

A WORLD OF COMFORT

 Eberspächer



CLIMATE CONTROL SYSTEMS / CONSTRUCTION

HARD WORK – PERFECT TEMPERATURE

Heating & Air Conditioning Solutions

EBERSPÄCHER GROUP



EXHAUST
TECHNOLOGY



CLIMATE CONTROL
SYSTEMS



AUTOMOTIVE
CONTROLS

- Enhanced application expertise for heating and cooling
- Extensive product portfolio for heating and cooling
- Accessories for a wide variety of applications
- A/C and heating specialists

INNOVATIVE MARKET AND CUSTOMIZED SOLUTIONS



EXPERTS IN COOLING AND HEATING

FOR SPECIAL VEHICLES

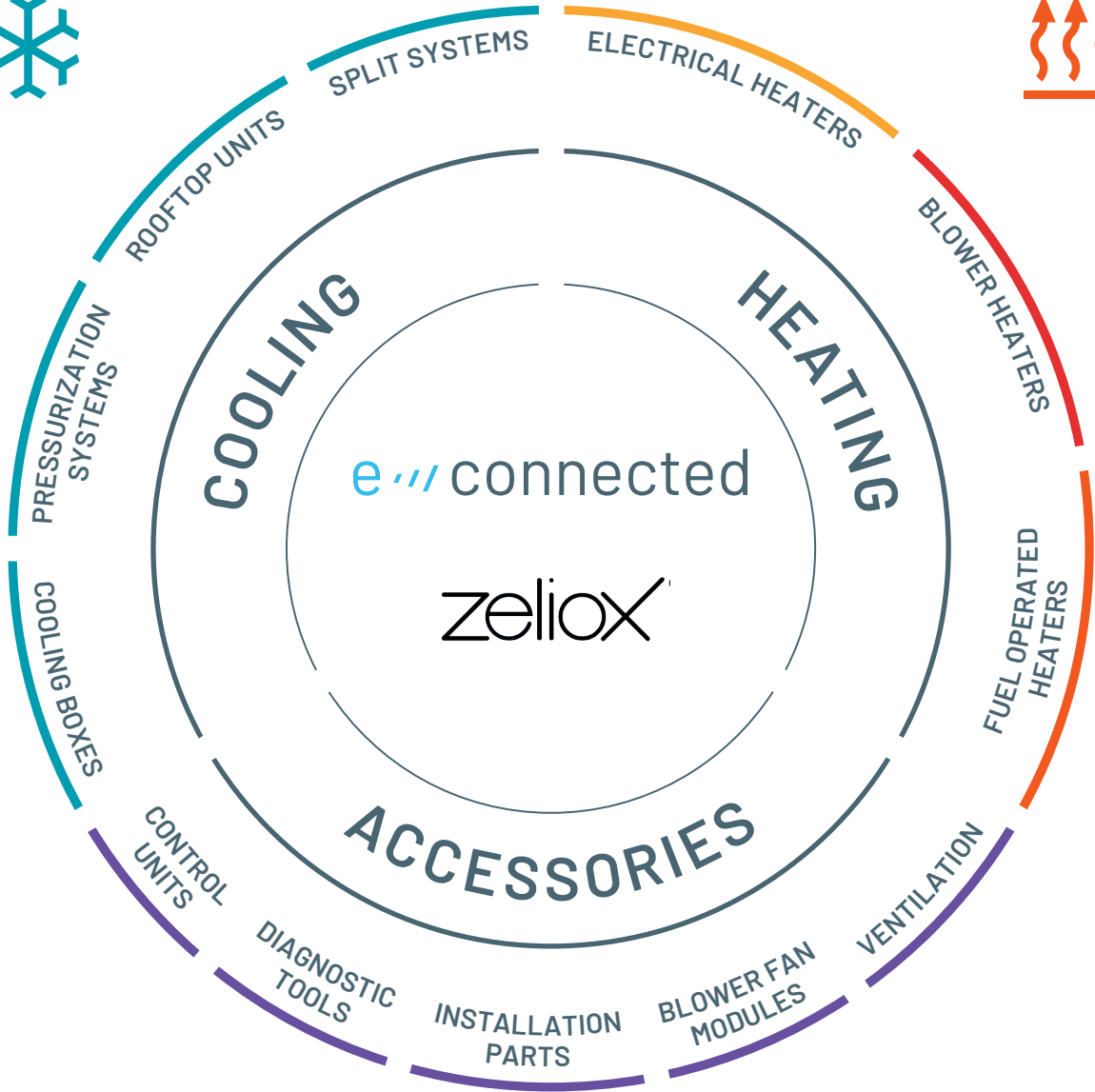
Ideal conditions for construction machinery – the perfect solution for every need

