



Advancer

Built from ambition.

SINGLE AND MULTI-TEMPERATURE
REFRIGERATION SOLUTIONS FOR TRAILERS



TRANE
TECHNOLOGIES

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Discover the most complete range in trailer refrigeration.

The A-Series range is designed for transport fleets, retailers, and pharmaceutical companies - or any other organization that needs to move diverse loads at precise temperatures in the most efficient way.

Discover the technology to set new levels of performance, cost savings, uptime, and lowered emissions. And secure your ticket to long-term business success. Single- and multi-temperature, fuel, hybrid, full electric or silent as the night; the A-Series range offers the ideal refrigeration solution that fits your fleet.



Discover the benefits of the A-Series with the TK Advancer Reality APP



Download on the App Store



GET IT ON Google Play

ADVANCER SINGLE TEMPERATURE

Precise trailer refrigeration with hallmark fuel efficiency.

Stay ahead of competition with Advancer Single Temp, the standard in refrigerated transport. Designed to deliver one of the fastest pulldowns on the market, optimal airflow and remarkable fuel efficiency. Whatever your fleet ambition, Advancer is built for it.

RADICAL FUEL SAVINGS
Up to 30% more fuel-efficient.

UNRIVALLED COOLING EFFICIENCY
Engine-independent airflow for consistent performance.

STAY LONGER ON THE ROAD
Up to 60% reduction in unscheduled servicing.

AVAILABLE IN



A-360
ENTRY ALL-ROUND MODEL
A powerful engine, full variable airflow and precise temperature control.



A-400
STANDARD MODEL
With electronic engine speed control and extra features to boost fuel efficiency.



A-500
FLAGSHIP MODEL
The highest level of fuel efficiency, refrigeration capacity, and temperature management.



30%
Up to 30% more fuel-efficient

40%
Faster pulldown

30%
Lower environmental impact

Turning efficiency into a competitive advantage.

With Advancer Single Temperature we pushed innovation to its very limit, so you can go beyond market averages and stand out in both performance and efficiency. Take your operations to the next level by investing in excellence.

THE RIGHT TEMPERATURE FOR EVERY CARGO

Find the perfect balance between load protection and fuel consumption with fully variable airflow. By separating fan speed from engine speed, you gain more control to set **precise airflow conditions for each load and delivery scenario.**

FLEXIBLE AIRSPEED, FASTER PULldOWN

Advancer Single Temperature transfers power to the compressor more efficiently, enabling more power from the engine to be transformed into actual cooling capacity. The result? **A pulldown that is up to 40% faster and requires up to 30% less fuel per trip.**



EASIER, SAFER, SMARTER

Make your life easier with an **intelligent fleet**, including intuitive, driver-friendly controllers and proactive telematics. Access in-depth fuel consumption data, automatically analyzed and turned into recommendations guiding you towards the 'next best action' for any notification.

DESIGNED FOR TOMORROW

Reduce your CO₂ emissions up to 30% and lower your environmental impact up to 65%, while meeting all European regulations. Hit the road with a fully power agnostic unit, capable of operating on diesel, hybrid or axle power sources. And confidently anticipate future compatibility with either a generator or an axle and battery combination.

LOWER MAINTENANCE COSTS

Extend uptime with a truly impressive **maintenance interval of 3,000 hours**, as well as a reduction in maintenance costs up to 30%.

Technical specifications.

