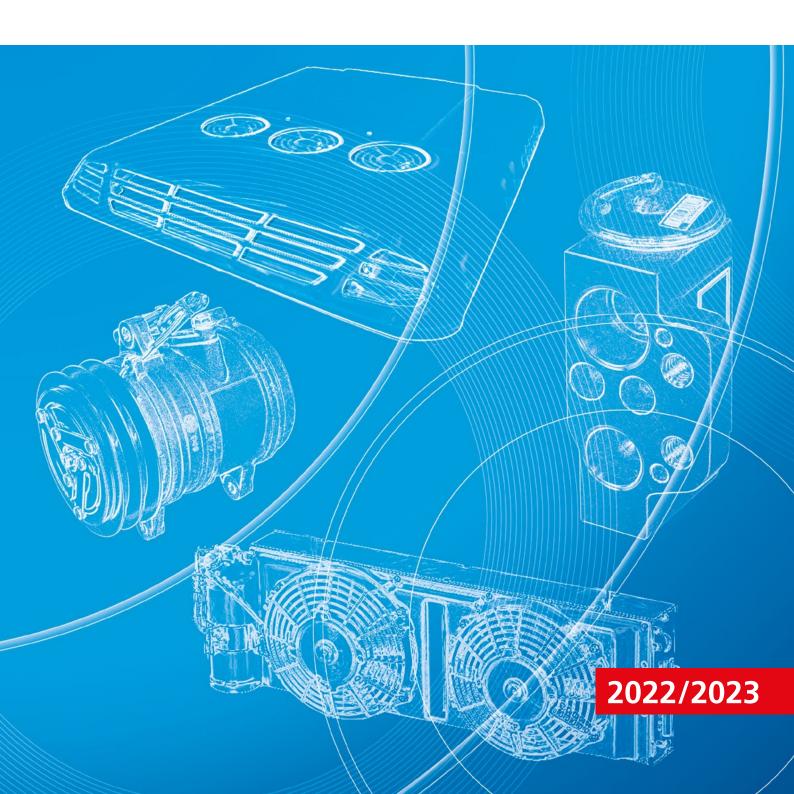


Product Catalog Air-Conditioning Solutions

For Trucks, Light-Duty Vehicles, Buses, Off-Highway and Special Vehicles



Dear Customers, dear Webasto Partners,

With this product catalog, Webasto offers you a comprehensive overview of the latest air-conditioning products. In combination with our additional accessories catalogue, you are ideally equipped for your work with our solutions. The catalog is intended to help you prepare quotations quickly and easily, and to put you in a position to give professional advice at any time.

Furthermore, it gives you an overview of the special Webasto services for individual system solutions that you can expect from us as your business partner. Take up these offers and contact us at any time – we will be happy to assist you!

We wish you great success with our products, Your Webasto Team

Table of Contents

Webasto Netw

Market Segme

Air-Conditionin Integrated Heat Exc Rooftop Air-condition Integrated Air-cond

Transport Refri Integrated Transpor Rooftop Transport F

HEPA Air Filtra

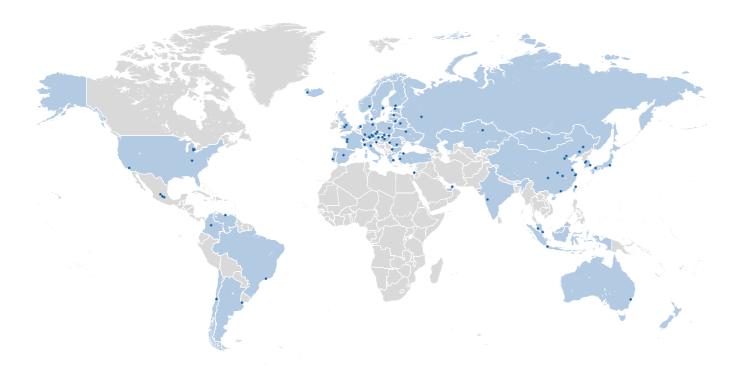
Further Inform Functionality of the Webasto Subsidiarie Abbreviations

vork and Services	4
ents	6
ng Systems	
changers	18
tioning Systems	24
ditioning Systems	38
rigeration Systems ort Refrigeration Systems Refrigeration Systems	62 76
ation Systems	88
nation	
e Products	90
ries and Representatives	91
	94

Webasto Network

Webasto Services

Expect comprehensive support from Webasto in all areas. Before, during and after the installation of your Webasto solution!

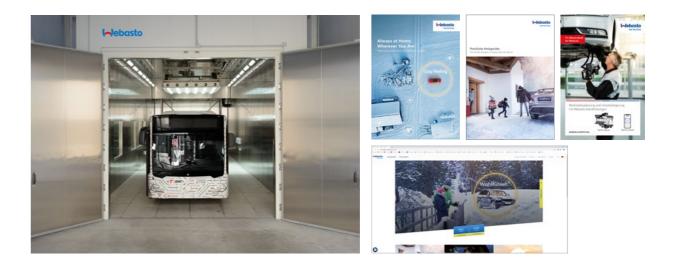


Our service partners actively support you in your day-to-day business – worldwide. Whether with effective training measures on new products or with practical tips and tools to make your work easier. This unique service network helps not only to fulfil the Webasto quality promise around the globe, but also supports you in your sales efforts. You can rely on the consistently high quality of products from Webasto: All our solutions meet the highest international quality standards and offer the latest technology.

A further benefit for you: We are never far away and can therefore identify ourselves with your needs on the spot and take your suggestions into consideration in the further development of our products and services.

Engineering Services

Apart from a wide range of standard products, we offer you individually optimized system solutions. Whether installation position, operating temperature, operation at high altitudes, interface connection or the installation situation in the vehicle: we can work out an optimum solution for all your requirements. In this context, you can rely on our many years of experience in original equipment and the aftermarket. You profit from our high process and quality level, and our know-how in system integration, mechatronics and software development.



Technical Services

From the various parts of your application to extensive series of tests, Webasto offers you everything to ensure your solution functions perfectly. Our service is also at your disposal after installation for maintenance and spare parts.

- Efficient spare part management
- Secure login to the dealer portal (e.g. product documentation, installation instructions)
- Professional quality management
- Broad spectrum of test possibilities
 (e.g. climatic chamber, acoustic chamber, environmental tests)
- Technical support/online training

The development process of a customized system solution:

- Identification of the existing boundary conditions and requirements
- Calculation of the necessary heating or cooling capacity
- Elaboration of an application solution or complete development of an individual system
- Proof of the customer's specific requirements
- System or application acceptance in the customer's works

Marketing Services

We ensure our global brand awareness and image branding through a wide range of measures.

- High-quality, target group-specific marketing tools for all media
- Support for our partners on customized marketing measures
- Advertising and mailing templates for customer activation and customer loyalty
- Point-of-sale marketing materials
- Product-specific selling argument lists
- Professional participation in trade fairs
- Broad array of sponsoring activities



Our Value Promise

Webasto air-conditioning systems offer your customers a wide variety of advantages:

Worthwhile investment

- High-quality and reliable components from proven series production • All components for air-conditioning systems available from a broad product range
- Vehicle-specific installation kits for optimum integration
- Low maintenance costs

More safety and greater comfort

- Optimum temperature and humidity at all times
- High efficiency in all temperature ranges
- Greater concentration and thus greater safety
- Quiet operation thanks to high-quality fans
- Constant temperature in the interior thanks to intelligent temperature management
- Uniform air distribution thanks to modular air system components

Optimum transport of perishable goods

- Coverage of different temperature ranges through the use of different refrigerants

Market Segments

Webasto develops innovative air-conditioning solutions for the following markets:

Buses









Off-Highway



Special Vehicles

The tailor-made Webasto air-conditioning solution for every area

	Cooling capacity (kW)					
Rooftop AC systems	3.5 – 36.0	•	-	-	-	•
Integrated AC systems	4.0 - 16.0					
Transport refrigeration systems	1.0 – 5.6					

Apart from our wide range of standard products, we also offer you individual system solutions.

Webasto also offers heating and air-conditioning solutions for recreational vehicles and boats. Please ask for our separate product catalogs.

Light-Duty

- Individual combination of the system components for specific application solutions

• Constant temperature in the refrigerated compartment thanks to automatic temperature control • All air-conditioning components can be individually integrated into the vehicle



Trucks

A pleasant cabin climate at all times – independant of the engine Engine idling is not only costly in the longer term, it is actually forbidden in many countries. Our Webasto non-idling solutions bring the cabin to a pleasant temperature – fully independently of the engine. That reduces fuel consumption and – as a positive side-effect – also the emission of pollutants. This comfort benefits the driver, too, both while driving and during his breaks.

An idling truck engine consumes on average three liters of fuel per hour. Added to that is the increased wear on the engine and other components. The reliable air-conditioning systems from Webasto ensure comfortable temperatures without incurring these costs.

Benefits of the Webasto solutions for trucks:

- No unnecessary running of the engine in idle
- Reduced fuel costs
- Optimized cabin temperature at all times without the engine running



Parking Air-conditioning system

Air-conditioning solution	Cooling capacity (kW)
Parking air-conditioning system	
Cool Top RTE	1.6 – 2.3



Light-Duty Vehicles

Reliable climate comfort for a safe journey

Light-duty vehicles have to transport goods and people safely to their destination. Reliable and efficient air-conditioning and transport refrigeration systems play a central role here.

Webasto offers a wide range of powerful air-conditioning and refrigeration solutions to meet every specialized transport demand. Whether temperature-sensitive medicines or other perishable goods have to be transported – we have a tailor-made solution available for every vehicle type and form of use.

Benefits of the Webasto solutions for light-duty vehicles:

- Installation kits for a wide variety of vehicles available
- Reduction in operating costs thanks to fuel saving and lower wear





Integrated air-conditioning system

Integrated transport refrigiration system

Air-conditioning solution	Cooling capacity (kW)		
Heat exchangers			
Integrated heat exchangers	3.8 – 13.0		
AC systems			
Rooftop AC systems	3.5 – 8.5		
Integrated AC systems*	4.0 - 9.6		
Transport refrigeration system			
Rooftop systems	1.0 – 5.6		
Integrated systems	1.0 – 3.7		

* Webasto also offers air-conditioning solutions for the new refrigerant R1234yf.





Rooftop transport refrigiration system



Buses

Reliable climate comfort for a safe journey

In order to ensure a safe journey, buses must be air-conditioned and ready for operation right from the beginning of the journey. For their climate control equipment, Webasto can draw on a vast product portfolio ranging from various integrated heating solutions up to air-conditioning systems and a wide range of accessories.

With this product range we can equip buses of all sizes and offer a tailor-made climate solution for every specialized application.

Benefits of the Webasto solutions for buses:

- Comfort for drivers and passengers in all climate conditions
- Comprehensive range of various integrated heating and air-conditioning solutions



Integrated air-conditioning system

Air-conditioning solution	Cooling capacity (kW)
Heat exchangers	
Integrated heat exchangers	3.8 – 13.0
AC systems	
Rooftop AC systems	3.5 – 8.5
Integrated AC systems*	4.0 - 9.6

* Webasto also offers air-conditioning solutions for the new refrigerant R1234yf.



Rooftop air-conditioning



Off-Highway

Do your job more efficiently

Irrespective of the climatic situation, off-highway machines have to be sturdy and ready for operation at any time. Not only the vehicles, but also the operators are subjected to extreme working conditions.

In order to meet the high demands on man and machine, Webasto has developed intelligent air-conditioning solutions. These systems combine comfort and efficiency – and save fuel.

Benefits of the Webasto solutions for

- agricultural and off-highway machines:
- Safe working conditions in all climate conditions
- Comfortable climate for the operator



Air-conditioning system

Air-conditioning solution	Cooling capacity (kW)
Heat exchangers	
Integrated heat exchangers	3.8 – 13.0
AC systems	
Rooftop AC systems	3.5 – 8.5
Integrated AC systems*	4.0 - 9.6

* Webasto also offers air-conditioning solutions for the new refrigerant R1234yf.



Special Vehicles

Including Fire Trucks, Ambulances, Security Vehicles, Vocational Work Trucks

Perfect environmental conditions – when every second counts

In rescue service, disaster control or firefighting you need to be focused from the very beginning on your operation. With the Webasto air-conditioning systems, special vehicles are ideally tempered which increase the safety, comfort and staying power for driver and crew. Parking heaters ensure de-iced and de-fogged windows even before the start of your special operation and offer a comfortable temperature within the vehicle. Thanks to the engine preheating, they also reduce wear and fuel costs.

Benefits of the Webasto solutions for special vehicles:

- Ideal climate conditions for drivers, crew and passengers
- Wide product portfolio available to find the ideal solution for your demand
- High quality and reliability for the most challenging missions



Integrated air-conditioning system

Cooling capacity (kW)	
3.8 – 13.0	
3.5 – 8.5	
4.0 – 9.6	

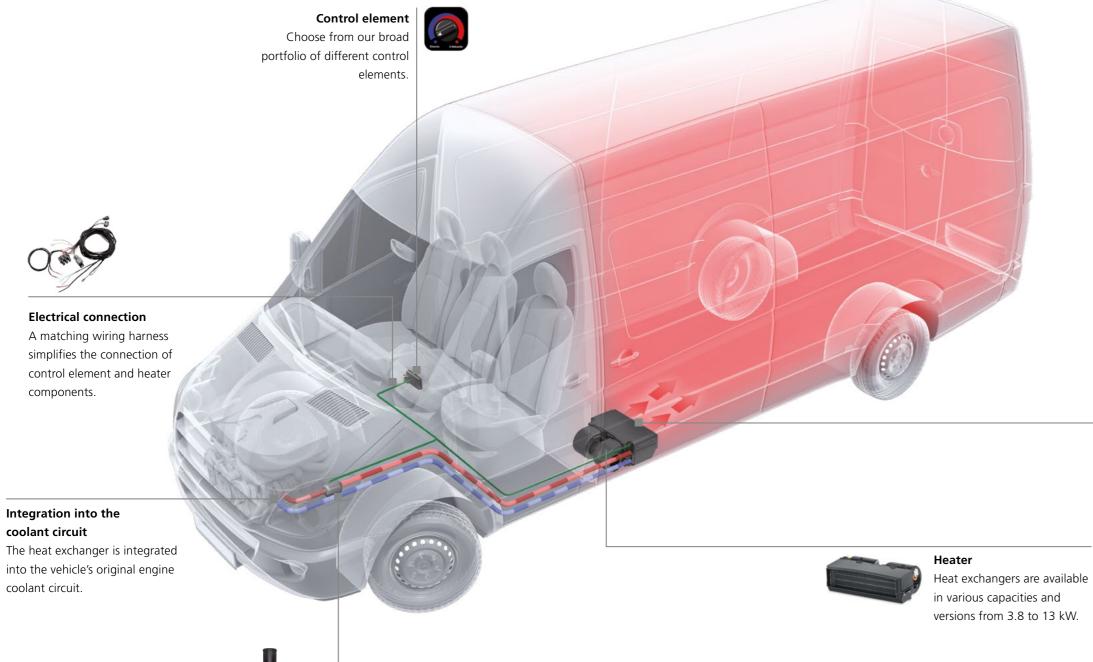
* Webasto also offers air-conditioning solutions for the new refrigerant R1234yf.



Rooftop air-conditioning

Application of an integrated heat exchanger

The integrated Webasto heating systems use the engine residual heat to heat the vehicle. They are available in different capacities variants (3.8 to 13 kW) and are integrated into the coolant circuit. An comprehensive range of accessories is available for the installation.



Coolant pump We offer you the right coolant pump for your heating solution.



Air distributor module

Our broad portfolio of air distribution solutions ranges from a simple air distributor plate through to a modular system, enabling a central or lateral air inlet into the cabin.

Advantages of integrated heating systems

- Use of the engine residual heat via the coolant circuit to heat the cabin
- Low energy consumption (only fan and circulation pump)
- Individual choice of heat exchanger installation position

Integrated heat exchangers

3.8 to 13.0 kW heating capacity



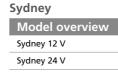
Pleasantly warm in commercial vehicles and minibuses

The integrated heat exchangers are versatile and are the ideal solution for heating the interiors of minibuses and commercial vehicles. In these systems, the waste heat from the engine is used for heating, being transferred via the coolant circuit. These products can be installed under the dashboard or under the roof, for example. In addition to high reliability, these heat exchanger are also distinguished by a long service life.

A large range of accessories, such as control elements and air ducts, offer high flexibility.

- Heating solutions with a heating capacity from 3.8 to 13.0 kW
- Optimum integration into various vehicle structures thanks to versatile installation options
- Low energy consumption
- High-quality reliable components from proven series-production processes





















Cyprus Model overview Cyprus 12 V Cyprus 24 V

Technical data

Model overview	Sydney	Stoccolma	Houston	Toronto	Phoenix	Cyprus
Nominal heating capacity (kW)	3.	8	6.5	7.0	8.6	13.0
Nominal voltage (V)	12/24	12	12/24	12	12/24	12/24
Max. total current absorption at 12 V (A)	4.2	3.5	14.0	8.6	8.4	24.0
Max. blower volume flow (m ³ /h)	17	70	420	450	450	800
Dimensions L x W x H (mm)	260 x 177 x 130	276 x 183 x 191	230 x 220 x 175	590 x 380 x 160	385 x 233 x 128	545 x 300 x 175
Weight (kg)	1.3	2.5	2.8	4.2	3.0	4.0
Water connection, Ø (mm)	16					

the control element is not included.

20





Scope of delivery	Order number
Heating system	62U003CC048B*
	62U003CC049B*

* Blower motor with only two speeds

Scope of delivery	Order number
Heating system with control element	62U003CC051A

Scope of delivery	Order number
Heating system	62U003CC017A
	62U003CC018A

Scope of delivery	Order number
Heating system with control element	62U003CC012A

Scope of delivery	Order number
Heating system	62U003CC019C
	62U003CC020C

Scope of delivery	Order number
Heating system	62U003CC052A
	62U003CC053A

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the air ducts and the climate. Products are supplied together with product documentation. Unless stated otherwise,

Integrated heat exchangers

Control elements

		Sydney	Stoccolma	Housten	Toronto	Phoenix	Cyprus	Order number
	Heating control switch							
	Without electric water valve, controller and signal cable, 12/24 V	•		•		•	-	62A03998A
Biovia Hebosto	With electric water valve, controller and signal cable, 12 V	•		•		•	•	620282129A
	With electric water valve, controller and signal cable, 24 V	•		•		•		620282102A
	 – 50 x 50 x 5 mm (W x H x D) – Mechanical control of the water valve for the heater 							
	3-position blower switch							
Cristian Cri	 - 12/24 V - 53 x 50 x 5 mm (W x H x D) - Mechanical control of fan speed 	•		•		•		62A04001A

tegrated Heat Exchangers

Application of a rooftop air-conditioning system

The main components of the air-conditioning system are accommodated in a compact housing. They can be fitted quickly and easily on the vehicle's roof. Webasto rooftop air-conditioning systems are available in different capacities (3.5 to 36 kW).

Control element

temperature control.

You can choose from a wide range of different control elements, from simple control knobs to fully automatic



Electrical connection A matching cable harness simplifies the connection of the control component and air-conditioning components.



Compressor Choose the most suitable compressor for the power needed from our wide range, details available in Accessories Catalogue.

> **Refrigerant lines** Choose lines and connections from our wide range to give a refrigerant circuit that's an optimum fit.

Air inlet grille Via the air inlet grille, the air

from the cabin is passed into the air-conditioning system.

Installation kit for compressor Vehicle-specific installation kits ensure easy fitting and reliable operation of the compressor. The functionality of an air-conditioning system can be found on page 90.





Rooftop air-conditioning system Compact air-conditioning systems are available in different capacities from 3.5 to 36 kW. The heating function provides additional comfort at low temperatures.



Air distributor modules Our wide selection of air distribution solutions ranges from a simple air distributor plate to the modular system. This allows air to flow out centrally or laterally in the cabin.

Advantages of rooftop air-conditioning systems

- Compact design
- Optimum harmonization of air-conditioning components
- Quick and easy installation
- Additional comfort options (heating or fresh air)
- Proven, high-quality, standard component

From 3.5 kW to 6.2 kW cooling capacity



First-class air-conditioning in commercial vehicles and in construction and agricultural machinery

These rooftop air-conditioning systems are versatile, and can be used for the mini buses, ambulances and fire fighting vehicles and for construction and agricultural machinery. These units are very reliable and have a long service life. There is a wide range of accessories, such as control elements, air ducts and installation sets, available for these air-conditioning systems. The housings of these air-conditioning systems can be painted to match the color of the vehicle.

For complete air-conditioning solutions, the Portofino model has an optional heating function.

