ChargeMaster Plus 12/100-3 CZone

Product code: 44311005

MASTERVOLT
THE POWER TO BE INDEPENDENT

ChargeMaster Plus is the next generation of battery chargers that integrates multiple functions into one single device. Replacing auxiliary chargers, battery isolators and VSR, ChargeMaster Plus reduces system complexity and cost. Designed for versatility, it charges a maximum of three batteries in a fast and safe way and works anywhere in the world.

Battery's Best Friend

With the Battery's Best Friend architecture, ChargeMaster Plus is capable of charging a multitude of battery chemistries, sizes and voltages. All batteries are charged with the fast and safe 3-step+ charge method. Other unique features are:

- Revival mode: automatically revives even fully depleted batteries.
- Priority Charge: redirect available power to the lowest battery, for faster charging.
- Smart Input: charge all three batteries from one single alternator for continuous charging on the go.

Global Charging

The ChargeMaster Plus handles worldwide AC voltages and frequencies. Resisting large voltage fluctuations and high temperatures, it keeps working in harsh environments. For marine and mobile markets, the ChargeMaster Plus is CE, ABYC, UL, SAE, CEC and RCM/C-Tick compliant.

System Simplicity

Nowadays, equipment must be self-explaining. The ChargeMaster Plus displays the charge phase of all three outputs in an understandable way. Robust and ergonomic connections save installation time. An integrated VSR eliminates the need for additional components and ensures that the alternators energy is funnelled through to the batteries.

Powerful Connections

In modern applications, all components work together, the ChargeMaster Plus supports not only MasterBus but also CZone and NMEA. This enables the charger to communicate with displays, shunts and power systems including communication standards like, FireCan, CANopen and many more. The ChargeMaster Plus can operate as a power supply for delicate communication equipment, or during the construction phase of a boat.

Features

- MasterBus, CZone and NMEA communication.
- Multicharger with two outputs, one in/output, DC-DC converter, current limiter and VSR.
- Combine Lithium Ion, Gel or AGM, and large or small battery banks on a single battery charger.
- Charges multiple batteries while being underway.
- Extended specifications: offers 20 % more output at 14.4 V and 80 % charging power at 60 °C.
- Safe Charge: quickly recognize the State of Charge for extended battery life.
- Very wide operating range of 80-275 V AC, 35-70 Hz.
- Compact, easy to connect and quick to install.

Specifications

Communication & monitoring

Communication interfaces	MasterBus, CZone, NMEA

General specifications

Nominal output voltage	12 V
Max. charge current per output	100 A
Smart In-/Output output voltage	12 V
Smart In-/Output output current	5-40 A (adjustable)
Smart In-/Output input current	max. 40 A
Max. AC current (230 V / 120 V)	8.5 A / 17 A
Total charge current	100 A at 14.4 V
Number of battery outlets	3 (max.)
Battery capacity range	400-1000 Ah
Nominal input voltage	120/230 V (80-275 V) 50/60 Hz
AC connection	screw terminals, suitable up to up to 6 mm²
Power supply mode	yes
Display/read-out	LED display
Dimensions, hxwxd	384 x 250 x 127 mm
	15.1 x 9.8 x 5.0 inch
Weight	5.9 kg
	13.0 lb
Approvals	CE, ABYC, UL1236, SAE J1171, ISO 8846, CEC/DOE, RCM/C-Tick

Technical specifications

Charge characteristic	IUoUo, automatic / 3-step+ for Gel/AGM/Lithium Ion/traction/spiral
Temperature compensation	-30 mV/°C / -17 mV/°F; temperature sensor included
DC voltage compensation	through MasterShunt
Power consumption (DC side)	< 2 mA (MasterBus off)
Current Control function	yes, through MasterBus
Power factor control	> 0.98
Temperature range (ambient temp.)	-25 °C to 80 °C, derating < 0 °C and > 40 °C
	-13 to 176 °F
Cooling	vario fan
Protection degree	IP23, vertical mounting
Protections	over-temperature, overload, short circuit, high/low battery voltage, ignition protection
MasterBus compatible	yes
Charger Status Interface (alarm contact)	yes, using a Multipurpose Contact Output (code 77030500)

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