A - SERIES MODELS				A-360	A-400		A-500	
PERFORMANCE								
Refrigeration capacity: system net cooling capacity at 30 °C ambient temperature under A.T.P. Conditions								
Return air temperature to evaporator	@ Nominal Airflow (Default @ Pull Down)	°C	0	-20	0	-20	0	-20
Capacity on engine power		W	15,600	8,100	16,200	8,300	19,500	10,400
Capacity on electric standby		W	12,700	6,600	13,000	6,700	14,600	8,400
Heating capacity: box temperature +2 °C								
Capacity on engine power	Outside air temperature: -20°C	W	10,750		10,750		15,900	
Airflow: independent from unit engine speed selectable within range @ set point & pull down								
Airflow volume @ 0 Pa static pressure	Default @ Pull Down	m³/h	5,000		5,000		5,500	
	Max @ Pull Down	m³/h	5,500		5,500		6,000	
	Default @ Set Point	m³/h	3,400		3,400		3,400	
	Max @ Set Point	m³/h	5,000		5,000		5,500	
TECHNICAL DATA								
Weight – including battery								
Model Standard		kg	830		830		830	
Dimensions								
Width x Depth x Height		mm	2,076 x 440 x 2,270		2,076 x 440 x 2,270		2,076 x 440 x 2,270	
Engine								
Maintenance Interval		hrs	3,000		3,000		3,000	
Number of cylinders			4		4		4	
Capacity		l	2.1		2.1		2.1	
Sound pressure level								
High Speed Diesel		dB(A)	65		65		65	
Electric Standby		dB(A)	64		64		64	

ADVANCER MULTI-TEMPERATURE

Advancer Spectrum: Mastering Multi-Temp.

Deliver whatever you need, no matter how varied the load. With Advancer Spectrum, your fleet runs as optimized and flexible as possible. Control every inch of your trailer while relying on the A-Series efficiency and performance.

PROVEN ADVANCER PERFORMANCE

Fast temperature recovery, radical fuel efficiency, exceptional temperature control.

ULTIMATE FLEXIBILITY

Single temp always, multi-temp whenever you need it.

FUTUREPROOF

Sustainable, power-agnostic multi-temperature cooling with access to ULEZs.

FULL CONTROL

Bespoke multi-temp A-series controller.

AVAILABLE IN



A-500 SPECTRUM

The highest level of fuel efficiency, refrigeration capacity, and multi-zone temperature management.



A-500e SPECTRUM

Fully engineless operations for zero-emission, sustainable cooling with multi-temperature capabilities.

**Multi-temperature
& all-electric**

Zero emissions, ultimate flexibility. With ultra-precise multi-zone temperature control, Advancer-e Spectrum brings the ultimate tool for high-performance, emission-free refrigeration. **Deliver whatever you need, wherever you need.**



Unrivaled
Temperature control

Stellar
Fuel efficiency

Full electric
100% engineless



Unlock the full potential of your fleet.

Freezing cold at the back and only slightly chilly at the front? Or frozen all the way across? Advancer Spectrum enables you to control the temperature(s) across your trailer down to 0.5°C accuracy. A refrigeration trailer designed with your real-world applications in mind.

ULTIMATE FLEXIBILITY
Quickly respond to peak demands by using your box to the fullest. Whatever mix of cargo, you can ship it all in a single trailer. One vehicle to access all parts of the supply chain: from the last mile to the highway.

REMOTE EVAPORATORS
Reach every inch of your trailer with our remote evaporators, significantly increasing your cooling capacity.

TAILORED TEMPERATURE CONTROL
Gain total control of your cargo and your fleet with two different cooling modes, designed to make your life a lot easier:

- **Continuous mode:** Tight temperature control for sensitive cargo, such as pharma and fresh products.
- **Cycle sentry mode:** Maximum fuel saving for products that require less strict temperature control.

Technical specifications.

