Advancer offers a true breakthrough in the world of cold chain logistics.

It’s a refrigeration unit designed for transport fleets, retailers, and pharmaceutical companies. It’s for every organization needing to move diverse loads at precise temperatures in the most efficient way possible. And it’s technology that sets an astonishing new standard for performance, cost savings, uptime, and lowered emissions.

All combined, Advancer represents the future of trailer refrigeration and the ideal investment for ensuring your long-term business success.
Inspiring progress. Delivering results.

When we say the Advancer range is built from ambition, we really mean it.

The ambition to deliver a level of performance that’s simply never been seen before. To push innovation to its very limit. To set a new standard for efficiency, quality, and reliability. To align our ambition for continued excellence with yours. And to offer the control and interactivity needed to take your operation to the next level – and beyond.

MAKE THE MOST OF EVERY JOURNEY
From an incredible speed of pulldown to uniquely controllable airflow, you can transport loads from precious vaccines to fresh foods with complete confidence (page 9)

SPEND LESS TIME ON MAINTENANCE
With fewer components designed for quality and assembled for easier access, the time required for maintenance is dramatically reduced (page 10)

ENJOY PEACE OF MIND – WHATEVER THE CONDITIONS
Whether your trailer is exposed to mild or extreme ambient conditions, Advancer fans run independently of unit engine speed to maintain consistent performance (page 9)

ENSURE THERE’S ALWAYS POWER AT YOUR FINGERTIPS
Advancer is fully power agnostic and can utilize diesel, hybrid, generator, or shore power sources with ease. Future compatibility with a generator or axle and battery combination is also guaranteed (page 7)

MAKE YOUR LIFE EASIER, SAFER, AND SMARTER
From proactive telematics to an intuitive, driver-friendly controller, Advancer turns the promise of an intelligent fleet into reality (pages 14-16)

KNOW YOU’RE INVESTING IN TOMORROW
Advancer’s ground-breaking architecture is compliant with all of today’s regulations, and designed to accommodate any new demands with ease (page 18)

PUT EFFICIENCY TO WORK
With unrivalled electrical & fuel efficiency, lower maintenance costs, and enhanced serviceability, Advancer helps you save money at every corner (page 6)

SET THE PERFECT TEMPERATURE FOR EVERY CARGO
Advancer introduces fully variable airflow to give you precise control over temperature ranges and fuel consumption (page 8)
Turning efficiency into a competitive advantage

Advancer is 30% more fuel-efficient than the market average and delivers 40% better system efficiency versus the market average – numbers verified in both full load and part-load testing. Such breakthrough performance is achieved through a range of complementary innovations that include:

- Fully variable airflow that separates fan speed from engine speed to let you find the ideal balance between load protection and fuel consumption for every load.
- The intrinsic advantage of combining an engine to drive the compressor directly with a fan makes Advancer 25% more energy efficient than conventional generator-driven architectures.
- Faster pulldown where the unit’s mild hybrid architecture drives powerful and highly controllable evaporator fans, thereby creating superior cooling capacity – as well as significant fuel savings.
- Constant improvement is another factor designed into Advancer, with Connected Solutions integrated as standard to provide proactive insights for refining fuel usage and set-up.

NEW FEATURE: ELECTRONIC ENGINE SPEED CONTROL

Fitted as standard to Advancer A-400 and A-500 models, the electronic engine speed control (Eco Governor) provides unrivalled insights into fuel efficiency. This innovative capability enables you to monitor:

- Fuel consumption by trip
- Total consumed liters per hour
- Total consumption / remaining fuel

Utilizing optional sensors fitted to the fuel tank, the system can also send out alarms to notify you when fuel levels reach a pre-set threshold, thereby affording the driver time to locate the most suitable location to re-fuel.

The lowest possible cost of ownership

With Advancer you don’t just benefit from stunning fuel efficiency. The unit is also designed for serviceability, to extend uptime and to deliver a truly impressive maintenance interval of 3,000 hours – as well as a 30% reduction in maintenance TCO.

From an architecture that limits the need to keep the engine running in low speed for extended periods of time – thereby reducing wear and tear – to reducing the number of serviceable items, Advancer keeps you running, earning, and saving.

