



SUPRA® HE SERIES

**PERFORMANCE AND HIGH
EFFICIENCY FOR ALL YOUR
DISTRIBUTION NEEDS**



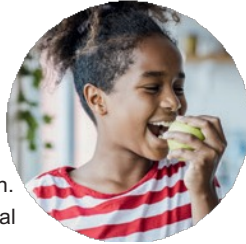
DELIVERING CONFIDENCE

At Carrier Transicold, confidence is what drives us forward. We provide healthy, safe, sustainable and intelligent cold chain solutions offering advanced connectivity and visibility and delivering innovation to reduce waste and ensure temperature-sensitive goods arrive in optimal condition. We provide customers with advanced, energy-efficient and environmentally sustainable truck refrigeration systems.

OUR COMMITMENTS

#1 A strong, committed and industry-leading brand

- Over 100 years of historical recognition in healthy, safe, sustainable and intelligent cold chain solutions.
- An established presence throughout EMEA with the regions' largest refrigerated vehicle service network.
- An all-inclusive range of best-in-class products and services to answer our customers' needs.
- Dedicated, highly skilled workforce providing reliable refrigeration solutions to support client needs.
- Award-winning, certified expertise in sustainability, electrification, digitalization and noise emission reduction.
- Committed to moving the cold chain forward to help preserve, protect and extend the supply of food and vital medicines.



#2 Advanced, innovative and high-performance products

- An innovation-driven culture with more than 30 products developed in the last 5 years.
- Continued focus on fully electric solutions from the 1999 E-Drive™ technology to engineless refrigeration and hundreds of Vector eCool™ all-electric systems operating in Europe and Australia in 2022 to shape the future of refrigerated transport.
- Reduce overall Total Cost of Ownership (TCO) with a clear focus on reducing fuel consumption and pollution emissions.
- Lynx™ Fleet digital solutions to connect and unlock customer equipment potential through extended performance optimization.



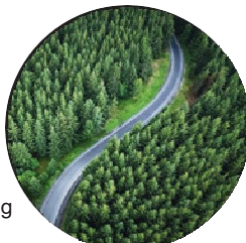
#3 Customer satisfaction is at the heart of our day-to-day operations

- Customer-centric focus to proactively resolve issues and anticipate needs to exceed customer expectations with tailor-made solutions.
- Unparallel access to the largest service network for transport vehicles in EMEA.
- More than 600 sites, 700 mobile units, 2,200 service technicians, and 24/7 assistance for unmatched availability.
- Maximize efficiency of customer activities and provide ultimate protection for transported goods with total life-cycle support and guaranteed carefree mobility.
- Adapt to customers' technological choices by offering alternative energy products with the lowest carbon footprint.



#4 Supporting Carrier's 2030 ESG goals to reduce our customers carbon footprint by more than 1 gigaton

- Solutions using alternative power sources such as electricity, compressed natural gas (CNG) and hydrogen contribute to the decarbonization of transport refrigeration solutions.
- Fully electric options available across 100% of our segment.
- Reduce overall emissions of our products during use, fuel consumption and noise emissions while improving efficiency.
- Offering low Global Warming Potential (GWP) refrigerants across all ranges.
- Strong focus on lowering energy intensity by 10% and achieving water neutrality in our operations by 2030.
- Continue efforts to help reduce food waste and loss and expand the cold chain across the world.



SUPRA HE SERIES: PERFORMANCE AND HIGH EFFICIENCY

SUPRA HE

The Supra HE series has been designed by merging mechanical and electric subsystems in order to offer efficiency improvement and product compactness for a truly versatile solution. Quieter, lighter and smaller, this unit has been tested in extreme ambient temperatures in order to provide the best uptime and reliability, resulting in a quick return on investment.

EFFICIENCY FOR LESS ENVIRONMENTAL IMPACT

The need for safe and sustainable cold chain technologies to preserve and protect the supply of food and medicine around the world has never been greater, this is why Carrier Transicold is committed to providing customers with advanced, energy-efficient and environmentally sustainable refrigeration units. With the Supra HE series, a focus has been made on overall system efficiency in order to significantly reduce energy and refrigerant consumption and ultimately reduce pollution emissions. Our Supra HE range helps our customers meet rapidly evolving supply chain demands while improve the overall environmental sustainability of their fleet and preserve our planet.

