

# ChargeMaster



**The comfort of  
your home, any  
time, any place**



Best value for money

Charging three batteries  
simultaneously

User-friendly operation

Easy to install



THE POWER TO BE INDEPENDENT

# Battery chargers of a new generation

Mastervolt's motto is 'The power to be independent'. You can rely on being independent with this new generation of fully automated battery chargers: the Mastervolt ChargeMaster series. You can plug in and charge anywhere in the world. You can rest assured that your batteries are always quickly and fully charged, wherever you want to stop. Thanks to Mastervolt's 3-step<sup>+</sup> charging process, your batteries will perform better and last longer.

## **Complete range 12 V and 24 V models**

The Mastervolt ChargeMasters are available in various versions, allowing you to select the battery charger best suited to your situation and wishes. The ChargeMaster series offers three simultaneous charging outputs. The small ChargeMaster models come with two metres of cable pre-assembled to the inlet, so it truly is plug & play! The larger models have a single full output for your service battery and two 10 A outputs, which are perfect for your starter and thruster batteries. For specifications of all models, please refer to the back of this document.

## **Also works on generator power**

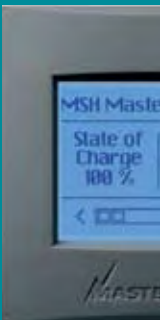
The ChargeMaster also works well with generator power. For the experts: thanks to the sophisticated 'cos phi 1' technology, charging returns are extremely high, enabling optimal charging even with limited generator capacity.

## **Boat yards and installation suppliers are satisfied**

Boat yards can benefit from the ChargeMaster's autoranging capability as no separate stock is required for 120 V and 230 V models. Installation providers are also satisfied with the ChargeMaster; installing and connecting is a straightforward task. Combined with the single cable MasterBus system, this has become even easier. This wonderfully uncomplicated platform for communication and connections enables all components within your system to communicate. Configurations, checking, digital switching between components, full monitoring and safety; from the control panel or from your computer you retain a comprehensive overview and you always have the latest status of your system at hand.

## **Quality guaranteed**

Every ChargeMaster complies with the latest international standards that apply for battery chargers. This means that each ChargeMaster complies with CE standards & SAE J1171 - UL pending.





### Clear read-out panel

A clearly lit display on the ChargeMaster provides all essential information: charging current, charging voltage, charging phase (bulk, absorption, float), battery content measurement and/or battery condition measurement as a percentage of the available Ah capacity. The read-out panel also provides an indication of MasterBus communication. The system provides various alarms, including for excessive voltage. The three buttons adjacent to the read-out panel allow for easy operating of the entire system.



### MasterView Easy for remote monitoring

Our MasterView system with touch screen panel can configure all settings and monitor in real time charging phase, battery voltage, charging current, the % charged. In addition the MasterView Easy can also configure and monitor other Mastervolt equipment connected within the system for example, a Mastervolt Whisper generator and Mass Sine Inverter.



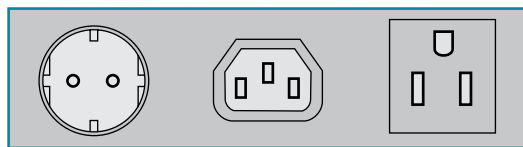
### Multifunctional

The ChargeMaster is suitable for any application you can think of, including electric vehicles, electric forklift trucks, cleaning equipment and other light industrial applications.



### Robust connections

The ChargeMaster is equipped with very robust metal to metal connections for the three DC cable outputs. This ensures solid connections and prevents corrosion and/or excessive heating of contact surfaces. The AC connection part is also safely separated and extremely shock-resistant. The battery charger setpoints are still easily accessible.



### Works with any voltage

The Mastervolt ChargeMaster works at full output power in any port thanks to its auto-ranging capability. Autoranging guarantees perfect, fully automated functionality, whichever the available voltage. It may be 90 V or 265 V AC, or have a frequency of 50 or 60 Hz - the 3-step<sup>+</sup> charging process ensures the batteries are quickly and fully charged. The memory function prevents devices from overcharging during peak currents, ensuring your battery lasts longer. Thanks to cos phi 1 adjustment, even low generator power will provide the same charging current.