EXTENDING POWER EFFICIENCY INTO THE FUTURE

With its 48V mild hybrid architecture, Advancer is designed to be compatible with a variety of power sources including shore power, hybrid, holdover battery and axle generator. This arrangement ensures you’re future-ready and able to adapt to any delivery environment, while maintaining a highly efficient and cost-effective operation.
**The most precise temperature control available**

Advancer helps you adopt a smarter approach to airflow depending on what you’re transporting and where. To do that, the unit introduces fully variable airflow, a unique feature in the world of transport refrigeration. What this means in practice is greater choice, more control, and the ability to set precise airflow conditions for each load and delivery scenario.

**Scenario #1**

Cargo ventilation
Provide high airflow to your sensitive cargo (fruits & vegetables, flowers, etc.) even when the cooling demand is low, to protect its quality at all times.

**Scenario #2**

Efficient cooling
Keep it cool without wasting energy on airflow for goods that need refrigeration but reduced ventilation (dairy, frozen products, etc.).

**Scenario #3**

First & last mile speed
Reach a specific set point faster during initial pulldown or after multiple door openings by engaging high-speed airflow until the set point is reached.

**Scenario #4**

Longer trailers
Provide sufficient air throw to secure accurate temperature control as far as the rear door for trailers up to 15.6m* long.

* Achieved with optional air straightener
* Load trailer according to best practices

**Flexible airspeed, faster pulldown**

Fully variable airflow is made possible with Advancer’s underlying architecture, where fan performance is no longer tied to engine speed. As a result, you’ll be able to select from a wide range of airflow values (by steps of 100 m³/h) at any given engine speed.

With variable, constant airflow comes the ability to increase evaporator airflow for longer trailers up to 15.6 meters long. It also contributes to a significant increase in pulldown speed.

Advancer delivers pulldown that is up to 40% faster than leading competitor products and requires up to 30% less fuel per trip.

**POWERING GREATER CAPACITY**

By merging a 48V DC mild hybrid architecture with a direct drive on the compressor, Advancer combines the best of both electrical and mechanical worlds. This is done to reduce energy losses across the unit and maximize fuel savings.

When understanding the impact this has on performance, the headline is simple: by being more efficient at transferring power to the compressor, more power from the engine is transformed into actual cooling capacity – which in turn means lightning-fast recovery, and unbeatable pulldown.
Innovation for enhancing fleet operations

MAINTENANCE AND SERVICEABILITY
— 3,000 hours maintenance intervals for maximum asset dependability
— 30% reduction in servicing requirements

PROACTIVE DIAGNOSIS
Thermo King Connected Solutions are fitted as standard, and include data from the fuel tank and battery (on A-400 and A-500 models)

INTELLIGENT DESIGN
Compared to Thermo King’s previous architecture:
— More than 700 design requests from customers
— 37 serviceable items removed
— 38% reduction in hardware
— 33% reduction in the number of refrigerant joints
— Designed for ease of service & maintenance
— Waterproofed electronics & connectors

Future-ready thinking
As well as being designed for simplified usage, servicing, and maintenance, Advancer also features a modular design approach that helps ensure the unit offers faster development cycles and time to innovation.

We've done this to inspire a more fluid and responsive approach to meeting tomorrow's performance and regulatory compliance challenges.

With Advancer you can meet all your operational requirements today with groundbreaking technology, cover all the bases when it comes to power supply, and be ready to deploy new capabilities when they're needed to keep you running.

Central to Advancer’s revolutionary architecture has been an extensive ‘voice of customer’ engagement program.
This was conducted with a large number of organizations from across the globe and included trailer and tractor manufacturers.
The result was more than 700 design requests that guided our every decision.

You can be sure that with Advancer, every component and design decision has been taken from a customer’s perspective — to deliver technology that’s purpose-built to drive your future success.
Meet the A-Series

**ALL 3 MODELS IN THE ADVANCER RANGE:**

- are the most fuel-efficient on the market
- are the greenest units on the market
- are the quietest units on the market
- have the highest cooling and heating capacity on the market
- provide the highest airflow
- provide fully variable airflow independent of unit engine speed
- include a 2-year telematics contract

---

**A-360**

**ALL-ROUND REFRIGERATION EXCELLENCE**

A powerful engine, engine-independent airflow and precise temperature control.

---

**A-400**

**THE NEW STANDARD IN TRAILER REFRIGERATION**

Comes with electronic engine speed control and with extra features to boost fuel efficiency.