+ 4,500,000
running hrs

Achieved around the world



NEW ARCHITECTURE

A new technology designed for efficiency

When designing the new Supra HE range, the overall system efficiency has been significantly enhanced by reducing and improving energy links as well as downsizing major components. The semi-electric architecture that is both engine and electrically driven is the best option because it mixes mechanical transmissions to power the compressor and the engine, together with 12V DC electrical driven system for fans.

12V DC
electric drive system for fans

Full airflow always available

A new condenser airflow management

Condenser side
The Supra HE is equipped with a variable speed evaporator DC fan system in order to find the best compromise between energy consumption, RPM speed and refrigeration efficiency.

Evaporator side
Thanks to this technology, Supra HE can provide the necessary maximum airflow velocity during diesel operation or on grid mode. No compromises.

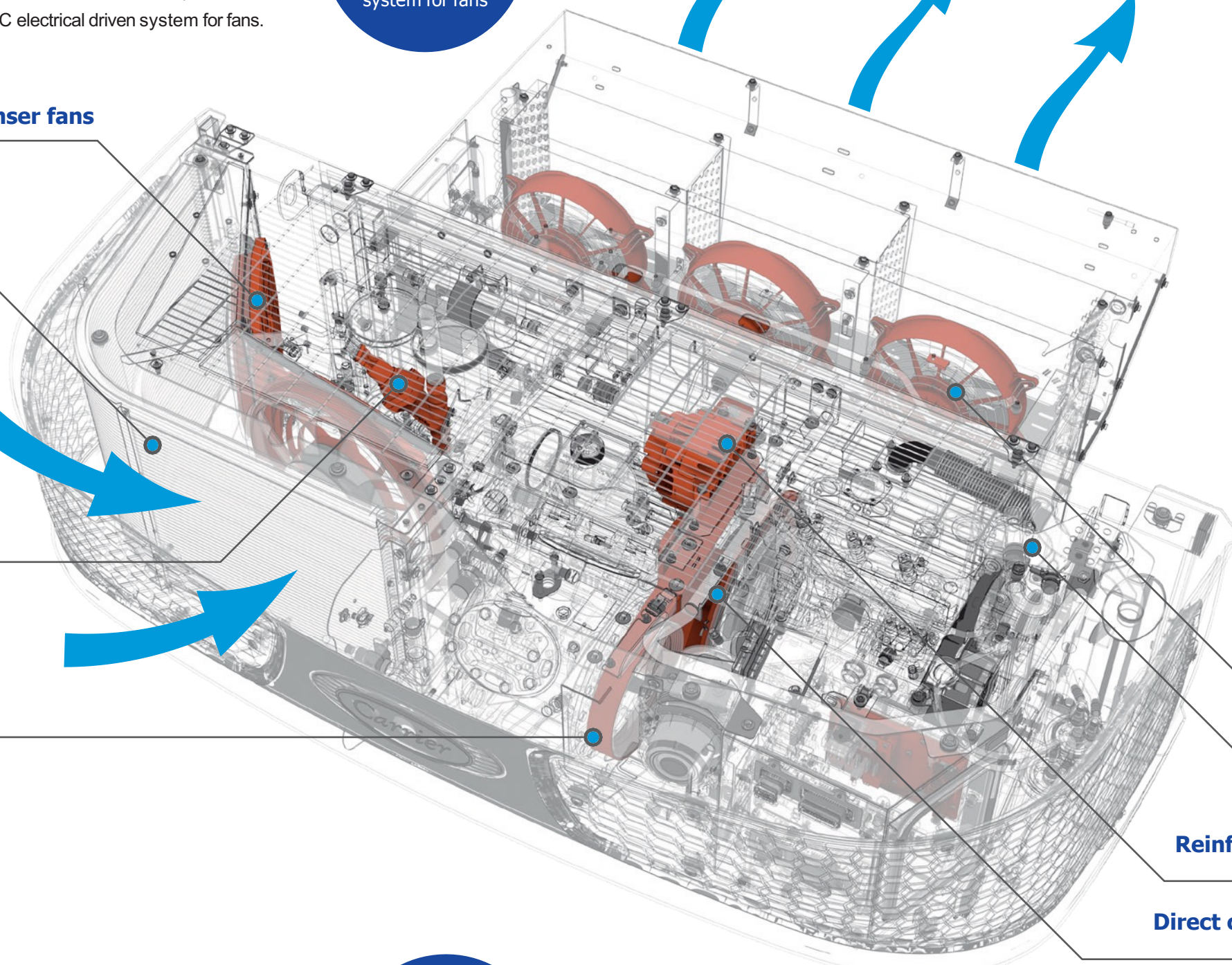
12V variable speed condenser fans

Microchannel condenser

Variable adaptive speed

SMV valve

One belt



12V long life evaporator fans

New 3 speeds engine

Reinforced 12V alternator

Direct coupling architecture

A new power train

The power train architecture has been simplified to move from a six belt design to only one. The Stage V Non-Road Mobile Machinery (NRMM) compliant power train now has a direct coupling architecture with 2-way communication Engine Control Unit (ENCU). Thanks to fewer parts, the power train results in a lighter, quieter and more compact, but also more efficient with less fuel consumption.