MODEL		A-500 SPECTRUM		
PERFORMANCE				
Refrigeration capacity: system net cooling capacity at 30 °C ambient temperature under A.T.P. Conditions				
Return air temperature to evaporator	@ Nominal Airflow (Default @ Pull Down)	°C	0	-20
Capacity on engine power		W	19,500	10,000
Capacity on electric standby		W	15,800	7,750
Airflow: independent from unit engine speed selectable within range @ set point & pull down				
Airflow volume @ 0 Pa static pressure	Default @ Pull Down	m³/h	5,300	
	Default @ Set Point	m³/h	3,400	
TECHNICAL DATA				
Weight – including battery				
Model Standard		kg	840	
Dimensions				
Width x Depth x Height		mm	2,076 x 440 x 2,270	
Engine				
Maintenance Interval		hrs	3,000	
Number of cylinders			4	
Capacity		l	2.1	
Electric stand-by motor				
Voltage / Phase / Frequency			400/3/50 460/4/60	
Rating		kW	9.3	
Sound pressure level (standard unit)				
High Speed Diesel		dB(A)	67	
Electric Standby		dB(A)	64	
Generic				
Box length		m	15	
Refrigerant			R-452A	
Controller			A-Series Controller	
EVAPORATORS				
Capacity				
S3A 0-30°C		W	8,850	
S6A 0-30°C		W	1,4500	
Dimensions				
S3A Width x Depth x Height		mm	1,100 x 1,000 x 200	
S6A (2 x S3A) Width x Depth x Height		mm	2 x (1,100 x 1,000 x 200)	

ADVANCER ELECTRIC

Advancer—e: All-Advancer, All-Electric.

The trailer refrigeration industry is transitioning to a cleaner and more sustainable future. Take the first step towards full electrification with this engineless Advancer—e, compatible with alternative power sources. A unit that's fully emission-free and extraordinarily efficient.

FULL-ELECTRIC OPERATIONS

Save fuel and increase fleet sustainability with zero-emission refrigeration.

LOW NOISE

Absence of engine reduces sound for urban and late-night deliveries.

LIGHTWEIGHT

Absence of an engine reduces total weight of the vehicle and fuel consumption.

FUTUREPROOF

Fully compatible with conventional and alternative power sources.

AVAILABLE IN



A-500e

Futureproof your fleet with engineless, zero-emission cooling.



A-500e SPECTRUM

Fully engineless operations for zero-emission, sustainable cooling with multi-temperature capabilities.

All-electric, multi-temperature

Zero emissions, ultimate flexibility. With ultra-precise multi-zone temperature control, Advancer—e Spectrum brings the ultimate tool for high-performance, emission-free refrigeration. **Deliver whatever you need, wherever you need.**



Full electric
100% engineless

Save 10 tons CO₂
Per year per unit*

Full flexibility
Available in single & multi-temperature

* Depending on usage profile and ambient conditions

Your partner in the switch to electric.

Advancer—e opens the door to a fully carbon-neutral fleet and helps you prepare for future regulations. Make your fleet compatible to fit about any power source, today or in the future.

ALTERNATOR-POWERED

Alternator technology for electrically driven cooling. Run your electric unit via a high-performance and high-efficiency alternator driven by the vehicle's engine.



AXLE-POWERED

Power your unit with energy recovered and stored by an axle and battery pack. A smart power recovery system that lets you run your cooling unit with recaptured, zero-emission energy, generated by your vehicle's axle.

BATTERY-POWERED

Various battery packs to run your unit 100% electrically. No fuel, no emissions.

A sustainable all-electric fleet.

- **Zero-emission:** Grant your fleet access to ultra-low emission zones without worry. Each unit can reduce your fleet's carbon footprint by up to 10 tons of CO₂ per year (depending on usage profile and ambient conditions).
- **Low noise:** Perform urban and late-night deliveries without making a sound, thanks to the engineless design.

Technical specifications.

