

# Get all the comforts of home with the most innovative battery chargers and inverters

Mastervolt's battery chargers and inverters are advanced, reliable and of excellent quality. Whether you wish to use a microwave, charge your stern thruster battery or use an entertainment system, Mastervolt equipment ensures you all the comforts of home.

MASTERVOLT



## BATTERY CHARGERS

Mastervolt battery chargers offer your batteries more capacity and a longer lifespan. They combine multiple functions in one device and charge batteries safely and fully, even when completely depleted.

### 14 MASS

Robust battery charger with integrated alarm functions and comprehensive certification. The best choice for professional and demanding applications.

RECOMMENDED FOR:



### 18 CHARGEMASTER PLUS CHARGEMASTER

The ChargeMaster Plus charges nearly every combination of batteries in a fast and safe way, combining auxiliary chargers, a battery isolator and VSR in a compact CZone compatible device.

The capable and compact ChargeMaster series is suitable for semi-professional and recreational use.

RECOMMENDED FOR:



### 28 EASYCHARGE

A starter model including the proven Mastervolt 3-step+ charge characteristic. Waterproof and robust battery charger, also available in a portable version.

RECOMMENDED FOR:



## SINE WAVE INVERTERS

Mastervolt offers a complete range of pure sine wave inverters from 300 watts to 40 kilowatts, for professional and recreational use.

### 32 MASS SINE ULTRA MASS SINE

The Mass Sine Ultra, suitable for parallel and 3-phase configuration, is ideal for large installations.

The Mass Sine is designed for continuous use in the most extreme conditions.

RECOMMENDED FOR:



### 36 AC MASTER

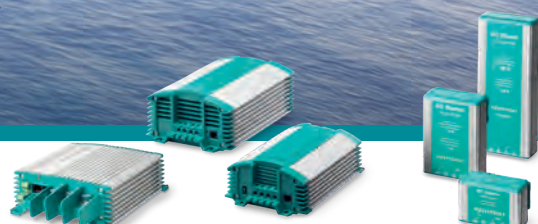
Pure sine wave inverter with excellent price/quality ratio for recreational and semi-professional applications.

RECOMMENDED FOR:





# Charge & Convert



## INVERTER / CHARGER COMBINATIONS

Mastervolt inverter/chargers integrate a powerful battery charger, an efficient inverter and a versatile transfer system in one robust, lightweight and compact device.

### 44 COMBIMASTER

The CombiMaster series is designed and built with a high power rating and > 200 % peak power that can start the most complex loads with ease. Completed with MasterBus, CZone and NMEA 2000 compatible communication, the CombiMaster allows a broad range of monitoring and system integration options.

### 48 MASS COMBI ULTRA MASS COMBI PRO

The Mass Combi Ultra is available up to 3500 watts. Parallel or three-stage configuration enables capacities up to 35 kW. The Ultra model has a solar input and a secondary battery charger.

A 'Pro' model is available for professional use.

## DC-DC CONVERTERS

The versatile Mastervolt converters ensure all your equipment has a stable feed with the right current.

### 54 MAC PLUS MAGIC

The perfect choice for professional use, with low conversion losses, battery charger and dimming function.

The Mac Plus is also ideal for Euro 5/6 applications. Can be parallel switched for capacities over 100 amperes.

### 58 DC MASTER

Converters with an excellent price/quality ratio, easy to install and highly suitable for recreational and semi-professional applications.

RECOMMENDED FOR:



RECOMMENDED FOR:



RECOMMENDED FOR:



# Mastervolt Battery Chargers: A long life for your battery

We know how important it is to charge your batteries safely, reliably and quickly, even if the power supply is affected by low quality or limited availability. You also value batteries that have a long lifespan while maintaining their capacity. Mastervolt offers you the best possible solution.

The Mastervolt 3-step+ charging method ensures more power and a longer life for your batteries. Our battery chargers integrate multiple functions making sure your batteries are safely and completely charged, even when they are depleted. Fast battery charging is guaranteed by the efficient use of the available grid or generator power (all Mastervolt battery chargers have a power factor correction).

