

# TX- and UT-Series Hybriddrive

Time to switch, time to win

SINGLE- AND MULTI-TEMPERATURE HYBRIDDRIVE  
REFRIGERATION SOLUTIONS FOR TRUCKS





# Content

HybridDrive: the challenges in today's transport world	3
HybridDrive: Time to switch	4
Thermo King combines proven technologies	8
Choose your HybridDrive	10

## Meeting tomorrow's challenges in transport today

Thermo King, undisputed leader in diesel-powered refrigeration, joined forces with Frigoblock, acknowledged experts in electric-powered solutions. The result, built on the success of the HybridDrive trailer range, is a full range of HybridDrive truck units. The TX- and UT-Series offer you the benefits of both diesel and electric power in a choice of single or multi-temperature configurations, nose-mount or undermount installations.

Diesel and electric energy sources each have their own advantages. By combining them in a HybridDrive, you can be assured that your operation will meet and exceed current and future environmental regulations. Thermo King HybridDrive truck solutions provide the lowest total cost of ownership and the smallest environmental footprint.

They enable refrigerated truck operators to meet tomorrow's challenges today:

- Reducing your environmental footprint to comply with ever more stringent requirements from customers
- Ensuring the distribution of fresh and frozen products in densely populated urban areas where access is limited to low-noise, low-emissions vehicles
- Retaining the flexibility and autonomy needed to operate either urban distribution or inter-urban transport
- Making the switch to game-changing technology while reducing your operating cost.



# TX-Series and UT-Series HybridDrive: Time To Switch

In an era where urban access and environmental responsibility are paramount, businesses need solutions that not only meet today's demands but also anticipate tomorrow's challenges. Hybrid technology offers an intelligent approach to fleet management, empowering you to navigate evolving regulations, enhance operational efficiency, and significantly reduce your environmental footprint.

### SWITCH FOR ACCESS AND PRODUCTIVITY

More and more cities are restricting or banning vehicles due to noise or diesel emissions. TX- and UT-Series HybridDrive ensure current and future access to these delivery locations, maximizing fleet utilization.

### SWITCH FOR A FUTURE-PROOF OPERATION

- Our HybridDrive solution means you can leverage the economy and low emissions of the most advanced GreenTech truck engines without compromising performance.
- Emissions can be cut by over 50 % while noise can be reduced to minimal levels for urban deliveries and improved driver comfort.

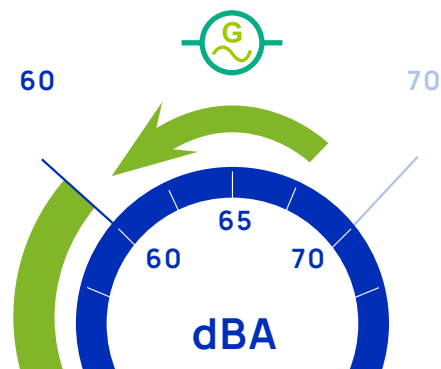
### SWITCH, CONNECT AND ADVANCE

- Thermo King BlueBox gives the TX- and UT-Series HybridDrive advanced connectivity and extended communication capability for optimized fleet management and productivity.
- The system automatically selects the best operating mode for the current circumstances. When the vehicle comes to a halt, the unit's controller monitors temperature requirements and vehicle location, to decide if diesel operation should be switched on.

### SWITCH AND SAVE

- Operational efficiencies mean that a full return on investment can be obtained within a short time period.
- Operating in HybridDrive mode can deliver substantial fuel savings when compared with diesel.
- Savings of up to 50 % of fuel and related CO<sub>2</sub> emissions per year are achievable for each vehicle operating in HybridDrive mode.

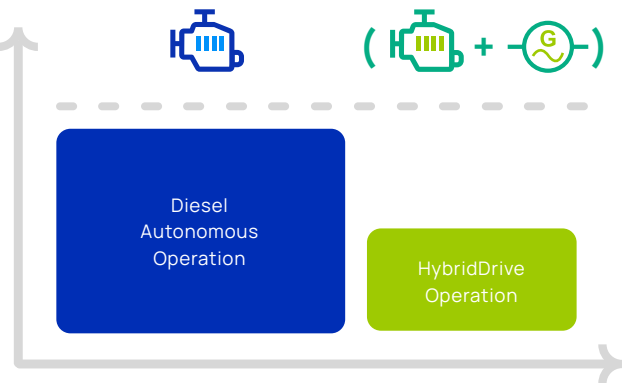
### SOUND PRESSURE (dBA)



**-6dBA**

HybridDrive mode can operate below 60 dB on average (model dependent)

### FUEL SAVINGS



UP TO  
**-50%**  
Fuel savings in HybridDrive mode



# TX-Series and UT-Series HybridDrive: Time To Switch

FULL SUPPORT FROM THE MOST EXTENSIVE DEALER SERVICE NETWORK IN THE INDUSTRY

Making the switch is easy. The Thermo King Dealer network employs 1400 certified technicians and is fully equipped to install and maintain advanced HybridDrive systems.