- Air-conditioning systems with a cooling capacity of 3.5 kW to 6.2 kW
- Compact construction and aerodynamic design
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Easy installation and low maintenance





Compact Cooler 4E 24 V

Compact Cooler 4E 24 V

Portofino Model overview

Portofino 12 V
Portofino 24 V
Accessories
Mounting kit
Heating kit

Minsk

Model overview	Scope of delivery	Order number
Minsk 12 V	Evaporator unit	62U003FF083ED
Minsk 24 V		62U003FF124EC
Accessories		
External connection kit	For external refrigerant connection	62A031024A



Compact Cooler 5 Model overview Compact Cooler 5 12 V Compact Cooler 5 24 V Compact Cooler 5 12 V

compact cooler 5 24 V
Compact Cooler 5 24 V –
(R1234yf)
Accessories
E-Unit

Rimini

Model overview Rimini 12 V

Rimini 24 V

Technical data

Model overview	Compact Cooler 4 E	Portofino	Minsk	Compact Cooler 5	Rimini			
Nominal cooling capacity (kW)	3.5	4.0	5.0	5.0	6.2			
Heating capacity (optional) (kW)	-	5.0		-				
Refrigerant		R134a						
Nominal voltage (V)	24		12/	/24				
Max. operating temperature (°C)	-		4	5				
Max. total current absorption at 12 V (A)	-	20.0	9.0	9.0 15.0				
Max. total current absorption at 24 V (A)	68.0	-	-	-	-			
Max. volume flow of evaporator blower (m³/h)	550	400	450	630	550			
Dimensions L x W x H (mm)	774 x 1,110 x 215	600 x 900 x 190	505 x 462 x 145	760 x 750 x 165	605 x 800 x 165			
Weight (kg)	52.0	15.5	6.0	23.0	23.5			
Inlet connection	-	3/4"-16 UNF-2A	_	3/4"-16	UNF-2A			
Outlet connection	-	7/8"-14 UNF-2A	-	7/8"-14	UNF-2A			
Expansion valve	-	Block valve	Angle valve	Block	valve			
Addtional information		Fixing kit Heating kit	External Fitting kit	for variants see table	-			
	Use Table for part No			Use Table for part No				





Scope of delivery	Order number
Air-conditioning system with control element, air distributor plate, Standard installation kit	9023838C
Air-conditioning system with control element, air distributor plate, Electric thermostat, Standard installation	9023839C

Scope of delivery	Order number
Air-conditioning system	62U003FF081EB
	62U003FF082EB
	62U003AA130A
	62A031064A

Scope of delivery	Order number
Air-conditioning system with control element,	9023843C
air distributor plate	9023842C
Air-conditioning system with control element,	9023845C
air distributor plate, electronic thermostat	9023844C
Air-conditioning system with control element,	9023841C
air distributor plate, Standard installation kit with 6 m hoses	9023840C
Air-conditioning system with control element, air distributor plate, electronic thermostat, external refrigerant lines	9023846C
Air conditioning system, external refrigerant line	629022993E
Air conditioning system, external refrigerant line	6246573A
With electric motor and compressor	9004866E

Scope of delivery	Order number
Air-conditioning system	62U003FF052EF
	62U003FF053EF

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the compressors, the air ducts and the climate. Products are supplied together with product documentation Unless stated otherwise, the control element is not included.

From 8.5 kW to 15.5 kW cooling capacity



Perfect air-conditioning in small and medium-sized bus

The rooftop air-conditioning systems are designed especially for air-conditioning small and medium-sized buses with up to 35 seats. These units are very reliable and have a long service life. There is a wide range of accessories, such as control elements, air ducts and installation sets, available for these air-conditioning systems. The housings of these air-conditioning systems can be painted to match the color of the vehicle.

For complete air-conditioning solutions, the Compact Cooler 8, Cool Top 110/140 RT-C and Madrid models have an optional heating function.

- Air-conditioning systems with a cooling capacity of 8.5 kW to 15.5 kW
- Compact construction and aerodynamic design
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Air distribution via a central duct or two side ducts
- Choose between fresh air and recirculated air (optional)
- Easy installation and low maintenance





Compact Cooler 8

Model overview
Compact Cooler 8 12 V
Compact Cooler 8 24 V
Compact Cooler 8 12 V
Compact Cooler 8 24 V
Compact Cooler 8 12 V
Compact Cooler 8 24 V
Compact Cooler 8 24 V

Compact Cooler 8 24 V

Cool Top 110 RT-C/140 RT-C

Model overview Cool Top 110 RT-C 12 V

Cool Top 110 RT-C 12 V

Cool Top 110 RT-C 12 V

Cool Top 140 RT-C 12 V

Cool Top 140 RT-C 12 V

Cool Top 140 RT-C 24 V

Cool Top 140 RT-C 24 V

Cool Top 140 RT-C 12 V

Cool Top 140 RT-C 24 V

Accessories
Thermal Management Con

Thermal Management Co Plus
Heating kit 12 V
Heating kit 24 V
Front box kit
Condensate drainage kit
Lifting kit
Drilling template
Wiring harness kit

Internal air grid black Internal air grid grey

Smirne

Smirne 24 V

Model	overviev
Smirne 12	2 V

-	-		

Model overview
Madrid 12 V
Madrid 24 V
Madrid 12 V
Madrid 24 V
Accessories
Heating kit

Model overview	Compact			Smirne	Madrid	
	Cooler 8	110 RT-C	140 RT-C			
Cooling performance nominal (kW)	8.5	11.0	14.0	11.7	15.5	
Cooling performance according EN5151 moderate (kW) Performance @ T amb = 35 °C, rel. humidity = 46%, T in = 27 °C	_	8,5	11		_	
Heating performance (kW)	7.5	12	2.0	-	20.0	
Refrigerant			R13	4a		
Nominal voltage (V)	12/24	12	12 12/24			
Max. current absorption (A) at 12 V (with forced fresh air)	30.0	50.0	80.0	35.0	58.0/9	0*
Max. Power consumption (A) (with forced fresh air) 24 V	_	25	40	-	_	
Max. air flow evaporator blower (m³/h) (free blowing)	1,300	1,500 (1,800)	2,000 (2,300)	1,100	2,100	2,500
Dimensions L x W x H (mm)	970 x 1,025 x 197	1,150 x 1,	600 x 204	930 x 1,045 x 170	1,280 x 1,79	0 x 185
Weight (kg)	32.0	48.0	50.0	33.5	59.0	
Nominal roof radius (mm)	-	5,2	200	-	7,000)
Inlet connection	3/4" – 16 UNF-2A	7/8" – 14	4 UNF-2A	3/4" – 16 UNF-2A	7/8" – 14 L	JNF-2A
Outlet connection	7/8" – 14 UNF-2A	1-1/16" -	14 UNF-2A	7/8" – 14 UNF-2A	1-1/16" – 14	UNF-2A
Water connection, Ø (mm)	20.0	18	3.5	-	16.0	
Expansion valve	Block valve					
Accessories	for variants see table					

* 90A is the absorbtion of the Madrid with the air flow of 2,500 m³/h.



Scope of delivery	Order number
Air-Conditioning system with control element,	9023857B
electronic thermostat, heating section, fresh air flap	9022638C
Air-Conditioning system, electronic thermostat, heating section	9023856B
Air-Conditioning system with control element, heating section	9023855B
Air-Conditioning system, electronic thermostat, fresh air flap	9023853B
Air-Conditioning system, electronic thermostat	9023851B
Air-Conditioning system with control element	9023849B
	9023850B
Air-Conditioning system with control element, air distributor	9023848B
plate, standard installation kit, with 6 mt hoses	9023847B
Air-Conditioning system with control element, electronic thermostat, fresh air flap	9023854B
Air-Conditioning system with control element, electronic thermostat,	9023852B

	Scope of delivery	Order number
	Air-Conditioning system, manual version (control panel excluded)	6237878D
	Air-Conditioning system, automatic version (control panel excluded)	6238282D
	Air-Conditioning system, automatic version, fresh air (control panel excluded)	6242415B
	Air-Conditioning system, manual version (control panel excluded)	6237944C
	Air-Conditioning system, automatic version (control panel excluded)	6237945D
	Air-Conditioning system, manual version (control panel excluded)	6238286D
	Air-Conditioning system, automatic version (control panel excluded)	6238285D
	Air-Conditioning system, automatic version, fresh air (control panel excluded)	6242974B
	Air-Conditioning system, automatic version, fresh air (control panel excluded)	6242975B
ontrol	Control Head, operating manual	6243687A
ontrol	Control Head, operating manual	6243617A
	Only for automatic version	6240599B
	Only for automatic version	6240600B
		6238406A
		6240595A
		6240617A
		6240620C
		6243879C
		62U003AA140A
		62U003AA141A

Scope of delivery	Order number
Air-conditioning system, fresh air flap	62U003FF072EE
	62U003FF073EE

Scope of delivery	Order number
Air-conditioning system with 2,100 m ³ /h	62U003FF116EG
volume flow	62U003FF117EG
Air-conditioning system with 2,500 m3/h	62U003FF118EG*
volume flow	62U003FF119EH*

 \star 90A is the absorbtion of the Madrid with the air flow of 2,500 m³/h

62A031033A

From 19.0 kW to 36.0 kW cooling capacity

Perfect air-conditioning in midi buses

This range of modular rooftop air-conditioning systems is designed for midi buses. The high energy-efficiency and -saving is achieved by an intelligent control of the condenser fans and the compressor. Thanks to the user-friendly maintenance concept, servicing is easier and the life and efficiency of the components are longer. Perfect comfort in all driving conditions is obtained by maintaining a constant supply of fresh air, even at the highest driving speeds. The heating option further increases passenger comfort. Installation is very fast and easy. The housings of these air-conditioning systems can be custom-painted to match the color of the vehicle.

- Air-conditioning systems with a cooling capacity up to 36.0 kW
- Compact and aerodynamic design
- High energy efficiency and innovative concepts
- High-quality and reliable components from proven series production
- Perfect comfort due to constant fresh air supply and optional heating function
- Fast installation and low maintenance concept

Cool Top 190 – 220 RT-C/CXL

Model overview	Scope of delivery	Order number
Cool Top 190 RT-C 12 V	Air-Conditioning system, automatic version and fresh air (control panel excluded)	62408530
Cool Top 190 RT-C 24 V	Air-Conditioning system, automatic version and fresh air (control panel excluded)	62419050
Cool Top 190 RT-CXL 12 V	Air-Conditioning system, automatic version and fresh air (control panel excluded)	62420690
Cool Top 190 RT-CXL 24 V	Air-Conditioning system, automatic version and fresh air (control panel excluded)	62420700
Cool Top 220 RT-C 24 V	Air-Conditioning system, automatic version and fresh air (control panel excluded)	62411370
Cool Top 220 RT-C 24 V	Air-Conditioning system, automatic version (control panel excluded) with heating kit installed	62447594
Accessories		
Thermal Management Control	Control Head, operating manual	62436874
Thermal Management Control Plus	Control Head, operating manual	62436174
Heating kit 12V		6241881
Heating kit 24V		6241882/
Front box kit		6238406/
Condensate drainage kit		6240595
Lifting kit		6242258/
Drilling template Cool Top 190 RT-C		6242360/
Drilling template Cool Top 190 RT-CXL/220 RT-C		6241883/
Hoses kit Cool Top 220 RT-C	10 mt hoses + 2 x fitting compressor + 2x fittings units included	62418894
Wiring harness kit 20 pins		62438790
Power circuit 12V Cool Top 190 (35 mmq)		620282503
Power circuit 24V Cool Top 190 (25 mmq)		620282504
Power circuit 24V Cool Top 220 (35 mmg)		620282503

Technical data

Model overview	Cool Top 190 RT-C	Cool Top 190 RT-CXL	Cool Top 220 RT-C		
Nominal Cooling capacity (kW)	19.0	22.0			
Nominal heating capacity (kW)		20.0	·		
Refrigerant		R134a			
Nominal Voltage (V)	12/2	4	24		
Max. Power consumption (A) (with forced fresh air) 12 V	92	_			
Max. current absorption (A) at 24 V (with forced fresh air)	46	69			
Max. air flow evaporator blower (m³/h)/ (free blowing)	3,680	3,680	4,800		
Dimensions L x W x H (mm)	1,600 x 2,150 x 200	1,780 x 2,150 x 200	1,780 x 2,150 x 200		
Weight (kg)	75	78	80		
Nominal roof-radius (mm)	6,000	7,5	500		
Connection inlet	Fitting 7/8"-14 UNF-2A				
Connection outlet	Fitting 1-1/16"-14 UNF-2A				
Connection water (mm)	18.5				
Expansion valve	Block va	alve	TXV		



Control elements





Air-conditioning control element 12 V, horizontal 24 V, horizontal 12 V, vertical 24 V, vertical – 145 x 50 x 5 mm (W x H x D) or 50 x 145 x 5 mm (W x H x D) - Mechanical control: - On/Off switch, air-conditioning system – Fan speed - Fresh air/recirculated air control Temperature regulation ing control eleme Air-conditi



Horizontal Vertical



- 100 x 50 x 5 mm (W x H x D) or 50 x 100 x 5 mm (W x H x D)
- Mechanical control:
- On/Off switch, air-conditioning system
- Fan speed
- Temperature regulation





24 V, vertical

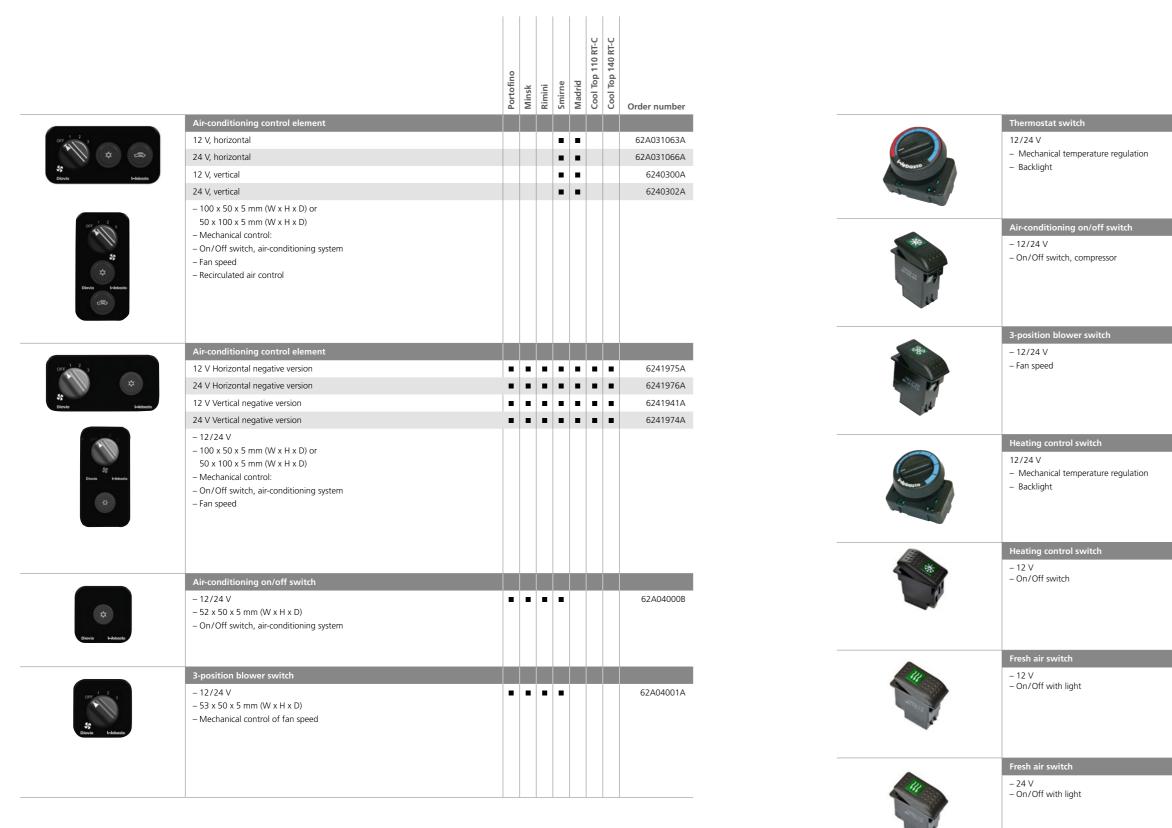
– 100 x 50 x 5 mm (W x H x D) or

Air-conditioning control element

- 50 x 100 x 5 mm (W x H x D) - Mechanical control:
- On/Off switch, air-conditioning system
- Fan speed
- On/Off switch, heater

Portofino	Minsk	Rimini	Smirne	Madrid	Order number 62A031003B 6240304A 6240301A 62A031073A
					62A03993B 62A03992B
					62A031065A
•				•	62A031065A 62A031069A 62A031067A 6240303A

Control elements



Compact Cooler 4 E	Compact Cooler 5	Compact Cooler 8	Order number
-	•	•	60ACKIT649A
-	-	•	66596A
	•	-	66595A
	•	-	67638A
	•	•	67638A 6240086A

Parking Coolers

Cool Top RTE 16 – Cool Top RTE 23

.

The powerful, flat and lightweight electric parking cooler system for trucks

This powerful rooftop air-conditioning system ensures pleasant temperatures and humidity in truck cabins. Well-rested drivers have demonstrably better concentration and therefore contribute to greater safety on the road. The compressordriven system is prefilled with refrigerant and is connected to the 24-V vehicle battery. The high performance combined with the lightweight construction and flat design results in one of the best parking coolers.

Installation in the existing roof opening is very simple and saves time. Highquality components set up a high quality standard for parking coolers and ensure a long life with a minimum expenditure on maintenance. The electric parking cooler reduces engine idling times and therefore saves fuel. The low-voltage cutoff ensures that the engine will start.

- Powerful parking cooler system (1.6 - 2.3 kW) with high energy efficiency
- Optimum air distribution and quiet operation
- Lightweight construction Flat design enables the
- installation also on high cabins The low-voltage cutoff ensures
- that the engine will start
- Wide choice of vehicle-specific mounting kits

~ · ·	
Control	elements

Control from the control panel with LC display Comfortable adjustment via remote control



Technical data

	Cool Top RTE 16	Cool Top RTE 23
Nominal cooling capacity (W)	1,600	900 – 2,500
Refrigerant	R134a	R134a
Nominal voltage (V)	24	24
Max. total power consumption at 24 V (A)	23	17.5 – 51
Max. operation temperatur (°C)	45	45
Max. volume flow of evaporator blower (m³/h)	650	150 - 420
Dimensions condenser L x W x H (mm)	645 x 920 x 140	990 x 734 x 163
Dimensions evaporator L x W x H (mm)	387 x 349 x 165	350 x 355 x 138
Installation height (mm)	142 (depending on cabin type)	163
Weight (kg)	23.4	28

Model overview	Scope of delivery	Order number
Cool Top RTE 16	Air conditioning system, remote control, technical documentation	IND-CTRTE1600
Cool Top RTE 23	Air conditioning system, remote control, technical documentation, brackets, wiring, univ	versal internal white plate 4810134A, white 4810135A, red
Used for Installation vehicle-specific	kit	Order number
RTE-16	DAF XF 105/106 (Super Space Cab)	IND-2-6-1147-2
RTE-16	Iveco Stralis Cube with additional metal frame	IND-2-6-1119-2
RTE-16	lveco Stralis AT, AD, AS	IND-2-6-1120-2
RTE-16	lveco Eurocargo MLL High roof	IND-2-6-1120-2
RTE-16	MAN TGX XXL (with/without deflector) MAN TGX XL*	IND-2-6-1143-2
RTE-16	MAN TGX XLX (only without deflector) MAN TGA	IND-2-6-1143-2
RTE-16	MAN TGS M/L, LX MAN TGL L, LX MAN TGM L, LX	IND-2-6-1143-2
RTE-16	MAN TGX, TGA, TGS, TGL, TGM with deflector	IND-2-6-1177-2
RTE-16	Mercedes-Benz Actros MP3	IND-2-6-1121-2
RTE-16	Mercedes-Benz Actros MP4	IND-2-6-1136-2
RTE-16	Renault Premium	IND-2-6-1123-2
RTE-16	Renault T	IND-2-6-1139-2
RTE-16	Scania R, P, G, Top E HL	IND-2-6-1116-2
RTE-16	Scania new R, S N-Cab + HL Cab	IND-2-6-1126-2
RTE-16	lveco Eurocargo MLL flat roof*	IND-2-6-1122-2
RTE-16	Iveco Stralis HI-STREET cab with flat roof*	IND-2-6-1122-2
RTE-16	Iveco Eurostar*Renault Magnum (old version)	IND-2-6-1122-2
RTE-16	Renault Magnum Classic E Multipass-Cab	IND-2-6-1122-2
RTE-23	Spare part universal internal white plate	9700010202A

Model overview	Scope of delivery	Order number
Cool Top RTE 16	Air conditioning system, remote control, technical documentation	IND-CTRTE1600
Cool Top RTE 23	Air conditioning system, remote control, technical documentation, brackets, wiring, universal internal white plate	4810134A, white 4810135A, red
Used for Installation k vehicle-specific	it	Order number
RTE-16	DAF XF 105/106 (Super Space Cab)	IND-2-6-1147-2
RTE-16	Iveco Stralis Cube with additional metal frame	IND-2-6-1119-2
RTE-16	lveco Stralis AT, AD, AS	IND-2-6-1120-2
RTE-16	lveco Eurocargo MLL High roof	IND-2-6-1120-2
RTE-16	MAN TGX XXL (with/without deflector) MAN TGX XL*	IND-2-6-1143-2
RTE-16	MAN TGX XLX (only without deflector) MAN TGA	IND-2-6-1143-2
RTE-16	MAN TGS M/L, LX MAN TGL L, LX MAN TGM L, LX	IND-2-6-1143-2
RTE-16	MAN TGX, TGA, TGS, TGL, TGM with deflector	IND-2-6-1177-2
RTE-16	Mercedes-Benz Actros MP3	IND-2-6-1121-2
RTE-16	Mercedes-Benz Actros MP4	IND-2-6-1136-2
RTE-16	Renault Premium	IND-2-6-1123-2
RTE-16	Renault T	IND-2-6-1139-2
RTE-16	Scania R, P, G, Top E HL	IND-2-6-1116-2
RTE-16	Scania new R, S N-Cab + HL Cab	IND-2-6-1126-2
RTE-16	Iveco Eurocargo MLL flat roof*	IND-2-6-1122-2
RTE-16	Iveco Stralis HI-STREET cab with flat roof*	IND-2-6-1122-2
RTE-16	Iveco Eurostar*Renault Magnum (old version)	IND-2-6-1122-2
RTE-16	Renault Magnum Classic E Multipass-Cab	IND-2-6-1122-2
RTE-23	Spare part universal internal white plate	9700010202A





Application of an integrated air-conditioning system

Webasto integrated air-conditioning systems are available with various capacities (4 to 16 kW). All the components are integrated into the vehicle and can be matched to individual requirements. A comprehensive range of accessories makes them easier to install in the vehicle.



