

# ChargeMaster 24/20-3



Product code: 44020200

Make the most of your batteries with the ChargeMaster series, plugging in and charging anywhere in the world. Mastervolt's ChargeMaster guarantees fast and complete charging of your batteries no matter where you are. Thanks to Mastervolt's innovative 3-step+ charging process, batteries also perform better and last longer.

All ChargeMasters can be easily connected to a MasterBus network with only one cable and one connection (with the exception of the ChargeMaster 12/10, ChargeMaster 12/15-2 and ChargeMaster 24/6). What's more, you have the option for central, local or remote monitoring, configuration and control of your system.

### Clear Display

A clearly lit display on the ChargeMaster provides all essential information: charge current, charge voltage, charge phase and battery content measurement and/or battery condition measurement as a percentage of available Ah capacity. The display also provides an indication of MasterBus communication. Three buttons adjacent to the read-out panel allow for easy operating of the entire system.

The ChargeMaster is available in various models to guarantee you the ideal battery charger for any situation and demand.

### Features

- For recreational and semi-professional use.
- Suitable for any type of battery, including Lithium Ion batteries.
- 3-Step+ charging technology for fast and complete charging, also charges depleted batteries.
- Memory function prevents overcharging in case of unreliable mains.
- Safe and complete charging due to standard safety features.
- Charging capacity up to 1000 Ah battery banks.
- Easy to connect and quick to install.
- Can charge multiple battery banks simultaneously.
- Built-in system functionality (MasterBus) in combination with other Mastervolt products.
- Clear control panel (with the exception of the ChargeMaster 12/10, ChargeMaster 12/15-2 and ChargeMaster 24/6).
- Supplies your system without battery.

### Charging your batteries with every voltage

The Mastervolt ChargeMaster supplies a maximum capacity wherever you are via auto-ranging. Auto-ranging ensures perfect fully automatic operation anywhere in the world, regardless of the available mains voltage (90-265 V AC, 50 or 60 Hz). The 3-step+ charging technology guarantees fast and complete charging, while the cos phi 1-regulation gets the most out of limited generator capacity.

### Robust Connections

Solid metal-to-metal connectors equipped with strain relief prevent corrosion and overheating.

### Charging multiple battery banks

The ChargeMaster series has three equal charge outputs. Those of the smaller ChargeMaster models are pre-installed with two metres of cable for a plug & play solution, while the heavier models have one full output (for example for your service battery) and two outputs of 10 A, ideal for your starter batteries.

### DC Power Supply

Even if the batteries are not connected, Mastervolt ChargeMaster battery chargers can provide a constant DC output allowing you to turn on lights or keep the fridge cold.

# Specifications

## General specifications

Nominal output voltage	24 V
Total charge current	20 A at 28.8 V
Number of battery outlets	3
Charge current second output	20 A
Charge current third output	20 A
Battery bank size	40-200 Ah
Nominal input voltage	120/230 V (90-265 V), 50/60 Hz
AC connection	connector strips
Power supply mode	yes
Galvanic isolation	yes
Display/read-out	LED display
Fastening	mounting bracket (included) or 4x screw
Dimensions, hwxwx	291 x 210 x 131 mm 11.5 x 8.3 x 5.2 inch
Weight	4 kg 8.8 lb
Compliance	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR
Optional	Quick Connect (OEM) version with WAGO 770-113 connector and 25 cm cable, product code 44020202

## Technical specifications

Charge characteristic	IUoUo, automatic 3-step+ for gel/AGM/wet/Lithium Ion
Charge voltage Bulk	28.8 V
Charge voltage Absorption	28.5 V
Absorption time	4 hours
Charge voltage Float (wet batteries)	26.5 V
Charge voltage Float (Gel/AGM batteries)	27.6 V
Temperature compensation	yes
DC voltage compensation	automatic
Power consumption (DC side)	< 2.5 mA
Full load consumption (230 V AC)	660 W
Current Control function	yes, through MasterBus
Power factor control	>= 0.98
Temperature range (ambient temp.)	-25 °C to 60 °C, derating < 0 °C and > 40 °C -13 to 140 °F
Cooling	vario fan
Protection degree	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage
MasterBus compatible	yes