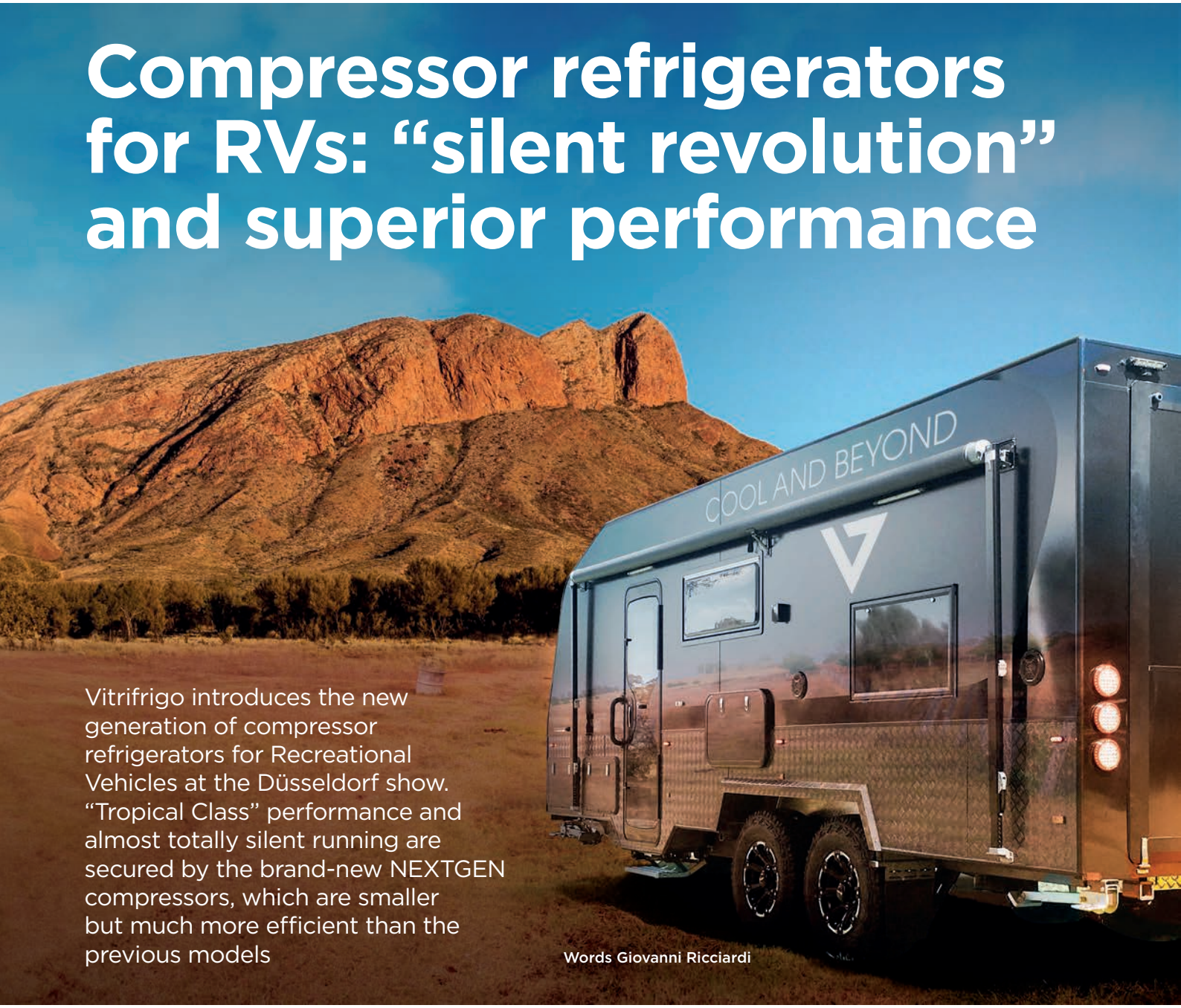
Compressor refrigerators for RVs: “silent revolution” and superior performance



Vitrifrigo introduces the new generation of compressor refrigerators for Recreational Vehicles at the Düsseldorf show. “Tropical Class” performance and almost totally silent running are secured by the brand-new NEXTGEN compressors, which are smaller but much more efficient than the previous models

Words Giovanni Ricciardi

The caravaning world is constantly evolving and is always looking out for more comfortable and functional solutions. Refrigerators are very important appliances and sure to make the travel experience really enjoyable, particularly during layovers.

In a world where summers are getting hotter and recreational vehicle batteries are getting bigger and more powerful, refrigerators have been at the center of a major technological evolution, and modern RVs are finally ready to move away from threeway technology and embrace the new generation of compressor refrigerators.

