



Revolutionize your cold chain: introducing
EUROFRIGO electric vehicle's
refrigeration units



“The progressive development of man depends on inventions.

They are the most important result of the creative faculties of the human brain.

The ultimate goal of these faculties is the complete mastery of the mind over the material world, the achievement of the possibility of channeling the forces of nature to satisfy human needs.

Nikola Tesla



Founded in Italy in 1960 by Luciano Menozzi, EUROFRIGO is synonymous with automotive temperature control, high build quality and innovative design.

EUROFRIGO is among the world's leading producers of vehicle temperature control systems. To play a critical role in shaping the transformation as we head into a new era of mobility, the Company is implementing a step-by-step strategy.

Strategy

Sustainable success is based on a long-term vision and an innovative strategy. A clear commitment to electric mobility is fundamental in EUROFRIGO's strategy. Over the next five years, the company will expand its E-motion product portfolio: by 2024, EF plans to offer a fully electric temperature control solution in all major segments. EUROFRIGO is accelerating its transformation into the leading provider of sustainable e-tcs (Electrical Temperature Control Solutions).

Compliance and risk management

Our business actions are based on forward-looking risk management, uniform group-wide frameworks, which are based on a compliance management system, as well as a circular hierarchy based on integrity where management and employees act with integrity, full responsibility. This way we guarantee the good reputation of our company, the trust of our clients and business partners and the well-being of our employees.

Sustainability

Climate change mitigation, responsible use of resources, social advancement and social justice are among the great challenges of our time. EUROFRIGO assumes economic, ecological and social responsibility and has made sustainable business operations an integral part of all its decisions and products.

Three fundamental aspects on the path to the goal: decarbonization, electrification and circular economy.

Stakeholder management

We rely on the opinions and suggestions of relevant stakeholders to guide us in the future development of our strategy and performance. In addition, the company is committed to advancing issues related to the environment, the economy and society.

Employees and corporate culture

EUROFRIGO always focuses attention on people. To do this, the company monitors many different areas, such as the changing world of work, work-life balance, the desire to learn or health and safety. The transformation affects all areas of the company. Digitalization, globalization, electrification and disruptive business models are shaping it. Our industry is experiencing one of the most exciting decades in its history. EUROFRIGO employees are driving fundamental change, with ambitious goals, passion for technology and innovative cultural change.

EXPERIENCE

EUROFRIGO has been a pioneer in electric refrigeration equipment when it launched its first fully electric 12VDC system in 1978.

These ME090 12V DC units helped hundreds of customers operating in dairy distribution make temperature-controlled deliveries to stores across Italy.

The evolution was the ME110 with improved design and performance and which gained popularity thanks to its reliability.

In the late 2000s, UK big large department stores began exploring the EV market and their only choice was EUROFRIGO, eventually with a dedicated 240VDC cooling unit developed for a specific EV manufacturer and later with 12 VDC electrical units. More than 1,200 units were put into service and performed above customer expectations.

PRESENT AND FUTURE

Introducing our innovative line of electric transportation refrigeration units, where cutting-edge technology meets sustainability. Designed to revolutionize cold chain logistics, these units offer efficient and environmentally friendly solutions for the transport of temperature-sensitive goods.

Embrace the future of refrigeration with our reliable and environmentally friendly products.

EUROFRIGO E-MOTION electrical product line designed to be innovative and disruptive to revolutionize the industry.

With the experience gained in more than 45 years manufacturing electric drive solutions, we now present a complete range of 12, 24, 48, 72, 312 and 540VDC refrigeration units that stand out for their cooling capacity, simplicity and efficiency.

Connected either to the 12 or 24VDC auxiliary battery, to the vehicle's 72, 312, 540VDC traction battery or equipped with a completely independent and fully integrated 48VDC LiFePo4 battery, our E-MOTION range offers cooling capacities from 1 to 7kW at 0°C and 0.6 to 3.7kW at -20°C (+30°C ambient according to ATP conditions).

Whether it is a roof top, over cab or under chassis solution to suit virtually all applications in vans, rigid trucks and light trailers.

B1—B2

B5—B6



B3—B4

Embark on a greener journey: welcome to the future of refrigerated transport with EUROFRIGO.

Our new range of electric refrigeration units is designed to transform the way you transport temperature-sensitive cargo.

Nominal Technical Data



Model	Compressor	Capacity 0°C Watts	Capacity -20°C Watts	Volume max advised m3	Evap. Air flow m3/h	Consumption (max)	Voltage (VDC)	Gas	MT	Weight Kg
B1	ESC14H	1250	450	4	840	0,8 kW/h	12 / 24	R134A	-	45
B2	ESC14M	1800	750	8	840	1,4 kW/h	12 / 24	R452A	-	47
B3	ESC28L	3000	1500	12	840	2,2 kW/h	48/72/312/540	R452A	0	75
B4	ESC28M	4100	2000	16	1440	2,2 kW/h	48/72/312/540	R452A	0	90
B5	ESC28H	5200	2500	24	1440	2,6 kW/h	48/72/312/540	R452A	0	120
B6	ESC34H	7500	3250	36	2120	3,7 kW/h	48/72/312/540	R452A	0	145

Models B3, B4, B5 and B6 can be supplied with our self-contained LifePo4 battery pack.