## Which Mastervolt battery charger best meets your needs?

Mastervolt offers four ranges of battery chargers:

### ■ Mass series

For the tougher tasks in professional and semi-professional situations. With its integrated alarm functions and various approvals, the Mass is the best choice for professionals.

### ■ ChargeMaster and ChargeMaster Plus series

The ChargeMaster series is suitable for recreational and semi-professional use. It is easy to install and includes a detailed LED and easy controls. The ChargeMaster safely charges multiple battery banks at the same time, anywhere in the world.

The ChargeMaster Plus is a new generation of battery chargers that will replace the ChargeMaster in stages. The ChargeMaster Plus combines three battery chargers, a battery isolator and VSR in one compact device. This all-in-one solution can charge all batteries, even when you're on the go.

**NEW** CZone compatible models available.

### ■ EasyCharge series

Entry level model with proven Mastervolt 3-step+ charge characteristic, in a waterproof epoxy-filled, non-corrosive enclosure.

### ■ EasyCharge Portable series

For people on the move, the portable version offers a rugged solution that can be used everywhere.







## The best battery charger for every application



The ChargeMaster series can charge multiple battery banks at once. The Mass battery charger has one main outlet to optimally charge a battery bank. Both guarantee a long lifespan for your batteries, even with daily and intensive use. The ChargeMaster Plus can smoothly charge a combination of multiple battery types, sizes and voltages. The intelligent built-in auxiliary power means that all Mastervolt battery chargers can also charge a completely discharged battery (< 8 V).

## Charging Lithium Ion batteries



Mastervolt battery chargers can seamlessly charge Lithium Ion batteries as the Mastervolt battery chargers communicate directly with the Lithium Ion battery via the integrated MasterBus (or have been adapted to the required charging voltages).

## Qualifications



All Mastervolt products comply with one or more of these approvals (see relevant product specifications for details). If the required qualification is not present, ask your account manager for an addition.

## MASTER TIP



## Choosing the right battery charger

### Determine:

- How many battery banks do I want to charge?
- The battery charger must have the same voltage as the battery bank.
- Rule of thumb is that 25 % of the battery capacity as a charge capacity is sufficient to safely and quickly charge batteries while still supplying power to the consumers (for instance, a 50-amp battery charger is sufficient for a 200 Ah battery). Increase up to 50 % for Mastervolt Gel batteries and 100 % for Mastervolt Lithium Ion batteries for faster charging.



# Mass Series: The right choice for demanding conditions



**Mass battery chargers are designed for the toughest conditions for professional, semi-professional and recreational purposes. Even under the most extreme conditions the products from the Mass series operate faultlessly, giving you round-the-clock output when necessary.**

The sustainability and technologies that underpin the Mass concept have long been proven in practice. With an MTBF of 180,000 hours at full capacity and 24/7 use, the Mass products are ideal for the toughest tasks and any situation that requires a reliable power supply.



## FEATURES

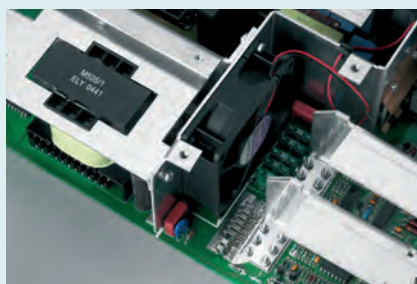
- Designed for the most difficult conditions.
- Lightweight, stainless steel, anodised aluminium casing.
- Coating of internal components prevents damage from damp or condensation to ensure a longer lifespan.
- Insensitive to electromagnetic effects from other devices.
- Suitable for every type of battery, also charges flat batteries.
- Delivered as standard with temperature sensor.
- Full power at temperatures of up to 45 °C.
- Load capacities from 80 to 1000 Ah or more.
- Stable and ripple free 24 and 48 V power supply, even without batteries.
- The Current Control function prevents the breakdown of fuses when the AC voltage drops.
- Parallel switching possible using multiple battery chargers.
- Connections in accordance with CE, ABYC A-31 and IEC60945.
- GMDSS models and panels available.
- Certified by RRR, RMRS (*does not apply to Mass 24/75 120 V*).
- Certified by DNV GL (*only 24/25, 24/50, 24/75, 24/75 (120 V) and 24/100 models*).