1 belt

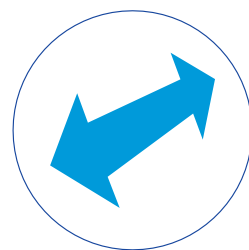
A new optimization refrigeration circuit

The design of the Supra HE range has been focused on refrigeration efficiency by improving temperature accuracy and ambient temperature capability. Thanks to this refrigerant loop, the Supra HE achieves up to 50% less refrigerant charge, braze joints have been reduced by -30% and better temperature control has been observed.

up to
-50%
refrigerant charge

*Compared to standard legacy Supra

COMPACT & LIGHT

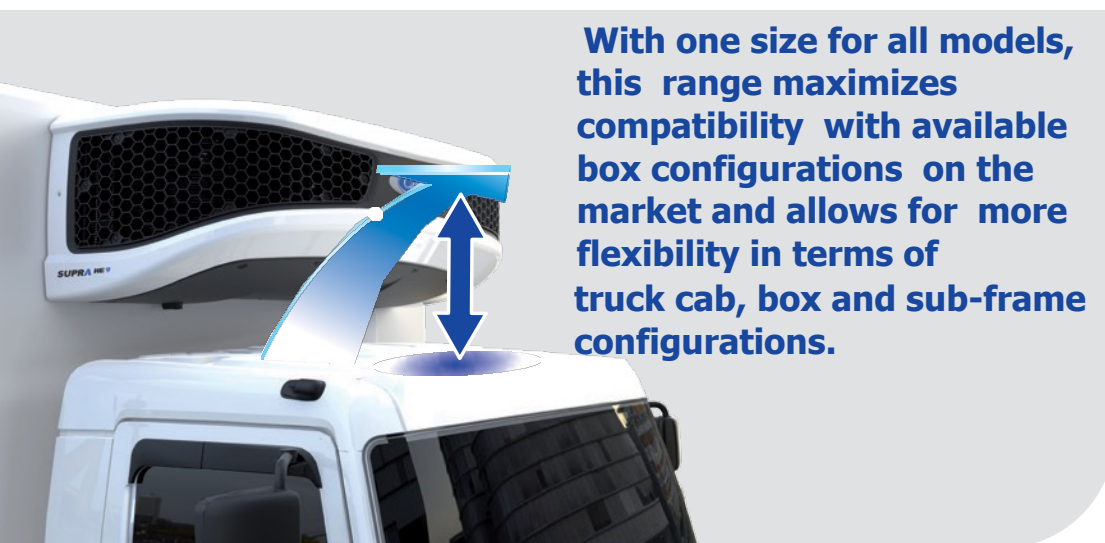


-14,8
cm

Shape of Supra HE 9/11/13 vs. Supra 1050/1150/1250

Designed with compactness in mind

The main driver at the start of the project has been to ensure that the size of the unit will be as compact as possible by optimizing the location of all components. With this objective in mind, the unit has been fully redesigned in a way to limit the number, size and complexity of components.



With one size for all models, this range maximizes compatibility with available box configurations on the market and allows for more flexibility in terms of truck cab, box and sub-frame configurations.

The new compact design allows for lower box configuration like bridge, tunnel or underground distribution, but is also a great fit for higher cabin configurations or shorter trucks.