Electrical connection A matching cable harness simplifies the connection of the control component and air-conditioning components.



Compressor Choose the right compressor for the power specification and installation position from our wide range.

> Installation kit for compressor Vehicle-specific installation kits make fitting easier and ensure reliable operation of the compressor.

Control element You can choose from a wide range of different control elements, from simple control knobs to fully automatic temperature control.



Condenser module Condenser modules are available in different capacities, designs and installation positions.



Air distributor modules Our wide selection of air distribution I tipes ranges from a simple air

solutions ranges from a simple air distributor plate to the modular

system. This allows air to flow out

centrally or laterally in the cabin.

Collector/dryer Removal of moisture from the refrigerant ensures reliable operation of the air-conditioning system.

The functionality of an air-conditioning system can be found on page 90.



Evaporator module Condenser modules are available in different capacities (from 4 to 16 kW), designs and installation positions.

The heating function on some models provides additional comfort at low temperatures.

> **Refrigerant lines** Choose lines and connections from our wide range to give a refrigerant circuit that's an optimum fit.

Advantages of integrated air-conditioning systems

- Individually selectable installation position for the components
- Complete integration into the vehicle
- No effect on aerodynamic characteristics
- Proven, high-quality, standard components

Installation options for integrated air-conditioning systems

In addition to a large selection of standard products, we offer you individually tailored system solutions. We will implement your chosen modifications according to your requirements, e.g. a particular temperature range or a special position for the air-conditioning components in the vehicle. You can rely on our many years of experience in original equipment and retrofitting.

The evaporator and the condenser, the two main components of our integrated air-conditioning systems, can be fitted separately in the vehicle - depending on space requirements and use. The various positions available are shown below.

Possible positions for the evaporator

- Under the roof
- Under the dashboard
- Integrated into the roof
- Vertically on the side at the rear
- Vertical
- On the roof

Possible positions for the condenser

- On the roof
- On the underbody
- At the front of the vehicle

Condenser mounted on the underbody





Evaporator under the roof





Evaporator vertical on the side at the rear Evaporator vertical

Condenser mounted at the front of the vehicle





Evaporator under the dashboard





Evaporator vertical on the side at the rear Evaporator vertical

Condenser mounted on the roof



Evaporator under the roof



Evaporator under the dashboard



Evaporator integrated into the roof



40

Evaporator vertical on the side at the rear Evaporator vertical



Evaporator under the dashboard



Evaporator integrated into the roof







Evaporator integrated into the roof



From 4.0 kW to 5.9 kW cooling capacity



Tailor-made air-conditioning solutions for commercial and special vehicles, minibuses, construction machinery and agricultural machinery

The integrated heating air-conditioning systems are versatile and can be used for minibuses, ambulances and fire trucks as well as construction and agricultural machinery. Depending on the type of vehicle, these air-conditioning systems can be installed under the dashboard or in the roof liner under the roof or vertically in the rear panel. These air-conditioning systems are very reliable and have a long service life.

The wide range of accessories includes condensers, which can be mounted on the roof or under the chassis, as well as control elements, air ducts and customerspecific installation sets. For a complete air-conditioning solution, the Baltimore, Quebec, Michigan and Milano models have an additional heating function.

- Air-conditioning systems with a cooling capacity of 4.0 to 5.9 kW
- Optimum integration into the vehicle design thanks to versatile installation options
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Very low maintenance





Oakland

Oakland 12 V

Oakland 24 V

Quebec

Model overview Baltimore 12 V Baltimore 24 V Baltimore 12 V

Model overview



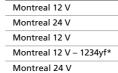




Model overview Quebec 12 V Quebec 24 V Quebec 12 V Quebec 12 V – R1234yf Quebec 24 V Quebec 12 V Quebec 24 V Quebec 12 V Quebec 24 V







Model overview

Michigan

Montreal

Model overview Michigan 12 V Michigan 24 V

Wyoming

Model overview Wyoming 12 V Wyoming 24 V

Milano

Model overview Milano 12 V Milano 24 V

Technical data

Model overview	Baltimore	Oakland	Osaka	Quebec	Montreal	Michigan	Wyoming	Milano	
Nominal cooling capacity (kW)	4.	0	4.6	5.0		5.5		5.5	
Nominal heating capacity (kW)	2.0	-	-	6.7	-	6.3	-	11.0	
Installation position	unde	r the		vertical ceiling		ling	under the		
	dashl	poard						dashboard	
Refrigerant		R134a		R134a –	R1324yf		R134a		
Nominal voltage (V)			12/24			12/24	12/	2/24	
Max. total current absorption at 12 V (A)	7.	4	9.5	9	.5	13.0	12.7	13.0	
Max. volume flow of evaporator blower (m³/h)	45	60	350			450			
Dimensions L x W x H (mm)	381 x 23	3 x 126	410 x 165 x 320	370 x 185 x 330	370 x 160 x 350	590 x 38	414 x 328 x 233		
Weight (kg)		3.7	5.5	6.5	5.5	8.7	7.5	6.4	
Water connection, Ø (mm)	16	-	-	16	-	16	-	16	
Expansion valve	Angle	valve		1	Blo	ck valve			
Additional information	-	-	-	cotrol element included			4 connections for 60 mm air hose		
				heating function, black color	black color				

	Scope of delivery	Order number
	Air-conditioning system, black, heating function	62U003CF072EC
		62U003CF088EB
	Air-conditioning system, black, for vertical, heating function installation, with adjustable heating function	62U003CF073EA

Scope of delivery	Order number
Air-conditioning system, black	62U003FF084ED
	62U003FF085ED

Scope of delivery	Order number
Air-conditioning system, black	62U003FF069EA
Air-conditioning system, black	62U003FF070EA

Scope of delivery	Order number
Air-conditioning system, black, with heating function,	62U003CF030EB
without heating valve, with control element	62U003CF031EB
Air-conditioning system, gray, with heating function,	62U003CF043EC
without heating valve, with control element	6244372A
-	62U003CF044EC
Air-conditioning system, black, with adjustable	62U003CF026EB
heating function, with control element	62U003CF027EB
Air-conditioning system, gray, with adjustable	62U003CF045EC
heating function, with control element	62U003CF046EC

Scope of delivery	Order number
Air-conditioning system, black, with control element	62U003FF030EB
	62U003FF031EB
Air-conditioning system, gray, with control element	62U003FF058EB
	6244346A
	62U003FF059EA

* Dimensions 370 mm x 185 mm x 330 mm

Scope of delivery	Order number
Air-conditioning system, black,	62U003CF057EA
with heating function, with control element	62U003CF058EA

Scope of delivery	Order number
Air-conditioning system, black, with control element	62U003FF078EA
	62U003FF079EA

Scope of delivery	Order number
Air-conditioning system, black,	62U003CF055EC
with heating function	62U003CF056EC

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the compressors, the air ducts and the climate. Products are supplied together with product documentation Unless stated otherwise, the control element is not included.

From 6.0 kW to 8.9 kW cooling capacity



Optimum air-conditioning solutions for light-duty vehicles, minibuses and special vehicles

The integrated heating air-conditioning systems are versatile and can be used for mini-buses, ambulances and fire trucks as well as construction and agricultural machinery, for example. With a wide variety of installation options - under the dashboard or roof, in the roof liner or vertically in the rear panel, these units can be installed in various types of vehicle.

The wide range of accessories includes condensers, which can be mounted on the roof or under the chassis, as well as control elements, air ducts and customerspecific installation sets. For a complete air-conditioning solution, the Oslo, Norway and Paris models have an additional heating function.

- Air-conditioning systems with a cooling capacity of 6.0 to 8.9 kW
- Optimum integration into the vehicle design thanks to versatile installation options
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Very low maintenance







Model overview
Norway 12 V
Norway 24 V
Norway 24 V

Glasgow

Glasgow 24 V

Glasgow 12 V

Oslo

Oslo 12 V

Oslo 24 V

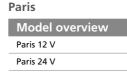
Model overview Glasgow 12 V

Glasgow 12 V - R1234yf*

Model overview

Oslo 12 V - R1234yf*





Monaco

Model overview
Monaco 12 V

Monaco 24 V

The control element is not included.

Technical data

Model overview	Glasgow	Oslo	Norway	Paris	Monaco
Nominal cooling capacity (kW)	6.	2	6.3	7.7	
Nominal heating capacity (kW)	-	8.5	10.2	6.3	-
Installation position	unde	r the		unde	er the
	dashb	oard	vertical	dash	board
Refrigerant	R134a – R1324yf		R134a		
Nominal voltage (V)			12/24		
Max. total current absorption at 12 V (A)	14.8	15.8	16.0	17.6	18.6
Max. volume flow of	650		634		
evaporator blower (m³/h)					
Dimensions L x W x H (mm)	400 x 360 x 170		425 x 225 x 440	580 x 3	40 x 128
Weight (kg)	4.7	5.3	10.0	5.2	4.7
Water connection, Ø (mm)	-		16		-
Expansion valve	Block valve				
Additional information	-	-	cotrol element included	-	-

Scope of delivery	Order number
Air-conditioning system, black	62U003FF054EC
	6244460A
	62U003FF055EC
Air-conditioning system, black, with thermostat	6245545A

* Expansion valve TXV sealing plastic hoods included

Scope of delivery	Order number
Air-conditioning system, black, with heating function	62U003CF041EC
	6244496A
	62U003CF042EC
Air-conditioning system, black, with thermostat	6241804A

* Expansion valve TXV sealing plastic hoods included

Scope of delivery	Order number
Air-conditioning system, gray,	62U003CF049EB
with heating function, with control element	62U003CF050EB
Air-conditioning system, black, with heating function, with control element	62U003CF021EC

Scope of delivery	Order number
Air-conditioning system, black, with heating function	62U003CF077EA
	62U003CF078EA

Scope of delivery	Order number
Air-conditioning system, black	62U003FF129EA
	62U003FF130EA

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the compressors, the air ducts and the climate. Products are supplied together with product documentation.

From 9.0 kW to 11.9 kW cooling capacity



An ideal climate for minibuses with up to 15 seats

These integrated air-conditioning systems create pleasant conditions for the driver and passengers in minibuses with up to 15 seats. With installation options under the dashboard or roof, in the roof liner or vertically in the rear panel, these units offer a high degree of flexibility. These units are very reliable and have a long service life.

The wide range of accessories includes condensers, which can be mounted on the roof or under the chassis, as well as control units, air ducts and customer-specific installation sets. For a complete air-conditioning solution, the Ibiza, London and Oxford models have an additional heating function.

- Air-conditioning systems with a cooling capacity of 9.0 to 11.9 kW
- Optimum integration into the vehicle design thanks to versatile installation options
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Very low maintenance





Ibiza
Model overview
lbiza 12 V

Ibiza 24 V

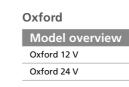
Marbella 24 V

		1.
	and a	. 1



Model overview	Scope of delivery	Order number
London 12 V	Air-conditioning system, black, with heating function	62U003CF047EC
London 12 V – R1234yf*		6244497A
London 24 V		62U003CF048EC
London 12 V	Air-conditioning system, black, with thermostat	6245548A
London 24 V	Air-conditioning system, black, with thermostat	6247104A









Vancouver 12 V – R1234yf* Vancouver 24 V

Unless stated otherwise, the control element is not included.

Technical data

Model overview	Marbella	Ibiza	Vancouver	London	Oxford
Nominal cooling capacity (kW)	9	0		9.5	
Nominal heating capacity (kW)	-	12.0	-	13	.0
Installation position	vert	ical	under the	dashboard	vertical
Refrigerant	R13	34a	R134a / R	1234yf (*)	R134a
Nominal voltage (V)	12 / 24				
Max. total current absorption at 12 V (A)	20.5	21.2	22.0	21.0	17.0
Max. volume flow of	800				
evaporator blower (m³/h)					
Dimensions L x W x H (mm)	533 x 34	12 x 176	500 x 372 x 170	550 x 400 x 180	175 x 420 x 560
Weight (kg)	8.0	10.0	6.7	7.7	8.0
Water connection Ø (mm)	-	16	-	16	16
Expansion valve	Block valve				
Air duct connection	-	-	-	-	5 / 7 connections for
					air duct Ø 60 mm

Scope of delivery	Order number
Air-conditioning system	62U003FF096EB
	62U003FF097EB

Scope of delivery	Order number
Air-conditioning system, with heating function	62U003CF062EC
	62U003CF080EA

* Expansion valve TXV sealing plastic hoods included

Scope of delivery	Order number
Air-conditioning system, with heating function	62U003CF085EB
	62U003CF082EB

	Scope of delivery	Order number
	Air-conditioning system, black	62U003FF060EF
*		6244498A
		62U003FF061EF

* Expansion valve TXV sealing plastic hoods included

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the compressors, the air ducts and the climate. Products are supplied together with product documentation.

Slim profile HVAC for perfect roof integration



Webasto's Slim Profile HVAC is the first step Webasto has taken to initiate the revolution of HVAC design in the off-highway HVAC market and marks the next step on Webasto's innovation road. The use of a reversed curved blade fan and slim-profile evaporators and heat-exchangers are the key elements of the design that allows for achieving a height of only 80 mm for the unit. Due to the fan used and the unique design of internal air-handling, the unit outperforms current similar-size units in airflow as well as cooling and heating performance.

The HVAC is designed to be installed in the roof of both agricultural and construction machinery. Due to the slim package dimensions of the unit (842 x 580 x 80 mm) it enables OEMs and cabin manufacturers to fundamentally innovate the design of their cabins. The new Webasto unit, will make it possible to design slim roofs with increased headroom and greater visibility without any loss of comfort. The results of our stringent in-house testing program have clearly demonstrated the capabilities of the unit in terms of performance, durability and regulation-conformity.

The unit has the capacity to deliver 7.0 kW of cooling performance (at 35 °C and 60 % Ur) and 6.6 kW heating performance (at -10 °C with 800 l/h at 90 °C) with an airflow (free-blowing) of up to 700 m³/h. The concept unit has dimensions of 842 x 580 x 80 mm and weights less than 7 kg. Of course, the design can be adapted to individual OEMs needs.

The unit is designed to be combined with the Webasto CECU which allows for complete integration of the air-conditioning system into existing control and electronic infrastructure of OEMs thus enabling a seamless user comfort experience. Of course, integrated diagnostic functionalities are offered as well. This unit is followed by the Ultra-Slim Profile concept HVAC which goes so far as decreasing the height of the unit again by 50 % to only 40 mm. More information on this unit is available upon request!

Technical Specifications

Model	HVAC Slim Profile: HVAC SP80
Cooling performance nominal (kW)	7.0
Heating performance (kW)	6.6
Nominal Voltage (V)	12
Max. Operation temperatur (°C)	45
Max. Power consumption (A) at 12V	100,0
Measured at 13 V	
Max. Air Flow Evaporator Blower (m ³ /h)	700
Dimensions L x W x H (mm)	842 x 580 x 111
Weight (kg)	7,0
Connection water (mm)	16
Addtional information	With manual or automatic control

Key benefits at a glance:

- New design with clear focus on a slim package with high performance
- 7.0 kW of cooling performance
- 6.6 kW of heating performance
- Slim design provides for more headroomand increased visibility
- Design can be adapted to individual needs of OEMs and cabin manufacturers





Model overview SP80 12 V SP80 12 V R134a

Control element



Model overview

part number 12 V

- 120 x 63 x 43 mm (W x H
- Electric control
- Water valve
- Signal cable (2m)
- On/Off switch, air-conditi
- Fan speed
- Temperature regulation

Scope of delivery	Order number
Heating system	6244244A
Air conditioning system, black, with heating function	6244242A

	HVAC with fresh air control	HVAC	HV
x D)	62A04052B	62A04054B	62A04069B
tioning system			

From 12.0 kW to 16.0 kW cooling capacity

Optimum air-conditioning solutions for minibuses with up to 25 seats

These integrated air-conditioning systems create pleasant conditions for the driver and passengers in minibuses with up to 25 seats. With installation options under the dashboard or roof, in the roof liner or vertically in the rear panel, they offer a high degree of flexibility. These units are very reliable and have a long service life. The wide range of accessories includes condensers, which can be mounted on the roof or under the chassis, as well as control elements, air ducts and customerspecific installation sets.

For a complete air-conditioning solution, the Kiev and Monterrey models have an additional heating function.

- Air-conditioning systems with a cooling capacity of 12.0 to 16.0 kW
- Optimum integration into the vehicle design thanks to versatile installation options
- High efficiency in relation to the dimensions
- High-quality and reliable components from proven series production processes
- Very low maintenance



Model overview Riga 12 V

Riga

Riga 12 V	
Riga 12 V	
Riga 24 V	
Riga 12 V	
Riga 24 V	



Kiev Model overview Kiev 12 V Kiev 24 V



Moscow Model overview Moscow 12 V Moscow 24 V

Monterrey

Model overview
Monterrey 12 V
Monterrey 24 V
Monterrey 12 V
Monterrey 24 V

Technical data

Model overview	Ri	ga	Kiev	Moscow	Monterrey		Newport		
Nominal cooling capacity (kW)	12.0	14.0		13.4	14.0	16.0	14.0	16.0	
Nominal heating capacity (kW)		_	11.5	-	14.6 –				
Installation position	under dash or under roof								
Refrigerant		R134a							
Nominal voltage (V)	12/24								
Max. total current absorption at 12 V (A)		31.0	18.0	19.0		39.0	40.0		
Max. volume flow of evaporator blower (m³/h)	1,5	350	1,0	000	1,300				
Dimensions L x W x H (mm)	1,240 x 3	320 x 175	890 x 380 x 170	856 x 355 x 170		925 x 390 x 180			
Weight (kg)	18	3.0	12.5	11.5	13	3.5	12	2.5	
Water connection Ø (mm)	-	-	16	-	2	20	-	-	
Expansion valve	Block valve,	Angle valve,	Block	valve Block valve, Angle valve,		Block valve,	Angle valve,		
	2 tons	3 tons			2 tons	3 tons	2 tons	3 tons	
Air duct connection	6 connec 72 mm				_				



Newport Model overview Newport 12 V Newport 24 V

Newport 12 V	
Newport 24 V	

The performance data for your application may differ from the nominal values. These depend on various conditions, such as the compressors, the air ducts and the climate. Products are supplied together with product documentation. The control element is not included.