As a heating and cooling system supplier, Eberspächer provides ideal thermal management for construction machinery. Our climate control systems offer enhanced comfort and safety: drivers can enjoy pre-heated engines and warm cabs in winter and pleasantly cool driver cabs in summer. Machine operators demonstrably perform better and are more alert in a cab with a pleasant climate. At the same time, we also help customers comply with statutory workplace regulations and ensure operational readiness. Thanks to our experience in HVAC development, application and production, we can offer customized heating and air-conditioning applications – **all from a single source.**

[Construction]



OUR PRODUCT PORTFOLIO



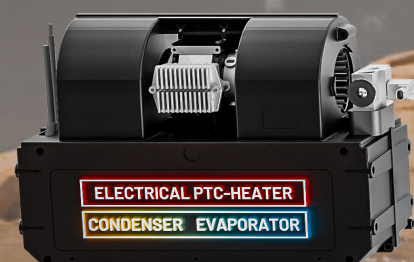
PRODUCTS FOR CONSTRUCTION MACHINERY



TAILORED CLIMATE CONTROL FOR ALL DRIVE TYPES

With our equal evaporator casings like Falcon we have developed one great solution for vehicles of all drive technologies. Designed for electric, hybrid, and combustion vehicles, our modular systems offer a uniform design: same size, same mounting positions for every model. The seamless integration makes transition planning so much easier.

SAME, SAME. BUT DIFFERENT.

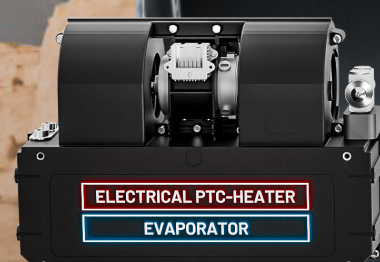


Heat pump system: Our Heat Pump is the most energy-efficient climate control system for electric vehicles. It is designed to minimize battery consumption and uses an evaporator and a condenser to create a reversible air cycle for both cooling and heating. A PTC heater ensures a warm cabin in extremely cold conditions.

Key advantages

- + Significantly reducing electricity usage by transferring heat
- + Preservation of battery life
- + Automatic pre-heating

System components: heat pump unit, e-compressor, external exchanger, chiller, KanBox

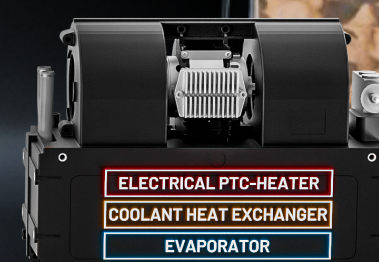


EHVAC system: The EHVAC system for electric or hybrid vehicles leverages electric-powered components to deliver precise control over cabin temperature and airflow. Equipped with an evaporator for cooling and a battery-operated PTC heater, it ensures electrified comfort.

Key advantages

- + Reducing fuel use and emissions by operating entirely on electric power
- + Automatic pre-conditioning
- + Versatile voltage range

System components: EHVAC unit, e-compressor, condenser, chiller, central control unit KanBox

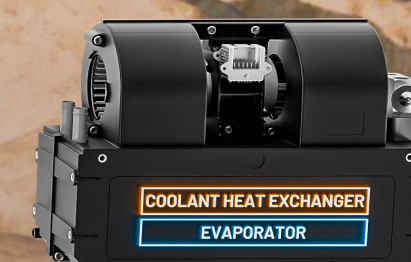


EHHVAC system: The EHHVAC system for hybrid or electric vehicles synergizes the benefits of electric and combustion technologies in climate control. The unit combines an evaporator, a coolant heat exchanger, and an electric PTC heater to deliver unparalleled versatility.

Key advantages

- + Optimized energy use by blending electric heat with waste heat
- + Reduced emissions
- + Automatic pre-heating

System components: EHHVAC unit, e-compressor, condenser, chiller, central control unit KanBox



HVAC system: The HVAC system for fuel and hybrid drives utilizes the principles of thermodynamics and fluid mechanics to heat, cool, ventilate, and dehumidify the air inside your vehicle. The unit is equipped with an evaporator for cooling and a coolant heat exchanger that uses engine heat for warming the cabin air.

Key advantages

- + Efficient waste heat utilization
- + Safe and dependable comfort even in the toughest conditions

System components: HVAC unit, compressor, condenser, central control unit KanBox

THERMAL MANAGEMENT SYSTEMS

A thermal management system is particularly critical for modern electric and hybrid vehicles, where the efficiency and lifespan of batteries and electronic components are directly influenced by temperature. Our advanced TMS ensures precise temperature control for the traction battery, either separately or in combination with the electric motor and the cabin.