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](http://MASTERVOLT.COM/REFERENCES)  
AND  
EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-BACKGROUND)



## MasterBus Compatible

Mastervolt battery chargers can be easily connected to a MasterBus network with only one cable and one connection. You can also choose central, local or remote monitoring, configuration and control of your system.



## Made tough by smart design

The certified Mass battery chargers are very strong, designed to withstand heavy vibrations and shocks. Their premium quality components meet the highest possible specifications, while the smart and extra robust mounting adds to the professional end result.

## GMDSS Compatible

The Mass series are designed for the most demanding situations. To help you comply with SOLAS regulation, all Mass battery chargers are GMDSS compatible. GMDSS stands for Global Maritime Distress and Safety System, and allows users to monitor various alarm functions. GMDSS versions of the Mass 24/25 DNV, Mass 24/50, Mass 24/75, Mass 24/100 and Mass 24/100-3ph are available.

A separate remote panel is available, which is compatible with all Mass battery chargers - **product code 70400050**.

A single front display with GMDSS remote panel is available for:

- Mass 24/25-2 DNV; **product code 21709150**
- Mass 24/50-2; **product code 21709200**
- Mass 24/75, Mass 24/100, Mass 24/100-3ph; **product code 21709300**







# Specifications






## Mass battery chargers

Products | CHARGE & CONVERT

Specifications







Mass battery chargers

				
	<b>Mass 24/15-2</b>	<b>Mass 24/25-2</b>	<b>Mass 24/25-2 DNV</b>	<b>Mass 24/50-2</b>
Product code	40020156	40020256	40720266	40020506
Product code 120 V				
Product code with GMDSS front module	n.a.	n.a.	40720268	40020508
GENERAL SPECIFICATIONS				
Nominal output voltage	24 V	24 V	24 V	24 V
Total charge current	15 A at 28.5 V	25 A at 28.5 V	25 A at 28.5 V	50 A at 28.5 V
Number of battery outlets	2	2	2	2
Charge current second output	3 A	3 A	3 A	3 A
Recommended battery capacity	30-150 Ah	50-250 Ah	50-250 Ah	100-500 Ah
Nominal input voltage	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz
Power supply mode	yes	yes	yes	yes
Display/read-out	LED	LED	LED	LED
Dimensions, hxxwxd	325 x 220 x 111 mm 12.8 x 8.7 x 4.4 inch	325 x 220 x 111 mm 12.8 x 8.7 x 4.4 inch	365 x 220 x 111 mm 14.4 x 8.7 x 4.4 inch	340 x 261 x 130 mm 13.4 x 10.3 x 5.1 inch
Weight	3.3 kg / 7.3 lb	3.3 kg / 7.3 lb	3,5 kg / 7.7 lb	4.6 kg / 10.1 lb
Approvals	CE, ABYC A-31, RRR, RMRS	CE, ABYC A-31, RRR, RMRS	CE, ABYC A-31, DNV-GL, RRR, RMRS	CE, ABYC A-31, DNV-GL, RRR, RMRS
TECHNICAL SPECIFICATIONS				
Charge characteristic	IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
Charge characteristic can be set to your requirements.				
Temperature sensor	yes (included)	yes (included)	yes (included)	yes (included)
DC voltage drop compensation	yes	yes	yes	yes
DC consumption	< 1 mA	< 1 mA	< 1 mA	< 1 mA
Full load consumption (230 V AC)	550 W	880 W	880 W	1800 W
Power factor control	> 0.95	> 0.95	> 0.95	> 0.95
Temperature range (ambient temp.)	-25 °C to 80 °C; derating > 45 °C / -13 °F to 176 °F; derating > 113 °F			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23	IP23	IP23	IP23
Protections	over-temperature, overload, short circuit, high/low battery voltage			
MasterBus compatible	yes	yes	yes	yes
Charger Status Interface (alarm contact)	yes	yes	yes	yes