г	n

Scope of delivery	Order number
Air-conditioning system, 2-ton expansion valve, 1 air duct, front distribution, 2 air ducts, top	62U003FF066EC
Air-conditioning system, 2-ton expansion valve, 2 air ducts, front distribution, 1 air duct, top	62U003FF067EC
Air-conditioning system, 2-ton expansion valve,	62U003FF065EC
3 air duct, front distribution	62U003FF068EC
Air-conditioning system, 3-ton expansion valve,	62U003FF132EA
3 air duct, front distribution	62U003FF133EA

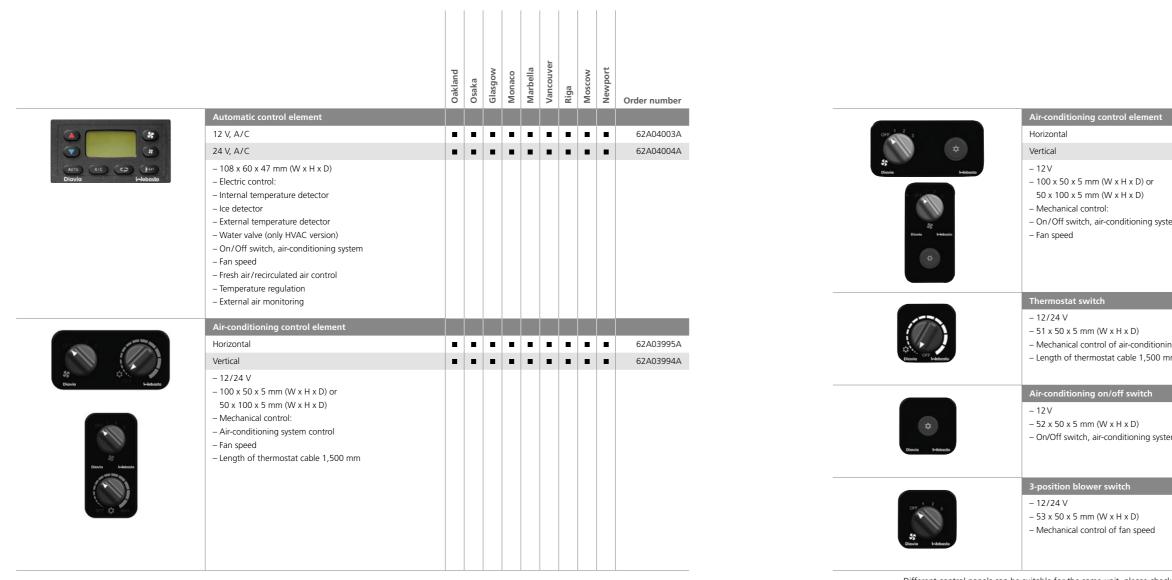
Scope of delivery	Order number
Air-conditioning system, with heating function	62U003CF051EE
	62U003CF052EE

Scope of delivery	Order number
Air-conditioning system	62U003FF064EB
	62U003FF071EB

Scope of delivery	Order number
Air-conditioning system, 2-ton expansion valve,	62U003CF069EB
with heating function	62U003CF070EB
Air-conditioning system, 3-ton expansion valve,	62U003CF075EC
with heating function	62U003CF076EC

Scope of delivery	Order number
Air-conditioning system, 2-ton expansion valve	62U003FF104EE
	62U003FF105EE
Air-conditioning system, 3-ton expansion valve	62U003FF127EE
	62U003FF128EE

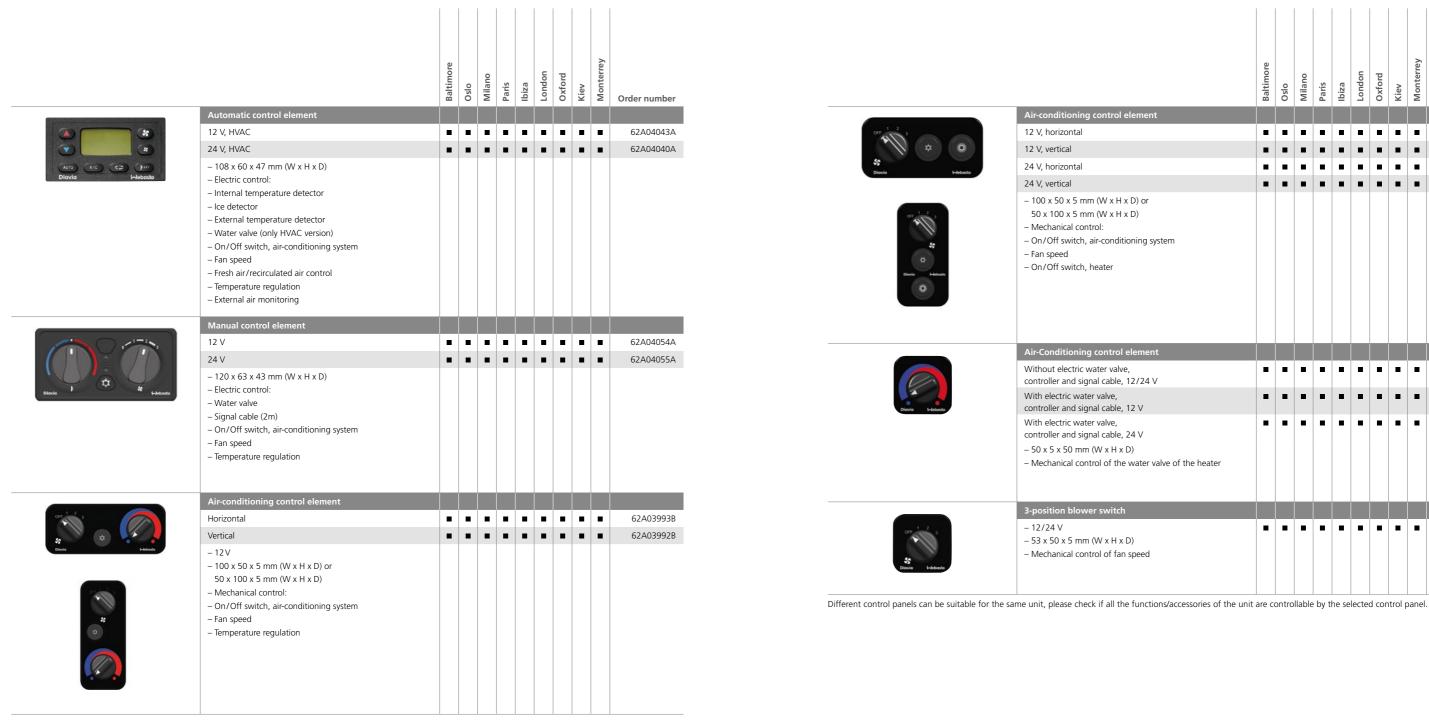
Control elements for air-conditioning systems without heating



Different control panels can be suitable for the same unit, please check if all the functions/accessories of the unit are controllable by the selected control panel.

Image: space of the state of		Oakland	Osaka	Glasgow	Monaco	Marbella	Vancouver	Riga	Moscow	Newport	Order number
Image: system mm Image: system mm <th< td=""><td></td><td></td><td>_</td><td></td><td>_</td><td>_</td><td></td><td></td><td></td><td>_</td><td>C2 4 02 00 7 D</td></th<>			_		_	_				_	C2 4 02 00 7 D
tem i											
ing system nm iem iem	tem										
ing system nm iem iem											
iem III III III III III III III III III I		•	•	•	•	•	•	•	•	•	62A03999A
Image: Second	iem	•	•	•	•	•	•	•	•	•	62A04000B
• • • • • • • • • •											
											62A04001A

Control elements for air-conditioning systems with heating



	Baltimore	Oslo	Milano	Paris	Ibiza	London	Oxford	Kiev	Monterrey	Order number
	•	•			-	-	-			62A031065A
	-				-	-			-	62A031069A
	-	-			-	-				62A031067A
										6240303A
tem										
	•	•	-	•	•	•	-		•	62A03998A
	-	-	-	•	-	-	-		-	620282129A
lve of the heater	•	-			-	•			•	620282102A
										62A04001A

Electroventilated condensers

	Model	Performance (kW)	Dimensions L x W x H (mm)	Description	Current consumption (A)	Weight (kg)	Voltage (V)	Order number
	Trieste	5	575 x 480 x 180	T&F, Fin pitch 3.5 mm	13	8	12	62U00025431E
PERMIT	Trieste	5	575 x 480 x 180	T&F, Fin pitch 3.5 mm	6	8	24	62U00025433E
	Trieste	6.5	575 x 480 x 180	HTC, Fin pitch 2.5 mm	13	8	12	62U00025455C
	Trieste	6.5	575 x 480 x 180	HTC, Fin pitch 2.5 mm	6	8	24	62U00025457C
	Venezia	2.8	570 x 370 x 150	T&F, Fin pitch 2.5 mm	7	8	12	62U00025322B
	Venezia	2.8	570 x 370 x 150	T&F, Fin pitch 2.5 mm	3	8	24	62U00025386B
and	Venezia	5.5	570 x 370 x 150	HTC, Fin pitch 2.5 mm	7	8	12	62U00025315C
	Venezia	5.5	570 x 370 x 150	HTC, Fin pitch 2.5 mm	3	8	24	62U00025327B
0	Capril	8	815 x 600 x 150	T&F, Fin pitch 3.5 mm	18	12	12	62U00025430E
Francis	Capril	8	815 x 600 x 150	T&F, Fin pitch 3.5 mm	9	12	24	62U00025432E
	Capril	10.5	815 x 600 x 150	HTC, Fin pitch 2.5 mm	18	12	12	62U00025456D
	Capril	10.5	815 x 600 x 150	HTC, Fin pitch 2.5 mm	9	12	24	62U00025458C
	Napoli	6	830 x 485 x 150	T&F, Fin pitch 2.5 mm	18	12	12	62U00025393B
	Napoli	6	830 x 485 x 150	T&F, Fin pitch 2.5 mm	9	12	24	62U00025326B
	Napoli	11.5	830 x 485 x 150	HTC, Fin pitch 2.5 mm	18	12	12	62U00025316B
	Napoli	11.5	830 x 485 x 150	HTC, Fin pitch 2.5 mm	9	12	24	62U00025317C
00	Valencia	12.5	955 x 600 x 150	HTC, Fin pitch 2.82 mm	27	14	12	62U00025437E
APPERET-	Valencia	12.5	955 x 600 x 150	HTC, Fin pitch 2.82 mm	13	14	24	62U00025438D
	Sicilia	5	690 x 157 x 230	T&F, Fin pitch 2.1 mm	13	8	12	62U00025060E
	Sicilia	5	690 x 157 x 230	T&F, Fin pitch 2.1 mm	6	8	24	62U00025439D
	Verona	5	690 x 157 x 230	T&F, Fin pitch 2.1 mm	13	9.5	12	62U00025258G
E.	Verona	5	690 x 157 x 230	T&F, Fin pitch 2.1 mm	6	9.5	24	62U00025444A
	Taormina	5	710 x 165 x 180	T&F, Fin pitch 2.1 mm	13	9.5	12	62U00025441A
	Taormina	5	710 x 165 x 180	T&F, Fin pitch 2.1 mm	6	9.5	24	62U00025442A

	Model	Performance (kW)	Dimensions L x W x H (mm)	Description	Current consumption (A)	Weight (kg)	Voltage (V)	Order number
	нтс	6.5	480 x 110 x 350	HTC, Fin pitch 2.5 mm	13	3.7	12	62U00025453A
	нтс	6.5	480 x 110 x 350	HTC, Fin pitch 2.5 mm	6	3.7	24	62025454A
and the later	нтс	5	606 x 110 x 350	HTC, Fin pitch 3.5 mm	18	4.5	12	62U00025427A
	нтс	7	606 x 110 x 350	HTC, Fin pitch 2.5 mm	18	4.5	12	62U00025460A
1200	нтс	12	606 x 160 x 350	HTC, Fin pitch 2.5 mm	16	7.5	24	62U00025486A
	нтс	12	606 x 160 x 350	HTC, Fin pitch 2.5 mm	32	7.5	12	62U00025472A
	нтс	12	725 x 105 x 450	HTC, Fin pitch 3.5 mm	18	6	12	62U00025426B
	нтс	14	725 x 105 x 450	HTC, Fin pitch 2.5 mm	18	4.6	12	62U00025459C
	нтс	14	725 x 105 x 450	HTC, Fin pitch 2.5 mm	9	4.6	24	62U00025478A

Air-conditioning kit, including evaporator, for light-duty vehicles

el	2		ent					Order number		Kit characteri	stics
	Emissions standard	Model year	Engine Displacement	Horse Power	Cylinders	Notes				Control	Notes
ën											
per 2.0 HDI – 2.2 HDI	-		1997	84	4	7)	621FI33500EA	62A03898A		Webasto	2)
oer 2.0 HDI – 2.2 HDI	-		1997	84	4		621FI33500EA	62A03915A		Original	2)
oer 2.0 HDI – 2.2 HDI	-		1997	84	4	8)	621FI33500EA	62A03955A	62A03898A	Webasto	2)
oer 2.0 HDI – 2.2 HDI	-		1997	84	4	8)	621FI33500EA	62A03955A	62A03915A	Original	2)
per 2.2 HDI	Euro 4	from 2006	2198	101/120	4	5)	621FI34400EB	62A031020B	62A031017A	Original	
per 2.2 HDI	Euro 4	from 2006	2198	101/120	4	5)	621FI34400EB	62A031020B	62A031018A	Webasto	
per 2.2 HDI	Euro 5	from 2010	2198	100	4		621CI13601EA			Webasto	
per 2.2 HDI	Euro 5	from 2010	2198	100	4		621CI13701EA			Original	
per 2.8 HDI (series 244)	-	from 2001 – 2006	2798	127	4		621FI30400EB	62A03898A		Webasto	2)
per 2.8 HDI (series 244)	-	from 2001 – 2006	2798	127	4		621FI30400EB	62A03915A		Original	2)
per 3.0 HDI	Euro 4	from 2006	2999	157	4	6)	621FI34300EB	62A031019A	62A031017A	Original	
per 3.0 HDI	Euro 4	from 2006	2999	157	4	6)	621FI34300EB	62A031019A	62A031018A	Webasto	
per 3.0 HDI	Euro 4	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031017A	Original	
per 3.0 HDI	Euro 4	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031018A	Webasto	
per 3.0 HDI	Euro 5	to 2010	2998	157	4		621FI36001EA			Webasto	
per 3.0 HDI	Euro 5	to 2010	2998	157	4		621FI36101EA			Original	
per 33-35 2.8 HDI (series 230)	_	from 2000	2798	127	4	9)	621FI30400EB	62A03864B			2)
										1	
ato 2.3 JTD (series 244)	-	from 2001	2286	110	4		621FI32400EB	62A03898A		Webasto	2
ato 2.3 JTD (series 244)	_	from 2001	2286	110	4	29)	621FI32400EB	62A03915A		Original	2)
ato 2.8 JTD (series 244)	_	from 2001	2798	127	4		621FI30400EB	62A03898A		Webasto	2
ato 2.8 JTD (series 244)	_	from 2001	2798	127	4	29)	621FI30400EB	62A03915A		Original	2)
ato 10-14 2.8 TD	_	to 03/1999	2800	122	4	,	621FI285120EA				2
ito 10-14 2.5 D – 2.5 TDI	_	from 1994	2500	85/116	4		621FI223120EC				2)
ito 10-14 2.8 D	_		2800	87	4		621FI285120EA				2)
to 10-14 2.8 JTD (series 230)	_	from 2000	2800	122	4	9)	621FI30400EB	62A03864B			2)
ato 10-14 2.8 TDI (series 230)	_	from 03/99	2800	122	4	10)	621FI30400EB	62A03865B			2)
nto 2.0 JTD		from 05/2004	1997	84	4		621FI33500EA	62A03898A		Webasto	
	-					7)					2
ato 2.0 JTD		from 05/2004	1997	84	4	7)	621FI33500EA	62A03915A	624020004	Original	2
ito 2.0 JTD	-	to 05/2004	1997	84	4	8)	621FI33500EA	62A03955A	62A03898A	Webasto	2
ito 2.0 JTD	-	to 05/2004	1997	84	4	8)	621FI33500EA	62A03955A	62A03915A	Original	2
to X250 2.0 MJT	Euro 5	from 2010	1956	116	4		621FI35601EA			Original	
ito X250 2.0 MJT	Euro 5	from 2010	1956	116	4		621FI35701EA			Webasto	
ato X250 2.2 MJT	Euro 4	from 2006	2198	101	4	5)	621FI34400EB	62A031020B	62A031017A	Original	
to X250 2.2 MJT	Euro 4	from 2006	2198	101	4	5)	621FI34400EB	62A031020B	62A031018A	Webasto	
to X250 2.3 MJT	Euro 4 / 5	from 2006	2287	120	4	6)	621FI34200EB	62A031019A	62A031018A	Webasto	
to X250 2.3 MJT	Euro 4 / 5	from 2006	2287	120	4	6)	621FI34200EB	62A031019A	62A031017A	Original	
to X250 2.3 MJT	Euro 4 / 5	from 2006	2287	120	4	5)	621FI34200EB	62A031020B	62A031017A	Original	
ato X250 2.3 MJT	Euro 4 / 5	from 2006	2287	120	4	5)	621FI34200EB	62A031020B	62A031018A	Webasto	
	Euro 4 / 5 Euro 4 / 5	from 2006 from 2006	2287 2999	120 157	4	5) 6)	621FI34200EB 621FI34300EB	62A031020B 62A031019A	62A031018A 62A031018A		Webasto Webasto

Model	Emissions standard	Model year	Engine Displacement	Horse Power	Cylinders	Notes		Order number		Kit characteris	Notes
Ducato X250 3.0 MJT	Euro 5	from 2010	2998	157	4		621FI36001EA			Webasto	
Ducato X250 3.0 MJT	Euro 4 / 5	from 2006	2999	157	4	6)	621FI34300EB	62A031019A	62A031017A	Original	
Ducato X250 3.0 MJT	Euro 4 / 5	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031017A	Original	
Ducato X250 3.0 MJT	Euro 4 / 5	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031018A	Webasto	
Ducato X250 3.0 MJT	Euro 5	from 2010	2998	157	4		621FI36101EA			Original	
lsuzu											
NLR-NMR-NLS 85 (small cabin)	Euro 4 / 5	from 2008	2999	150	4		621IS02111EB				2)
NPR 75 5.2 TDI	_	from 2007	5193	190	4		621IS02211EA				2)
NPR85 L gsx (large cabin)	Euro 4 / 5	from 2008	2999	150	4		621IS02011EB				2)
NPR85 (large cabin)	Euro 5 / 6	from 2014	2999	150	4		621IS02611A				2)
NPR85 (narrow cabin)	Euro 5 / 6	from 2014	2999	150	4		621IS02711A				2)
Iveco											
ECO Daily 2.3 HPI	-	to 2010	2286	116	4		621IV02218EA			Original	2)
Eurocargo TECTOR E17	-	to 2006	3920	170	4		621IV00908EA				2)
Eurocargo TECTOR E18	-	to 2006	5880	182	6		621IV00908EA				2)
Eurocargo TECTOR E21	-	to 2006	5880	209	6		621IV00908EA				2)
Eurocargo TECTOR E24	-	to 2006	5880	240	6		621IV00908EA				2)
Eurocargo TECTOR E28	-	to 2006	5880	275	6		621IV00908EA				2)
Eurocargo TECTOR E13 E15	Euro 3 / 4	from 2006	3920	150	4		621IV02318EA				2)
Eurocargo TECTOR E13 E15	Euro 2	to 2006	3920	150	4		621IV00908EA				2)
Eurocargo TECTOR E17	Euro 3 / 4	from 2006	3920	170	4		621IV02318EA				2)
Eurocargo TECTOR E18	Euro 3 / 4	from 2006	5880	182	6		621IV02318EA				2)
Eurocargo TECTOR E21	Euro 3 / 4	from 2006	5880	209	6		621IV02318EA				2)
Eurocargo TECTOR E24	Euro 3 / 4	from 2006	5880	240	6		621IV02318EA				2)
Eurocargo TECTOR E28	Euro 3 / 4	from 2006	5880	275	6		621IV02318EA				2)
Mercedes-Benz											
Sprinter 2.2 CDI	_	from 2006	2148	150	4	20)	621MB32400EA	62A031028A			2)
Sprinter 2.2 CDI (also for RHD drive)	_	from 2006	2148	150	4	17)	621MB32400EA	62A031029A			2)
Sprinter 208-308 CDI (engine OM 611)	-	from 2000	2150	82	4		621MB311116ED			Original	2)
Sprinter 211-311 CDI (engine OM 611)	-	from 2000	2150	109	4		621MB311116ED			Original	2)
Sprinter 213-313 CDI (engine OM 611)	_	from 2000	2150	129	4		621MB311116ED			Original	2)
Sprinter 216-316-416 (engine OM 612)	-		2686	156	5		621MB311116ED			Original	2)
Sprinter 3.0 DCI	-	from 2006	2987	184	6	17)	621MB32400EA	62A031061A			2)
Sprinter 308 CDI (engine OM 611)	_	from 2000	2150	79	4		621MB311116ED			Original	2)
Sprinter 316 2.2 CDI (Euro 5) OM651	Euro 5	from 2009	2143	163	4	20)	621MB32400EA	62A031117A			2)
Vito 108 2.2 CDI (engine OM611) (cab only)	-	from 1994 – 2000	2151	82	4	16)	621MB307114ED			Original	2)
Vito 109-111-115 2.2CDI	_	from 2003	2148	108	4		621MB322121EA				2)
Vito 110 2.2 CDI (engine OM 611) (cab only)	-	from 1994 – 2000	2151	102	4	16)	621MB307114ED			Original	2)

