



All good things come in threes

Optimal Battery Charging - at any time, fully automatic and worldwide

The creation of the Battery Charger VBCS Triple is a completely new unit combination consisting of a Mains Charger PB, a Charging Converter VCC and a Solar Controller MPP, which ensures the energy supply in the camper. The batteries will always be charged automatically, regardless if during driving or at the parking lot. Particularly the amply dimensioned charging capacity of the integrated charging converter of 30, 45 or 60 A ensures battery charging with full charging current, even at short distances, and that it is fully charged at the destination.

Regarding quality, equipment and functions, the series VBCS Triple is identical to the VOTRONIC individual units, and it distinguishes itself by the particularly compact and lightweight design. The units extremely contribute to cost saving and help to gain valuable space in the camper. Acquisition, installation, cabling and connection wiring are reduced to a minimum in order to conserve valuable resources.

Designed for well-established battery sizes, three different unit combinations are available. All units are equipped with 8 characteristic lines of charging for lead-acid, gel and AGM batteries, as well as - future-proof - for Lithium LiFePO4 batteries. The integrated battery trainer keeps the board batteries ready for operation during extended stop periods.

A LCD display and control panel, which had been developed specifically for this charging unit, indicates all important unit information. Furthermore, the charger can be adapted to the energy supply of the parking lot.

PRODUCT FEATURES

- Continuous, all-automatic battery charging
- High operating safety
- Quick, gentle charging
- Integrated battery care
- Full charging capacity worldwide
- 110 V / 230 V
- 8 characteristic lines of charging for acid, gel, AGM and LiFePO4 batteries
- Temperature sensor 825 is included in the standard delivery
- Robust technology and compact design
- Easy installation, short cable paths
- Options: Plug-and-play Display and Control Panel LCD-Charge Control S

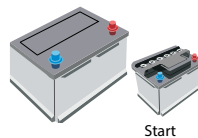
Series VBCS Triple

Unit Combination of Mains Charger, Charging Converter and MPP Solar Controller and Battery Trainer



Suitable for Euro 6

Mobile Charger with charging options for board and starter battery



VBCS 30/20/250 Triple:

VCC Charging Converter with 30 A
Pb Mobile Charger with 20 A
MPP Solar Charging Controller for max. 250 Wp

VBCS 45/30/350 Triple:

VCC Charging Converter with 45 A
Pb Mobile Charger with 30 A
MPP Solar Charging Controller for max. 350 Wp

VBCS 60/40/430 Triple:

VCC Charging Converter with 60 A
Pb Mobile Charger with 40 A
MPP Solar Charging Controller for max. 430 Wp

Our Tip

The combination chargers of series Triple distinguish depending on application:

The series VBCS Triple is a special development with integrated MPP solar charging controller with focus on board battery charging in campers, whereas the series VAC Triple with integrated charging current distributor also supplies high charging current to the starter battery, thus being particularly suitable for intervention vehicles.



Charging of lead batteries is strongly depending on the temperature. Therefore, a temperature sensor should be used for full charging of gel and AGM batteries, which is included in the delivery scope of all units

» All units with technical data are listed on page 35.

Battery Charger
VBCS Triple / VAC Triple



Unit Type	VBCS 30/20/250 Triple	VBCS 45/30/350 Triple	VBCS 60/40/430 Triple	VAC 45-10/25 Triple	VAC 60-15/30 Triple
Order No.	3241	3243	3245	0663	0665
Mains Operation					
Nominal Operating Voltage (AC)	110 V - 230 V / 45 - 65 Hz worldwide				
Operating Voltage Range (AC)	90 V - 270 V, Short-timing (5 s) 305 V				
Max. Power Consumption (AC)	360 W	520 W	700 W	610 W	780 W
Charging Capacity Board-Battery max.	20 A	30 A	40 A	35 A	45 A
Charging Capacity Starter-Battery via Charging Current	4 A	4 A	5 A	10 A	15 A
Mains Detection/Switching Output for Motor locking	●	●	●	●	●
AC Power Limit Function	●	●	●	●	●
12 V/12 V B2B Charging Converter Operation					
Charging Capacity Board Battery max.	30 A	45 A	60 A	45 A	60 A
Automatic Activation D+, Ignition	●	●	●	●	●
Starter Battery/Alternator Voltage Range (Euro 6) / max. Current	10.5-16.5 V / 42 A	10.5-16.5 V / 63 A	10.5-16.5 V / 82 A	10.5-16.5 V / 63 A	10.5-16.5 V / 82 A
Max. Current Limit II (adjustable)	25 A	48 A	65 A	48 A	65 A
MPP Solar Charging Controller Operation					
Capacity Solar Module (Pmax)	50 - 250 Wp	50 - 350 Wp	60 - 430 Wp	—	—
Current Solar Module max.	15,0 A	21,0 A	26,0 A	—	—
Voltage Solar Module (Voc) max.	36 V	36 V	36 V	—	—
Charging Current Board/Starter Battery max.	18.0 / 4.0 A	25.5 / 5.0 A	31.5 / 5.0 A	—	—
Terminal AES Refrigerator	●	●	●	—	—
Starter-Battery					
Nominal Voltage / Capacity min. recommendable	12 V / >60 Ah	12 V / >80 Ah	12 V / >100 Ah	12 V / >80 Ah	12 V / >100 Ah
Bord-Battery, IU1oU2oU3					
Nominal Voltage Lead-Acid/ LiFePO4	12 V / 12.0-13.3 V	12 V / 12.0-13.3 V	12 V / 12.0-13.3 V	12 V / 12.0-13.3 V	12 V / 12.0-13.3 V
Battery Capacity, adjustable	45 - 280 Ah	68 - 420 Ah	90 - 560 Ah	68 - 420 Ah	90 - 560 Ah
No. of charging program adjustable Lead-Acid/-Gel/-AGM (see p. 6)	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4
4 different charging programs for some of the latest LiFePO4 Battery-Systems with BMS	4x	4x	4x	4x	4x
Voltage Sensor Lines Start-/Bord-Battery	●/●	●/●	●/●	●/●	●/●
Lead Temperature Compensation/LiFePO4 Protection	●/●	●/●	●/●	●/●	●/●
Temperature Sensor 825 in Delivery Scope	●	●	●	●	●
Automatic Battery Regeneration/Li Auto Wake Up	●/●	●/●	●/●	●/●	●/●
Lead Board Battery Trainer (Pulser), optionally activatable	●	●	●	●	●
Control Input for LiFePO4 - BMS for Charging Stop	●	●	●	●	●
Plug-in Connection Display LCD-Charge Control S	●	●	●	●	●
Plug-in Connection VBS2	●	●	●	●	●
Dimensions * (WxDxH):	217x250x85 mm	217x250x85 mm	217x250x85 mm	217x250x85 mm	217x250x85 mm
Weight	2700 g	2850 g	2900 g	2850 g	2900 g

* Dimensions incl. mounting flanges, without connections **Delivery Scope:** Manual, Mains cable, temperature sensor 825 **Mark of Conformity:** CE, E Test (EMV/automotive regulations)

Recommendable Accessories



Art.-Nr. 1247
LCD-Charge Control S

More Information see page 71.