BATTERY THERMAL MANAGEMENT SYSTEMS

Our Battery Thermal Management System (BTMS) ensures that your vehicle's battery operates within the optimal temperature range of 20°C to 40°C, regardless of external conditions. The system is equipped with state-of-the-art cooling and heating components, insulation, and control sensors, offering a comprehensive solution for battery temperature regulation.

- + Optimal performance of the battery
- + Guaranteed range and efficiency during cold weather
- + No overheating of the battery
- + Improved battery lifespan
- + Efficient charging by keeping the battery within the optimal temperature range
- + Maximized vehicle range through consistent battery performance

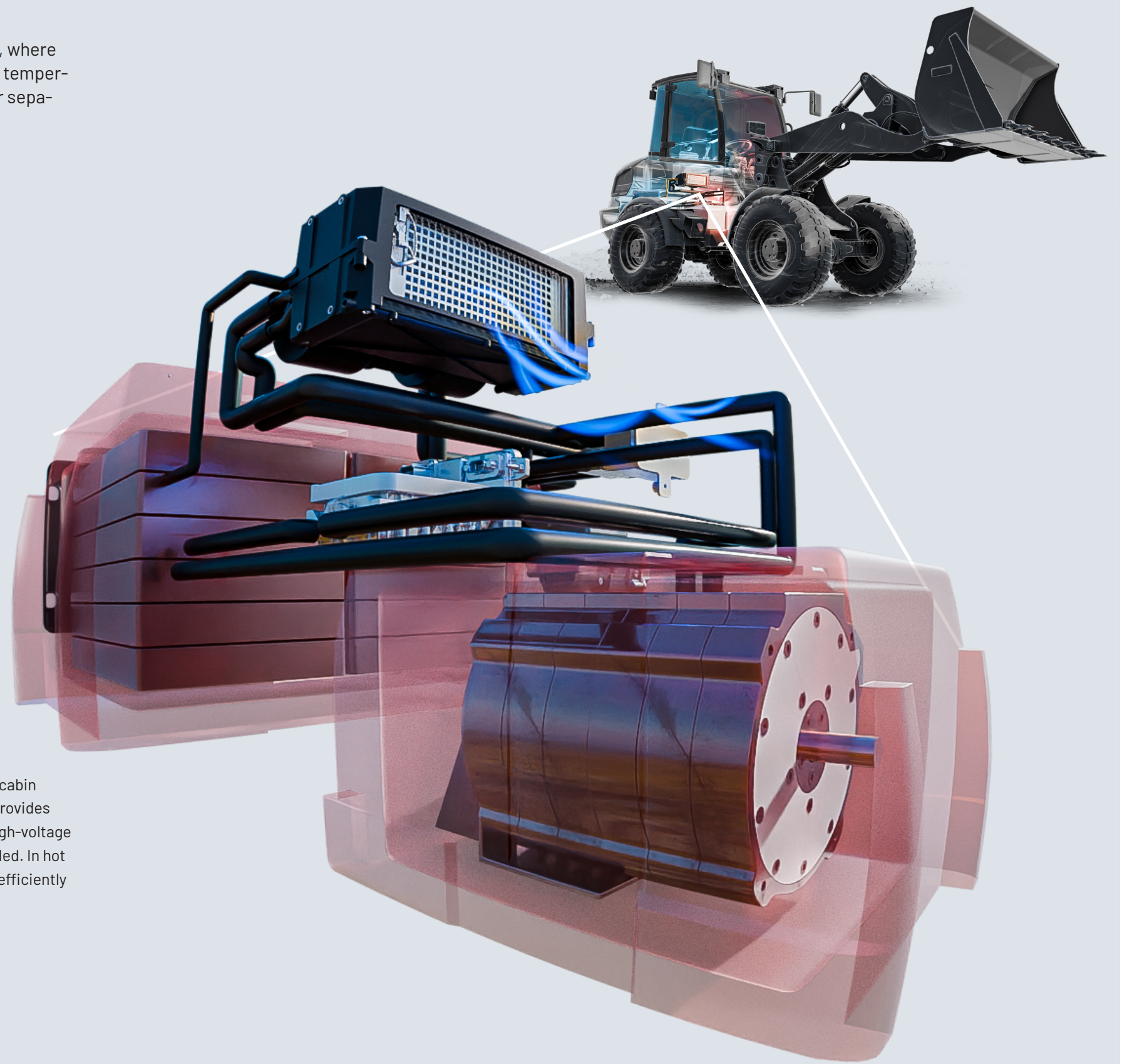
INTEGRATED THERMAL MANAGEMENT SYSTEMS

Our Integrated Thermal Management System joins the needs of multiple systems into one seamless operation. In addition to securing the battery's performance, it also manages the climate control of engine, electronics, and cabin.