Vitrifrigo is an Italian company with established experience in the refrigeration industry and has focused on technological innovation and design since its founding. NEXTGEN compressors provide efficient and extremely performing cooling, achieving T-class (tropical) performance. This means that smaller components can be used in order to dramatically decrease power consumption and noise. NEXTGEN compressor technology is the expression of a true generational leap. Its advantages include:

- *Performance*: Vitrifrigo solutions guarantee the highest level of performance under all conditions of use resulting from unique process development and product refinement. The food and drinks inside

the refrigerator will always be at the right temperature.

- *Quiet running*: The new compressor is considerably smaller than conventional technology but performs 25% better. Because of these characteristics, it needs much smaller fans for operation which means quieter running. Night Mode can be selected to further lower mechanical buzzing while sleeping.
- *Low weight*: The use of new materials and innovative design makes the refrigerators equipped with NEXTGEN compressor up to 40% lighter than conventional models.
- *Minimal consumption*: The efficiency of the new compressor results in 25% lower energy consumption under normal conditions. The Night Mode function provides additional savings of up to 30-35%.
- *Sustainability*: Vitrifrigo was one of the first companies to use natural gas (isobutane) in its refrigerators, a very important ecological choice for the RV industry.

SLIM series models: the top of the 12/24V segment for vans and motorhomes

NEXTGEN compressor refrigerators are derived directly from Vitrifrigo's experience in Australia, where Expedition Vehicle and off-road vehicle outfitters are called to provide exceptional refrigeration performance while meeting the safety and self-sufficiency requirements demanded of vehicles designed to cross the desert in extreme conditions. *"Regardless of how hot and tough the journey has been, when Australian customers stop for layovers the first thing they do is crack open a beer, and it has to be ice-cold"*, Michele Marchionni, Business Development Manager for Vitrifrigo's Leisure sector, told us.

The SLIM line was created precisely to offer this kind of performance in a market accustomed to relatively simpler conditions with no trade-off concerning performance or comfort inside the vehicle. Incidentally, the removable compressor means gaining about 10% of interior space. Two products, in particular, are the most representative of this evolution and will be among the highlights of the products showcased by Vitrifrigo in Düsseldorf:

SLIM90: The choice of materials and the next-generation compressor make it one of the lightest solutions on the market (19,3 kilograms compared to the segment average of 23 kilograms). It has a large 10-liter freezer compartment capable of reaching temperatures down to -18°C. The door can be paneled to allow installation consistent with the vehicle style. The refrigeration unit is removable, meaning that it can be installed outside the living pod (at a maximum distance of 150 centimeters) to eliminate noise completely.

SLIM250: Designed specifically for Expedition Vehicles and Off-Road caravans but suitable for any type of recreational vehicle that needs a fridge of this size, it offers space and performance comparable to a home appliance with one-of-a-kind versatility of use. The SLIM250 is split into two independent volumes. The upper 190-liter volume works as a refrigerator to a temperature of 2°C, while the lower 60-liter well can work as a refrigerator or freezer to a temperature of -18°C. The refrigerator/freezer unit fits two NEXTGEN compressors installed internally but its sound insulation and technical features make it extremely quiet and also suitable for installation in the sleeping area.

All devices in Vitrifrigo's SLIM line offer the Night Mode function, which reduces noise and consumption, and the Turbo function, which pulls down the temperature of the compartments faster, this is ideal while traveling. The compatible power supply is either 12 V or 24 V.

Technical specifications	Slim 90	Slim 250
Total capacity	90 liters	250 liters
Freezer compartment	10 liters, to -18°	60 liters drawer, to -18°
Net weight	19,3 kilograms	51 kilograms
Refrigeration unit	remotable up to 150 centimeters	double indoor unit in a soundproof compartment
Turbo mode	accelerated temperature abatement	
Night mode	noise decreased by an additional 30%	
Power supply and nominal consumption	12/24 VDC, 75 W	
Customizable panel	yes	

From family business to successful multinational corporation

Vitrifrigo was founded in Pesaro in 1978, and during its 46-year history, it has enjoyed steady growth, which has allowed the company's total sales to multiply almost fourfold over the past decade. Vitrifrigo now also has a presence in the United States, where it opened a business unit in 2005, and manufactures products in 5 plants using top-notch materials and state-of-the-art production techniques. The company prides itself on its multidisciplinary approach to the world of refrigeration and manufactures devices for many different uses, including minibars, medical transport, yachts, RVs, and trucks.

Vitrifrigo produces 200,000 refrigerators each year that are installed by thousands of customers worldwide. Such a large network obviously needs support, which is offered through 350 service points in Europe and almost 500 worldwide.

Following the experience gained in 230 V products, Vitrifrigo has adopted isobutane natural gas within its entire product range, becoming one of the very first companies in the RV world in 100% compliance with European pollution laws, well before the polluting gas ban became mandatory.

Technological innovation, attention to design, and love for the environment have always been the values that drive Vitrifrigo.