### Easy to install

The Mastervolt ChargeMaster can be installed to bulkheads or the floor, by using the purpose designed mounting bracket supplied in conjunction with bolts or screws to fully secure the ChargeMaster.



# Technical specifications



**ChargeMaster**  
12/25-3

Article no. 44010250



**ChargeMaster**  
12/35-3

Article no. 44010350



**ChargeMaster**  
12/50-3

Article no. 44010500



**ChargeMaster**  
12/70-3\*

Article no. 44010700



**ChargeMaster**  
12/100-3\*

Article no. 44011000

## GENERAL SPECIFICATIONS

Nominal input voltage	120/230 V (90-265 V)				
Nominal input frequency	50/60 Hz (45-65 Hz)				
Nominal output voltage	12 V				
Total charge current	25 A @ 14.4 V	35 A @ 14.4 V	50 A @ 14.4 V	70 A @ 14.4 V	100 A @ 14.4 V
Number of battery outlets	3				
Charge current second output	25 A	35 A	50 A	10 A	10 A
Charge current third output	25 A	35 A	50 A	10 A	10 A
Charge characteristic	IUoUo, automatic / 3-step for gel/AGM/wet cel				
Charge voltage Bulk (25 °C/77 °F)	14.40 V				
Charge voltage Absorption (25 °C/77 °F)	14.25 V				
Charge voltage Float (25 °C/77 °F)	13.25 V				
Max. Absorption time	4 hour				
Max. Bulk time	8 hour (start Bulk timer @ 13.25 V)				
Min. Absorption time	15 min				
Dimensions (hwxwd)	210x130x60 mm 8.3x5.1x2.4 inch	301x210x131 mm 11.9x8.3x5.2 inch	360x277x150 mm 14.2x10.9x5.9 inch		
Weight	1 kg / 2.2 lbs	4 kg / 8.8 lbs	6.7 kg / 14.8 lbs		
Battery capacity (recommendation)	50-250 Ah	70-350 Ah	100-500 Ah	140-700 Ah	200-1000 Ah

## TECHNICAL SPECIFICATIONS

Power factor regulations	≥ 0.98				
Full load consumption (230 V AC)	420 VA	600 VA	850 VA	1200 VA	1700 VA
Temperature compensation	battery temperature sensor including 6 metre cable delivered as a standard				
Voltage compensation	yes, automatic				
DC consumption	< 10 mA				
Display	LED		LCD		
MasterBus connectivity	smart system integration via MasterBus (CAN)/Ethernet				
Temperature range	-25 to 65 °C, derating above 40 °C				
Cooling	vario fan and natural cooling to ensure optimized cooling when unit stored in corners etc.				
Sound level	< 52 dBA @ 1 m				
Protection degree	IP23				
Approvals	fully CE / UL1236 supplement marine battery chargers (12/35 & 12/50) / SAE J1171/ISO 8846 ignition protected UL pending for 12/25, 12/70 & 12/100				

## OPTIONS

MasterView Read-out (art. no. 77010050)		status panel, MasterVision compatible
MasterView Easy (art. no. 77010300)		touch screen to control and monitor all MasterBus products
MasterView System (art. no. 77010400)		color touch screen to control and monitor your complete Mastervolt system
MasterBus USB Interface (art. no. 77030100)		operates in combination with MasterAdjust software, freeware from <a href="http://www.mastervolt.com">www.mastervolt.com</a>
MasterShunt (art. no. 77020100)		MasterBus compatible shunt, including Ah counting and control of charger to ensure optimized charging

• At request also available for DC input voltage from 90-400 V DC.