No overheating: The Integrated TMS keeps inverters, motors, and chargers within the optimal 20°C to 90°C range.

Rapid temperature adjustment in the cabin:

Waste heat from battery and motor heats the cabin via a heat exchanger. An electric PTC heater provides extra warmth, and for extreme conditions a high-voltage water heater is available. Pre-heating is included. In hot weather, the battery-powered cooling circuit efficiently cools the cabin.

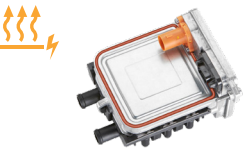


With our competence in climate control we develop thermal management systems also for the batteries. Our holistic approach is to combine thermal management for cabin, battery and motor to save components, weight, space and cost.

ELECTRICAL HEATING & AIR CONDITIONING SYSTEMS



HIGH-VOLTAGE COOLANT HEATER - TITRONIC



- Third generation of high-voltage PTC water heater for electric vehicles
- Reliable and powerful PTC technology offering a high heating performance of 5 kW*
- Six heat stages

Version		CHHV 50 G3
Heating performance	kW	5.0*
Main dimension	mm	160 x 159 x 105
Weight	kg	2.0
Operating voltage range (HV)	V	250 - 450 / 12
Interfaces		LIN 2.1

* Un = 350 V, Tco = 60°C, Qco = 10 l/min, Coolant = 50:50

ELECTRICAL WATER HEATER - PLUGTRONIC



- Vehicle pre-heating system, consisting of a 230 V-heater for pre-heating the engine and interior, a water pump, wiring and an electronic charger
- Can be combined with vehicle-specific kits
- Flexible positioning with a water pump as standard for simple installation
- Water pump available for 12 V or 24 V
- 20 mm water spigot diameter

Version		800	1850
Heating performance	kW	0.8	1.85
Main dimension	mm	151 x 131 x 81	
Weight	kg	0.8	
Operating voltage range (HV)	V AC	230	
Interfaces	V DC	12 / 24	

ELECTRICAL BLOWER HEATER



- Compact size perfectly suited to small cabins
- Electric heater with secured PTC element and equipped with safety thermal switch
- Water blower heater also available

Version		ALIZE 2 ELEC	KELEC EV01	KELEC EV02
Heating performance	kW*	1.6 - 2.2	0.85 - 1.7	
Airflow	m³/h*	210	230	350
Ventilation speed		3		
Operating voltage range	V DC*	PTC from 24 to 800		
Ventilation voltage	V*	12 / 24		
Main dimension	mm	189 x 175 x 132	235 x 255 x 114	344 x 273 114

*Depending on model

ELECTRICAL HVAC VERTICAL EVAPORATOR



- Vertically mounted hybrid evaporator for conventional A/C with PTC heating element
- Features with directional scrolls which can be pivoted to direct the air in the right direction
- Also available as non-electric version with water heat exchanger

Version		MK0 EHVAC	VK9 EHVAC
Heating performance	kW	2.2	3
Cooling performance	kW	4.3	7.5 or 8.5*
Airflow	m³/h	390	600 or 800*
Electrical consumption	W	220	300 or 600*
Operating voltage range	V DC	24 - 800	
Main dimension	mm	160 x 324 x 378	173 x 398 x 335

*Depending on model

ELECTRICAL HVAC HORIZONTAL EVAPORATOR



- Vertically mounted hybrid evaporator for conventional A/C with PTC heating element
- Features with directional scrolls which can be pivoted to direct the air in the right direction
- Also available as non-electric version with water heat exchanger

Version		Super K EHVAC	Kool EHVAC	Falkon EHVAC
Heating performance	kW	up to 4		up to 5
Cooling performance	kW	3.5	4.5	7.7
Airflow	m³/h	440	520	660
Electrical consumption	W	100	180	360
Operating voltage range	V DC	24 - 800		
Main dimension	mm	216 x 368 x 137	261 x 384 x 158	297 x 432 x 167

ROOFTOP EHVAC UNIT - RK9



- Compact system with integrated evaporator, condenser, dryer filter and PTC heating element
- Available also as A/C version with integrated electrical compressor
- Ideal for small series production or vehicles that cannot accommodate a compressor
- Extremely simple retrofitting

Version		RK9 EHVAC
Heating performance	kW	6
Cooling performance	mm	7
Airflow	m³/h	530
Weight	kg	35
Main dimension	mm	1.101 x 580 x 250

Our entire product portfolio is available in our heating and air conditioning catalog.

