

# VOTRONIC B2B Chargers (Booster)

## Series VCC – Installation – Perfect Charging on the Road –

### Charging Converter Series VCC

Charging Booster, optimised charging, also for short distances

The charging converters ensure optimised and quick charging of the supply battery by the dynamo during driving. In contrast to simple cutoff relays, the charging voltage will be raised to the value, which is required for full charging of the corresponding battery type and which is prescribed by the battery manufacturers. So, the full charging current is available, and the battery is charged with considerable current rates within short time.

Long charging cables and losses, as well as voltage fluctuations at the dynamo are neatly compensated. Charging converters with different input and output voltage rates (12 V/24 V or 24 V/12 V) allow simple charging of a second battery, even without installation of a second dynamo.

Thus, the charging converter ensures the known high-quality battery charging of the VOTRONIC chargers also during driving. Due to the intelligent microprocessor charging control with characteristic lines of charging „IU1oU2“ and dynamic charging time calculation an automatic, quick and gentle full charging is ensured, as well as subsequent trickle charge of the connected batteries from any charging state. At the same time, simultaneous supply of consumers in parallel to the supply battery is ensured.

- High charging capacity, already within short distances
- Significantly improved energy balance of the supply circuit
- Outstanding protection of the supply battery and the connected consumers against sometimes very strong voltage fluctuations of dynamically controlled dynamos of newer vehicles
- During longer distances, the IU1oU2 charging technology achieves full charging and overcharging is reliably excluded
- Optimised characteristic lines of charging adjustable for 4 battery types by battery selector switch (acid, gel, two times AGM)
- Automatic, adjustable power control giving priority to charging of the starter battery by the dynamo in case of strong loaded vehicle mains to ensure that the vehicle can be started at any time
- In case of simultaneous consumption during parallel and floating operation, charging of the battery is continued or trickle charging is effected. Calculation and control of the adaptation of the charging time is effected automatically by the charging converter

- The integrated temperature compensation automatically ensures the individual adaptation of the charging voltage to the battery temperature independently of the dynamo. Battery temperature sensor, order No. 2001, is required
- Simple installation, no interventions in the starter circuit required. The unit is switched into the charging cable to the supply battery
- Executions VCC 1212-25 IUoU and VCC 1212-45 IUoU are also suitable for an operation with EBL (electroblock)
- Integrated on-board mains suppression filter ensures unproblematic parallel operation of solar systems, mains chargers and other charging sources at one battery
- Galvanic isolation between input and output ensures absolute separation of the battery circuits for outstanding suppression of failures, for neat ground ratio on both sides, also with long supply cables, safety in case of failure (puncture 12 V/24 V or 24 V/12 V is not possible) and reliably avoids undesirable back discharge of the battery circuits
- Control input for fully automatic controlled operation (ignition, D+ motor running) or optionally manual control by remote switch
- If required, the measuring input allows a pure voltage control of the unit
- The application range of the unit also covers perfect battery charging in great distance of the dynamo in large vehicles, trailers, supply containers etc.
- If higher capacity is required, operation of two units in parallel operation is possible. The charging capacity is then up to 12 V/90 A

The charging converters also distinguish by their compact design, low weight (high-frequency switching transmitter, switch mode technology) and powerfully dimensioned power components. 6 Pilot lamps always inform about the operating state of the unit. The connection of a Remote Control S, order no. 2075, or Remote Indicator IP67, order no. 2081, Battery-State-Indicator IP67, order no. 2082, plug-in type, is provided and can easily be realised.

Unit Type	Order No.	Charging Capacity V/A	Battery Capacity Ah	Battery Type adjustable Acid/Gel/AGM1/AGM2, IU1oU2	Connections for Temp. Sensor Cable/Remote Control	Input Voltage/ max. Current V/A	Control Input D+, Terminal 15/Measuring Input Starter Batt.	Terminals Front/Rear mm <sup>2</sup>	Dimensions * (DxWxH) mm	Weight g
VCC 1212-25 IUoU	<b>3310</b>	12/25	50-200	4-fold	Yes / Yes / Yes	12V (11-16)/40	Yes / Yes	4-16/4-16	245x160x71	1450
VCC 1224-25 IUoU	<b>3311</b>	24/25	50-200	4-fold	Yes / Yes / Yes	12V (11-16)/70	Yes / Yes	4-16/4-16	245x160x71	1750
VCC 2412-25 IUoU	<b>3312</b>	12/25	50-200	4-fold	Yes / Yes / Yes	24V (22-32)/18	Yes / Yes	4-16/4-16	245x160x71	1450
VCC 2424-25 IUoU	<b>3313</b>	24/25	50-200	4-fold	Yes / Yes / Yes	24V (22-32)/36	Yes / Yes	4-16/4-16	245x160x71	1750
VCC 1212-45 IUoU	<b>3317</b>	12/45	90-360	4-fold	Yes / Yes / Yes	12V (11-16)/65	Yes / Yes	4-16/4-16	245x160x71	1800
VCC 2412-45 IUoU	<b>3319</b>	12/45	90-360	4-fold	Yes / Yes / Yes	24V (22-32)/33	Yes / Yes	4-16/4-16	245x160x71	1800

\* Dimensions incl. mounting flanges, without connections

**Mark of conformity:** CE, E Test (EMV/Automotive Regulations)

**Delivery Scope:** Manual

**Recommendable Accessories:** Battery Temperature Sensor, order no. 2001;

Remote Control S, order no. 2075; Remote Indicator IP67, order no. 2081; Battery-State-Indicator IP67, order no. 2082



Recommendable Accessories:

Battery Temperature Sensor and Remote Indicators on Page 6

Galvanic Isolation, Puncture-proof



Charging during driving according to characteristic line

