

## FOR IMMEDIATE RELEASE

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## Thermo King to Showcase New Sustainable Thermal Management Solutions at 2023 Busworld in Brussels, Belgium

*The new Athenia™ ENVI R-744 CO<sub>2</sub> heat pump with natural refrigerant for electric and hybrid buses to highlight the Thermo King exhibition at Busworld.*

**Brussels, Sept. 29, 2023** – [Thermo King®](#), a leader in transport temperature control solutions and a brand of [Trane Technologies](#), will present latest innovation in thermal management systems for clean and sustainable passenger and driver comfort in all types of buses, at Busworld 2023 in Brussels, Belgium, from October 7 – 12, 2023.

"At Busworld we not just want to showcase products but emphasize Thermo King's dedication to a holistic and tailored approach to bus thermal management systems," said Urszula von Kreijfelt, commercial director for Thermo King Bus. "From sustainable heat pump solutions using natural refrigerants to highly customized, integrated systems, our presence at Busworld reiterates our commitment to the passenger transport sector. We partner with OEMs and respond to all customer requirements with the joint goal to shape the today and future of sustainable passenger transport."

Visitors to the Thermo King **stand 426 in Hall 4** will see the new **Athenia™ ENVI Heat Pump with R-744 (CO<sub>2</sub>)**, an environmentally friendly, natural refrigerant designed specifically for electric and hybrid buses and optimized to deliver passenger comfort and sustainable operation with market leading performance. Thermo King exhibition will also spotlight complete, customizable thermal management systems for all types of buses including new systems for buses below 12 metres length and vehicles operating in high ambient regions.

- **Thermo King Athenia™ ENVI Heat Pump with R-744 (CO<sub>2</sub>)** – an "all-in-one", highly customised rooftop unit featuring an environmentally friendly, natural refrigerant, optimized to keep the driver and passengers at the right comfort level with heating, cooling and fresh-air control.

The R-744, often named CO<sub>2</sub>, is a natural, non-toxic, non-flammable and non-ozone-depleting refrigerant with global warming potential (GWP) of just 1. Thanks to its capabilities, the new Thermo King Athenia™ ENVI heat pump has been optimized to offer maximum passenger comfort not only during the summer months when cooling is required, but also during the coldest winters – with no need for additional heaters or boilers.

The unit can operate in heating mode in ambient temperatures as low as -25°C and deliver cooling when the temperature is as high as +50°C. Simultaneously the unit protects the bus

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driveline batteries by providing cooled or warmer water to condition them during charging and discharging.

The integrated Battery Thermal Management System optimizes overall energy use, ensuring high coefficient of performance (COP) levels of the system and reducing lifecycle costs. The “all-in-one” unit can also utilize waste heat from other sources in the vehicle to further optimize energy usage and contribute to passenger comfort.

The Thermo King Athenia™ ENVI heat pumps already provide sustainable comfort cooling and heating to the Ebusco buses operating in Berlin as part of one of the largest electric bus fleets in Germany.

- **Thermo King Athenia™ APX** – the high-capacity cooling only unit for high ambient areas offers unparalleled performance and airflow to secure optimum passenger performance in tropical ambient conditions. The Athenia™ APX features a high efficiency screw compressor for increased durability and is available in both electric and diesel version. The unit is suitable for electric, diesel or hybrid intercity, tourist and city buses.
- **Thermo King S30E Heat Pump**– an ultra-low profile, one-piece compact rooftop heat pump unit for mini and midi buses below 12 metres. The unit is presented by Thermo King for the first time in Europe and offers fast pull down, heat pump with PTC heater (option), accurate temperature control with high efficiency and low noise DC fans.

"Thermo King Bus HVAC is committed to providing sustainable solutions that keep passengers, drivers, and staff comfortable while also benefiting operators with a turnkey solutions, knowledge and controls tailored to their bus types," said Peter Hansen product leader Thermo King Bus. "We offer bus manufacturers and bodybuilders application expertise and best in class solutions with a variety of customized options and accessories, such as front boxes, floor heating convectors, auxiliary heaters and waste heat utilization, CO<sub>2</sub> sensors, and other elements, all managed by a single Thermo King proprietary controller."

For more information about the Thermo King solutions, please visit [www.europe.thermoking.com](http://www.europe.thermoking.com).

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## About Thermo King

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 more information, visit [www.europe.thermoking.com](http://www.europe.thermoking.com) or [www.tranetechnologies.com](http://www.tranetechnologies.com).

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