Air-conditioning kit, including evaporator, for light-duty vehicles

Model								Order number		Kit characteri	stics
	Emissions standard	Model year	Engine Displacement	Horse Power	Cylinders	Notes				Control	Notes
Vito 112 2.2 CDI (engine OM 611) (cab only)	-	from 1994 – 2000	2151	122	4	16)	621MB307114ED			Original	2)
Nissan											
INTERSTAR 2.2/2.5 DCI (not prepared)	-	from 2004	2500	120	4	20) 33)	621RE20100EA	62A03967A			2)
INTERSTAR 2.2/2.5 DCI (not prepared)	-	from 2004	2500	120	4	21) 33)	621RE20100EA	62A03968A			2)
INTERSTAR 2.5 DCI	Euro 4	from 2006	2464	120	4	19)	621RE20200EA	62A031030A			2)
Rear evaporator for Primastar 2.0 + air duct kit (suitable only with Webasto solution)	-						62U003FF058EB	623RE89EA			2)
Opel											
Movano 2.2/2.5 DCI (not prepared)	_	from 2003 – 2006	2500	120	4	20) 33)	621RE20100EA	62A03967A			2)
Movano 2.2/2.5 DCI (not prepared)	_	from 2003 – 2006	2500	120	4	21) 33)	621RE20100EA	62A03968A			2)
Movano 2.5 DCI	Euro 4	from 2006	2464	120	4	20)	621RE20200EA	62A031030A			2)
Vivano 2.0 rear evaporator + air duct kit (suitable only with Webasto solution)	-						62U003FF058EB	623RE89EA			
Peugeot											
Boxer 2.0 HDI (version 244)	-	from 05/2004	1997	84	4	7)	621FI33500EA	62A03898A		Webasto	2)
Boxer 2.0 HDI (version 244)	-	from 05/2004	1997	84	4	7)	621FI33500EA	62A03915A		Original	2)
Boxer 2.0 HDI (version 244)	-	to 05/2004	1997	84	4	8)	621FI33500EA	62A03955A	62A03898A	Webasto	2)
Boxer 2.0 HDI (version 244)	-	to 05/2004	1997	84	4	29)	621FI33500EA	62A03955A	62A03915A	Original	2)
Boxer 2.2 HDI	Euro 4	from 2006	2198	101/120	4	5)	621FI34400EB	62A031020B	62A031017A	Original	
Boxer 2.2 HDI	Euro 4	from 2006	2198	101/120	4	5)	621FI34400EB	62A031020B	62A031018A	Webasto	
Boxer 2.2 HDI	Euro 5	to 2010	2198	100	4	5)	621CI13601EA			Webasto	
Boxer 2.2 HDI	Euro 5	to 2010	2198	100	4	5)	621CI13701EA			Original	
Boxer 3.0 HDI	Euro 4	from 2006	2999	157	4	6)	621FI34300EB	62A031019A	62A031017A	Original	
Boxer 3.0 HDI	Euro 4	from 2006	2999	157	4	6)	621FI34300EB	62A031019A	62A031018A	Webasto	
Boxer 3.0 HDI	Euro 4	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031017A	Original	
Boxer 3.0 HDI	Euro 4	from 2006	2999	157	4	5)	621FI34300EB	62A031020B	62A031018A	Webasto	
Boxer 3.0 HDI	Euro 5	to 2010	2998	158	4	5)	621FI36001EA			Webasto	
Boxer 3.0 HDI	Euro 5	to 2010	2998	158	4	5)	621FI36101EA			Original	
Boxer 330-350 2.8 HDI	-		2798	127	4	15)	621FI30400EB	62A03864B			2)
Renault											
Master 2.2/2.5 DCI (not prepared)	-	from 2004	2500	120	4	20) 33)	621RE20100EA	62A03967A			2)
Master 2.2/2.5 DCI (not prepared)	_	from 2004	2500	120	4	30) 33)	621RE20100EA	62A03968A			2)
Master 2.3 DCI with PTO	Euro 5	from 2010	1998	125	4	20) 31) 34)	621RE20501EA				2)
Master 2.5 DCI	Euro 4	from 2006	2464	120	4	20)	621RE20200EA	62A031030A			2)
Master/Mascott 3.0 DCI (transversal engine)	_	from 2004	2953	136	4	33)	621RE20100EA	62A03988A			
Trafic 2.0 rear evaporator + air duct kit (suitable only with Webasto solution)	_						62U003FF058EB	623RE89EA			

Model	σ		ť					Order number	Kit characte	ristics
	Emissions standard	Model year	Engine Displacement	Horse Power	Cylinders	Notes			Control	Notes
Volkswagen										
Caddy 1.9/2.0 TDI (engine BKC/BRU/BJB)	-	from 2008	1390	90/ 105/140	4	27)	621VW22800EA	62A031027B		2)
Crafter 2.0 TDI (incl. bipower)	Euro 5	from 2011	1968	109/163	4	20)	621MB32400EA	62A031109B		
Crafter 2.5	Euro 4	from 2006	2461	136	5	20)	621MB32400EA	62A031043A		
Crafter 2.5 TDI	Euro 4	from 2006	2461	136	5	17)	621VW22501EA			2)
LT35 2.5 SDI (engine AGX, AVR)	-	from 1999	2459	75/102	5		621VW19051ED			2)
LT35 2.5 TDI (engine AHD, ANJ, BBF, BBE, APA, AVR)	-	from 1999	2459	75/102	5		621VW19051ED			2)
Transporter 1.9 TDI T5 (engine AXB, AXC)	-	from 2003	1898	80	4		621VW21956EC			
Transporter 1.9 TDI T5 (engine BRS, BRR)	-	from 2003	1898	80	4	32)	621VW21956EC			
Transporter T5 2.0 TDI	-	from 2010	1968	102	4		621VW22056EA			

Notes

1) For the Euro 5 version separately belt with code 62013716EA needed

2) AC unit with manual control

- 3) Additional control wiring kit for Jumpy 2.0 HDI TD
- Only for cars without prepared oil pump
 Wiring harness for not prepared vehicles
 Wiring harness for prepared vehicles
- 7) Kit suitable for new engines with back side power steering pump are identified by chassis number from 7431721dd 04.05.2004
- 8) Kit suitable for old engines with front side power steering pump Nt suitable for old engines with non-side power secting participation (former 1FI32300E)
 Additional control wiring kit for Jumper 2.8 HDI series 230
 Additional control wiring kit for Ducato 2.8 JTD series 230
 Vehicles with crankshaft pulley with one groove

- 12) Additional control wiring kit for Scudo 2.0 HDI TD
- 13) Only for cars with prepared oil pump
- 14) Only for cars without prepared oil pump
- 15) Additional control wiring kit for Boxer 2.8 HDI16) Additional kit for cars without REC

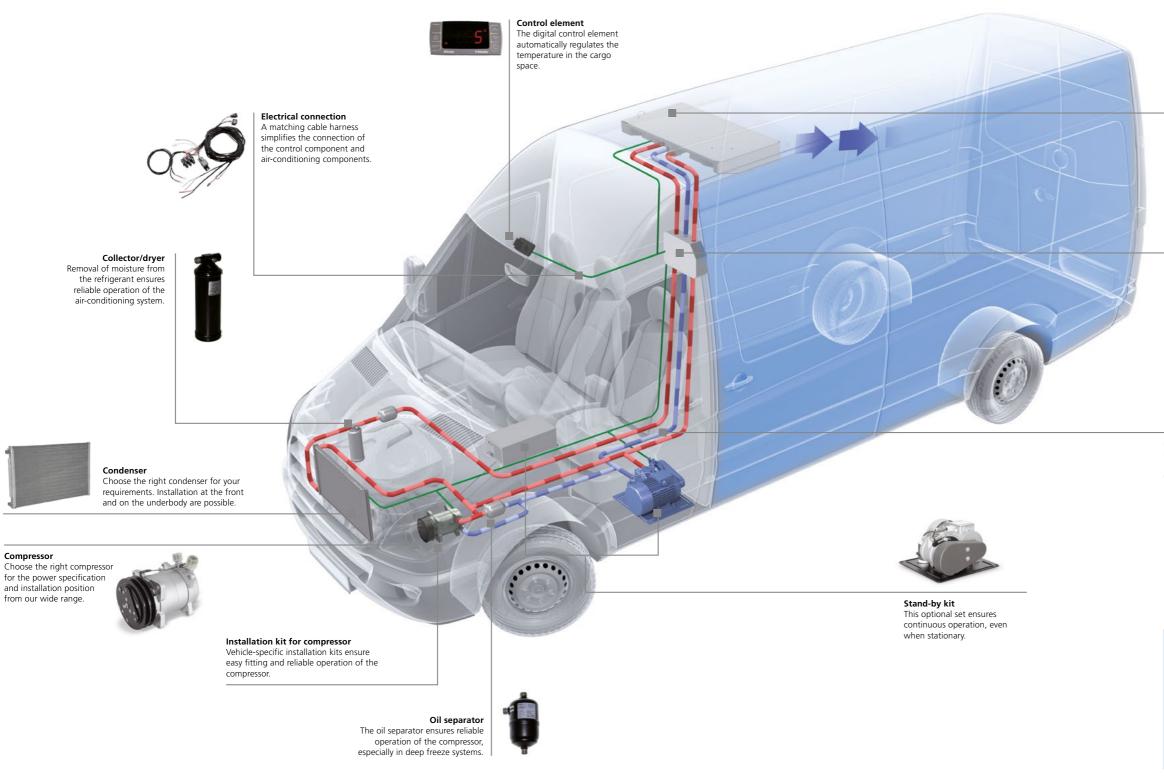
17) For kit with V5 compressor

- 18) Only vehicles with hydraulic coupling system
- 19) Kit with SP15 (154cc) compressor (included in the 62A031030A)
- 20) Kit with SP15 (154cc) compressor
- 21) Kit with SP10 (110cc) compressor

- Control wiring kit for Expert 2.0 HDI
 Compressor mounting kits for Caddy Gasoline
 Additional kits for vehicle with one radiator fan
- 25) Kit for vehicle with double radiator fan and with Engine Coolant Temperature sensor (G83) situated at the radiator hose
- 26) Kit for vehicle with double radiator fan and with Engine Coolant Temperature sensor (G83) situated behind the alternator 27) Unified version (Euro 3, Euro 4)
- Additional kit for vehicles with high original cooling radiator (height 477 mm)
 Original AC panel kit with A/C switch and rear heater switch
- 30) Is necessary only for cabin application, not necessary with a second compressor application
- 31) Power steering, alternator bracket and hoses
- 32) Belt 62013687A must be added 33) Only for vehicles with heating BEHR
- 34) Front-Wheel Drive

Application of an integrated transport refrigeration system

Webasto integrated transport refrigeration systems are suitable for fresh produce delivery (> 0 °C) and for deep frozen cargo (< 0 °C). They are available in various capacities up to 3,660 W. An optional stand-by function allows operation independently of the engine. The system components are fully integrated into the vehicle and can be tailored to the individual application and requirements. Vehicle-specific installation kits are available.





Evaporator

Evaporator modules are available in different capacities.



Hot gas defroster kit This optional function ensures rapid defrost of the evaporator in the cargo space.

Refrigerant lines

Choose lines and connections from our wide range to give a refrigerant circuit that's an optimum fit

Advantages of an integrated transport refrigeration system:

- Complete integration into the transport refrigeration vehicle
- No effect on aerodynamic characteristics
- Optional rapid defrost function

Integrated, battery drive

Battery-operated transport refrigeration system, fully integrated in vehicles with cargo space volumes up to 5 m³ for transporting perishables.

Transport refrigeration systems ensure that perishables can be transported across long distances at optimum temperatures so they arrive at their destination in perfect condition. Suitable for cold and frozen goods (working range -20/+10 °C), the Frigo Top 10 is Webasto's unique solution for smaller transport vehicles with an air-conditioning system but no space for an additional compressor in the engine compartment. The compressor, motor and condenser of the compact Frigo Top 10 are completely integrated under the chassis so there is no protrusion that changes your vehicle's visual appearance and fuel is saved. It also features an auto switch-off device with low battery voltage. Powered directly by the vehicle battery, installation is easy, with no need to connect engine-driven compressors and no roof drilling. Proven Webasto quality and reliability are built in, so you can look forward to accustomed efficiency and the all-important long life.time.

- Cooling capacity up to 1,108 W
 Automatic temperature regulation and defrost function deliver high efficiency cooling in all temperature ranges
- High-quality reliable components from proven series-production processes
- Easy installation and maintenance
- ATP (Accord Transport Perissable) certification

Frigo Top 10

Model overview	Scope of delivery	Order number
Frigo Top 10 I-E 12 V	Transport refrigeration system with refrigerant R404A, including motor-pulley-compressor module, condenser, evaporator, installation kit, without stand-by module, automatic temperature regulation, defrost kit, product documentation	6235097B
Frigo Top 10 I-ES 12 V/230 V	Transport refrigeration system with refrigerant R404A, including motor-pulley-compressor module, condenser, evaporator, installation kit, with stand-by module, automatic temperature regulation, defrost kit, product documentation	6232186B
Frigo Top 10 I-ESG 12 V/230 V R452A	Transport refrigeration system with refrigerant R452A, including motor-pulley-compressor module, condenser, evaporator, installation kit, with stand-by module, automatic temperature regulation, defrost kit, product documentation	6244178A
Accessories		
Cut off device for battery protection specific for Mercedes vehicles	-	6234421A
Vehicle-specific installation kits	Bracket for condenser and motor/compressor module	On request

Model overview	Frigo Top 10 I-E	Frigo Top 10 I-ES	Frigo Top 10 I-ESG
Refrigerant	R40	04A	R452A
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature 0°C Engine operation/Stand-by operation	1,022	1,108	1,119/1,135
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -10°C Engine operation/Stand-by operation	722	776	750/748
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -20°C Engine operation/Stand-by operation	389	403	352 / 349
Nominal Voltage (V)	12	12	12
Air Flow in m³/h	743	743	759
Max. Current absorption (A) Engine operation 12 V/24 V	65	65	60
Max. Current absorption (A) Stand-by operation 230 V	10	10	10
Dimensions L x W x H (mm) Condenser unit	481 x 265 x 124	481 x 265 x 124	481 x 265 x 124
Dimensions L x W x H (mm) Evaporator unit	660 x 530 x 158	660 x 530 x 158	660 x 530 x 158
Dimensions L x W x H (mm) Motor compressor	465 x 455 x 240	465 x 455 x 240	465 x 455 x 240
Weight (kg) Condenser unit	2.9	2.9	2.8
Weight (kg) Evaporator unit	11.5	11.5	11.5
Weight (kg) Motor compressor unot	25.0	25.0	25.0

The performance data for your application may differ from the normal value.

* To complete the installation: Compressor, compressor mounting kit, compressor fittings - depending on application



The performance data for your application may differ from the nominal values.

Integrated solutions, direct drive

Transport refrigeration system fully integrated into the vehicle. Optimum component combinations thanks to modular system.

The transport refrigeration systems ensure that perishable goods can be transported over long distances at the optimum temperature and reach their destination in perfect condition. The components of this cooling system, such as evaporators, condensers and compressors as well as a large range of accessories can be combined to give individually tailored solutions. This gives a high degree of flexibility and adaptability to different applications as specified by the customer. With powerful fans, they offer reliability and a long life, important factors in transport refrigeration. Depending on the desired temperature range, the system can be filled with the refrigerant R134a or R404A. An electric motor is available as an option for stand-by operation.

Pordoi

Modular system for almost all light-duty vehicles. The fully integrated design ensures that neither the exterior appearance nor the aerodynamics of the vehicle are negatively affected.

Stand-by module:

The stand-by module is used to keep the transport refrigeration system working at set temperature when the vehicle is still and connected to the power network. The stand-by module grants the cooling power declared with ATP certification only for the refrigerant R134a.

Model overview	Pordo	i 2000	Pordo	i 3000	Pordo	i 4000	
			Stand-by u	init optional			
Refrigerant	R404A	R134a	R404A	R134a	R404A	R134a	
Cooling capacity according to ATP standard, at ambient temperature of +30°C and compartment temperature of 0°C, in engine/stand-by operation optional (W)	2,493/753	1,565/1,233	2,799/890	2,203/1,636	3,660/1,133	2,616/1,858	
Cooling capacity according to ATP standard, at ambient temperature of +30°C and compartment temperature of -20°C, in engine/stand-by operation optional (W)	1,206/-	_	1,332/-	_	1,926/-	_	
Cooling capacity according to ATP standard, at ambient temperature of +30°C and compartment temperature of +5°C, in engine/stand-by operation optional (W)	_	1,895/1,539	_	2,714/1,994	_	3,101/2,329	
Nominal voltage (V)				12			
Air flow (m³/h)	67	70	1,0	040	1,534		
Max. total current absorption at 12 V, in engine/stand-by operation (A)	(*),	/14		(*))/16		
Dimensions Condenser unit Evaporator unit L x W x H (mm)	(¹ 660 x 50		(*) 900 x 500 x 157		(*) 1,000 x 500 x 157		
Weight Condenser unit Evaporator unit (kg)	(*	°) .5	(*) 10.5		(* 12	,	
Accessories			Stand-by unit (**)				

Integrated system

- Tailor-made refrigeration units for commercial vehicles with cargo spaces up to 18 m³
- Cooling capacity up to 3,660 W
- Automatic temperature regulation
- High efficiency in all temperature ranges
- High-quality reliable components from proven series production processes
- ATP (Accord Transport Perissable) certification for all units

Pordoi 2000

Model overview	Scope of delivery	Order number					
Pordoi 2000	Evaporator unit with refrigerant R404A, product documentation	62U003FF109ED					
Pordoi 2000	Pordoi 2000 Evaporator unit with refrigerant R134a, product documentation						
Accessories							
Stand-by unit		62U006SB04F					

Pordoi 3000

Model overview	Scope of delivery	Order number
Pordoi 3000	Evaporator unit with refrigerant R404A, product documentation	62U003FF111ED
Pordoi 3000	62U003FF110ED	
Accessories		
Stand-by unit		62U006SB04F

Pordoi 4000

Model overview	Scope of delivery	Order number
Pordoi 4000	Evaporator unit with refrigerant R404A, product documentation	62U003FF112ED
Pordoi 4000	Evaporator unit with refrigerant R134a, product documentation	62U003FF113ED
Accessories		
Stand-by unit		62U006SB04F

The following pages contain an overview of the available vehicle-specific installation kits. These contain a compressor with bracket, condenser with bracket, collector/dryer, pressure switch, cable harness, refrigerant lines and joints.



The performance data for your application may differ from the nominal values.

Transport refrigeration kit for integrated solutions

Model			ť				em	icle em	Ev	aporator to be add	ed
	Emissions standard	Model year	Engine Displacement	£	Cylinders	Notes	with original vehicle air-conditioning system	without original vehicle air-conditioning system	Part No.	Evaporator with Valve (R134A) P/N	Evaporator with Valve (R404a) P/N
Citroën											
Berlingo 1.6 HDI	Euro 5		1560	75/92	4			х	622HDPE002FB	62U003FF108ED	
Jumper 2.2 HDI	Euro 4	from 2006	2198	101	4		x		6231182A	62U003FF110ED	
Jumper 2.2 HDI	Euro 4	from 2006	2198	101	4		x		6231182A	62U003FF113ED	
Jumper 2.2 HDI	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF110ED	
Jumper 2.2 HDI	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF113ED	
Jumper 2.2 HDI	Euro 5	from 2010	2198	100	4			х	622HDCI005FA	62U003FF110ED	
Jumper 2.3 MJT	Euro 4	from 2006	2287	120	4		X		621HDFI008EC	62U003FF110ED	
Jumper 2.3 MJT	Euro 4	from 2006	2287	120	4		X		621HDFI008EC	62U003FF113ED	
Jumper 2.8HDI	-	from 2001	2798	127	4		X		621HDFI002EA	62U003FF110ED	
Jumper 3.0 HDI	Euro 4	from 2006	2999	157	4			х	622HDFI003FB	62U003FF113ED	
Jumper 3.0 HDI	Euro 4	from 2006	2999	157	4			x	622HDFI003FB	62U003FF110ED	
Jumpy 1.6 HDI	Euro 4	from 2007	1560	90	4		x		621HDFI012EA	62U003FF108ED	
Jumpy 1.6 HDI	Euro 4	from 2007	1560	90	4		x		621HDFI012EA	62U003FF110ED	
Jumpy 1.6 Blue HDI	Euro 6	from 2016	1560	95-115	4			X	6241866B	62U003FF108ED	
Jumpy 1.6 Blue HDI	Euro 6	from 2016	1560	95-115	4			X	6241866B	62U003FF110ED	
Jumpy 2.0 HDI	Euro 4	from 2007	1997	120	4		x		621HDFI011EA	62U003FF110ED	
Jumpy 2.0 HDI	Euro 4	from 2007	1997	120/136	4			х	622HDFI004FA	62U003FF110ED	
Jumpy 2.0 HDI	Euro 5	from 2010	1997	163	4			х	622HDFI011FC	62U003FF110ED	
Jumpy 2.0 HDI	Euro 5	from 2010	1997	163	4		x		621HDFI020EA	62U003FF108ED	
Jumpy 2.0 HDI	Euro 5	from 2010	1997	163	4		x		621HDFI020EA	62U003FF110ED	
Jumpy 2.0 Blue HDI	Euro 6	from 2010	1997	128-163	4			х	6244080A	62U003FF108ED	
Jumpy 2.0 Blue HDI	Euro 6	from 2010	1997	128-163	4			х	6244080A	62U003FF110ED	
FIAT											
Doblò 1.3 MJT 16 V	Euro 5	from 2010	1248	75	4			x	622HDFI009FA	62U003FF108ED	
Doblò 1.3 MJT	Euro 5	from 2010	1248	90	4			x	6240889A	62U003FF108ED	
Doblò 1.3 MJ	-	from 2004	1248	69	4		x		621HDFI003EB	62U003FF108ED	
Doblò 1.3 MJ	Euro 4	from 2010	1248	90	4		x		621HDFI014EA	62U003FF108ED	
Doblò 1.6 MJ	Euro 4	from 2010	1598	105	4		x		621HDFI015EA	62U003FF108ED	
Doblò 1.6 MJ	Euro 4	from 2010	1598	105	4		x		621HDFI015EA	62U003FF110ED	
Nuovo Doblo' Cargo 1.6 MJT II	Euro 6	from 2016	1598	95-105	4			x	6242084C	62U003FF108ED	
Nuovo Doblo' Cargo 1.6 MJT II	Euro 6	from 2016	1598	95-105	4			x	6242084C	62U003FF110ED	
Doblò 1.9 JTD	_	from 2003	1910	105	4		x		621HDFI007EB	62U003FF108ED	
Doblò Cargo 1.3 (69HP) MJ.	Euro 3/4	from 2004	1248	69	4			x	622HDFI012FA	62U003FF108ED	
Doblò Cargo 1.4 (120HP) T-Jet Nat	Euro 5/6	from 2011	1368	120	4			x	622HDFI015FA	62U003FF108ED	
Doblò Cargo 1.4 (95HP) Benz.	Euro 4	from 2007	1368	95	4			x	622HDFI008FA	62U003FF108ED	
Doblò Cargo 1.6 (105HP) MJT	Euro 5		1598	105	4			x	622HDFI006FA	62U003FF108ED	
Doblò Cargo 1.9 (105HP) MJ.	Euro 4	from 2007	1910	105	4			x	622HDFI014FA	62U003FF108ED	
Doblò Cargo 2.0 (135HP) MJT	Euro 5		1956	135	4			x	622HDFI006FA	62U003FF110ED	
Nuovo Doblo' Cargo 2.0 MJT II	Euro 6	from 2016	1956	135	4			x	6242084C	62U003FF108ED	
Nuovo Doblo' Cargo 2.0 MJT II	Euro 6	from 2016	1956	135	4			x	6242084C	62U003FF110ED	
Ducato 2.0 MJ	Euro 5	from 2007	1956	115	4		x		621HDFI018EA	62U003FF110ED	
Ducato 2.0 MJ	Euro 5	from 2008	1956	115	4		x		621HDFI018EA	62U003FF113ED	
Ducato 2.0 Mjt (SP15)	Euro 5	from 2011	1956	115	4			x	622HDFI013FA	62U003FF110ED	
Ducato 2.0 Mjt (SP15)	Euro 5	from 2011	1956	115	4			x	622HDFI013FA	62U003FF113ED	
Ducato 2.0 Mjt (TM15)	Euro 5	from 2011	1956	115	4			x	622HDFI010FA	62U003FF110ED	