-157
kg

Supra HE 9 vs. Supra 1050 in standard versión

Light is right

The weight savings allows for several benefits including a reduction of fuel consumption and more admissible load on front axle.



A NEW STANDARD FOR NOISE EMISSION



-2 dB*

*vs. standard legacy Supra

Quieter operation from standard version

The Supra HE power train architecture is inspired from the automotive industry and has been completely redesigned for less vibration. The engine and electric motor are now placed on 3 shock absorbers.

A complete new silent kit and top cover have been developed to encapsulate noise around the power train.

SILENT & CITY VERSIONS



up to
2dB
less

Providing the same cooling capacity as the standard version with +50°C ambient capabilities, the Supra HE silent version emits 2 less dB.

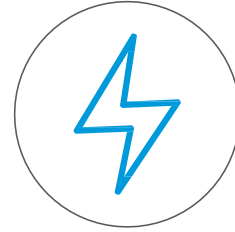
The Supra HE is equipped with a brand new insulated exhaust to reduce noise and thermal emissions, as well as a new cover to limit noise emission from the top.

The cover has also been designed in order to allow great condenser airflow. The skin and bottom panel feature a new insulation design equipped with foam and other high density materials.

BEST-IN-CLASS ENERGY CONSUMPTION & EFFICIENCY



-41%
%



-40%
%

Fuel consumption

Consumption of Supra HE 6 vs. Supra 750.*

Electrical consumption

Consumption of Supra HE 6 vs. Supra 750.*

*Carrier math's based official external lab measurements (Temporary results)

LESS MAINTENANCE

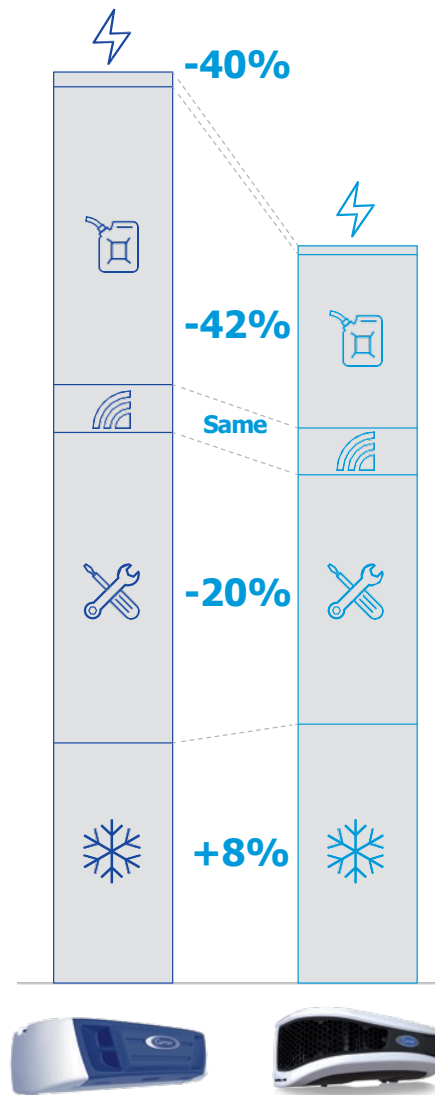
Interval maintenance has been increased to 2,000 hours for all models - ultimately improving uptime. You will only need to send your Supra HE unit for maintenance 3 times on a total of 6,000 running hours, compared to 8 times for the Supra 750 and 850 and 6 times for the Supra 1150 and 1250.

-2,000 hrs
Of interval maintenance

Tailored to your needs

Get your own modeling by asking your Carrier Key Account Manager to get your own simulation based on your specific application & data. Different options can be tailored to your needs:

Thanks to its architecture and technology, the Supra HE range is up to 40% more economical in both fuel and electrical consumption compared to the legacy Supra range.



TCO

TCO & RETURN ON INVESTMENT

Get fast return on investment with the Supra HE range, tailored to your need.

With this example of Supra HE 6 vs Supra 750, you will get your return on investment in only 12 months, and a reduction of 19,1% in 10 years.

For this example, we considered an application of 1000hr/ year, 85% in diesel and 15% in standby.