MODEL		A-500e		
PERFORMANCE				
Refrigeration capacity: system net cooling capacity at 30 °C ambient temperature under A.T.P. Conditions				
Return air temperature to evaporator	@ Nominal Airflow (Default @ Pull Down)	°C	0	-20
Capacity on engine power		W	15,100	8,000
Airflow: independent from unit engine speed selectable within range @ set point & pull down				
Airflow volume @ 0 Pa static pressure	Default @ Pull Down	m³/h	4,500	
	Default @ Set Point	m³/h	3,400	
TECHNICAL DATA				
Weight – including battery				
Model Standard		kg	650	
Dimensions				
Width x Depth x Height		mm	2,076 x 440 x 2,270	
Electric stand-by motor				
Voltage / Phase / Frequency			400/3/50	
			460/4/60	
Rating		kW	9.3	
Sound pressure level (standard unit)				
High Speed Diesel		dB(A)	67	
Electric Standby		dB(A)	64	
Generic				
Box length		m	15	
Refrigerant			R-452A	
Controller			A-Series Controller	

ADVANCER WHISPER PRO

So quiet you can hear your customers smile.

Deliver any kind of fresh product, without waking up a soul. The Advancer Whisper Pro is your ticket to enter the city at night, quietly traversing the last mile at less than 60db. Silent enough to comply with the most stringent inner-city noise regulations, powerful enough for the highest cooling capacity.

- NIGHTTIME DELIVERIES**
Compliant with the most stringent noise regulations, including PIEK.
- MOST EFFICIENT ROUTE**
Skip rush hour and save time with nighttime deliveries.
- PEACE OF MIND**
Automatically switch to low-noise with geofencing.
- NO COMPROMISES**
The highest cooling capacity and all Advancer benefits.

AVAILABLE IN



A-400 & A-500 WHISPER PRO

Unrivalled fuel efficiency, refrigeration capacity, with ultra-silent operations.



A-400 & A-500 WHISPER PRO

Unrivalled fuel efficiency, refrigeration capacity, with ultra-silent operations and multi-zone temperature control.



A-500e & A-500e SPECTRUM WHISPER PRO

Full electric version, unrivalled refrigeration capacity, with ultra-silent operations in single and multi-temperature.



- Enter the city at night**
Less than 60db – PIEK certified
- 14% faster distribution routes**
Operate outside rush hours
- No driver intervention**
Switches to low noise automatically

POWER SOURCES

An extensive range of clean and sustainable power sources.

The A-Series technology enables you to optimize the energy usage of your fleet, without compromising on cooling capacity or operational performance. Invest in a more sustainable refrigeration unit that easily adapts to a variety of power sources, tailored to your refrigeration needs.

GREENTECH

LOWER EMISSIONS,
HIGHEST PERFORMANCE

Achieve extraordinary reductions in fuel use and emissions with this advanced diesel technology. Compliant with the most stringent EU standards.

HYBRID DRIVE

BEST OF BOTH WORLDS

Enjoy unmatched long-haul performance along with complete inner-city access. Slash your fuel emissions with this entry ticket to any city center, now and in the future.

AXLEPOWER

POWERED BY THE ROAD

Power your refrigeration unit by the road, and run your refrigeration unit electrically all the time. Fully sustainable refrigeration with maximum fleet flexibility.

BE-TECH

BATTERY-POWERED
INNOVATION FOR ALL-ELECTRIC
REFRIGERATION

Combine sustainability and performance with full-electric refrigeration.



GREENTECH

GREENTECH

Lower emissions, highest performance.

Transform your fleet into a fuel efficiency champion with Advancer GreenTech diesel engines. This technology enables you to drastically reduce emissions, waste and noise pollution, and comply with the most stringent EU standards. All thanks to advanced diesel technology, compatible with biodiesel and Hydrotreated Vegetable Oil.

THE CLEANEST ENGINE
ON THE MARKET

Reduce up to 90% of greenhouse gas emissions with second-generation biofuel HVO. This higher quality renewable biofuel for diesel engines allows for much more environmentally sustainable operations and a lower impact to inner cities air quality.

AVAILABLE ON



ADVANCER
SINGLE-TEMPERATURE

The standard in refrigerated transport with ultra-efficient operations and fully variable airflow.

ADVANCER
MULTI-TEMPERATURE

Ultra-precise multi-zone temperature control to unlock the full potential of your fleet.