Model	7.		int				le stem	hicle stem	Ev	aporator to be add	ed
	Emissions standard	Model year	Engine Displacement	£	Cylinders	Notes	with original vehicle air-conditioning system	without original vehicle air-conditioning system	Part No.	Evaporator with Valve (R134A) P/N	Evaporator with Valve (R404a) P/N
Ducato 2.0 Mjt (TM15)	Euro 5	from 2011	1956	115	4			х	622HDFI010FA	62U003FF113ED	
Ducato 2.2 MJ R134a	Euro 4	from 2006	2198	101	4		х		6231182A	62U003FF110ED	
Ducato 2.2 MJ R134	Euro 4	from 2006	2198	101	4		х		6231182A	62U003FF113ED	
Ducato 2.2 MJ	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF110ED	
Ducato 2.2 MJ	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF113ED	
Ducato 2.3 MJ	-	from 2006	2287	120	4		х		621HDFI008EC	62U003FF110ED	
Ducato 2.3 MJ	-	from 2006	2287	120	4		x		621HDFI008EC	62U003FF113ED	
Ducato 2.8JTD (Serie 244)	-	from 2003	2798	127	4		х		621HDFI002EA	62U003FF110ED	
Ducato X 250 2.2 MJT	Euro 4	from 2006	2287	120	4L			х	622HDFI001FB	62U003FF110ED	
Ducato X 250 2.2 MJT	Euro 4	from 2006	2287	120	4L			x	622HDFI001FB	62U003FF113ED	
Ducato X250 2.3 MJT	Euro 4/5	from 2006	2287	120	4L			x	6243998A	62U003FF110ED	
Ducato X250 2.3 MJT	Euro 4/5	from 2006	2287	120	4L			x	6243998A	62U003FF113ED	
Ducato X250 3.0 MJT	Euro 4	from 2006	2999	157	4			x	622HDFI003FB	62U003FF110ED	
Ducato X250 3.0 MJT	Euro 4	from 2006	2999	157	4			х	622HDFI003FB	62U003FF113ED	
Fiorino 1.3 MJT 16 V	Euro 4	from 2008	1248	75	4			х	6240902A	62U003FF108ED	
Fiorino 1.3 MJT 16 V	Euro 5	from 2010	1248	75	4			х	622HDFI009FA	62U003FF108ED	
Scudo 1.6 MJ	Euro 4	from 2007	1560	90	4		x		621HDFI012EA	62U003FF108ED	
Scudo 1.6 MJ	Euro 4	from 2007	1560	90	4		x		621HDFI012EA	62U003FF110ED	
Scudo 1.6 MJ	Euro 4	from 2007	1560	90	4	3)		x	622HDFI007FA	62U003FF108ED	
Scudo 1.6 MJ	Euro 4	from 2007	1560	90	4	3)		x	622HDFI007FA	62U003FF110ED	
Scudo 2.0 MJ	Euro 4	from 2007	1997	120	4		х		621HDFI011EA	62U003FF110ED	
Scudo 2.0 MJ	Euro 4	from 2007	1997	120/136	4			х	622HDFI004FA	62U003FF110ED	
Scudo 2.0 MJT/HDI	Euro 5	from 2010	1997	163	4		x		621HDFI020EA	62U003FF108ED	
Scudo 2.0 MJT/HDI	Euro 5	from 2010	1997	163	4		x		621HDFI020EA	62U003FF110ED	
Ford										· · · · · · · · · · · · · · · · · · ·	
Transit (Custom) 2.2 TDCI	Euro 5	from 2012	2200	100-125	4	10)		х	622HDFO003FA	62U003FF110ED	
Transit (Custom) 2.2 TDCI	Euro 5	from 2012	2200	100-125	4	10)		x	622HDFO003FA	62U003FF113ED	
Transit (Custom) 2.2 TDCI	Euro 5	from 2012	2200	100-125	4		x		621HDFO006SA	62U003FF110ED	
Transit (Custom) 2.2 TDCI	Euro 5	from 2012	2200	100-125	4		x		621HDFO006SA	62U003FF113ED	
Transit (Custom) 2.0 EcoBlue		from 2012	1996	105/130/170		10\	*		6243086A		
	Euro 6				4	10)		X		62U003FF110ED	
Transit (Custom) 2,0 EcoBlue Transit (Custom) 2,0 EcoBlue	Euro 6 Euro 6	from 2016 from 2016	1996 1996	105/130/170 105/130/170	4	10) 12)		x	6243086A 6241827A	62U003FF113ED 62U003FF110ED	
(Engine YNR6) Transit (Custom) 2,0 EcoBlue	Euro 6	from 2016	1996	105/130/170	4	12)		x	6241827A	62U003FF113ED	
(Engine YNR6)											
Connect 1.5 TDCi (6 gear box)	Euro 6	from 2016	1499	75/100/120	4	13)		х	6241354A	62U003FF108ED	
Connect 1.5 TDCi (6 gear box)	Euro 6	from 2016	1499	75/100/120	4	13)		х	6241354A	62U003FF110ED	
Transit 2.2 TDCI	Euro 5	from 2012	2198	101	4	4)	x		621HDFO005EB	62U003FF110ED	
Transit Connect 1.6 E5 – 6 Speed	Euro 6	from 2014	1560	75 - 95 - 115	4			х	6240604A	62U003FF108ED	
lveco											
Daily 2.3 HPI	Euro 4	2003 – 2006	2286	116	4			x	622HDIV004SA	62U003FF110ED	
Daily 2.3 HPI	Euro 4	2003 – 2006	2286	116	4			x	622HDIV004SA	62U003FF113ED	

Transport refrigeration kit for integrated solutions

Model			¥				em (nicle iem	Evaporator to be added				
	Emissions standard	Model year	Engine Displacement	£	Cylinders	Notes	with original vehicle air-conditioning system	without original vehicle air-conditioning system	Part No.	Evaporator with Valve (R134A) P/N	Evaporator with Valve (R404a) P/N		
Daily 2.3 HPI	Euro 5/5B+/6	to 05-2014	2286	106/126	4	11)		х	622HDIV005SA	62U003FF110ED			
Daily 2.3 HPI	Euro 5	to 05-2014	2286	106/126	4			х	622HDIV005SA	62U003FF113ED			
Daily 3.0	Euro 5/5b+	to 05-2014	2998	107/150	4			х	622HDIV006SB	62U003FF110ED			
Daily 3.0 HPT	Euro 5	to 05-2014	2998	145/170	4		х		621HDIV007EA	62U003FF110ED			
Daily 3.0 HPT	Euro 5	to 05-2014	2998	145/170	4		х		621HDIV007EA	62U003FF113ED			
Daily 3.0 JTD	-	2003 – 2006	3000	169/177	4			х	622HDIV001SB	62U003FF110ED			
Daily 3.0 JTD	-	2003 – 2006	3000	169/177	4			x	622HDIV001SB	62U003FF113ED			
Daily 3.1	Euro 5/5b+	from 2010	2998	107/150	4			х	622HDIV006SB	62U003FF113ED			
Mercedes-Benz													
Sprinter 2.2 CDI (MB N63)	Euro 4	from 2010	2143	163	4			x	6243136A	62U003FF110ED			
Sprinter 2.2 CDI (MB N63)	Euro 4	from 2010	2143	163	4			х	6243136A	62U003FF113ED			
Sprinter 2.2 CDI E4 OM 646 DELA	-	2006 – 2009	2148	150	4			х	622HDMB002SB	62U003FF110ED			
Sprinter 2.2 CDI E4 OM 646 DELA	-	2006 – 2009	2148	150	4			х	622HDMB002SB	62U003FF113ED			
Sprinter 3.0 CDI (Tend. Orig.) OM 642DELA	Euro 4/5/ 5b+/6	to 2006	2987	184	6			х	622HDMB009SA	62U003FF110ED			
Sprinter 3.0 CDI (Tend. Orig.) OM 642DELA	Euro 4/5/ 5b+/6	to 2006	2987	184	6			x	622HDMB009SA	62U003FF113ED			
Sprinter 316 2.2 CDI OM651 DE22LA (not fittable for vehicles BlueEfficiency)	Euro 5	to 2009	2143	163	4			x	622HDMB008SB	62U003FF110ED			
Sprinter 316 2.2 CDI OM651 DE22LA (not fittable for vehicles BlueEfficiency)	Euro 5	to 2009	2143	163	4			x	622HDMB008SB	62U003FF113ED			
Sprinter 316 NGT M271 E18 ML (MZ2)	Euro 4	from 2009	2987	115/156	4			х	6240094A				
Vito 111-115 2.2 CDI	not defi- ned	from 2003	2148	110-150	4			x	622HDMB006SA	62U003FF110ED			
Vito 111-115 2.2 CDI	not defi- ned	from 2003	2148	110-150	4			x	622HDMB006SA	62U003FF113ED			
Vito 2.2 CDI (engine OM 646) OM 651 (Euro 5)	Euro 4	from 2003	2148	109	4		х		621HDMB003EC	62U003FF110ED			
Vito 2.2 CDI (engine OM 646) OM 651 (Euro 5)	Euro 4	from 2003	2148	109	4		х		621HDMB003EC	62U003FF113ED			
Nissan													
Interstar 2.5 DCI	Euro 4	from 2006	2464	120	4			x	622HDRE001SA	62U003FF110ED			
Interstar 2.5 DCI	Euro 4	from 2006	2464	120	4			x	622HDRE001SA	62U003FF113ED			
NV200 1.5 DCI	Euro 5	from 2010	1462	86	4			x	622HDNI003FA	62U003FF108ED			
NV300 1.6 DCi	Euro 5B+/6	from 2016	1598	95-125-145	4			x	6242153A	62U003FF108ED			
NV400 2.3	Euro 4/5	from 2010	2298	125	4			х	622HDRE006SA	62U003FF110ED			
NV400 2.3	Euro 5B+	from 2010	2298	135-165	4		х	х	6235258A	62U003FF110ED			
Primastar 2.0 DCI	Euro 5	from 2010	1995	90-114	4	5)		х	622HDRE007SA	62U003FF108ED			

Model			ť				em	icle em	Evaporator to be added			
	Emissions standard	Model year	Engine Displacement	£	Cylinders	Notes	with original vehicle air-conditioning system	without original vehicle air-conditioning system	Part No.	Evaporator with Valve (R134A) P/N	Evaporator with Valve (R404a) P/N	
Primastar 2.0 DCI	Euro 5	from 2010	1995	90-115	4		х		621HDRE015A	62U003FF108ED		
Primastar 2.0 DCI	Euro 4	from 2006	1995	90	4	6)		х	622HDRE009SA	62U003FF108ED		
Opel												
Combo 1.4 Metan	Euro 5	from 2011	1368	120	4			x	622HDFI015FA	62U003FF108ED		
Combo 1.6 MJT	Euro 5		1598	105	4			х	622HDFI006FA	62U003FF108ED		
Movano 2.3 Twin Turbo	Euro 5B+	from 2010	2298	135-165	4		х	х	6235258A	62U003FF110ED		
Movano 2.5 DCI	Euro 4	from 2006	2464	120	4			х	622HDRE001SA	62U003FF110ED		
Movano 2.5 DCI	Euro 4	from 2006	2464	120	4			х	622HDRE001SA	62U003FF113ED		
Vivaro 1.6 DCi	Euro 5B+/6	from 2016	1598	95-125-145	4			х	6242153A	62U003FF108ED		
Vivaro 2.0 DCI	Euro 5	from 2010	1995	90-115	4		х		621HDRE015A	62U003FF110ED		
Vivaro 1.6 CDTi Biturbo	Euro 5B+		1598	120-140	4			х	6242153A	62U003FF110ED		
Peugeot												
Boxer 2.0 EcoBlue HDI	Euro 6	from 2016	1997		4		х	х	6244132A	62U003FF110ED		
Boxer 2.0 EcoBlue HDI	Euro 6	from 2016	1997		4		х	х	6244132A	62U003FF113ED		
Boxer 2.2 HDI	Euro 4	from 2006	2198	101	4		х		6231182A	62U003FF110ED		
Boxer 2.2 HDI	Euro 4	from 2006	2198	101	4		х		6231182A	62U003FF113ED		
Boxer 2.2 HDI	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF110ED		
Boxer 2.2 HDI	Euro 4	from 2006	2198	101	4			х	622HDFI001FB	62U003FF113ED		
Boxer 2.2 HDI	Euro 5	from 2010	2198	100	4			х	622HDCI005FA	62U003FF110ED		
Boxer 2.3 MJT	Euro 4	from 2006	2287	120	4		х		621HDFI008EC	62U003FF110ED		
Boxer 2.3 MJT	Euro 4	from 2006	2287	120	4		х		621HDFI008EC	62U003FF113ED		
Boxer 3.0 HDI	Euro 4	from 2006	2999	157	4			х	622HDFI003FB	62U003FF110ED		
Boxer 330-350 2.8HDI	-	from 2003	2798	127	4		х		621HDFI002EA	62U003FF110ED		
Expert 1.6 HDI	Euro 4	from 2007	1560	90	4		х		621HDFI012EA	62U003FF108ED		
Expert 1.6 HDI	Euro 4	from 2007	1560	90	4		х		621HDFI012EA	62U003FF110ED		
Expert 1.6 MJ HDI	Euro 5	from 2011	1560	90	4			х	622HDFI020FA	62U003FF108ED		
Expert 1.6 MJ HDI	Euro 5	from 2011	1560	90	4			х	622HDFI020FA	62U003FF110ED		
Expert 1.6 Blue HDI	Euro 6	from 2016	1560	95-115	4			х	6241866B	62U003FF108ED		
Expert 1.6 Blue HDI	Euro 6	from 2016	1560	95-115	4			х	6241866B	62U003FF110ED		
Expert 2.0 HDI	Euro 4	from 2007	1997	120	4		х		621HDFI011EA	62U003FF110ED		
Expert 2.0 HDI	Euro 4	from 2007	1997	120/136	4			x	622HDFI004FA	62U003FF110ED		
Expert 2.0 MJT/HDI	Euro 5	from 2010	1997	163	4		х		621HDFI020EA	62U003FF108ED		
Expert 2.0 MJT/HDI	Euro 5	from 2010	1997	163	4		х		621HDFI020EA	62U003FF110ED		
Expert 2.0 HDI	Euro 5	from 2010	1997	163	4			x	622HDFI011FC	62U003FF110ED		
Expert 2.0 Blue HDI	Euro 6	from 2010	1997	128-163	4			x	6244080A	62U003FF108ED		
Expert 2.0 Blue HDI	Euro 6	from 2010	1997	128-163	4			x	6244080A	62U003FF110ED		
Partner 1.6 HDI	Euro 5		1560	75/92	4			x	622HDPE002FB	62U003FF108ED		
Renault												
Kangoo 1.5 DCl	Euro 5		1461	75	4		x		621HDRE014EA	62U003FF108ED		
Kangoo 1.5 DCI (engine K9K)	Euro 4	from 2008	1461	68/86/105	4		x		621HDRE012EA	62U003FF108ED		
Kangoo 1.5 DCI (engine K9K)	Euro 5	from 2011	1461	68/86/105	4		^	x	622HDRE010FA	62U003FF108ED		
Master 2.3 DCI (engine K9K)	Euro 5	from 2010	2298	125	4				622HDRE010FA 622HDRE008SA	62U003FF108ED		
				125	4			X				
Master 2.3 DCI with PTO R134a	Euro 5	from 2010	2298					X	622HDRE006SA	62U003FF110ED		
Master 2.3 Twin Turbo	Euro 5B+	from 2010	2298	135-165	4		Х	х	6235258A	62U003FF110ED		

Transport refrigeration kit for integrated solutions

Model			¥				em	vehicle system	Eva	aporator to be add	ed
	Emissions standard	Model year	Engine Displacement	Å	Cylinders	Notes	with original vehicle air-conditioning system	without original vehicle air-conditioning system	Part No.	Evaporator with Valve (R134A) P/N	Evaporator with Valve (R404a) P/N
Master 2.5 DCI	Euro 4	from 2006	2464	120	4			х	622HDRE001SA	62U003FF110ED	
Trafic 2.0 DCI	Euro 5	from 2010	1995	90-115	4	5)		х	622HDRE007SA	62U003FF110ED	
Trafic 2.0 DCI	Euro 5	from 2010	1995	90-115	4		х		621HDRE015A	62U003FF110ED	
Trafic 2.0 DCI (not prepared)	-	from 2006	1995	90	4	6)		х	622HDRE009SA	62U003FF110ED	
Trafic 1.6 CDTi Single-/Bi-Turbo	Euro	from 2016	1598	95-125-145	4			х	6242153A	62U003FF110ED	
	5B+/6										
Volkswagen											
Caddy 1.6 TDI	Euro 4/5	to 09/2015	1598		4			х	6235704A	62U003FF108ED	
Caddy 1.9 TDI – 2.0SDI (engine BDJ)	-	from 2004	1968	69	4				62A01001A		
Caddy 2,0 BiFuel	Euro 4/5	to 09/2015	1968		4			х	6235704A	62U003FF108ED	
Crafter 2.0 TDI without A/C	Euro 5	from 2009	1968	106/163	4		х		621HDVW005EB	62U003FF110ED	
Crafter 2.0 TDI	Euro 5	2006-2011	1968	109-163	4			х	622HDVW004SC	62U003FF110ED	
Under chassis condenser kit									62A031023C		
T5 2.0 TDI	Euro 5								6235578A	62U003FF113ED	
T5 2.0 TDI 5 gear box	Euro 5	from 2009	1968	82-102	4			х	622HDVW005SA	62U003FF110ED	
T5 2.0 TDI Automatic Transmission	Euro 5	from 2009	1968	140-180	4			х	622HDVW007SA	62U003FF110ED	

General components	Refrigerant	Voltage (V)	Order number
Evaporator unit for Frigo 2000 – prepared for hot gas defrosting function	R134a		62U003FF108ED
Evaporator unit for Frigo 2000 – prepared for hot gas defrosting function	R404A		62U003FF109ED
Evaporator unit for Frigo 3000 – prepared for hot gas defrosting function	R134a		62U003FF110ED
Evaporator unit for Frigo 3000 – prepared for hot gas defrosting function	R404A		62U003FF111ED
Evaporator unit for Frigo 4000 – prepared for hot gas defrosting function	R404A		62U003FF112ED
Evaporator unit for Frigo 4000 – prepared for hot gas defrosting function	R134a		62U003FF113ED
Evaporator unit for Frigo 4000 – prepared for hot gas defrosting function	R404A	24	62U003FF099EE
Hot gas defrost kit		12	62U003AA133A
Hot gas defrost kit		24	62U003AA144A
Hot gas "light" defrost kit for positive temperatures			62U003AA137A
Low pressure switch kit			62U003AA132B
Oil separator kit			62U003AA044A
Sight glass			62U003AA131A
Wiring resistor to defrost the condensate drain for negative temperatures			62U003AA143A
Controller programming tool			620682827A
New stand-by PS 1000 (60 A – 12 V) w/o accessories	R134a		62U006SB04F
Accessories for stand-by			
Oil separator kit			62U003AA044A
Sight glass			62U003AA131A
Hot gas "light" defrost kit for positive temperatures			62U003AA137A
Low pressure switch kit			62U003AA132B
Extension cable			62A031092A

Notes

- Only for neg. temp. (R404A) the kit includes oil separator, wiring resistor and defrost
 Only for neg. temp. (R404A) the kit includes oil separator, wiring resistor and defrost
 Hot gas defrost kit -> defrosting of the evaporator fins: For temperature over 5°C the kit is optional, for temperatures lower than 5°C the kit is mandatory, for temperatures between 0 °C and 5 °C the kit is strongly recommended above all when there is a long use of the vehicle or when the door is often opened.
 For vehicles to November 2010 with Euro 4 and with original compressor
- 4) Condenser under chassis
- Verify on the fitting manual if the engine block is correct
 Do not install on Euro 5 vehicles
 Kit for vehicle with one radiator fan
 Adidtional kit for vehicle with double radiator fan

- 9) Kit under chassis condenser for heavy duty application 62A03966A to be ordered separately
- 10) Front-Wheel Drive
- 11) For Euro 6 installations special care for the positioning of the below chassis condenser must be taken not to interfere with the existing urea filter
- 12) Rear-weel Drive
- 13) Not fittable for vehicles with Entry/Trend set-up with Economy park and all the engines Econetic set-up

Transport refrigeration kit for integrated solutions



Defrost kit

Defrost of the evaporator fins: for temperatures above 5°C, the kit is optional, for temperatures below that it is obligatory; for temperatures between 0°C and 5°C, the kit is strongly recommended/necessary especially when the vehicle is in service for long periods.