---

**A-500**

**WHEN YOUR CARGO DESERVES THE BEST OF THE BEST**

Flagship model that offers the highest level of fuel efficiency, refrigeration capacity and temperature management.
Introducing the all-new A-Series Controller

With Advancer, you can get your hands on the smartest, most intuitive and easy-to-use controller on the market:

**DRIVER-FRIENDLY**
Enjoy our biggest ever screen, as well as full color and high-resolution display with backlit keys.

**USER INTERFACE**
Any information can be accessed via a maximum of five button presses and menu navigation is icon-based.

**FASTER BOOT TIME**
The new controller is significantly faster to boot up, and includes a progress bar to inform the operator.

**ACCESSIBLE INSIGHT**
Advancer is the first in the industry to provide insight on fuel consumption, including average liters per hour consumed by the unit and fuel level (if an optional fuel tank sensor is fitted).

**HIGHLY DURABLE**
The controller has been rated IP69K. It is fully dust-proof, resistant to vibrations and can withstand water under high-pressure.

**EASE OF USE**
The position and ergonomic viewing angle of the controller have been fully optimized for driver convenience.

**PROACTIVE ALARMS**
Details of triggered alarms are clearly displayed and grouped logically, alongside recommendations for ‘next best action’ to boost uptime.

**DATA LOGGING**
The A-series controller comes with a more frequent data logging capability, and over 1 year of data logging capacity – fully compliant with EN12830 regulation.

**MEMORY STORAGE**
The A-Series controller can be used in 14 languages on a single software package, and offers a variety of functionality and applications in one, future-proofed unit.
Intelligence you can rely on

Advancer is designed to be the most intelligent transport refrigeration unit ever built. To make this a reality, we’ve included a number of industry firsts into the list of features and benefits:

1. **Innovation #1**
   - Advancer is the first ever unit on the market to come with full connectivity as standard, with a 2-year contract included in the purchase price.

2. **Innovation #2**
   - The electronic engine speed control on all A-400 and A-500 models is another industry first that brings with it in-depth fuel consumption data.

3. **Innovation #3**
   - All Advancer units are also supported by proactive alarm recommendations, where ‘next best action’ accompanies any alert notification.

---

**Electronic Engine Speed Control**

This brand-new capability is available on the A-400 and A-500 models and provides a host of critical insights into fuel costs and usage.

With this feature, you can monitor:
- Average fuel rate
- Average fuel rate from last trip
- Average fuel rate for last 5 minutes and last 15 minutes

Electronic engine speed control helps you significantly cut fuel usage levels. With the optional fuel level sensor, you can also track the fuel levels of individual vehicles and notify drivers if they allow these to breach pre-arranged thresholds.

---

**Connectivity Fitted as Standard**

Included in the purchase price is all the hardware and software needed to get the service up and running from day one, alongside a 2-year contract that includes:
- Access to the TracKing telematics platform
- Access to Connected Solutions Mobile Apps (TK Reefer and TK Notify)
- Data sharing with external platforms
- All SMS and roaming costs
- Two-way command capabilities (A-400 and A-500)

---

**Proactive Alarm Recommendations**

Each alarm generated by an A-Series unit now includes a recommended ‘next best action’ that is available to view at the Smart Reefer control unit, as well as via the TrackKing platform, email notification, and the TK Notify app.
INTEGRATED SOLAR PANELS: INCREASE YOUR BATTERY RELIABILITY

— Ensure your units can **restart at any time**, irrespective of gaps in operation
— **Power telematics 24/7** to guarantee your ability to locate individual units
— Benefit from our **Intelligent Charging System**, where the solar panel simply keeps the battery topped up
— Instantly see if the battery is charging, is fully charged, or in poor condition, with visible **LEDs** built into the charge controller

Fitted during the manufacturing process, each solar panel is attached on top of the Advancer unit and delivers 25% more wattage than previous Thermo King panels. The result is a neat, aerodynamic fit that doesn’t contribute additional height to the unit or require drilling holes in the trailer roof.
### Technical specifications