Installation time: 14,25 hr;
Labor installation: 55 €/hr;
Fuel price: 1,20 €/l;
Electricity price: 0,123 €/kWh

12 month ROI

- Product Cost & Installation Time
- TRU Application
- Product Performance
- Energy Cost
- Repair & Maintenance Cost

Sustainable cold chain

The urgency of climate change requires us to be bold, to innovate and dare to disrupt. The future demands it. Reducing the carbon footprint of our products while in use and reducing food loss in our customers' operations represent the largest opportunities for us to make an impact in an effort to help address climate change. That's why we support Carrier's goal to reduce our customers' carbon footprint by more than 1 gigaton by 2030. The Supra HE unit has been designed with this goal in mind: delivering an efficient, innovative product that minimizes customer energy usage and emissions, while improving its energy efficiency.



NEW STANDARD CARRIER CONTROLLER

The Supra HE comes standard with a new user-friendly cabin command system and dash mount bracket. The controller is the same for all units allowing ease of use and avoiding multiple trainings for users.

The controller features a retro LED light display for better visibility while the ergonomics stay the same for better user experience.



FUNCTIONALITIES ARE NOW AVAILABLE IN STANDARD



- Improved pre-trip inspections with component level fault detection
- Auto diagnostics
- Integrated battery guard
- Auto restart capability programmable
- Smart engine management
- Data recorder - onboard memory
- Improved configurability
- Diesel/electric modes with auto switching
- Smart door switch logic
- Telematics: Lynx™ Fleet in standard

QUALITY & RELIABILITY

Reliability and performance have been put at the center of the development of the Supra HE range. Backed with hundreds of prototypes and field trials, the unit has been used in every region, all around the world, in order to demonstrate reliability from the coldest to the hottest ambient areas.

Its reliability has been proven in all conditions and the range is now able to run in all European region without restriction, even if it is equipped with the silent option. All of these rigorous tests are a gauge of trustworthiness and quality for our customers to be confident in getting the best solution on the market.



Dramatic changes around the world have reinforced the importance-and challenges-of ensuring that medicines reach the people who need them. Through industry-leading services, solutions and expertise across all aspects of the cold chain, Carrier is moving the cold chain forward to help preserve, protect and extend the world's supply of medicine. For some medicines to meet regulatory requirements and to be most effective, they must adhere to strict temperature controls and monitoring.

Carrier Transicold is helping its customers meet the requirements of these guidelines by providing a suite of solutions and services that are ideally suited to this task with the Certicold Pharma refrigeration units.



Quality assurance for our customers is something Carrier Transicold takes very seriously:

The Supra HE 9, 11, and 13 have successfully attained Certicold Pharma certification, reinforcing their suitability for pharmaceutical applications that demand strict temperature controls and monitoring. In addition to phenomenal performance, reliability and sustainability, our customers also have an independent guarantee of quality and compliance – which in pharmaceutical transport is critical. Recognised across Europe, this designation is awarded to systems that meet a strict set of criteria focused on quality manufacturing, accuracy, reliability and compliance.

The first Carrier unit equipped with telematics in standard fit

The Supra HE will be the first Carrier unit equipped with our telematics offer, Lynx Fleet, in standard fit in order to help our client optimize their fleet uptime and gain visibility & efficiency.