This kit is normally made in a different way in R134a "Light defrost" vs. R404A configurations. In both cases has is ordered separataley.



De-icing kit

The kit includes a heating wire to keep the evaporator drain hose frost-free allowing a correct drain flow after defrosting.



Low pressure switch

Swiches off the compressor when pressure goes below the lowest value.



Oil separator kit

This additional filter must be installed in R404a applications and is recommended when Set Point is < 5 °C.



Liquid line eyes kit

It is used to check the gas inside the system, when bubbles appear the reasons can be:

- Sub cooling not enough
- Refrigerant quantity not enough
- Condenser overheating (too small)
- Receiver drier too small
- Receiver drier obstructed

As indicated by the order numbers, our transport refrigeration kits contain the following:

Scope of delivery

Transport refrigeration kit 621HD, 622HD...F

- Compressor
- Compressor installation kit
- Condenser with mount for front mounting
- Collector/dryer
- Pressure switch
- Cable harness
- Refrigerant lines and connections

Please note when ordering

- For above-freezing temperatures: evaporator with refrigerant R134a
- For freezing temperatures: evaporator with refrigerant R404A

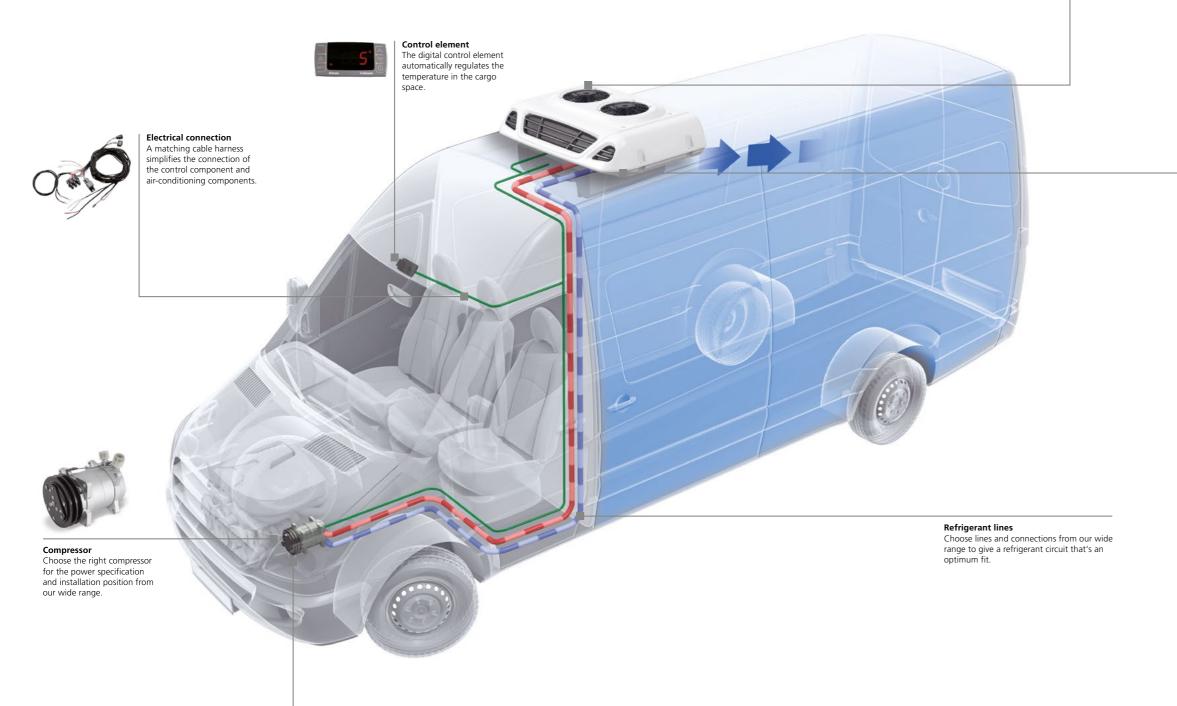
Scope of delivery

Transport refrigeration kit 622HD...S

- Compressor
- Compressor installation kit
- Condenser with mount for underbody mounting
- Collector/dryer
- Pressure switch
- Cable harness
- Refrigerant lines and connections

Application of a rooftop transport refrigeration system

The main components of the Webasto rooftop transport refrigeration system are accommodated in a compact, aerodynamic housing. The cooling systems, with capacity options ranging between 1,000 and 5,600 W, are suitable for fresh produce delivery (> 0 °C) and for deep frozen cargo (< 0 °C). An optional stand-by function allows cooling independently of the engine.



Installation kit for compressor Vehicle-specific installation kits ensure easy fitting and reliable operation of the compressor. This function ensures continuous operation, even when stationary.

Stand-by function



Rooftop transport refrigeration system The transport refrigeration system consists of a compact and a condenser for the cargo space. Capacities range from from 1 kW to 5.6 kW.

> Integrated Transport Refrigeration System

> > Koontop Iransport Refrigeration Syster

Advantages of rooftop transport refrigeration systems:

- Compact design
- Integrated compressor in the condenser unit of all battery-operated solutions
- Optimum harmonization of air-conditioning components
- Quick and easy installation

77

Rooftop solutions, direct drive

Transport refrigeration systems for light-duty vehicles transporting perishable goods. Maximum performance, compact, easy to install, for cargo spaces up to 23 m³.

The transport refrigeration systems ensure that perishable goods can be transported over long distances at the optimum temperature and reach their destination in perfect condition. In these systems, which have been designed for light-duty vehicles with a cargo space for sensitive products, the compressor is integrated into the vehicle. Thanks to a wide range of installation kits, the compressor can be installed in various different vehicle models. With powerful fans, they offer reliability and a long lifetime, important factors in transport refrigeration. Depending on the desired temperature range, the system can be filled with the refrigerant R134a, R404A or R452A.

Frigo Top

The transport refrigeration systems with direct drive, high capacity and very low maintenance requirements for vehicles with cargo spaces up to 23 m³. The flexible solutions are suitable for a very wide range of temperatures.

Technical data

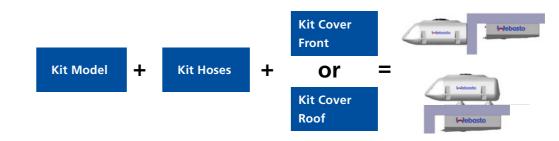
Model overview	Frigo 24 R			Frigo Top 36 RT-D		Frigo Top 38 RT-D	Frigo 43 F	o Top RT-D
Refrigerant	R452A	R134a	R452A	R134a	R404A	R404A	R452A	R404A
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature +5°C – Engine operation	-	2528,0	_	3310,0	_	_	_	_
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature 0°C – Engine operation	2421,0	2091,0	3674,0	2828,0	3550,0	3800,0	4220,0	4300,0
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -5°C – Engine operation	_	1571,0	_	2286,0	_	_	_	_
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -10°C – Engine operation	1776,0	_	2766,0	_	_	_	3065,0	_
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -20°C – Engine operation	1091,0	_	1512,0	_	1600,0	1600,0	2040,0	2050,0
Nominal Voltage (V)			1	2			12	/24
Installation	Roo	of	Roof an	id Front	Roof	Roof and Front	Roof ar	nd Front
Air Flow in m³/h	98	4	1,7	43	1,743	1,743	1,9	984
Max. current absorption (A) Engine operation 12/24 V	21.5/	-	42.0	/ -	31.0/-	42.0/-	42.0/	21.0
Dimensions L x W x H (mm) Condenser unit (Roof) Condenser unit (Front) Evaporator unit	900 x 496 _ 660 x 530		1,115 x 66 1,115 x 58 1,000 x 50	35 x 194	-	1,115x663x194 1,115x585x194 1,000x500x157	1,115 x 66 1,115 x 58 1,130 x 53	35 x 194
Weight (kg) – Condenser	15.0	12.0	31.0	28.0	15.0	28.0	31	.0
Weight (kg) – Evaporator unit	10.	0		12	2.5		18	3.5

Transport refrigeration for
commercial vehicles with cargo
spaces up to 23 m ³

- Cooling capacity of up to 4,300 W
- Automatic temperature regulation
- High efficiency in all temperature ranges
- High-quality reliable components from proven series-production processes
- ATP (Accord Transport Perissable) certification for all units with refrigerant R134a and R452A

Model overview	Scope of delivery	Order number
Kit model Frigo Top 24 RT-D 12 V (R134a)	Condensing unit (with plastic covers) evaporators, accessories box, drilling template, documents	6241858B
Kit model Frigo Top 24 RT-D 12 V (R452A)	Condensing unit (with plastic covers) evaporators, accessories box, drilling template, documents	6241910B
Kit model Frigo Top 36 RT-D 12 V (R134a)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242052B
Kit model Frigo Top 36 RT-D 12 V (R452a)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242014B
Kit model Frigo Top 36 RT-D 12 V (R404A)	Condensing unit (with plastic covers) evaporators, accessories box, drilling template, documents	6242437B
Kit model Frigo Top 38 RT-D 12 V (R404A)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242669B
Kit model Frigo Top 43 RT-D 12 V (R452A)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242067B
Kit model Frigo Top 43 RT-D 24 V (R452A)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242093B
Kit model Frigo Top 43 RT-D 12 V (R404A)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242648B
Kit model Frigo Top 43 RT-D 24 V (R404A)	Condensing unit (w/o plastic covers) evaporators, accessories box, drilling template, documents	6242762B
Kit cover (Front mounting) 12/24 V	upper cover	6242056A
Kit cover (Roof mounting) 12/24 V	upper cover	6242054A
Kit hoses Frigo Top 24 RT-D R134a		6241951B
Kit hoses Frigo Top 24 RT-D R452A		6241947B
Kit hoses Frigo Top 36 RT-D R134a		6242057B
Kit hoses Frigo Top 36 RT-D R404-R452A		6242063B
Kit hoses Frigo Top 38 RT-D R404A		6242063B
Kit hoses Frigo Top 43 RT-D R404A-R452A		6242314B
Accessories		
De-Icing Kit		
Frigo Top 24		6231058A
Frigo Top 36 – 38		62U003AA143A
Frigo Top 43 12 V		6231060A
Frigo Top 43 24 V		6231061A
Heating Kit		1
Frigo Top 24 (R452A) – 36 (R404A)		6242400A
Frigo Top 36 (R452A) – 38 (R404A)		6242401A
Frigo Top 43 12 V		6242401A
Frigo Top 43 24 V		6242455A

Configuration for Frigo Top 36 RT-D with R452A & R134a, Frigo Top 38 RT-D, Frigo Top 43 RT-D



Configuration for Frigo Top 24 RT-D, Frigo Top 36 RT-D with R404A





Rooftop solutions, battery drive

Compact transport refrigeration systems for light-duty vehicles transporting perishable goods. Reliable solutions for cargo space volumes up to 5 m³. The transport refrigeration systems ensure that perishable goods can be transported over long distances at the optimum temperature and reach their destination in perfect condition. This product series is designed for light transportation vehicles with a cargo space and built-in air-conditioning system. Both the electric motor and the compressor are integrated into the condenser unit. With powerful fans, they offer reliability and a long lifetime, important factors in transport refrigeration.

Rolle

Battery-operated transport refrigeration systems for smaller vehicles and cargo spaces up to 5 m³. Exceptionally quick and easy to install.

- Transport refrigeration for commercial vehicles with cargo spaces up to 5 m³
- Cooling capacity of up to 1,186 W
- The motor and the compressor are integrated into the condenser unit.
- Automatic temperature regulation High efficiency in all temperature ranges
- High-quality reliable components from proven series-production processes
- ATP (Accord Transport Perissable) certification for all units

Rolle 2000

Model overview	Scope of delivery	Order number
Rolle 2000	Transport refrigeration system for refrigerant R404A, including condenser, evaporator, installation kit, automatic temperature regulation, product documentation	621RLN2K01EH
Rolle 2000 Stand-by	Transport refrigeration system for refrigerant R404A, including condenser, evaporator, installation kit, automatic temperature regulation, stand-by unit, product documentation	621RLN2K01SEH

Rolle 2000 HD

Model overview	Scope of delivery	Order number
Rolle 2000 HD	Transport refrigeration system for refrigerant R404A, including condenser, evaporator, installation kit, automatic temperature regulation, product documentation	621RLN2K02EF
Rolle 2000 HD Stand-by	Transport refrigeration system for refrigerant R404A, including condenser, evaporator, installation kit, automatic temperature regulation, stand-by unit, product documentation	621RLN2K02SEF

Technical data

Model overview	Rolle	2000	Rolle 2000 HD			
	without stand-by unit	with stand-by unit	without stand-by unit	with stand-by unit		
Refrigerant		R4	04A)4A		
Cooling capacity according to ATP standard, at ambient temperature of +30°C and compartment temperature of 0°C, in engine/stand-by operation optional (W)	1,011/-	1,011 / 985	1,186/-	1,186/1,059		
Cooling capacity according to ATP standard, at ambient temperature of +30°C and compartment temperature of -20°C, in engine/stand-by operation optional (W)	424/-	424/447	508/-	508/477		
Nominal voltage (V)		1	2			
Air flow (m³/h)		6	50			
Max. total current absorption at 12 V, in engine/stand-by operation (A)	80/-	80/5	90/-	90/6		
Max. total current absorption, generator (A)	12	5	140			
Dimensions L x W x H (mm) Condenser unit Evaporator unit	810 x 540 x 243 660 x 500 x 157		810 x 54 660 x 50			
Weight (kg) Condenser unit Evaporator unit	45 7.5	53 7.5	47 7.5	55 7.5		

The performance data for your application may differ from the nominal value.



The performance data for your application may differ from the nominal values.

Rooftop solutions, direct drive

Refrigeration systems for light-duty vehicles transporting perishable goods. Highest performance, variable and easy installation for cargo space volumes up to 21 m³.

Transport refrigeration systems keep perishables at the perfect temperature so they reach their destination in top condition. Frigo Top is the new generation of transport refrigeration systems with greatly improved functionality. The new model series offers a broad range of variability and thereby meets individual customer requirements. All systems come in 12 V and 24 V versions, with a stand-by operation optionally with 230 V or 400 V and the option of rooftop or front installation.

Among other aspects, the optimized product structure features very durable fans and a dual-sided defrosting system. The integrated heat exchanger enhances the unit's cooling capacity. Thus, it ensures powerful cooling even at high outside temperatures. Thanks to the refrigerant R404A, these systems are suitable for both above zero and below zero temperatures and therefore cover a wide range of uses. These systems stand out for their particularly easy and comfortable installation and maintenance. Laterally removable covers facilitate fast and easy access to the components. Moreover, the electronic elements are cost-effectively and easily exchangeable. The compressor is integrated into the engine space.

Cooling capacity up to 3,836 W Automatic temperature regulation

- High efficiency in all temperature ranges
- Stand-by operation optionally with 230 V and 400 V
- Rooftop or front mounting
- Reliable devices with highquality components made in proven series production
- Easy installation and maintenance
- ATP (Accord Transport Perissable) certification for all units

Technical data

Model overview	Frigo Top 25 RT-DS	Frigo Top 35 RT-DS	Frigo Top 35 RT-DSG	Frigo Top 40 RT-DS
Refrigerant	R40)4A	R452A	R404A
Cooling performance nominal (according ATP standard) in W at 30 °C ambient temperature and compartment temperature 0 °C Engine operation/Stand-by operation	2,347/1,490	3,509/2,412	3,024/2,240	3,836/2,469
Cooling performance nominal (according ATP standard) in W at 30 °C ambient temperature and compartment temperature -10°C Engine operation/Stand-by operation	1,747/1,105	2,791/1,806	2,319/1,615	2,880/1,836
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -20°C Engine operation/Stand-by operation	1,250/730	2,011/1,266	1,626/1,033	2,011/1,283
Nominal Voltage (V)	12/230/400	12/24/230/400	12/230/400	12/24/230/400
Air Flow in m³/h	850	1,420	1,589	1,960
Max. Current absorption (A) Engine operation 12/24 V	15	30/15	30	30/15
Max. Current absorption (A) Stand-by operation 230/400 V	8.5/8.5	10.8/10.8	10.8	10.8/10.8
Dimensions L x W x H (mm) Condenser unit	906 x 715 x 262	1,096 x 725 x 278	1,096 x 725 x 278	1,096 x 725 x 278
Dimensions L x W x H (mm) Evaporator unit	660 x 530 x 158	1,130 x 530 x 158	1,130 x 530 x 158	1,130 x 530 x 158
Weight (kg) Condenser unit	55.2	65	65/52.5	66
Weight (kg) Evaporator unit	11.5	18.5	18.5	18.5

Frigo Top 25 RT-DS

Description	Scope of delivery	Order number
Kit model Frigo Top 25 12 V – 230 V single phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234554B
Kit model Frigo Top 25 12 V – 400 V three phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234570B
Kit cover roof mounted Frigo Top 25	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234632A
Kit cover front mounted Frigo Top 25	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234633A
Kit hoses Frigo Top 25	Hoses and joints	6234684A
Accessories		
Kit heating		6234860A
Kit de-icing 12 V Frigo Top 25		6231058A

Frigo Top 35 RT-DS – DSG

Description	Scope of delivery	Order number
Kit model Frigo Top 35 12 V – 230 V single phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234749A
Kit Model FT35 12 V – 230 V single phase gas R452A	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6244720A
Kit model Frigo Top 35 24 V – 230 V single phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234770A
Kit model Frigo Top 35 12 V – 400 V three phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234759B
Kit model Frigo Top 35 24 V – 400 V three phase	Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents	6234781B
Kit cover roof mounted Frigo Top 35-40 12 V	Upper/lower cover, grid and fans, accessories bag	6234642A
Kit cover roof mounted Frigo Top 35-40 24 V	Upper/lower cover, grid and fans, accessories bag	6234653A
Kit cover front mounted Frigo Top 35-40 12 V	Upper/lower cover, grid and fans, accessories bag	6234647A
Kit cover front mounted Frigo Top 35-40 24 V	Upper/lower cover, grid and fans, accessories bag	6234678A
Kit hoses Frigo Top 35-40	Hoses and joints	6234685A
Accessories		
Kit heating Frigo Top 35 12 V		6234861A
Kit heating Frigo Top 35 24 V		6234862A
Kit de-icing 12 V Frigo Top 35-40		6231060A
Kit de-icing 24 V Frigo Top 35-40		6231061A

Frigo Top 40 RT-DS

Description	Sc	ope of delivery	Order number			
Kit model Frigo Top 40 12 V – 230 V single phase		Condenser unit (w/o plastic covers) evaporator unit, accessories box, drilling template, documents				
Kit model Frigo Top 40 24 V – 230 V single phase	Condenser unit (w/o plastic covers) accessories box, drilling template, d		6234791B			
Kit model Frigo Top 40 12 V – 400 V three phase	Condenser unit (w/o plastic covers) accessories box, drilling template, d		6234788B			
Kit model Frigo Top 40 24 V – 400 V three phase	Condenser unit (w/o plastic covers) accessories box, drilling template, d		6234794B			
Kit cover roof mounted Frigo Top 35-40 12 V	Upper/lower cover, grid and fans, a	accessories bag	6234642A			
Kit cover roof mounted Frigo Top 35-40 24 V	Upper/lower cover, grid and fans, a	accessories bag	6234653A			
Kit cover front mounted Frigo Top 35-40 12 V	Upper/lower cover, grid and fans, a	accessories bag	6234647A			
Kit cover front mounted Frigo Top 35-40 24 V	Upper/lower cover, grid and fans, a	6234678A				
Kit hoses Frigo Top 35-40	Hoses and joints	6234685A				
Accessories						
Kit heating Frigo Top 40 12 V			6234863A			
Kit heating Frigo Top 40 24 V			6234864A			
Kit de-icing 12 V Frigo Top 35-40			6231060A			
Kit de-icing 24 V Frigo Top 35-40			6231061A			
Kit Model + Kit Hoses	Kit Cover Front + or	Hebasto				
	Kit Cover					

Roof

* To complete the installation: Compressor, compressor mounting kit, compressor fittings – depending on application.





Rooftop solutions, multi-temperature

Transport refrigeration systems with variable single or multi-temperature application for light-duty commercial vehicles with a cargo space capacity of up to ca. 16 m³. Energy-efficient shipping of perishable goods with different refrigeration requirements.

The requirements for energy efficiency and versatility in transporting refrigerated goods are increasing. Especially the capacity for optimal transport of goods with diverse cooling or refrigeration requirements in one vehicle is becoming ever more important. The Frigo Top 35 RT-DSMT is well-suited for transporting various types of goods at different temperatures. It enables independent, flexible temperature control in separate cargo spaces and can be variably combined with two evaporators (Frigo Top 25 and Frigo Top 35). This ensures perfect, constant refrigeration in the individual cargo spaces. This also applies for light-duty vehicles with removable walls.

The microprocessor control of the compressor and the blowers was enhanced once again in order to boost energy efficiency and extend the lifetime. The extremely flat, space-saving design of the evaporators is also beneficial. The use of standard components that are also used in the Frigo Top 25 and Frigo Top 35 models, ensures very fast availability of spare parts (condensing unit, evaporator, hoses and hose assemblies as well as the fittings). The devices are designed to be very user-friendly and thus allow for easy, fast and cost-effective installation and maintenance.