Autonomy granted and guaranteed for each model.

Modelo	Modulo 1 (Horas)	Modulo 2 (Horas)	Modulo 3 (Horas)
B3	10	20	-
B4	8	16	-
B5	5	10	15
B6	3	6	9
Peso (kg)	40	80	120

The autonomy may vary from the indicated value depending on the type of use, environmental conditions and aging.

Introducing our next-generation lithium iron phosphate (LiFePO₄) battery pack, the pinnacle of energy storage technology. Designed to redefine power solutions, our LiFePO₄ battery pack offers unparalleled performance, safety and longevity for a wide range of applications.

Key Features:

1. Long-lasting performance:

Benefit from a long lifespan, providing significantly more charge and discharge cycles compared to traditional batteries.

2. High energy density:

Experience exceptional energy storage capacity in a compact, lightweight design, optimizing Use of space without compromising power.

3. Fast charging:

Enjoy fast and efficient charging times, reducing downtime and ensuring your devices or systems are ready to go when you need them.

4. Improved Security:

Built with inherent safety features, our LiFePO₄ battery pack is thermally stable, minimizing the risk of overheating or thermal runaway. It is also inherently resistant to fire hazards.

5. Stable voltage output:

Maintain a constant and stable voltage output throughout the discharge cycle, ensuring a and reliable power supply for your applications.

6. Wide operating temperature range:

It operates smoothly in a variety of environments with the wide temperature range of our battery pack, making it suitable for various applications and climates.

7. Environmentally friendly:

Embrace a greener future with our LiFePO₄ battery, which contains no harmful heavy metals and is fully recyclable, contributing to a more sustainable energy landscape.

8. Integrated Battery Management System (BMS):

Ensure optimal performance and safety with our advanced BMS, which monitors the health of individual cells, balancing charge levels and protecting against overcharging or discharging.

9. Reliability and Guarantee:

Rely on the robust and reliable design of our LiFePO₄ battery pack, backed by a comprehensive Warranty to give you peace of mind.

Whether you need an application for a shop truck, a modern electric vehicle or simply want to have a fully independent cooling unit for your ICE vehicle, here are the benefits of our E-Motion range:

Environmental impact:

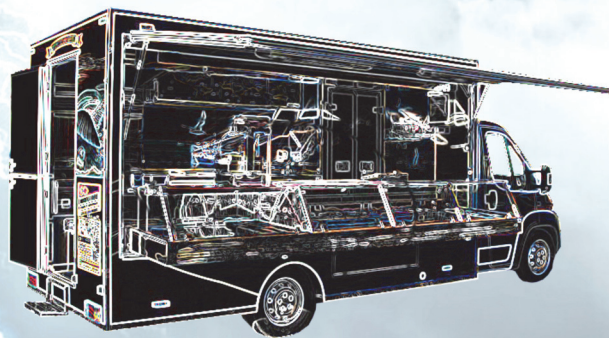
Reduced emissions:

E-Motion units help reduce greenhouse gas emissions compared to traditional diesel-powered refrigeration units. This is especially significant in the context of sustainability and efforts to mitigate climate change.

Energy efficiency:

Greater Efficiency: E-Motion units are designed with advanced technologies and better energy efficiency compared to traditional systems. This efficiency leads to lower energy consumption, reducing overall operating costs.

Silent operation



Lower noise levels – E-Motion units run quieter than their diesel counterparts, resulting in less noise pollution. This is especially advantageous in urban areas where noise restrictions may apply.

Savings on fuel costs:

Lower operating costs: By relying on electric power instead of diesel fuel, E-motion offers long-term cost savings. This is particularly beneficial as electricity costs can be more stable and predictable than fuel prices.

Flexibility and Independence:

Independent Operation: E-motion units are designed to operate independently of the vehicle's engine. This allows for greater flexibility in terms of when and where the cooling unit is active, without being tied to the movement or idling of the vehicle.

Temperature accuracy:

Precise Temperature Control – E-Motion units feature advanced temperature control systems that can maintain a precise and constant temperature within the refrigerated compartment. This is crucial to preserve the quality and safety of perishable products.

Reduced maintenance costs:

Fewer Moving Parts: E-Motion units have fewer moving parts compared to traditional systems. This results in lower maintenance costs and reduced downtime, contributing to greater reliability.

Normative compliance:

Compliance with regulations: The use of E-Motion units can align with increasingly strict environmental regulations and restrictions on noise and emissions in various regions. This helps companies comply with local and international standards.