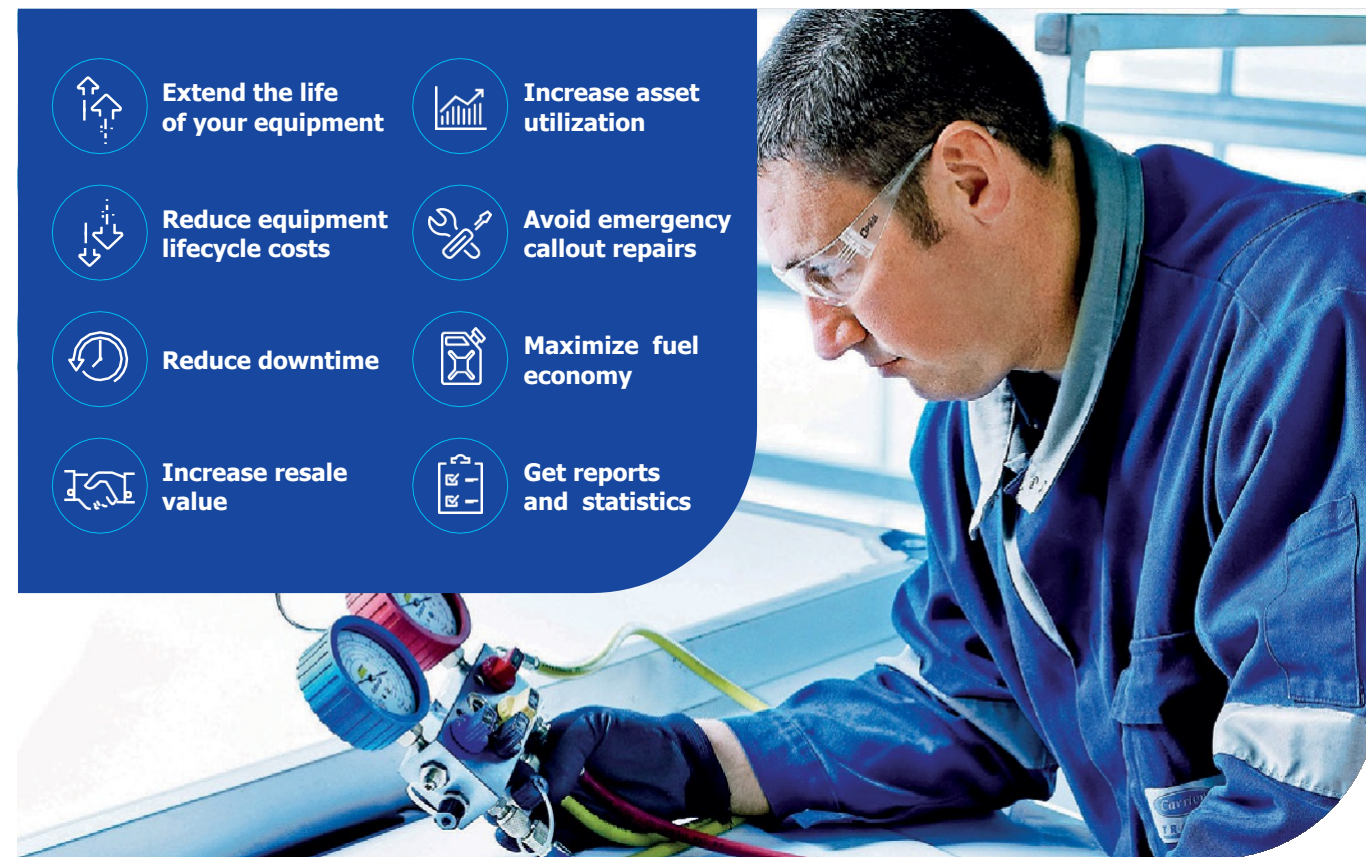


Lynx Fleet open ecosystem will intelligently monitor connected refrigeration systems from anywhere in the world, providing vital information for producers, drivers, transport managers and retailers on the products being transported and the vehicles transporting them. The digital system will provide access to live service for each connected.

refrigeration unit, helping to aid fleet management procedures and ensure minimal disruption through vehicle downtime. It can be customized to meet customer needs and will continue to evolve.

				
<p>OPTIMIZE Optimize equipment utilization and automation-enabling proactive fleet management</p>	<p>END-TO-END MONITORING Anytime, anywhere, end-to-end monitoring reduces potential supply chain disruptions and product rejections</p>	<p>VISIBILITY Open eco-system delivers comprehensive visibility-enabling close collaboration with management, business operations and partners</p>	<p>SUSTAINABILITY Sustainable solutions that reduce product and food waste, improve fuel efficiencies and cut down GHG emissions</p>	<p>SERVICEABILITY Leverage the largest service network in EMEA- Carrier is delivering confidence as your trusted service provider</p>




No matter what level of service your business needs, Carrier Transcold offers the flexibility to help you get the best value and the most mileage out of your service plan. By combining your Carrier Transcold transport refrigeration units with our BluEdge service maintenance package, you can be confident you will be receiving optimum levels of product support that will keep your fleet operating as effectively as it was originally designed.