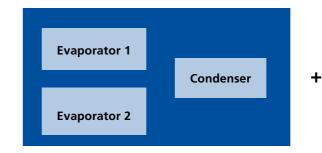
- Flexible, suitable for single and multi-temperature use
- Cooling capacity of up to 3,070 W
- Automatic temperature control
- Enhanced energy efficiency,
- longer operating time
- Stand-by operation optionally with 230 V
- Simple, easy installation and maintenance, lower costs
- Fast availability of devices and spare parts
- ATP (Accord Transport Perissable) accreditation for all devices and their combinations

Model overview	Scope of delivery	Order number
Frigo Top 35 RT-DSMT 12 V evap Frigo Top 25 + Frigo Top 25	Condensing unit (w/o plastic covers) 2 evaporators, accessories box, drilling template, documents	6238287B
Frigo Top 35 RT-DSMT 12 V evap Frigo Top 25 + Frigo Top 35	Condensing unit (w/o plastic covers) 2 evaporators, accessories box, drilling template, documents	6238288B
Kit cover (front mounting)	Upper/lower cover, grid and fans	6234647A
Kit hoses Frigo Top 35 RT-DSMT evap Frigo Top 25 + Frigo Top 25	Hoses and joints	6238289A
Kit hoses Frigo Top 35 RT-DSMT evap Frigo Top 25 + Frigo Top 35	Hoses and joints	6238290A
Accessories		
Kit de-icing Frigo Top 35 RT-DSMT 12 V evap Frigo Top 25 + Frigo Top 25		6231058A + 6231058A
Kit de-icing Frigo Top 35 RT-DSMT 12 V evap Frigo Top 25 + Frigo Top 35		6231058A + 6231060A
Extension kit 5-16 L = 4 m		6238213A
Extension kit 5-16 L = 6 m		6238215A
Extension kit 5-8 L = 4 m		6238216A
Extension kit 5-8 L = 6 m		6238218A

* To complete the installation: Compressor, compressor mounting kit, compressor fittings – depending on application.

Technical data

Model overview	Frigo Top 35 RT-DSMT*	Frigo Top 35 RT-DSMT**		
Refrigerant	R404A			
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature 0°C Engine operation/stand-by operation (W)	2,450/1,930	3,070/2,280		
Cooling performance nominal (according ATP standard) in W at 30°C ambient temperature and compartment temperature -20°C Engine operation/stand-by operation (W)	1,314/950	1,570/1,020		
Nominal voltage (V)	12/230	12/230		
Air flow in m ³ /h	930	1760		
Max. current absorption (A) Engine operation 12 V	30	37.5		
Max. current absorption (A) Stand-by operation 230 V	10.8	8/-		
Dimensions L x W x H (mm) Condenser unit	1,096 x 725 x 278			
Dimensions L x W x H (mm) Evaporator unit/Evaporator unit 2	(660 x 530 x 158) + (660 x 530 x 158)	(660 x 530 x 158) + (1,130 x 530 x 158)		
Weight (kg) Condenser w/wo stand-by	65	.0		
Weight (kg) Evaporator unit 2	11.5/11.5	11.5/18.5		

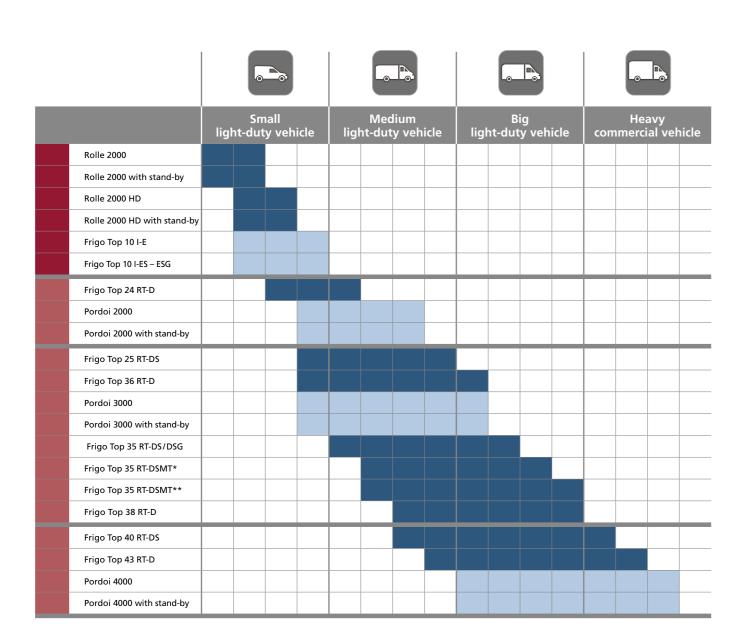


* With two evaporators Frigo Top 25. ** With evaporators Frigo Top 25 and Frigo Top 35.



The appropriate refrigeration systems for your commercial transport vehicle

Installation options, features and accessories



	Mounting		Power supply		Mounting Power supply			Use	
	_						_		
	Roof mounting	Intergrated	Direct drive	Electric (Battery)	AC stand-by (network) operation	Cool and freeze (0°C and -20°C)	Cool (0°C)	Multi-temperature	
Rolle 2000									
Rolle 2000 with stand-by									
Rolle 2000 HD									
Rolle 2000 HD with stand-by									
Frigo Top 10 I-E									
Frigo Top 10 I-ES – ESG									
Frigo Top 24 RT-D									
Pordoi 2000									
Pordoi 2000 with stand-by									
Frigo Top 25 RT-DS									
Frigo Top 36 RT-D									
Pordoi 3000									
Pordoi 3000 with stand-by									
Frigo Top 35 RT-DS/DSG									
Frigo Top 35 RT-DSMT									
Frigo Top 35 RT-DSMT									
Frigo Top 38 RT-D									
Frigo Top 40 RT-DS									
Frigo Top 43 RT-D									
Pordoi 4000									
Pordoi 4000 with stand-by									

* With two evaporators Frigo Top 25 ** With evaporators Frigo Top 25 and Frigo Top 35

Integrated

Electric

Direct Drive

Roof Top

top Transport igeration Systems Refr

HEPA air filtration systems

Compact, lightweight and easy to retrofit



High-efficiency particulate air filters (HEPA) are critical in the prevention of the spread of airborne bacterial and viral organisms. In conjunction with personal protective equipment, this type of filtration greatly reduces the risk of infection for emergency medical service operators.

Webasto filtration systems HFT 200, HFT 300 and HFT 600 are specifically designed to filter the air in the cabin and in the sanitary compartment of ambulances, removing 99.995 % particulates corresponding to SARS/COVID-19 virus sizes (0.1 micrometers) and effectively reducing the risk of infection.

Webasto HEPA Filter Top combines two main features to reduce viral loads in ambient air: a very high air volume flow for the rapid and complete filtration of the air every single minute and the extremely high removal efficiency of HEPA H14 filters. The unit complies with the International HEPA Filter standards WHO/CDC/ECDC, requiring 60 air changes per hour for infection control ambulances.

It can be easily installed in any existing emergency or passenger transportation vehicles.Moreover Webasto is uniquely able to offer the same level of HEPA-14 filtration used in ambulances also for passenger transport applications.

Key benefits at a glance:

- Removes 99.995 % of airborne infections and contaminants
- HEPA H14 classified filter
- High air exchange rate
- Up to 10 m³ fresh air every minute
- Ultra compact and lightweight
- Hasslefree installation in less than 30 minutes
- Contamination free exchange of H14 filters
- Available in three versions: 200, 300 and 600 m³/h
- A utomatic filter monitoring feature
- The material and characteristics of the HEPA filter core meet the requirements of European Medical Devices Directive CE 47/2007
- Meets WHO/CDC/ECDC air filtration guidelines
- CE/UL compliant

Models: HFT 200, HFT 300 and HFT 600

Technical data

Model overview	Scope of delivery	Order number
HFT-300 – with rocker switch control	Air filter with connector, instructions	6245612A
HFT-300 – with dashboard control	Air filter with connector, instructions	6246168A
HFT-600 – with dashboard control	Air filter with connector, instructions	6245613A
HFT-200 12 V – with dashboard control	Air filter with connector, instructions	6247077A
HFT-200 24 V – with dashboard control	Air filter with connector, instructions	6247078A
HFT-200 230 Vac – Indoor stationary version	Air filter with on/off switch, instructions, power supply, holder, 1.5 A	
	delayed fuse, connecting cable 2 mt long	6246313B

Technical data

Accessories	Scope of delivery	Order number
Spare filter kit HFT300/600		6245615A
Spare filter kit HFT200		6246659A
Power supply kit 220 – 12 V	only for HFT300 and HFT600	6246252A
Cable plug		6246250A
DC-DC converter 24 – 12 V	only for HFT300 and HFT600	6246336A
On off switch	only for HFT300	6246172A
Spare fan 24 V for HFT200		6246653A
Spare fan 12 V for HFT200		6246654A
Spare fan 12 V for HFT300 – 600		6246171A
Additional fixation bracket ring kit	Additional safety bracket for HFT200-300-600 ceiling installations	6240880A
Fan kit assembly HFT300 with switch		6246681A
Fan kit assembly HFT300 – 600 front no switch		6246685A
Fan kit assembly HFT600 rear		6246683A
Fan kit assembly HFT200 12 V		6246657A
Fan kit assembly HFT200 24 V		6246655A
Fan kit assembly HFT200 230 V		6246661A

Technical data

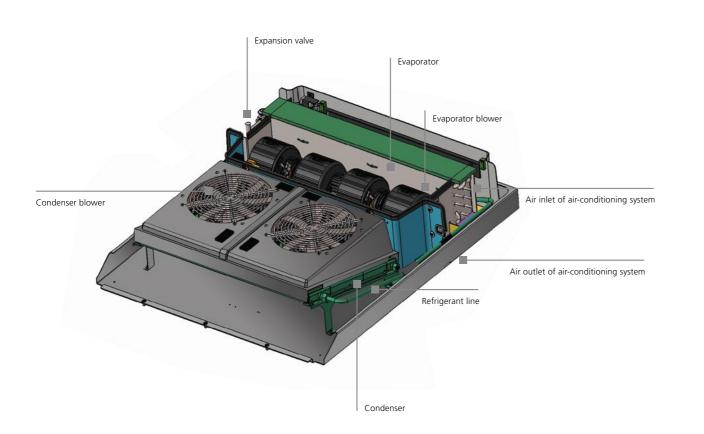
Heating unit	HFT 300	HFT 600	HFT 200	HFT 200
Nominal Voltage (V)	12*	12*	12/24	220
Current consumption@12 V (A)	7.1	14.2	4 (2.1)	na
Max. Air Flow rate (m³/h)	300	600	190	175
Air filter level	H14	H14	H14	H14
MPPS Efficiency (%)	99,995	99,995	99,995	99,995
Sound level (db)	69**	70**	66.5	66.5
Dimensions O-D. x L (mm)	200 x 600	200 x 1200	200 x 600	200 x 600
Weight (kg)	5	10.5	5.5	7.4
Installation position	Any	Horizontal	Any	Vertical
Temperature range	-20° to +60°	-20° to +60°	-20° to +60°	-20° to +60°

* 24 V available with a DC/DC converter. ** Measured at 1 m distance from the air inlet. Compliance: CE 47/2007 (European Medican Device Directive).



Operation of an air-conditioning system

Webasto subsidiaries and representatives



In the closed circuit of the air-conditioning system, a special refrigerant absorbs the heat from the interior of the vehicle and releases it again to the environment at some other point.

In this arrangement, the compressor draws in the gaseous refrigerant, compresses it and drives it into the condenser. There, it is condensed, releasing heat in the process. Via the expansion valve, the liquid refrigerant enters the evaporator, where it changes to the gaseous state, absorbing heat as it does so. The air passed across the evaporator by the blower cools and is discharged into the interior of the vehicle. Depending on the design of the equipment, recirculated air from the vehicle or fresh air from the environment can be used for this purpose.

The transport refrigeration system also operates on the same principle. In this case, an additional stand-by kit is generally connected and maintains the cooling function when the engine is not running.

Head Office Webasto Thermo & Comfort SE Friedrichshafener Straße 9 82205 Gilching

Tel.: +49 (0) 89 85794-0 webasto.com

Argentina

FRIBA TECNOLOGÍA S.A. Av. Pavón 4080/84 C1253AAY Buenos Aires Tel.: +54 11 49242117 friba.com.ar

Australia

Webasto Thermo & Comfort Australia Pty. Ltd. 423-427 The Boulevarde NSW 2232 Kirrawee Tel.: +61 2 85364800 webasto.com.au

Austria

Webasto Fahrzeugtechnik G.m.b.H. Jochen-Rindt-Straße 19 1230 Vienna Tel.: +43 (0) 1 6043780 webasto.at

Belarus

Falkat GmbH Ul. Drozda 8 220004 Minsk Tel.: +375 17 2001894 falkat.com

Belgium Webasto Thermo & Comfort Benelux B.V. Constructieweg 47 8263 BC Kampen Tel.: +31 (0) 38 3371137 webasto.nl

Bulgaria Rhea MP GmbH ul. Boris Iliev 17 1839 Sofia

Tel.: +359 2 9420555 rheamp.com

Chile

Hermanos Cabot 6707 – Dpt. 126 Las Condes – Santiago de Chile 7561255 Chile Tel.: +56 (9) 4683 1100 webasto.es

China

Webasto Thermo & Comfort Technology (Beijing) Co. Ltd. A2105, Building 2, Boya International Center No. 1 Lize Zhongyi Road **Chaoyang District** Beijing 100102 Tel.: +86 10 84782320 webasto.cn

Czech Republic Webasto Thermo & Comfort

Czech Republic s.r.o. Na Strži 1373/35 14000 Praha 4 Tel.: +420 241045450-7 webasto.cz

Denmark Webasto Thermo & Comfort Denmark ApS Islevdalvej 180 2610 Rødovre/Copenhagen Tel.: +45 44522000

webasto.dk

90

Webasto Thermo & Comfort – LATAM

AS KG KNUTSSON Saeveski 12 11214 Tallinn Tel.: +372 6 519300 kgk.ee

Esthonia

Finland Oy Kaha AB Ansatie 2 01740 Vantaa Tel.: +358 9 61568379 kaha.fi

France Webasto Thermo & Comfort France S.A.S. PA Estuaire Sud Rue du Camp d'Aviation 44320 Saint Viaud Tel.: +33 (0) 2 40 21 85 50 webasto-france.fr

Germany Webasto Thermo & Comfort SE Friedrichshafener Straße 9 82205 Gilching Tel.: +49 (0) 395 5592-229 webasto.de

Greece SYSTEMS S.A. 73rd, Agias Annis street 18233 Rentis Tel.: +30 210 3472105

Hungary Webasto Thermo & Comfort Hungária Kft. Szent László út 73 1135 Budapest Tel.: +36 1 3502338 webasto.hu

Webasto subsidiaries and representatives

India

Webasto Roofsystems India Ltd.

Gat 838/1, Sanaswadi, Pune Nagar Highway, Dist. Pune 412208 Maharastra Tel.: +91 2137619902

Iceland

Bilasmidurinn hf.

Bíldshofda 16 110 Reykjavik Tel.: +354 5672330 bilasmidurinn.is

Italy

Webasto Thermo & Comfort Italy S.r.L. Via Efrem Nobili 2 40062 Molinella (BO) Tel.: +39 051 6906 111 webasto.it

Japan

Webasto Thermo & Comfort Japan Co. Ltd.

11F Shin-Yokohama 2nd Center building 3-19-5 Shin-Yokohama Kohoku-ku Kanagawa Prefecture 222-0033 Yokohama Tel.: +81.45.567.0002 webasto.co.jp

Kazakhstan

Webasto Thermo & Comfort

Kazachstan LLP Alash High Road office No. 101, 22 010000 Astana city Tel.: +7 383 3637115

Latvia **KG KNUTSSON SIA**

Gunara Astras iela 3 Riga, LV 1084 Tel.: +371 67 807 870

Lithuania **UAB KG Knutsson**

Jocioniu g 14 Vilnius. LT - 02300 Tel.: +370 5 2758181 kgk.lt

Moldavia – via Webasto Romania Webasto Thermo & Comfort Romania

Sos Odai, 40 075100 Otopeni. Ilfov Tel.: +40 21 2032751 webasto.ro

Mongolia – via Webasto China Webasto Thermo & Comfort Technology (Beijing) Co. Ltd. A2105, Building 2, Boya International Center No. 1 Lize Zhongyi Road Chaoyang District Beijing 100102 Tel.: +86 10 84782320 webasto.cn

Netherlands Webasto Thermo & Comfort

Benelux B.V. Constructieweg 47 8263 BC Kampen Tel.: +31 (0) 38 3371137 webasto.nl

Norway Webasto Thermo & Comfort Norway Industriveien 34A 2072 DAL Tel.: +47 61 16 20 00

Poland Webasto Petemar Sp. z.o.o. ul. Warszawska 205/219

05-092 Lomianki Tel.: +48 22 7327320 webasto.pl

Romania Webasto Thermo & Comfort Romania Sos Odai, 40 075100 Otopeni, Ilfov Tel.: +40 21 2032751 webasto.ro

Russia Webasto Rus OOO Altajskaja ul. 19, 1/a

107065 Moscow Tel.: +7 495 7770245 webasto.ru

Sweden KG Knutsson AB Hammarbacken 8 19181 Sollentuna/Stockholm Tel.: +46 8 923000 kgk.se

Switzerland Lorch AG Kriesbachstrasse 4 8600 Dübendorf Tel.: +41 (0)44 299 98 98

Slovakia Webasto Thermo & Comfort Slovakia s.r.o. Galgovecká ulica 3 040 11 Košice Tel.: +421 5 57871000 webasto.sk

Slovenia Webasto Thermo & Comfort automobilska tehnika d.o.o. Cesta v Gorice 34 1000 Ljubljana Tel.: +386 1 2008712 webasto.si

Spain Webasto Thermo & Comfort Ibérica S.L.U.

C/Mar Tirreno 33 Polígono Industrial 28830 San Fernando de Henares (Madrid) Tel.: +34 91 626 86 11 webasto.es

South Korea

Webasto Korea Inc. Indeogwon IT Valley, 40 Imi-ro, Bldg. B, Suite 612 16006 Uiwang-si, Gyeonggi-do Tel.: +82 31 80170241 webasto.korea.com

Turkey

Webasto Thermo Comfort klimlendirme

Sistemleri Ticaret Limited irketi

Manisa Organize Sanayi Bölgesi 4. Kısım Ahmet Nazif Zorlu Bulvarı No: 8 45030 Manisa Tel.: +90 236 226 90 00 webasto.com.tr

Webasto Thermo & Comfort Ukraina TzoW Chervonopraporna str. 28 03680 Kiev Tel.: +380 (044) 503-31-76 webasto.com/ua

Webasto House White Rose Way

Ukraine

Doncaster South Yorkshire DN4 5JH Tel.: +44 (0) 1302 322232 webasto.co.uk

United Kingdom

USA Webasto Thermo & Comfort

North America Inc. 15083 North Road Fenton, MI 48430 Tel.: +1 800 860 7866 webasto.us

Webasto Thermo & Comfort UK Ltd.

Abbreviations

Specifications

- AC Air-conditioning system
- ACC Automatic climate control
- ECE Economic Commission for Europe
- EMC Electromagnetic compatibility
- HDD Heavy Duty Design
- HTM Heating time management
- HVAC Air-conditioning system with heating function (Heating, Ventilating, Air-conditioning)
- IK Installation kit
- SOD Scope of delivery

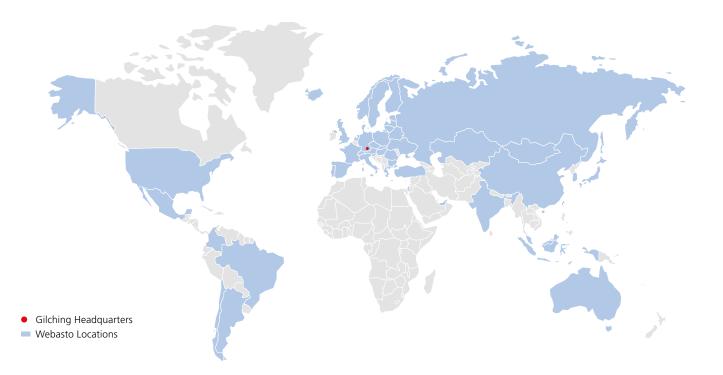
Units of measurement

D	Diameter (mm)
Н	Height (mm)
kg	Kilogram
L	Length (mm)
m	Meter
mm	Millimeter

W Width (mm)

Electrical units

А	Ampere
kW	Kilowatt
rpm	Revolutions per minute
V	Volt
W	Watt



The Webasto Group is a global innovative systems partner to the mobility industry and one of the 100 largest suppliers to the automotive sector worldwide. The company's offering includes in-house developed roof, heating and cooling systems for various types of vehicles, batteries and charging solutions for hybrid and electric vehicles, and additional services related to thermal management and electromobility. Among the customers of Webasto are manufacturers of passenger cars, commercial vehicles and boats, as well as dealers and end customers. In 2021, the Group generated sales of 3.7 billion euros and employed around 15,700 people at over 50 locations. The headquarters of the company, which was founded in 1901, is located in Stockdorf near Munich (Germany). For more information please visit www.webasto-group.com