AXLEPOWER

Self-charging energy recovery system.

Not a single drop of energy goes to waste. That's the ambition behind the AxlePower technology. Easily recover energy from the rolling of the wheels and braking, so you can use it to power your trailer refrigeration unit electrically.

SMART POWER MANAGEMENT

Proprietary Smart Power Management software in partnership with BPW.

FLEXIBLE TRAILER COOLING

Mix and match trailers thanks to a tractor-independent system.

UNLIMITED ACCESS

Deliver in ultra-low emission zones and noise-regulated zones. Anytime, anywhere.

AVAILABLE ON



ADVANCER

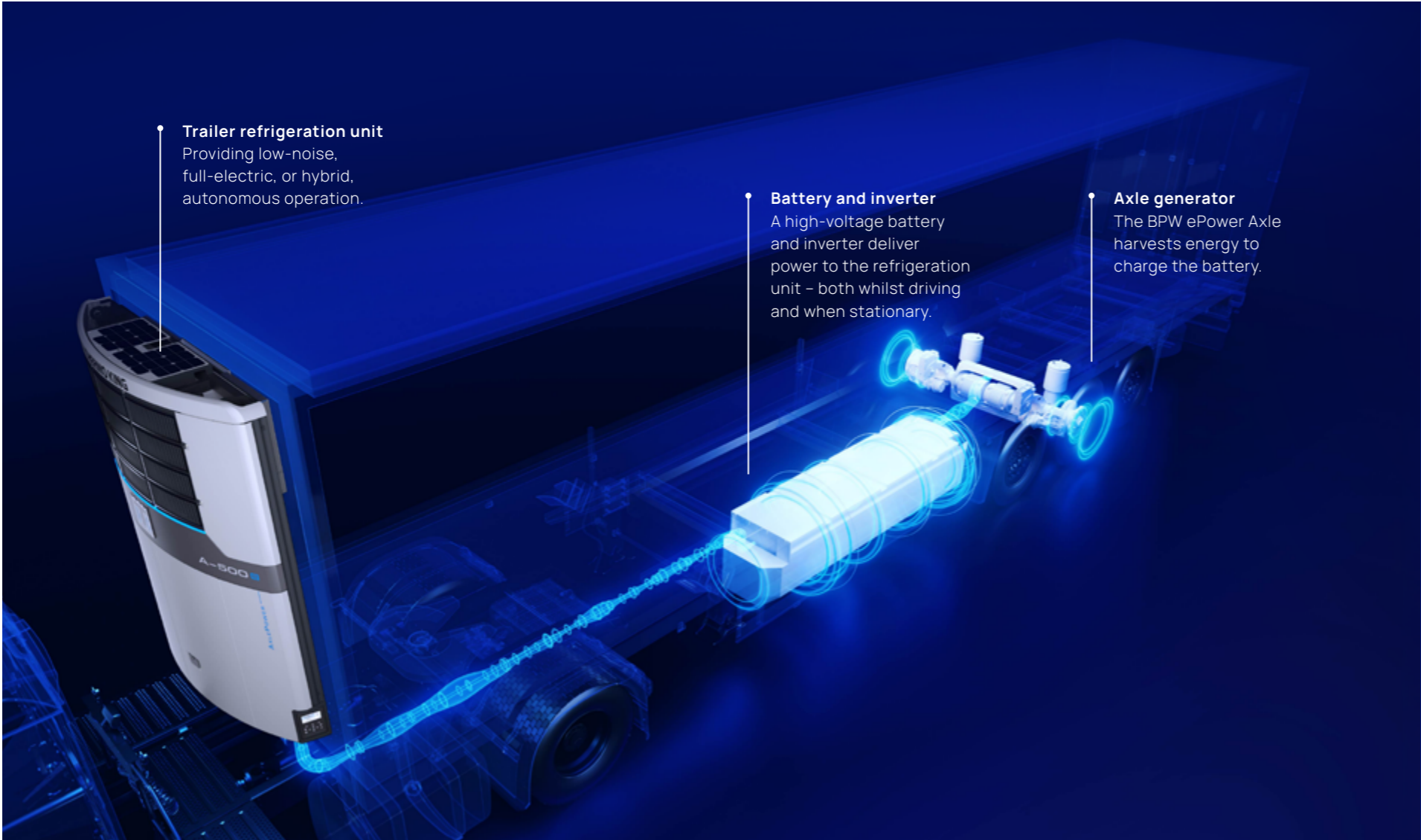
The standard in refrigerated transport with ultra-efficient operations and fully variable airflow.