-  **Extend the life of your equipment**
-  **Increase asset utilization**
-  **Reduce equipment lifecycle costs**
-  **Avoid emergency callout repairs**
-  **Reduce downtime**
-  **Maximize fuel economy**
-  **Increase resale value**
-  **Get reports and statistics**

A Tier for Every Business

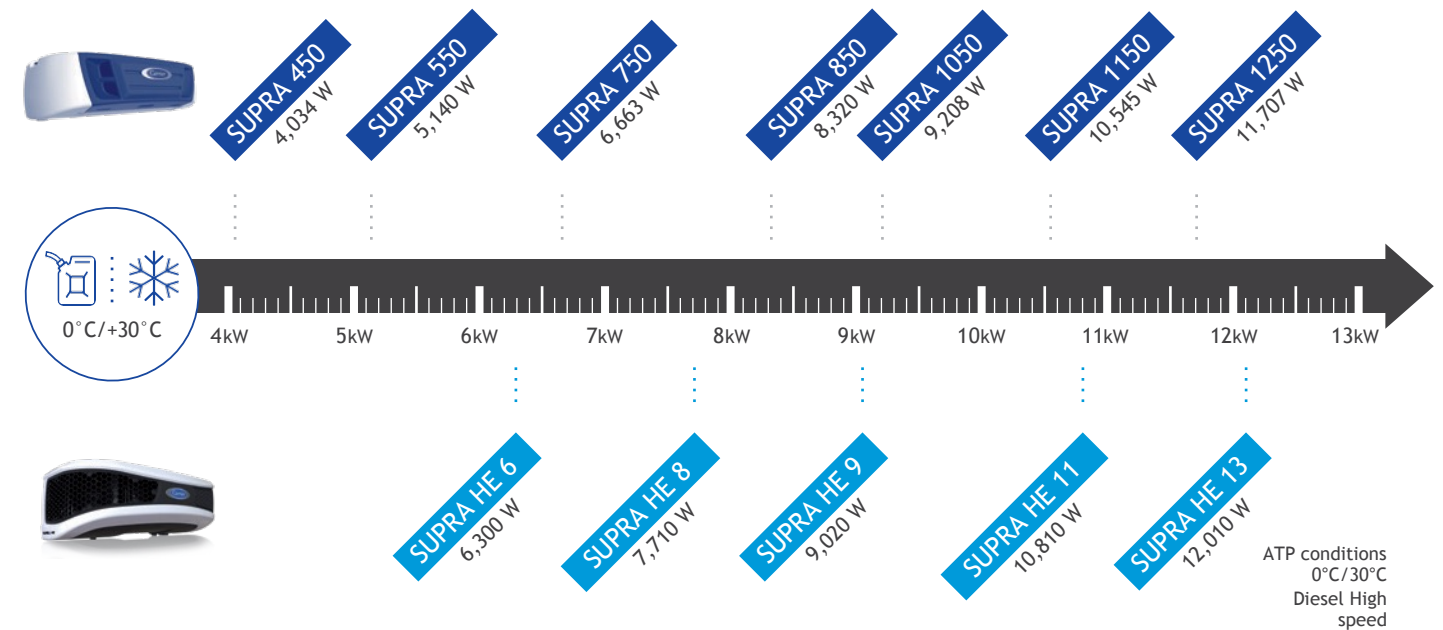
Our tiered service model offers customers a range of options to meet the particular needs of their business. It's an excellent fit for customers of any size.