AIR CONDITIONING & HEATING SYSTEMS



HORIZONTAL EVAPORATORS FOR SPLIT SYSTEMS



- Large portfolio enables solutions to be installed for almost every cabin
- Available as A/C only, heating only or HVAC version
- Also available for battery electric vehicles using a PTC heating element

Version		Super K	Kool	Falkon
Cooling performance	kW	3.5	4.5	7.7
Heating performance	kW	4.3	6.6	10
Airflow	m³/h	440	520	660
Electrical consumption	W	100	180	360
Main dimensions	mm	216 x 368 x 137	261 x 384 x 158	297 x 432 x 167

VERTICAL EVAPORATORS FOR SPLIT SYSTEMS



- Directional scrolls can be positioned indepedently
- With intergrated electrical flap on the air intake for outside air / circulating operation
- Available as A/C only, heating only or HVAC version

Version		MK0	MK1	VK9
Cooling performance	kW	4.3	7	8
Heating performance	kW	3.3	7.8	10
Airflow	m³/h	435	700	670
Electrical consumption	W	220	360	300
Main dimensions	mm	160 x 257 x 378	159 x 428 x 443	174 x 402 x 360

PRE-ASSEMBLED HVAC EVAPORATOR SYSTEMS - KAB



- Pre-assembled HVAC evaporator systems for integration in the cab ceiling
- System with integrated air distribution and manual operating elements
- Easy to install in the cab roof
- Over 10 system variants available for every requirement

Version		HVAC 4.3 / 3.5	HVAC 6.6 / 4.5	HVAC 10 / 7.7
Cooling performance	kW	3.5	4.5	7.7
Heating performance	kW*	4.3	6.6	10.0
Airflow	m³/h*	440	520	725
Electrical consumption	W	100	180	360
Main dimensions	mm	589 x 380 x 137.5	589 x 380 x 160.5	589 x 380 x 169

*Depending on model

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ROOFTOP A/C UNIT - RK9



- Also available for battery electric vehicles using a PTC heating element
- Can integrate an electric compressor (SH version)
- Also available as air conditioning only version

Version		RK9
Cooling performance	kW	up to 9
Heating performance	kW	up to 10
Weight	kg	23
Airflow	m³/h*	725
Main dimensions	mm	932 x 581 x 192

*Depending on model

PRE-ASSEMBLED HVAC EVAPORATOR SYSTEMS - HK EV04 HEAD LINER



- Thinnest HVAC on the market.
- The ceiling HK EV04 Head Liner is used in large cabins operating in a harsh environment, very hot climate or high thermal load
- It is fixed to the ceiling and its very low thickness guarantees a preserved livability
- The integrated control panel controls the temperature and ventilation speed.
- The water flow control valve is integrated in the evaporator body
- At the rear, the air inlet is protected by a filter accessible without tools
- Available as air-conditioning only version

Version		HK EV04 Head Liner
Cooling performance	kW	8.6
Heating performance	kW	9.5
Airflow	m³/h*	1300
Electrical consumption	W*	190
Main dimensions	mm	487 x 1000 x 132

*Depending on model

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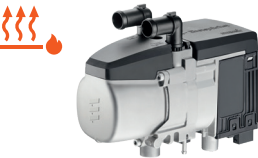
FUEL OPERATED HEATING



FUEL OPERATED WATER HEATERS

- Pre-heat both – the vehicle and the engine interior
- Pre-heating reduces engine wear due to reduced cold starts and saves fuel and money
- Pre-heated cabins defrost the wind-shield and secure safe operation

HYDRONIC S3



Version [Diesel, 24 V]		Commercial D5L	Commercial D6L
Heating performance	kW	1.3 to 5.0	1.3 to 5.6
Main dimension	mm	215 x 91 x 180 [With straight connection fittings]	
Weight	kg	2.0	
Fuel consumption	l/h	0.59	0.65
Interfaces		CAN/S+	

HYDRONIC M2



Version [Diesel, 24 V]		M8 Biodiesel*	M10	M12
Heating performance	kW	1.5 to 8.0	1.5 to 9.5	1.2 to 12.0
Main dimension	mm	331 x 138 x 221		
Weight	kg	6.2		
Fuel consumption	l/h	0.18 - 0.9	0.18 - 1.2	0.15 - 1.5
Interfaces		LIN		

* 100 % biodiesel compatible in accordance with FAME DIN EN 14214

HYDRONIC L3



Version [Diesel, 24 V]		L16	L24	L30	L35
Heating performance	kW	16.0	24.0	30.0	35.0
Main dimension	mm	544 x 230 x 221			
Weight	kg	16.0			
Fuel consumption	l/h	1.90	2.70	3.15	3.70
Interfaces		CAN/LIN/S+			

FUEL OPERATED AIR HEATERS

AIRTRONIC S3 / M3



- Extremely fast air heating
- Low energy consumption – ideal for long heating periods while the vehicle is at standstill
- Integrated altitude sensor: automatic altitude adjustment up to 5,500 m

Version [Diesel, 24 V]		S3 Commercial	M3 Commercial
Heating performance	kW	0.85 to 2.2	1.05 to 4.0
Main dimension	mm	310 x 115 x 122	376 x 140 x 150
Weight	kg	2.5	4.5
Fuel consumption	l/h	0.1 - 0.27	0.12 - 0.49
Interfaces		CAN/S+	



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ACCESSORIES AND CONTROLS

OUTLETS

You can choose the optimum items for your project from our huge range of outlets with different designs, functionalities and installation options.