And with over 500 authorized service points open 24/7 in 75 countries, you will never be far away from expert support.



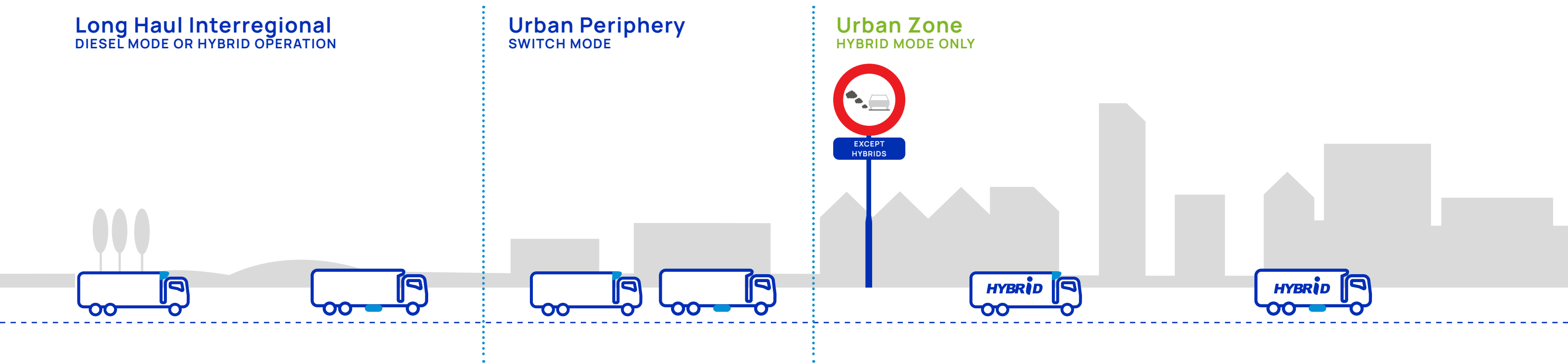
2019

2030

Long Haul Interregional  
DIESEL MODE OR HYBRID OPERATION

Urban Periphery  
SWITCH MODE

Urban Zone  
HYBRID MODE ONLY



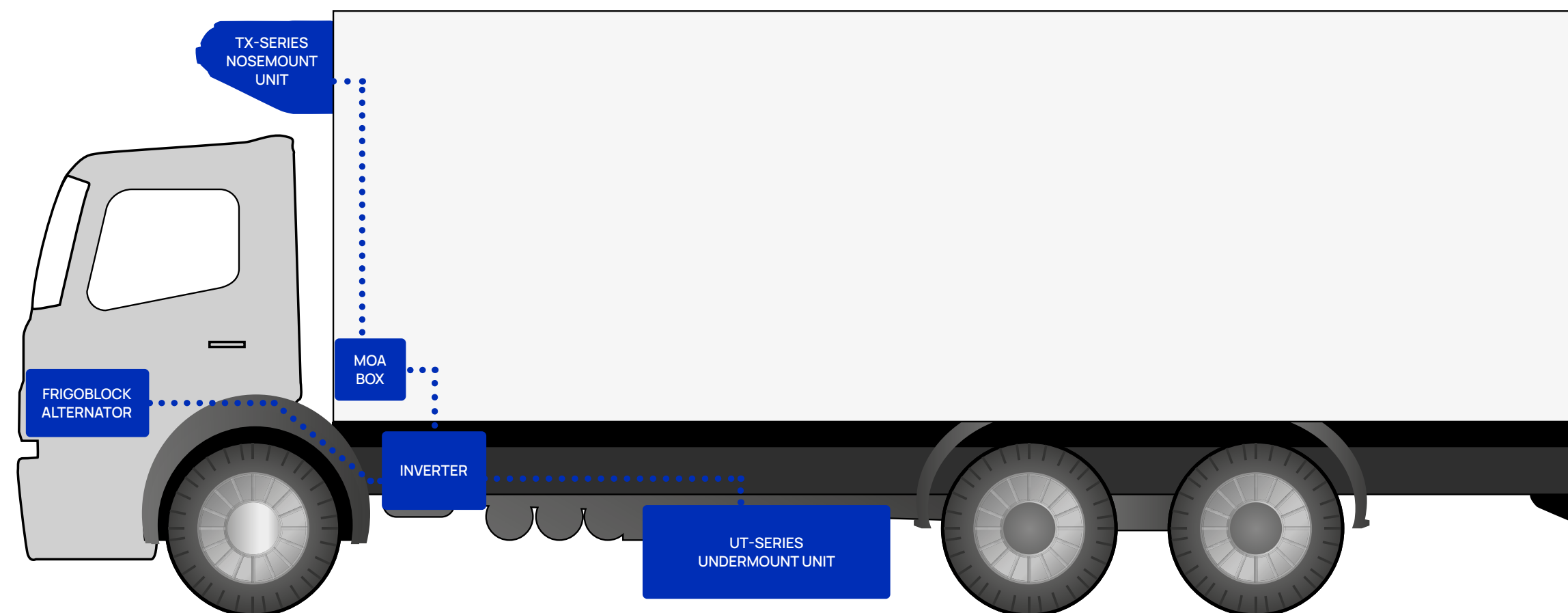
# Thermo King combines proven technologies