<b>ACCESSORIES</b>		MasterView Read-out 77010050	option	option	option	option
	<i>Remote panel for reading the charge status of your battery charger, including error notifications.</i>					
		EasyView 5 77010310	option	option	option	option
	<i>Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.</i>					
		MasterShunt 77020110	option	option	option	option
	<i>MasterBus integrated battery monitor, with detailed information on the status of your batteries for an optimised charging process, incl. voltage, current, remaining time and consumption capacity in percentage.</i>					
		DC Distribution 77020200	option	option	option	option
<b>MasterVision panels</b>	<i>Smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. With the included plug &amp; play cable it can be easily connected to the MasterBus network.</i>					
		MasterBus USB Interface 77030100	option	option	option	option
	<i>Communication port between MasterBus and the USB port of your PC; enables reading and configuration of your MasterBus system on the PC when combined with MasterAdjust software (free to download).</i>					
		Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard
		Temperature sensor 15m 41500800	option	option	option	option
<b>MasterVision panels</b>						
		C3-RS 70403040	option	option	option	option
	<i>Remote monitor for battery chargers, with a regulator for reducing grid power consumption.</i>					
		GMDSS remote panel 70400050	option	option	option	option
<b>MasterVision panels</b>	<i>Remote monitoring for Mass battery chargers, with GMDSS system monitoring functions. Battery voltage and current are displayed on the digital panel.</i>					
		Front panel with GMDSS remote panel	n.a.	n.a.	option, product code 21709150	option, product code 21709200
<i>Professional users will benefit from a front display with GMDSS alarm functions. GMDSS stands for an internationally agreed-upon set of safety procedures, types of equipment, and communication protocols that is a requirement for the SOLAS (Safety Of Life At Sea) convention and uses DSC and satellite communication.</i>						

## BATTERY CHARGERS

MASS 24 V  
MASS 48 V

					
<b>Mass 24/75</b>	<b>Mass 24/75 (120 V)</b>	<b>Mass 24/100</b>	<b>Mass 24/100-3ph</b>	<b>Mass 48/25</b>	<b>Mass 48/50</b>
40020756	40120756	40021006	40031006	40040256	40040506
40020758	40120758	40021008	40031008	n.a.	n.a.
24 V	24 V	24 V	24 V	48 V	48 V
75 A at 28.5 V	75 A at 28.5 V	100 A at 28.5 V	100 A at 28.5 V	25 A at 57 V	50 A at 57 V
1	1	1	1	1	1
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
150-750 Ah	150-800 Ah	200-1000 Ah	200-1000 Ah	100-500 Ah	100-500 Ah
230 V (180-265 V) - 50/60 Hz	120 V (90-130 V) - 60/50 Hz	230 V (180-265 V) - 50/60 Hz	3 x 400 V (365-550 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz
yes	yes	yes	yes	yes	yes
LED	LED	LED	LED	LED	LED
420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch	340 x 261 x 130 mm 13.4 x 10.3 x 5.1 inch	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch
7.7 kg / 17 lb	7.7 kg / 17 lb	7.7 kg / 17 lb	7.7 kg / 17 lb	4.6 kg / 10.1 lb	7.7 kg / 17 lb
CE, ABYC A-31, RRR, RMRS, DNV-GL	CE, ABYC A-31, DNV-GL	CE, ABYC A-31, RRR, RMRS, DNV-GL	CE, ABYC A-31, RRR, RMRS	CE, ABYC A-31, RRR, RMRS	CE, ABYC A-31, RRR, RMRS
IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion					
yes (included)	yes (included)	yes (included)	yes (included)	yes (included)	yes (included)
yes	yes	yes	yes	yes	yes
< 1 mA	< 1 mA	< 1 mA	< 1 mA	< 1 mA	< 1 mA
2600 W	2770 W	3500 W	3500 W	1800 W	3500 W
> 0.95	> 0.95	> 0.95	> 0.95	> 0.95	> 0.95
-25 °C to 80 °C; > 45 °C derating power / -13 °F to 176 °F; > 113 °F derating power					
vario fan	vario fan	vario fan	vario fan	vario fan	vario fan
IP23	IP23	IP23	IP23	IP23	IP23
over-temperature, overload, short circuit, high/low battery voltage					
yes	yes	yes	yes	yes	yes
yes	yes	yes	yes	yes	yes
option	option	option	option	option	option
option	option	option	option	option	option
option	option	option	option	option	option
option	option	option	option	option	option
option	option	option	option	option	option
delivered as standard	delivered as standard	delivered as standard	delivered as standard	delivered as standard	delivered as standard
option	option	option	option	option	option
option	option	option	option	option	option
option	option	option	option	option	option
option, product code 21709300	option, product code 21709300	option, product code 21709300	option, product code 21709300	n.a.	n.a.