Ultra-precise multi-zone temperature control to unlock the full potential of your fleet.

ADVANCER ELECTRIC

The first all-electric Advancer that enables zero emission.

Ultra-precise multi-zone temperature control to unlock the full potential of your fleet.



70-100%
fuel saving per refrigeration unit

100%
Electrical use of your refrigeration unit

100%
Emission-free refrigeration

No range anxiety
Break away from the charging infrastructure and stay on the road

Refrigeration powered by free and sustainable energy.

Cut down on fuel usage with electric low-noise power generation. And capture the full potential of electric cooling while enabling full fleet flexibility on all operational levels.

During routine operation, power is captured and stored in the AxlePower Energ-e Pack. With our propriety **Smart Power Management** software, AxlePower automatically switches to the right charging mode, without driver intervention.

MIX AND MATCH TRAILERS AND TRACTORS

AxlePower is mounted entirely on the trailer. Thanks to this tractor-independent design, you can mix and match it with any tractor on your fleet, regardless of powersource. Diesel, LNG, CNG, hydrogen or fully electric? No matter your choice of tractor, AxlePower is unaffected.

SUSTAINABLE IN EVERY WAY

Your refrigeration unit draws power from the **Energ-e pack, running 100% on electric power.** That means less noise, less emissions and less fuel.

With Advancer AxlePower, your trailer runs fully compliant and quiet operations to deliver anytime, anywhere.

SMART MADE SIMPLE

Track your battery performance in real time with **Connected Solutions.**

No more worrying about running out of power, but in-depth monitoring, reporting and automation of your battery status via the TrackIng web portal.



Smart Power Management

AxlePower automatically switches to the right charging mode, depending on your journey.

RECUPERATION MODE

Recover energy when the tractor is braking or going downhill, charging up the battery and providing you with zero-emission energy to power the unit.

PASSIVE MODE

When there is ample battery charge or when the refrigeration vehicle is transporting non-temperature sensitive products.

ACTIVE MODE

When there is insufficient battery charge and energy generation to power the unit. The engine pulls a little harder, so the activated axle generators can maintain speed and harvest enough power.

HYBRIDDRIVE

Switch from diesel to electric.

Use one unit to perform urban as well as interregional deliveries. Advancer's sustainable HybridDrive seamlessly switches between diesel and electric, offering you the best of both worlds.

- FUTUREPROOF**
Compatible with major alternative fuel sources: CNG, LNG, biofuel.
- LONGER UNIT LIFE**
Fewer engine operating hours to keep your unit longer in prime condition.
- PEACE OF MIND**
Easily enter inner-cities with automatic geofencing.

AVAILABLE ON



ADVANCER SINGLE-TEMPERATURE

The standard in refrigerated transport with ultra-efficient operations and fully variable airflow.



ADVANCER MULTI-TEMPERATURE

Ultra-precise multi-zone temperature control to unlock the full potential of your fleet.



90%
Emissions cut for full access in urban areas

5,000 liters
Save up to 5,000 liters of fuel per unit per year on interregional deliveries

13,500 kg
Reduce up to 13,500 kg of CO₂ emissions per unit per year

BE-TECH

Battery-powered innovation.