TRIMLINE



FUEL OPERATED
HEATING

CONTROL UNITS

We offer control units for every product and requirement, from web-based devices with remote diagnosis for pre-heaters and combined control units for heating and cooling systems to automatic HVAC control units.



WEB-BASED CONTROL
UNIT FOR HEATING



HEATING, A/C,
HVAC

HVAC MANAGEMENT

Our KAN-Box allows you to control different HVAC components via CAN bus in one system and to choose your individual preferred control option.



KAN-BOX

DIAGNOSTICS

Services and tools for easy diagnosis are available for our products.



EASYSKAN

PRESSURIZATION ACCESSORIES

The overpressure valve for pressurized cabins ensures an easy closing of the doors by a quick release of pressure created by the sudden closure of the door. The valves close to protect the cab up to 100 Pa or can be calibrated for other pressures on request.



OVERPRESSURE
VALVE



EBERSPÄCHER INTRODUCES THE ZELIOX. MOBILE POWER. ANYWHERE. ANYTIME.

Eberspächer expands its portfolio with the Zeliox product line, the innovative mobile All-In-One power solution. From compact energy systems to scalable high-performance setups, the Zeliox provides clean, efficient, and secure power.



YOUR TRUSTED PARTNER FOR ENERGY STORAGE SYSTEMS

Eberspächer combines decades of expertise with cutting-edge technology to deliver clean, reliable, and scalable power solutions. With the Zeliox, we offer a mobile All-In-One power solution that provides energy anywhere, charged via solar, while driving, shore power or mains. Our global network, technical know-how, and commitment to sustainability make us the ideal partner for efficient, future-proof energy solutions.



ZELIOX CONTROL MODULE

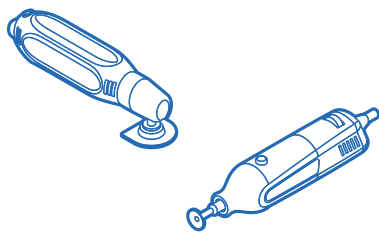
The Zeliox Control Module (ZCM) is a stand-alone smart power distribution system that connects directly to your vehicle battery. It lets you wirelessly manage vehicle accessories with six programmable channels (expandable to 24). It eliminates complex wiring, reduces installation time, and ensures seamless energy control. With RF-controlled buttons and app integration, you can adjust settings, monitor power usage, and prevent battery drain – making power management easier, safer, and more efficient.

ENERGY FOR EVERY APPLICATION

Available in various models, the Zeliox ensures the right power solution for every need. Whether for light applications, professional tools, or heavy-duty equipment, each system delivers reliable, scalable, and efficient energy wherever it's needed.

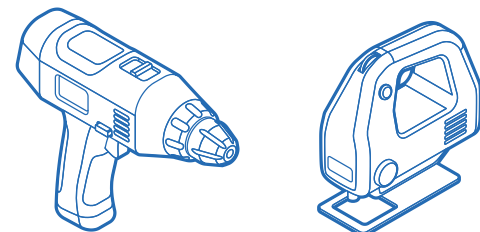
GO - CASUAL USE - 1000 W / 0.64 kWh

Laptops, chargers, small tools, ...



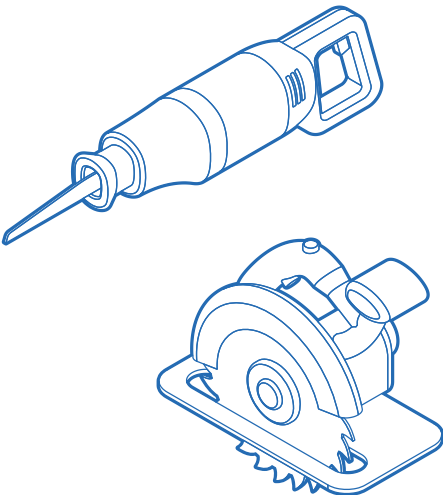
ECO I - LIGHT USE - 1600 W / 1.3 kWh

Soldering irons, heatguns, multiple chargers, ...



