

CV Standard Battery System

A perfect fit for commercial vehicles and mobile machines



The Webasto CV Standard Battery System is designed according to the high requirements of the commercial vehicle market. The modular and scalable concept is suitable as a traction battery for a wide range of vehicle types - from light commercial vehicles to various mobile machines.

It offers not only a robust housing, but also uncompromising quality and efficient thermo management. The depth of added value makes Webasto a reliable system partner that stands by the customer's side from development through production to integration and commissioning.

Standards & norms

- **Homologation:** ECE R100, ECE R10
- **CE-mark:** CE certified for mobile machines*
- **Safety:** ISO 6469, ISO 19014, ISO 26262 (ASIL C)
- **Environment:** ISO 20653 (IP67/IP6K9K)
- **Vehicle communication:** CAN-Bus conform to ISO 11898
- **Company standards:** LV 123, LV 124
- **EMC:** ISO 11452, ISO 7637, CISPR 25
- **Transport:** UN T38.3

Additional standards & norms**

- UN GTR No. 20, ISO 16750, ISO 12405, ISO 19453

* CE certified for various vehicle types (listing upon request)

** Tests & requirements partially fulfilled

All advantages at a glance:

- Scalable system with up to 18 CV Standard Battery Systems and a voltage of 400 or 800 V and with up to 630 kWh
- Robust housing enables use in rough terrain
- Intensively tested and certified to the highest safety and quality standards
- Vertical and horizontal mounting positions allow flexible and easy integration
- Convincing total cost of ownership thanks to standardized product

Safety features

- Physical separation between high voltage and cooling connectors
- Desiccant cartridges to avoid condensation over lifetime
- Integrated thermal runaway detection in each system
- State-of-the-art pressure equalization
- Insulation measurement, high voltage interlock and contactor monitoring included in every battery pack
- Temperature, voltage and current of different sub-components are monitored



Truck



Light vehicle



Bus



Special vehicles



Construction machines



Agricultural

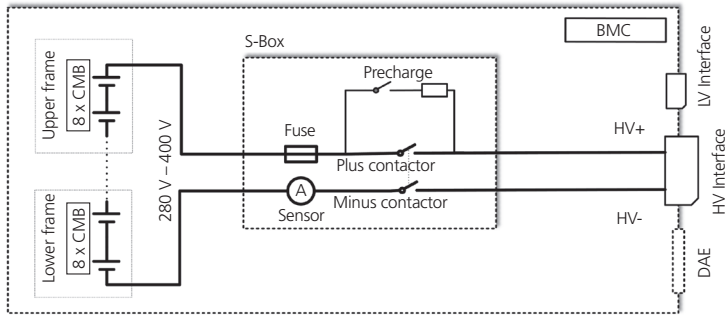


Airport



Material handling

Battery pack circuit



Technical specifications

	Battery pack
Dimensions (L x W x H)	960 x 686 x 302 mm
Dry weight	295 kg
Installed energy	~ 35 kWh
Nominal capacity	99 Ah
Depth of discharge	80 / 90 %
Voltage range	280 – 400 V (~ 350 V nominal)
Energy density	~203 Wh/l, >118 Wh/kg
Continuous power (CH/DCH) (@25 °C, SoC dependent)	50 / 56 kW
Peak power (CH/DCH) (10 s, @25 °C, SoC dependent)	113 / 112 kW
Lifetime (DoD, temperature and C-rate dependent)	Up to 3,000 cycles
Guarantee plus	Up to 8 years
Volume flow	10 l/min
Pressure loss	< 50 mbar
Cell type	prismatic NMC
Operating temperature	-30 °C to +60 °C 3,500 meters above sea level 0 - 100 % humidity

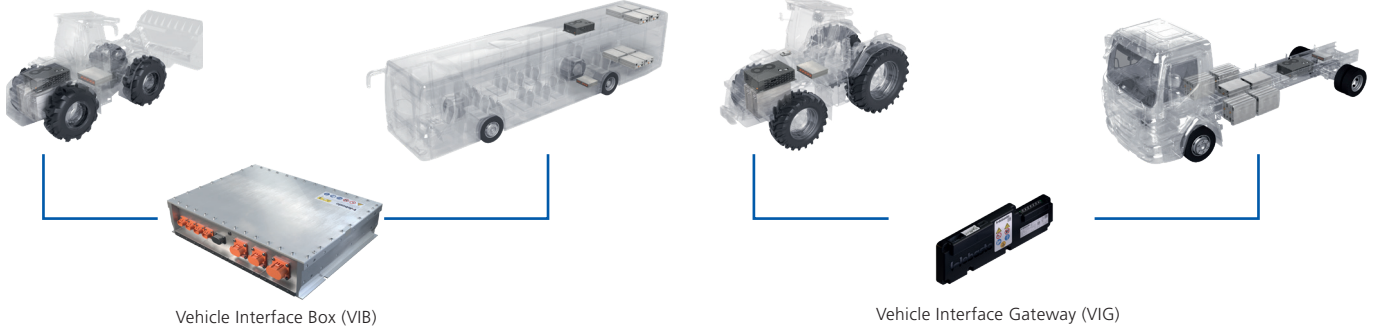
Our solution for commercial vehicles comprises CV Standard Battery System and Vehicle Interface Box or Vehicle Interface Gateway

Vehicle with two CV Standard Battery Systems

Expandable up to 10 CV Standard Battery Systems (350 kWh)

Vehicle with two CV Standard Battery Systems

Expandable up to 18 CV Standard Battery Systems (630 kWh)



System specifications	Vehicle Interface Box (VIB)		Vehicle Interface Gateway (VIG)	
	400 V system Max. 5 batteries	800 V system Max. 10 batteries	400 V system Max. 9 batteries	800 V system Max. 18 batteries
Installed energy (entire system)	n*35 kWh		n*35 kWh	
Topology in 400/800 V system	1snp	2snp	1snp	2snp
Continuous power (CH/DCH) (@25 °C, SoC dependent)	up to 150 kW	up to 300 kW	up to 485 kW	up to 970 kW
Peak power (CH/DCH) (10 s, @25 °C, SoC dependent)	up to 230 kW	up to 460 kW	up to 560 kW	up to 1120 kW