electric auto switching
• Set-point warning
• Oil and coolant level alerts
• Tiered security access levels for appropriate personnel
• Diesel engine and electric standby hour meter display

DAS (Data Acquisition System) and TracKing™ compatibility

Quality you can rely on
Number one for efficiency, reliability and durability – The UT XTREME™ Ambient from Thermo King was born from years of extensive research, testing and experience, imitated by many, perfected only by Thermo King.

At every stage of the development, the UT XTREME™ Ambient units have undergone rigorous testing procedures in cutting-edge R&D centres worldwide. This includes nonstop endurance tests, accelerated life tests and exposure to extreme operating environments. All of these measures ensure that you can rely on your UT XTREME™ Ambient unit for any type of application, in all conditions, without compromise.

State of the art GreenTech™ engine
- Low emissions
- High performance
- Increased lifespan
- Reduced maintenance

Maximum Operating Uptime
- Easy maintenance to ensure optimized performance for life time of the UT XTREME™ Ambient
- Lower maintenance costs versus competitor models
- Genuine TK Service Parts designed and tested specifically for the extreme demands of transport temperature control application

Scroll compressor

Technological advantages
- High efficiency means high capacity
- Greater capacity means faster pulldown and temperature recovery
- 87% fewer moving parts means high reliability and longer life
- Lower fuel consumption means more operating profit
- The scroll set to optimise the high ambient performance is cooled through liquid injection

Environmental advantages
- Less fuel required means less fuel consumed
- Less fuel consumed means lower diesel emissions
- Whisper-quiet operation means lower noise emissions
- Chlorine-free R-134a means zero ozone depletion

Condenser coils
- A larger condenser enables high temperature capability, further capacity and more efficiency, all with whisper-quiet operation
- The all new microchannel condenser coils provide a number of additional performance benefits which will ensure operating profits and reliability are enhanced
- These features include:
  • Reduced fuel consumption
  • Reduced engine and compressor temperatures
  • Reduced refrigerant charge
  • Reduced weight
  • Increased recyclability

Corrosion prevention
Due to the extreme environments in which the UT XTREME™ Ambient will operate, corrosion prevention was a key priority in the designing of these units. Some of these world-class leading features include:
  • An automotive grade electrocoated (e-coated) frame
  • An all aluminum microchannel coil to eliminate galvanic corrosion
  • Extensive use of painted aluminum and galvanised steel for skins and other components

The TSR-3 controller, easy to use, hard to beat!
Install confidence amongst your fleet and your drivers with the easy to use TSR-3 controller and display for the UT XTREME™ Ambient units. This innovative symbolic controller means your drivers can adjust and set the refrigeration unit with ease. Eliminate all doubt with the step-by-step easy to use interfaces.

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• Diesel engine and electric standby hour meter display

DAS (Data Acquisition System) and TracKing™ compatibility
Whisper-quiet operation

In times where noise pollution is a growing concern, Whisper-quiet operation has never been more important. Those of you distributing to urban and noise sensitive areas will be familiar with demands for noise reduction.

The UT XTREME HIGH Ambient was developed to minimise operating noise. Not only did we design effective containment but also focused on reducing noise generation at source. As a result, many components were redesigned to minimise noise while maintaining functionality and durability.

Bio-fuel compatibility

The GreenTech™ engines are approved for use with BS fuel (5% bio/95% petroleum diesel) with no change in maintenance schedules. Fuels with higher bio-diesel content (B6 up to B100) require shorter intervals between oil changes and injector servicing. Contact your Thermo King representative for more information.

Engine life

The engine used for the UT XTREME HIGH Ambient is more powerful than any other on the market, even running at no more than 80% of its maximum output. This means, both oil and coolant temperatures are reduced greatly, resulting in less component stress and engine wear.

Longer engine life = higher savings.

The GreenTech™ Engine from Thermo King

Low emissions, high performance

The UT XTREME HIGH Ambient is equipped with the class-leading range of GreenTech™ engines from Thermo King. These engines drastically reduce emissions, waste, and noise pollution, exceeding all known requirements, including the most stringent EU standards.