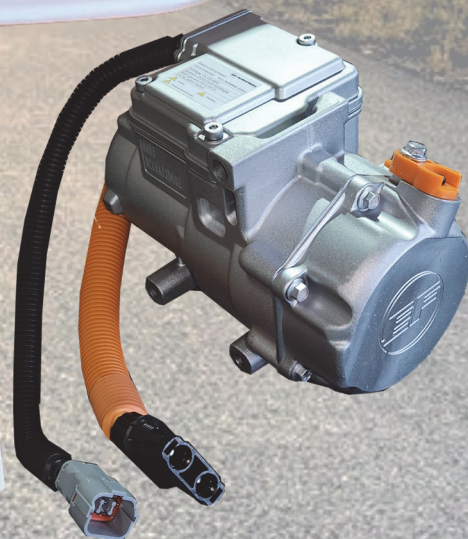
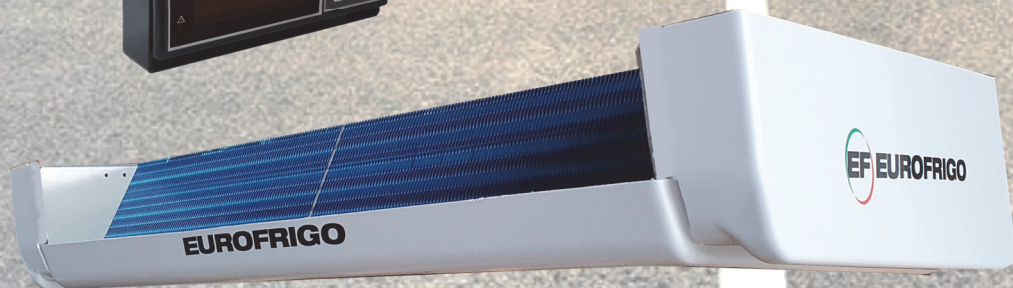
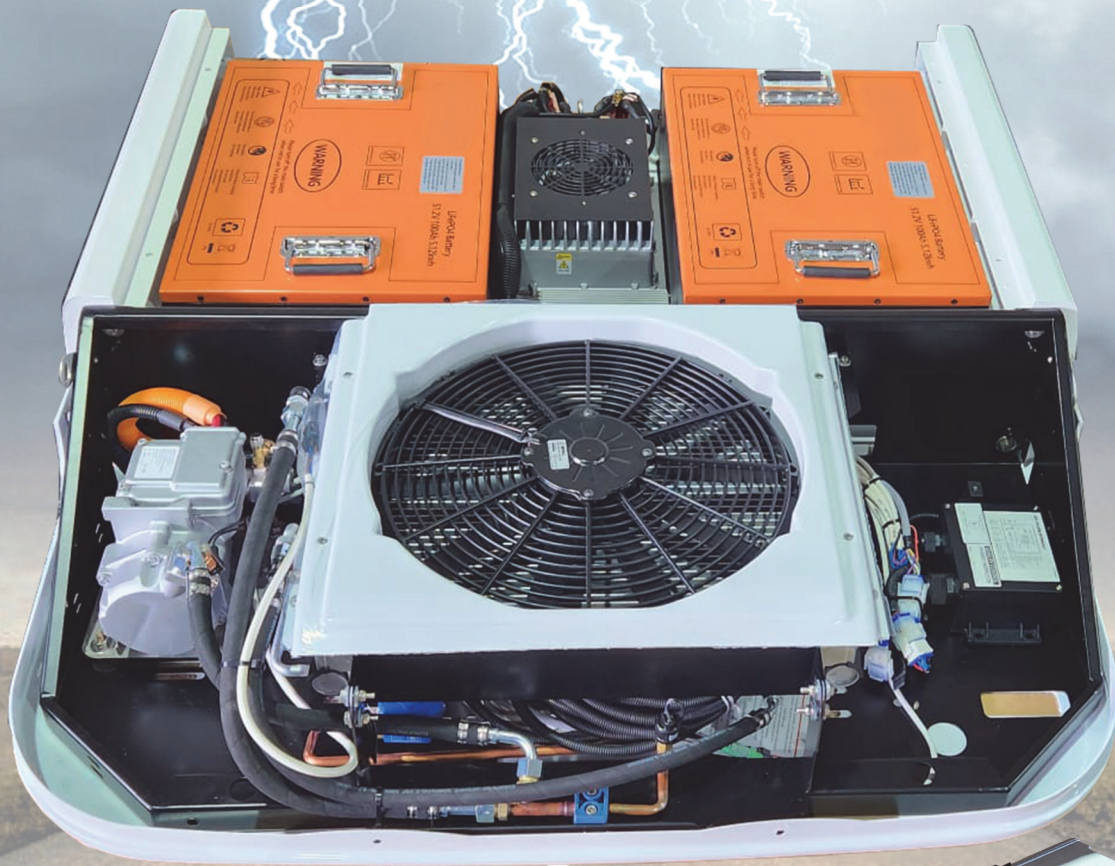
Long-term sustainability:

Future-proofing: As the world moves towards a more sustainable future, the adoption of E-Motion drives positions businesses to align with evolving environmental standards and consumer preferences, contributing to long-term sustainability.



In summary, the benefits of E-Motion refrigeration units span environmental considerations, cost savings, operational efficiency and regulatory compliance, making them a compelling option for companies involved in the transportation and storage of food-sensitive products.

La tecnología



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E MOTION



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