THE POWER TO BE INDEPENDENT

# Technical specifications



	ChargeMaster	ChargeMaster	ChargeMaster	ChargeMaster	ChargeMaster	ChargeMaster	ChargeMaster
	24/12-3	24/20-3	24/30-3	24/40-3*	24/60-3*	24/80-3*	24/100-3*
Article no.	44020120	44020200	44020300	44020400	44020600	44020800	44021000






## GENERAL SPECIFICATIONS

Nominal input voltage	120/230 V (90-265 V)						
Nominal input frequency	50/60 Hz (45-65 Hz)						
Nominal output voltage	24 V						
Total charge current	12 A @ 28.8 V	20 A @ 28.8 V	30 A @ 28.8 V	40 A @ 28.8 V	60 A @ 28.8 V	80 A @ 28.8 V	100 A @ 28.8 V
Number of battery outlets	3						
Charge current second output	12 A	20 A	30 A	10 A	10 A	10 A	10 A
Charge current third output	12 A	20 A	30 A	10 A	10 A	10 A	10 A
Charge characteristic	IUoUo, automatic / 3-step for gel/AGM/wet cel						
Charge voltage Bulk (25 °C/77 °F)	28.8 V						
Charge voltage Absorption (25 °C/77 °F)	28.5 V						
Charge voltage Float (25 °C/77 °F)	26.5 V						
Max. Absorption time	4 hour						
Max. Bulk time	8 hour (start Bulk timer @ 26.5 V)						
Min. Absorption time	15 min						
Dimensions (hwxwd)	210x130x60 mm	301x210x131	360x277x150	430x277x150			
	8.3x5.1x2.4 inch	11.9x8.3x5.2 inch	14.2x10.9x5.9 inch	16.9x10.9x5.9 inch			
Weight	1 kg / 2.2 lbs	4 kg / 8.8 lbs	6.7 kg / 14.8 lbs	8.8 kg / 19.4 lbs			
Battery capacity (recommendation)	25-120 Ah	40-200 Ah	60-300 Ah	80-400 Ah	120-600 Ah	160-800 Ah	200-1000 Ah

## TECHNICAL SPECIFICATIONS

Power factor (cos phi)	≥ 0.98						
Full load consumption (230 V AC)	400 VA	690 VA	1000 VA	1400 VA	2000 VA	2700 VA	3375 VA
Temperature compensation	battery temperature sensor including 6 metre cable delivered as a standard						
Voltage compensation	yes, automatic						
DC consumption with connected battery	< 5 mA						
Display	LED			LCD			
MasterBus connectivity	smart system integration via MasterBus (CAN)/Ethernet						
Temperature range	-25 to 65 °C, derating above 40 °C						
Cooling	vario fan and natural cooling to ensure optimized cooling when unit stored in corners etc.						
Sound level	< 52 dBA @ 1 m						
Protection degree	IP23						
Approvals	fully CE / UL 1236 supplement marine battery chargers (24/20 & 24/30) / SAE J1171/ISO 8846 ignition protected						
	UL pending for 24/12, 24/40, 24/60, 24/80 & 24/100						

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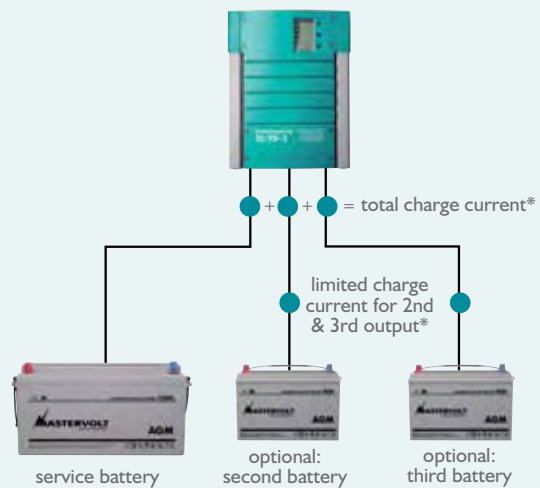
Subject to alterations. For more information please visit  
[www.mastervolt.com/chargemaster](http://www.mastervolt.com/chargemaster)

# ChargeMaster supreme benefits

- Standard safety features ensure full and safe charging.
- 3-step<sup>⊕</sup> charging process for full and quick charging
- Memory function prevents overcharging with peaks in power supply
- Clear read-out panel
- Installing is quick and easy
- Embedded system functionality (MasterBus) when using other Mastervolt products, including the MasterShunt and generator



## Safe charging of second & third battery



\* see technical specifications at the back.