When you see the GreenTech™ name and symbol, you know at a glance that you are looking at refrigeration units that contain the cleanest engines on the market today. Performance has also been enhanced; GreenTech™ engines are more powerful and cause less stress to components. It is the easy choice for you and the best choice for the environment.

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EMISSIONS (PARTICULATE MATTER): COMPETITOR VS UT XTREME HIGH AMBIENT ENGINES

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Emissions (g/kW/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPETITOR</td>
<td>0.19</td>
</tr>
<tr>
<td>TK 5.76</td>
<td>0.17</td>
</tr>
</tbody>
</table>

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Quieter operation

The belt drive system and fan are positioned at the back of the unit, resulting in a significant decrease in noise levels over other layouts trialled. This, combined with sound-abating technology around critical components, make the UT XTREME HIGH Ambient substantially quieter than any competitor systems.
Features and Options

ThermoKare
ThermoKare offers a comprehensive range of service contract options, helping to manage your maintenance costs and the total life cost of your unit.

Warranty coverage
2-year warranty coverage on unit and options

Cycle–Sentry
This feature stops the engine when refrigeration is not needed and restarts it when refrigeration or battery charge is required
- Fuel and CO₂ savings of up to 80%
- Increased component life
- Reduced maintenance costs

Thermo King high performance battery
- Incorporates silver-calcium technology to extend service life to over 20% more than conventional batteries

Thermo King EON battery 880CCA
- Uses Absorbed Glass Mat (AGM) technology with deep-cycle capability and enormous cranking power
- Saves you the time and money of battery replacements through an expected five to eight year service life also backed by our 2-year warranty

DAS (Data Acquisition System)
This high performance data recorder system records temperatures, set-point, operating modes and external events. An invaluable option for your unit.
- Data can be output to a computer or a printer
- Operates independently of unit controller
- Memory storage for over one year of data
- Provides evidence of customer’s availability control
- Approved to EN-12830, CE mark and IP-65 standards
- Up to 6 independent sensors
- Automatic power-up and shut-off to protect unit battery

TouchPrint Data Logger
Compact, easy to use data logger with high speed printer. Modular design fits radio DIN slot in cab or IP 65 box for external use.
- Reads and records temperature and set point on Thermo King units
- Exports tickets to USB flash drive
- Compatible with TrackKing and Wintrac
- EN 12830, E type and WELMEC 7.2 approved

SafeGuard Battery Kit
Monitors battery voltage and automatically disconnects battery if low voltage occurs. Prevents any auxiliary devices draining the battery ensuring unit can always be restarted.
- Extends battery life
- Avoids call outs and down time.

Electronic Fuel Capture
Fuel level sensors that are compatible with all Thermo King and some competitor tanks. Enable information to be visualized on unit controller or a combo display or enabled for remote monitoring via TrackKing.
- Data can be output to a computer or a printer
- Operates independently of unit controller
- Memory storage for over one year of data
- Provides evidence of customer’s availability control
- Approved to EN-12830, CE mark and IP-65 standards
- Up to 6 independent sensors

Remote Status Light and Combo Display
Combo Displays increase driver awareness, enabling early corrective action and reducing the risk of load loss.
- 3 in 1 display (unit status, fuel level and load temperature)
- Excellent visibility with auto-dimming for day and night operation
- Can display fuel level in Thermo King tanks

Door switches
- Reduces the load temperature rise and saves fuel when doors are opened

TSR–3 standard in-cab display
- Simplified keypad to reduce the risk of incorrect operation of the system, cutting down on errors
- Visible set-point confirmation for load protection
- Programmable features allow tailoring of operating conditions to each load

TSR–3 premium in-cab display
- Enables greater control of every aspect of a UT XTREME™ Ambient unit
- Allows access to all programmable features on the TSR–3 controller
- Simple and logical menus, easy to read screen and choice of 21 languages

TherMax system
- Faster defrosts

Evaporator guard
- Maximum protection against evaporator damage during loading and unloading
- Easy to install
- Exceptional quality

TSR–3 rear remote control
- Allows easy control of the refrigeration unit from inside the rear of the truck
- Enables energy efficient and safe loading

Body mount enclosure
Allows external mounting of in-cab displays on drawbar truck bodies, allowing for easy access

