



Item no. 323/454
Manufacturer's no. 3320



Battery-to-Battery Charger VCC Li, 45 A

VOTRONIC
Elektronik-Systeme GmbH

Information

Dimensions	280 x 74 x 139 mm
Pack size	30 x 16.7 x 8 cm
Net weight	1.72 kg
Gross weight	2 kg

The fully automatic battery charging converter for LiFePO₄ batteries in special vehicles, high-quality motorhomes and in on boats was developed according to the latest standards for charging supply batteries in lithium LiFePO₄ technology while driving.

In contrast to conventional cut-off relays, the charging converter automatically adapts the charging voltage to losses on the supply lines and fluctuating battery voltages. With a 24 V input voltage, it is even possible to charge the 12 V supply battery without an additional alternator.

The charging converter guarantees the high quality of battery charging of the VOTRONIC chargers even while driving. The intelligent microprocessor charge control with „IU1oU2oU3“ charging characteristics enables fast and gentle full charging and subsequent 100% charge retention of the batteries from any state of charge.

At the same time, 12 V consumers connected in parallel can also be supplied and overcharging of the batteries is reliably prevented, even during extremely long journey times.

The charging converters are characterised by their compact design, their low weight (high-frequency switch-mode technology) and their powerfully dimensioned power components. This ensures full charging power even with

Specifications

Charging current	45 A
Nominal voltage	24 V
Peak power	740 W
Type	2412-45 Li

long charging cables and strong voltage fluctuations on the starter battery, for example in vehicles that comply with the Euro 6 standard.

- The charging voltage is free of peaks and regulated in such a way that the batteries cannot overcharge.
- Fully automatic operation via switching input (ignition, engine running, D+) and voltage control
- The **automatic, adjustable power control** enables priority charging of the starter battery by the alternator in the event of an overloaded vehicle network, thus ensuring immediate starting capability.
- No discharge (current 0.000 A) of the batteries during standby or when the charging converter is switched off
- **Parallel and buffer operation:** The battery continues to be charged or is kept fully charged if it is used at the same time. The charging converter automatically calculates and monitors the adjustment of the charging times.
- **Monitoring-free charging:** protection against overload, overheating, overvoltage, short circuit, polarity reversal at the output, malfunction and battery back-discharge through electronic cut-off up to complete disconnection of the charging converter and battery by means of built-in safety switches.
- **Galvanic isolation between input and output:** absolute separation of the battery circuits even in the event of a fault, important for 12 V/24 V mixed systems, prevents unwanted reverse discharges and suppresses interference in the vehicle electrical system.
- **Charging cable compensation:** voltage losses on the charging cables are automatically compensated for.
- **Built-in on-board power supply filter:** trouble-free parallel operation with solar systems, wind and petrol generators, mains chargers etc. on one battery
- **Temperature monitoring and charge adjustment** by battery temperature sensor (322/898), enables charging operation even outside the recommended LiFePO₄ battery temperatures below 5 °C and above 35 °C.