Go all out in your goal to combine sustainability and performance, with fully-electric refrigeration units. Reduce your fuel consumption while upping your sustainability - without compromising on reliability.

This technology plugs directly into your BEV's battery or connects to an external battery for 100% emission free cooling, with limited impact on your (e-)vehicle range.

Our battery solutions are highly modular and effortlessly fit onto your vehicles to provide an emission-free alternative or backup to engine-power!

- FUTURE-READY**
Meet urban access regulations both day and night.
- PLUG-AND-PLAY**
Quick and easy installation.
- HIGH EFFICIENCY**
lowest impact on (vehicle) battery autonomy.

AVAILABLE ON



- ADVANCER ELECTRIC**
Futureproof your fleet with engineless, zero-emission cooling.



- 100%**
Electric operations: emission-free refrigeration
- 15 kWh - 105 kWh**
Highly modular, to fit your needs
- 24/7**
Access to the last mile

Performance-enhancing services & solutions



Don't settle for less, when you can take it to the max. With a complete range of smart services and digital solutions, Thermo King helps you maximize uptime, sustainability, savings and control all throughout your operations. Keep your unit performance up, and your worries down. All day, every day.

- + MAXIMIZE YOUR UPTIME**
Avoid costly downtime and keep your units going and earning for longer.
- + MAXIMIZE YOUR SUSTAINABILITY**
Limit your fleet's footprint and save smart on energy.
- + MAXIMIZE YOUR SAVINGS**
Reduce service and maintenance costs, and maximize your units' residual value.
- + MAXIMIZE YOUR CONTROL**
Monitor and maintain critical cargo quality at every step of your journey.

LOOKING FOR YOUR MAX?

Thermo King's certified dealers are at your service 24/7 and our network is available all across Europe. Visit our website to locate your closest dealer.



Get your max at
[europe.thermoking.com/
max-your-cool](https://europe.thermoking.com/max-your-cool)




GAIN MAXIMUM INSIGHT WITH TRACKING TELEMATICS


Keep an eye on your unit while it's out on the road. With Thermo King's TrackKing, part of our **Connected Solutions** portfolio, you stay updated on every aspect of your unit, in real-time. Track performance, keep an eye on temperatures and get immediate notification in the case of problems. **Two-way communication** allows you to respond quickly and remotely change settings when needed.


Every A-Series unit includes a **free two-year subscription** to our Connected Solutions service. Included in the purchase price are all the hardware and software needed to get the service up and running from day one.


Mix and max.

With a complete range of smart services and digital solutions, Thermo King helps you **maximize your uptime, sustainability, savings, and control** throughout your operations. From industry-leading telematics to customizable service agreements and performance-enhancing upgrades. **Explore the building blocks of our integrated portfolio right below.**

 **CONNECTED SOLUTIONS**
Proactively **manage** your fleet and **monitor** your unit and cargo conditions from any location.

 **UPGRADES**
Enhance fleet performance with a vast array of original Thermo King upgrades.

 **SERVICE CONTRACTS**
Maximize **uptime** with quality maintenance, fast response times and 24/7 dealer support.

 **GENUINE PARTS**
Avoid the costs of poor repairs and insist on **genuine replacement** and **remanufactured parts**.

ADVANCER

The new landmark in trailer refrigeration.

FASTEST PULLDOWN

Engine independent airflow for superior performance

FUEL EFFICIENCY

Never before seen to keep your costs down

UNRIVALED TEMPERATURE CONTROL

To make sure you can deliver every load in perfect condition

ALTERNATIVE POWER SOURCES

Stay ahead of regulations. All units are compatible with our AxlePower, alternator or battery solutions

OPERATIONAL FLEXIBILITY

Available in single and multi-temperature configurations



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

Find your nearest dealer on
dealers.thermoking.com

Thermo King Europe – Lenneke Marelaan 6, B-1932 Sint-Stevens-Woluwe, Belgium
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TRANE
TECHNOLOGIES