# ChargeMaster Plus Series:

## All-in-one solution for faster and safer charging



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



With the new 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.
- Multi voltage: charge 12 V starter battery in a 24 V system, without additional components (24 V models only).
- 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/DOE and RCM/C-Tick compliant.



### System Simplicity

Nowadays, equipment must be self-explaining. The ChargeMaster Plus displays the charge phase of all 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.

### MASTER TIP



ChargeMaster Plus simplifies charging systems. Charging faster and safer than ever, this all-in-one charging solution offers best value for money.

## FEATURES

- 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 (24 V models only).
- 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.

## Powerful Communications thanks to CZone integration

In modern applications, all electrical components work together. The CAN-based MasterBus enables the ChargeMaster Plus to communicate with displays, shunts and power systems including communication standards like CZone®, NMEA 2000 and CANopen (through additional interfaces).

**NEW** Models with the addition *CZone* do not only support MasterBus, but also support CZone and NMEA 2000 communication, without the need of additional interfaces. This ChargeMasters Plus series can be configured via MasterBus or will accept a CZone configuration file just like any other CZone device. Other communication standards like ModBus, CANopen, LinBus, etc. are supported via additional interfaces.

This wide range of communication interfaces makes the ChargeMaster Plus ideally suited for system integration. In addition, the ChargeMaster Plus can operate as a power supply for delicate communication equipment, or during the construction phase of a boat.