90L Fuel tank
- Approved for diesel and bio-diesel
- Vibration resistant as per Thermo King standards
- Mechanical fuel gauge with option to upgrade to electrical
- Galvanised drain plug as standard
- Corrosion resistant installation kit (e-coated)

Tough, leak resistant flexible hoses
- Highest quality
- Designed to reduce installation time
- Ideal for ‘scissor-lift’ applications for the airline catering industry
- Robust design proven with extensive field trials and thousands of running hours

Life Cost Management
- ThermoKare service contract
- 2-year warranty coverage
- Cycle–Sentry start/stop control system
- Thermo King high performance battery
- Thermo King battery wet cell 760CCA

Data Capture & Communications
- DAS (Data Acquisition System)
- FleetWatch (fleet management software)
- TouchPrint Data Logger
- TrackKing (tracking and load monitoring)
- Wintrac (data analysis software)

Load Protection
- Data phase correction
- Diesel/electric auto switching
- Door switches
- TSR–3 standard in-cab display

Customization
- TSR–3 premium in-cab display
- TherMax system
- Evaporator guard
- TSR–3 rear remote control
- Body mount enclosure
- 90L Fuel tank
- Flexible hoses
- Electronic Fuel Capture
- Remote Status Light and Combination Display

Exclusive driver training software
Avail of Thermo King’s Tutor Series with “Professor Kool”™ This software provides rapid and effective interactive training to reduce driver error and will ensure you get the best results from the operation of your equipment.
Specifications

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>UT XTREME AMBIENT HIGH AMBIENT</th>
<th>UT XTREME AMBIENT HIGH AMBIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONFIGURATION</td>
<td>CONFIGURATION</td>
</tr>
<tr>
<td>REFRIGERATION CAPACITY: SYSTEM NET COOLING CAPACITY AT 55°C AMBIENT TEMPERATURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return air to evaporator Celsius 0°C 20°C 0°C 20°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity on engine power W</td>
<td>6 700</td>
<td>11 500</td>
</tr>
<tr>
<td>Capacity on electric stand-by W</td>
<td>5 000</td>
<td>8 500</td>
</tr>
<tr>
<td>REFRIGERATION CAPACITY: SYSTEM NET COOLING CAPACITY AT 30°C AMBIENT TEMPERATURE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return air to evaporator Celsius 0°C 0°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity on engine power W</td>
<td>7 500</td>
<td></td>
</tr>
<tr>
<td>Capacity on electric stand-by W</td>
<td>6 000</td>
<td></td>
</tr>
<tr>
<td>AIRFLOW ON HIGH SPEED ENGINE OPERATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airflow volume @ 0 Pa static pressure (discharge velocity)</td>
<td>m³/hr</td>
<td>3350</td>
</tr>
<tr>
<td></td>
<td>m/s</td>
<td>6.6</td>
</tr>
<tr>
<td>WEIGHT: EXCLUDING BATTERY</td>
<td>kg</td>
<td>580</td>
</tr>
<tr>
<td>TOT unit + evaporator(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGINE: LOW EMISSIONS, 2 CYLINDER, LIQUID COOLED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model</td>
<td>TK 376</td>
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</tr>
<tr>
<td>Rating kW</td>
<td>14.6</td>
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<tr>
<td>Maintenance Interval hrs</td>
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</tr>
<tr>
<td>COMRESSOR: LIGHTWEIGHT ALUMINIUM ALLOY</td>
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<td></td>
</tr>
<tr>
<td>Model</td>
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</tr>
<tr>
<td>Displacement cc</td>
<td>98 cc</td>
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</tr>
<tr>
<td>ELECTRIC STAND-BY OPTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage / Phase / Frequency</td>
<td>kg</td>
<td>230V / 3Ph / 60Hz</td>
</tr>
<tr>
<td>Rating kW</td>
<td>7.5 kW</td>
<td></td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice. Airflow volume and weight will be cumulative. Capacity will depend on unit configuration.

WARRANTY CONDITIONS
Thermo King warrants the new product delivered will be free of defects in material and workmanship for the period of time specified in the applicable warranties. Specific terms of the Thermo King warranty are available on request.
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 further information, please contact:
europe.thermoking.com

Find your nearest dealer on
dealers.thermoking.com