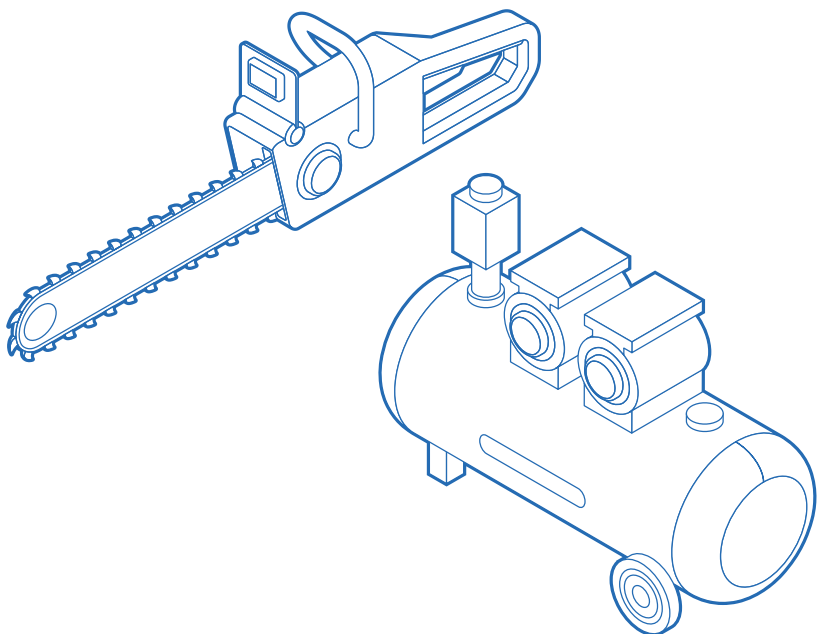
ECO II - MEDIUM USE - 2000 W / 1.3kWh

Circular saws, impact drills, fridges, ...



ECO III - HEAVY USE - 3000 W / 2.6 kWh

Compressors, chainsaws, welding equipment, ...



FAST & FLEXIBLE CHARGING

The Zeliox offers multiple charging methods for ultimate flexibility. Mains and shore power provide the fastest charge, fully recharging the ECO I in 1:45 hours. Vehicle alternator charging while driving takes around 3:30 hours. Solar panels provide continuous charging as fast as 4:20 hours depending on sunlight conditions. No matter the scenario, the Zeliox ensures uninterrupted power when and where you need it.

 ECO 4:20 H GO 2:10 H

 ECO 3:30 H GO 1:45 MIN

 ECO 1:45 H

ZELIOX GO AND ECO CONTROL MODULE

ADVANTAGES:

- Reliable energy** – The All-In-One power solution with battery, inverter, and safety features ensures stable 230V & 12V energy, eliminating complex installations.
- Plug & play installation** – Quick setup with secure connectors and no complex wiring required.
- Versatile charging compatibility** – Designed to integrate with various power sources, including vehicle alternators, mains, and solar (depending on model).

ADVANTAGES:

- Smart power management** – Wireless control of vehicle accessories with programmable channels, reducing wiring complexity.
- Flexible configuration** – Set amperage, time delays, and dimmable functions for customized power distribution.
- Easy installation** – Plug & play setup with minimal wiring and no dashboard modifications.

				
PRODUCT NAME	ZELIOX GO	ZELIOX ECO I	ZELIOX ECO II	ZELIOX ECO III
Power	1000 W	1600 W	2000 W	3000 W
Surge peak	1250 W	3200 W	4000 W	6000 W
Capacity	0.64 kWh	1.3 kWh*	1.3 kWh*	2.6 kWh*
Battery capacity	50 Ah	100 Ah	100 Ah	200 Ah
Battery type	Lithium 12.8 V	Lithium 12.8 V	Lithium 12.8 V	Lithium 12.8 V
Built-In DC-DC converter	30 A	30 A	30 A	60 A
Charging while driving	1:45 h	3:30 h	3:30 h	3:30 h
Charging via solar 300 W	2:10 h	4:20 h	4:20 h	8:40 h
Charging via shore power	-	1:45 h (60 A)	1:45 h (60 A)	1:45 h (120 A)
Connections, AC Input (Charge)	-	175-265 V 45-65 Hz 850 W	175-265 V 45-65 Hz 850 W	175-265 V 45-65 Hz 1700 W
AC Output	230 V 50/60 HZ 1000 W Forced air	230 V 50/60 HZ 1600 W Forced air	230 V 50/60 HZ 2000 W Forced air	230 V 50/60 HZ 3000 W Forced air
Weight	19.2 kg	33 kg	35 kg	54 kg
Dimensions w x d x h	445 x 392 x 195 mm	450 x 392 x 225 mm	450 x 392 x 225 mm	520 x 392 x 303 mm