#### A-SERIES MODELS

<table>
<thead>
<tr>
<th></th>
<th>A-360</th>
<th>A-400</th>
<th>A-500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REFRIGERATION CAPACITY: SYSTEM NET COOLING CAPACITY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return air temperature to evaporator</td>
<td>°C</td>
<td>0</td>
<td>-20</td>
</tr>
<tr>
<td>Capacity on engine power</td>
<td>W</td>
<td>15600</td>
<td>8100</td>
</tr>
<tr>
<td>Capacity on electric standby</td>
<td>W</td>
<td>12700</td>
<td>6600</td>
</tr>
<tr>
<td><strong>HEATING CAPACITY: BOX TEMPERATURE +2°C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity on engine power</td>
<td>W</td>
<td>10750</td>
<td>10750</td>
</tr>
<tr>
<td><strong>AIRFLOW: INDEPENDENT FROM UNIT ENGINE SPEED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airflow volume @ 0 Pa static pressure</td>
<td>m³/hr</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>Default @ Pull Down</td>
<td>m³/hr</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td>Max @ Pull Down</td>
<td>m³/hr</td>
<td>5500</td>
<td>5500</td>
</tr>
<tr>
<td>Default @ Set Point</td>
<td>m³/hr</td>
<td>3400</td>
<td>3400</td>
</tr>
<tr>
<td>Max @ Set Point</td>
<td>m³/hr</td>
<td>5000</td>
<td>5000</td>
</tr>
<tr>
<td><strong>WEIGHT: INCLUDES BATTERY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Standard</td>
<td>kg</td>
<td>830</td>
<td>830</td>
</tr>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>mm</td>
<td>2270</td>
<td>2270</td>
</tr>
<tr>
<td>Width</td>
<td>mm</td>
<td>2076</td>
<td>2076</td>
</tr>
<tr>
<td>Depth</td>
<td>mm</td>
<td>440</td>
<td>440</td>
</tr>
<tr>
<td><strong>SOUND PRESSURE LEVEL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Speed Diesel</td>
<td>dB(A)</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Electric Standby</td>
<td>dB(A)</td>
<td>64</td>
<td>64</td>
</tr>
</tbody>
</table>

---

Specifications are subject to change without notice.
ADVANCING WITH THERMO KING

THERMO KING’S DEALER NETWORK - WHERE COMPLETE COVERAGE MEETS EXPERT INSIGHT:
— Over 500 authorized service points in 75 countries
— 1,400 fully trained and certified technicians with Gold, Silver and Bronze Certi-Tech expertise certifications
— Open and available every day of the year

Find the support that’s closest to you with our online dealer locator: dealers.thermoking.com

More dealer services
— Emergency assistance
— Service contracts
— Genuine Thermo King parts
— Options and Accessories
— Mobile service
— Calibration and leak testing

24/7 support wherever you need us

EXTEND THE VALUE OF YOUR INVESTMENT WITH GENUINE THERMO KING SERVICE PARTS
With Advancer you’re equipping your fleet with the cutting edge of transport refrigeration equipment. Having made the investment, you’re next step is keeping the unit out on the road and earning money. That’s why you need confidence that every replacement part has been exhaustively tested to the same world-class standards as the manufactured original. With Thermo King genuine parts you can be sure that reliability and dependability come as standard.

Advanced fleet solutions

ALL-IN-ONE SOLUTION FOR ONE MONTHLY RATE
Appreciating the importance of cost and convenience for small to medium sized customers looking to source the right combination of trailer and refrigeration unit, Thermo King offers premier+.

CHOOSE PREMIER+ FOR
All-in-one solution – with refrigeration unit, trailer, service and maintenance contract and telematics subscription
Complete choice – including single- and multi-temperature refrigeration solutions
Budget optimization – with one monthly lease rate over a fixed term
Improved uptime – with quality components and 24/7 support
End-to-end financing – where we take care of the details
Full service coverage – covers both refrigeration unit and trailer

For more information on premier+, visit europe.thermoking.com

PROVEN IMPACT ON YOUR UPTIME
With uptime and reliability at the forefront of your mind, the Thermo King Blue Track program enables a host of value-adding capabilities for running a smart, responsive operation:
— Real time watch - 24/7 fleet alarm monitoring
— Proactive issue resolution
— Recommendations for addressing alarm codes
— Remote triage and express service
— Faster diagnosis, faster repairs and first time solution
— Preventive maintenance and repair, both mobile and in- dealership
— Smart, remote workshop routing to avoid wait time

For more information on the Blue Track Program, visit europe.thermoking.com

Let the experts service your fleet with Thermo King service contracts
Thermo King offers a complete selection of service contract solutions designed to optimize fleet efficiency, minimize operating costs and maximize equipment resale values. Let us take care of maintenance planning, scheduling, invoice interpretation, general fleet administration or a multilingual telephone service putting you in contact with an authorized Thermo King service Dealer. Our service solutions are available across Europe 24/7/365 so you can focus on what matters most: your business.
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:
europe.thermoking.com
tkadvancer.com

Find your nearest dealer on
dealers.thermoking.com