<p> CORE</p> <p>Extended warranty</p> <p>For customers that want to maintain their equipment on their own (but may occasionally call on Carrier for on-demand expert service) or want to sign up for our most basic plans.</p>	<p> ENHANCE</p> <p>Routine maintenance</p> <p>Designed for customers who want to sign up for a service plan that includes more value-added options, such as a multi-year service agreement, preventive maintenance, or remote monitoring.</p>	<p> ELITE</p> <p>Full service</p> <p>This is the most comprehensive service offering for each of our businesses, and it has one purpose: to provide customers with complete peace of mind. We will use unmatched customer support, coupled with cutting edge technology, to optimize performance, maximize uptime, and minimize cost.</p>
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Section	Cooling capacity (Watts)	SUPRA HE 6	SUPRA HE 8	SUPRA HE 9	SUPRA HE 11	SUPRA HE 13
Version						
Road only		■	■	■	■	—
Road & standby		■	■	■	■	■
Silent		■	■	■	■	■
Silent - Nordic		■	■	■	■	■
HMI						
Programable auto start		●	●	●	●	●
Command cabin		●	●	●	●	●
Remote panel		○	○	○	○	○
Light bar		○	○	○	○	○
Command cabin water proof box		○	○	○	○	○
Telematics						
Lynx Fleet telematics module		●	●	●	●	●
Lynx Fleet subcription		■	■	■	■	■
Fuel management						
Fuel heater EU version		○	○	○	○	○
Fuel tank 70L extra flat & accessories		○	○	○	○	○
Fuel tank 90L & accessories		○	○	○	○	○
Fuel tank 200L & accessories		○	○	○	○	○
Fuel sensor		○	○	○	○	○
Temperature management						
Door switch		○	○	○	○	○
Supply air sensor		●	●	●	●	●
Auto switch diesel/grid		●	●	●	●	●
Certicold		—	—	●	●	●
Thermometer		○	○	○	○	○
Energy management						
Automatic phase reverser		●	●	●	●	●
Complete battery box		○	○	○	○	○
Battery 90AH		○	○	○	○	○
Solar panel 50W		★	★	★	★	★
Solar panel 110W		★	★	★	★	★
Temperature Recorder						
DATA COLD™ 100 series		○	○	○	○	○
DATA COLD™ 300 series		○	○	○	○	○
DATA COLD™ 600 series		○	○	○	○	○
DATA COLD™ extra accessories		○	○	○	○	○
Services						
Oil drain extension		○	○	○	○	○
Extended maintenance interval 2000 hr		●	●	●	●	●
True Tech True View		○	○	○	○	○
Services kits & cables		○	○	○	○	○
Others						
Snow cover kit		○	○	○	○	○

— Not available ■ Option ● Standard ○ Accessory ★ Coming soon

PRODUCT RANGE SUMMARY



SPECIFICATIONS

Model		Supra HE 6	Supra HE 8	Supra HE 9	Supra HE 11	Supra HE 13	
Sound	Standard	Power (CE 2000-14) (dB Lwa)	95	96	97	97	97
		Pressure (DIN 8958) (dB)	67	67.6	68.1	67.8	68.4
	Silent	Power (CE 2000-14) (dB Lwa)	93	93	94	94.5	95.5
		Pressure (DIN 8958) (dB)	63.5	64.9	66.3	66.6	67.5
Airflow (m³/hr)		2 570	2 570	2 445	3 350	3 075	
Heating capacity (Watts)	Standard	+12°C/-20°C	4 180	5 730	6 310	10 490	10 850
	Nordic	+12°C/-20°C	6 785	8 760	9 440	10 490	13 150
Fuel consumption (avg. ATEE) (l/hr)		0.85	1.06	1.37	1.74	1.79	
Sound power (CE 2000-14) (dB)	Standard	95	96	97	97	97	
	Silent	93	93	94	95	95.5	
Weight (kg)		431	440	460	500	501	
Dimensions w*d*h (mm)		1915 x 815 x 615	1915 x 815 x 615	1915 x 815 x 615	1915 x 815 x 615	1915 x 815 x 615	

THE SUPRA HE IS OFFERED THROUGH CARRIER'S HEALTHY, SAFE, SUSTAINABLE AND INTELLIGENT COLD CHAIN PROGRAM TO PRESERVE AND PROTECT THE SUPPLY OF FOOD, MEDICINE AND VACCINES.

DELIVERING CUSTOMER SUPPORT WITH CONFIDENCE

More than 600 service centers

With over 600 locations throughout Europe, Middle East, Africa & Russia, Carrier Transicold EMEA provides customers with a large refrigerated truck and trailer service network.

More than 2,200 technicians

We place a great focus on technical training and spare parts supply, and have developed our PACE (Performance Assessment & Competitive Excellence) program to ensure speed and quality of response go hand in hand.

A full service maintenance agreement

With a BluEdge maintenance agreement, you can be confident in receiving the optimum level of product support to help keep your fleet operating efficiently and effectively.



ONECALL™

24/7 ASSISTANCE WE'RE JUST ONE CALL AWAY

Whether you need breakdown support in your own country or internationally, with oneCALL™ service our team is on hand to help get you back on the road as soon as possible - 24/7/365 - with minimum hassle.



**“CHUYÊN CHỜ HÀNG ĐẾN MỌI MIỀN ĐẤT NƯỚC
PHẦN LẠNH ĐỂ CHÚNG TÔI LO”**

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