## THERMO KING TX- AND UT-SERIES HYBRIDDRIVE REFRIGERATION UNITS

- Units can run over the road on full electric or autonomous diesel power and on electric stand-by when parked.
- The diesel drive remains available when the truck engine is turned off.
- HybridDrive mode is available for all applications: single- or multi-temperature, standard or Whisper Pro.
- Low fuel consumption in HybridDrive and diesel operation.
- Thermo King BlueBox (available as a factory installed option) for the most advanced telematics and connectivity.

### MOA BOX

The MOA box (Mains or Alternator) allows the choice between powering the refrigeration unit through shore power cable or in hybrid mode via the alternator.



### PROPRIETARY ALTERNATOR AND INVERTER TECHNOLOGY:

Approved by leading truck manufacturers, our water-cooled asynchronous alternator combined with our inverter filter has been developed to provide:

- Constant voltage and frequency to the unit regardless of vehicle engine speed.
- Rapid start-up with low mechanical stress.
- Optimum load temperature control with minimum power consumption.
- With a compact design, low weight and an extended life.

### INVERTER

The inverter transforms electricity from alternator to power TX- and UT-Series refrigeration units.

- Delivers constant voltage and frequency to the unit regardless of vehicle engine speed.
- Guarantees rapid start-up of the unit with low mechanical stress.
- Provides optimum load temperature control with minimum power consumption.

### 'SHORE POWER' PLUG IN FOR ELECTRIC OPERATION AT LOADING DOCKS

The shore power plug-in provides grid electricity to the refrigeration system at any loading dock, eliminating diesel idling, reducing emissions, and lowering operating costs.



# Choose your HybridDrive

HybridDrive technology is available on a wide range of TX-Series and UT-Series models. In addition to a choice of nose-mount and undermount installations, you can choose from a range of multi-temp configurations. In this way you can optimize your vehicle utilization and delivery capabilities while maintaining exceptionally low cost of ownership.

All TX-Series and UT-Series models feature an extensive range of performance-enhancing options so you can tailor your fleet to your specific operational requirements.

By choosing a Thermo King HybridDrive, you demonstrate a strong commitment to minimizing your business's environmental footprint.

This includes significantly reducing carbon and particulate emissions, as well as operating noise.

With no compromise on ROI, performance or load protection, this is a choice you will want to make.



## TX-Series

### HYBRIDDRIVE NOSEMOUNT UNITS

- T-600X
- T-800X
- T-800X Spectrum
- T-1100X
- T-1100X Spectrum
- T-1300X
- T-1300X Spectrum
- T-1300X Whisper Pro
- T-1300X Spectrum Whisper Pro



Discover our TX-Hybrid Series at [europe.thermoking.com/truck/tx-Series/truck-hybrid](https://europe.thermoking.com/truck/tx-Series/truck-hybrid)

## UT-Series

### HYBRIDDRIVE UNDERMOUNT UNITS

- UT-1000R
- UT-1400R
- UT-R Spectrum



Discover our UT-Hybrid Series at [europe.thermoking.com/truck/ut-series/ut-hybrid](https://europe.thermoking.com/truck/ut-series/ut-hybrid)

# TX- and UT-Series Hybriddrive

- **DIESEL AND ELECTRIC POWER IN ONE UNIT**

Meet and exceed current and future environmental restrictions with the flexibility of HybridDrive

- **RETROFITTABLE**

There's no need to wait for new equipment purchases to benefit from HybridDrive

- **INCREASED ACCESSIBILITY**

Low noise and reduced CO<sub>2</sub> emissions increase accessibility to city center ULEZs and LEZs

- **PROVEN THERMO KING TECHNOLOGY**

Proprietary alternator and inverter technology converts power into electricity to power the refrigeration unit



Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport climate control solutions. We engineer and provide cutting-edge technology and solutions with sustainability, reliability, and the customer experience in mind. Thermo King has provided transport temperature control solutions for various applications, including trailers, truck bodies, buses, air, shipboard containers, and railway cars since 1938.

For further information  
[europe.thermoking.com](https://europe.thermoking.com)

Find your nearest dealer on  
[dealers.thermoking.com](https://dealers.thermoking.com)