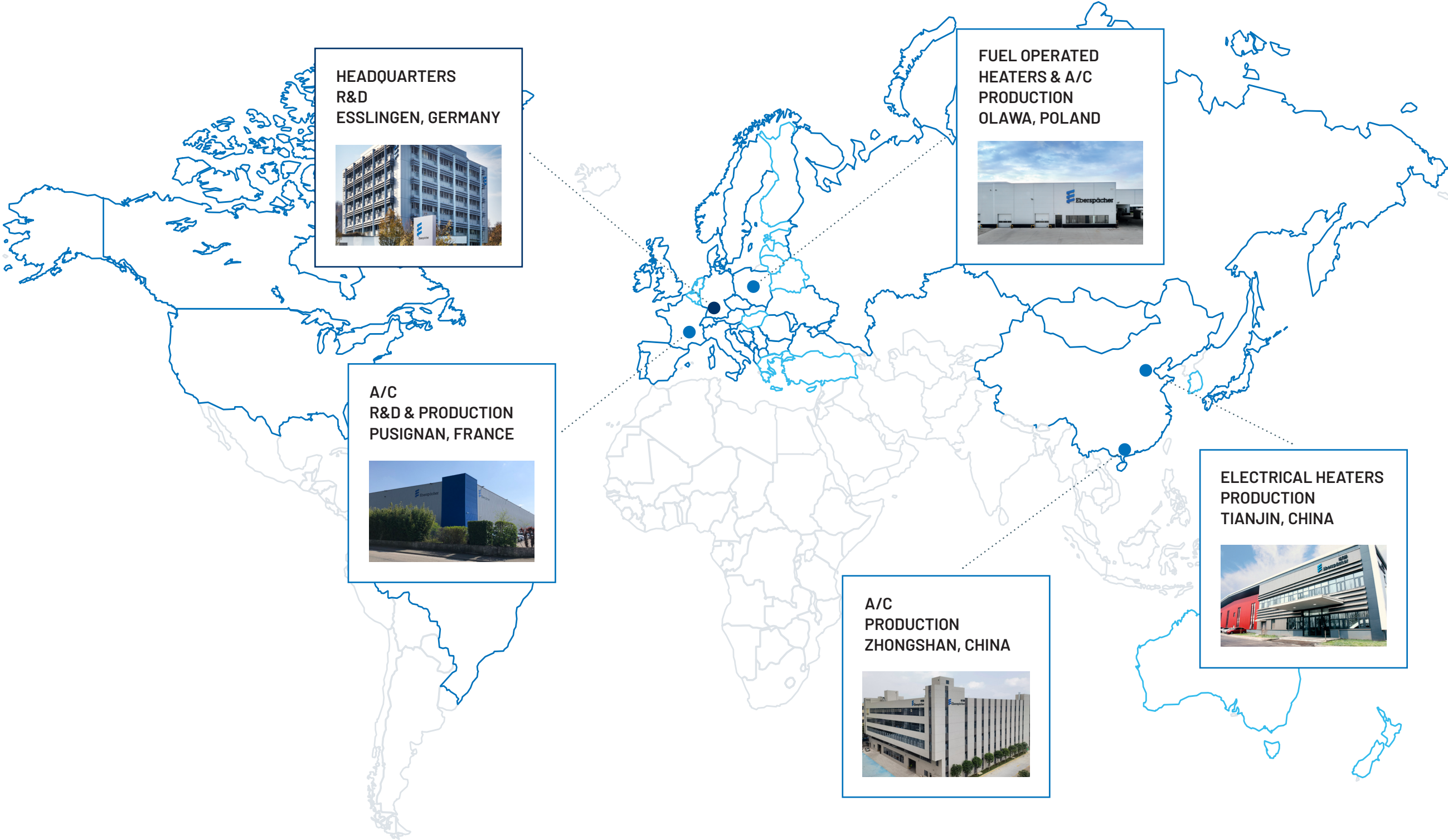
*Expandable

PRODUCT NAME	ZELIOX CONTROL MODUL
Input	12/24 V
Output	6 fully programmable channels
Rated input voltage	12/24 Vdc
Input voltage range	12-16/21-30 Vdc
Input current	76 A max.
Output current	76 A max.
Standby consumption	≤ 5 mA
Compatibility	App available for Android and iOS
Weight	0,87 kg
Dimensions w x d x h	253 x 48 x 161 mm



Want to know more?
Find all details on
eberspaecher-zeliox.com

GLOBAL FOOTPRINT



BRANCHES
ESSLINGEN, GERMANY

SUBSIDIARY

GENERAL AGENTS

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