# Specifications




## ChargeMaster Plus battery chargers

Specifications

ChargeMaster Plus

battery chargers







	<div>NEW MODEL</div> <div></div> <div>ChargeMaster Plus 12/75-3</div>	<div>NEW MODEL</div> <div></div> <div>ChargeMaster Plus 12/100-3</div>	<div>NEW MODEL</div> <div></div> <div>ChargeMaster Plus 24/40-3</div>	<div>NEW MODEL</div> <div></div> <div>ChargeMaster Plus 24/60-3</div>
Product code	44310755	44311005	44320405	44320605
GENERAL SPECIFICATIONS				
Nominal output voltage	12 V	12 V	24 V	24 V
Max. charge current per output	75 A	100 A	40 A	60 A
Smart In-/Output output voltage	12 V	12 V	12 or 24 V	12 or 24 V
Smart In-/Output output current	5-40 A (adjustable)	5-40 A (adjustable)	5-10 A at 12 V; 5-20 A at 24 V (adjustable)	
Smart In-/Output input current	max. 40 A	max. 40 A	max. 20 A at 24 V	max. 20 A at 24 V
Secondary output voltage	n.a.	n.a.	n.a.	n.a.
Secondary output current	n.a.	n.a.	n.a.	n.a.
Max. AC current (230 V / 120 V)	6.5 A / 13 A	8.5 A / 17 A	6.8 A / 13.5 A	10.2 A / 20.4 A
Total charge current	75 A at 14.4 V	100 A at 14.4 V	40 A at 28.8 V	60 A at 28.8 V
Number of battery outlets	3 (max.)	3 (max.)	3 (max.)	3 (max.)
Input current 'Smart Input'	40 A at 12 V	40 A at 12 V	20 A at 24 V	20 A at 24 V
Recommended battery capacity	320-800 Ah	400-1000 Ah	160-400 Ah	200-500 Ah
Nominal input voltage	120/230 V (80-275 V) 50/60 Hz	120/230 V (80-275 V) 50/60 Hz	120/230 V (80-275 V) 50/60 Hz	120/230 V (80-275 V) 50/60 Hz
AC connection	screw terminals, suitable up to up to 6 mm²			
Power supply mode	yes	yes	yes	yes
Display/read-out	LED	LED	LED	LED
Dimensions, hxxwxd	384 x 250 x 127 mm 15.1 x 9.8 x 5 inch	384 x 250 x 127 mm 15.1 x 9.8 x 5 inch	384 x 250 x 127 mm 15.1 x 9.8 x 5 inch	384 x 250 x 127 mm 15.1 x 9.8 x 5 inch
Weight	5.9 kg / 13 lb	5.9 kg / 13 lb	5.9 kg / 13 lb	5.9 kg / 13 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/flooded/Lithium Ion + user defined option			
<i>Charge characteristic can be set to your requirements.</i>				
Temperature compensation	-30 mV/°C / -17 mV/°F - temperature sensor included		-60 mV/°C / -76 mV/°F - temperature sensor included	
Voltage compensation	through automatic compensation or MasterShunt			
DC consumption	< 2 mA (MasterBus off)	< 2 mA (MasterBus off)	< 2 mA (MasterBus off)	< 2 mA (MasterBus off)
Current Control function	yes, through MasterBus or CZone			
Power factor control	yes, > 0.98	yes, > 0.98	yes, > 0.98	yes, > 0.98
Temperature range (ambient temp.)	-25 °C to 80 °C, derating > 40 °C / -13 °F to 176 °F, derating > 104 °F			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23, vertical mounting	IP23, vertical mounting	IP23, vertical mounting	IP23, vertical mounting
Protections	over-temperature, overload, short circuit, high/low battery voltage, ignition protection			
Communication	MasterBus, CZone, NMEA 2000			
<i>delivered as standard with 1 mtr Mastervolt-CZone drop cable</i>				
Charger Status Interface (alarm contact)	yes, using a Multipurpose Contact Output (product code 77030500)			

ACCESSORIES		DC Distribution 77020200	option	option	option	option
		MasterBus USB Interface 77030100	option	option	option	option
		Multipurpose Contact Output 77030500	option	option	option	option

Smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. With the included plug & play cable it can be easily connected to the MasterBus network.

Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterAdjust software (free to download).

MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), usable as CSI alarm contact.

ACCESSORIES					
	Temperature sensor 6 m: 41500500 (delivered as standard) 15 m: 41500800		EasyView 5 77010310		MasterView Read-out 77010050
	MasterShunt 77020115		MasterView Read-out 77010050		MasterView Read-out 77010050

Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.

Remote panel for reading the charge status of your battery charger, including error notifications.

MasterBus integrated battery monitor, with detailed information on the status of your batteries for an optimised charging process, incl. voltage, current, remaining time and consumption capacity in percentage.

NEW  
MODEL**ChargeMaster Plus  
24/80-2**

44320805

24 V

80 A

n.a.

n.a.

n.a.

14.25 / 28.5 V (12/24 V)

15 A at 12 V / 20 A at 24 V (adjustable)

11.75 A / 23 A

80 A at 28.8 V

2 (max.)

n.a.

280-700 Ah

120/230 V (80-275 V)

50/60 Hz

yes

LED

384 x 250 x 127 mm

15.1 x 9.8 x 5 inch

6.3 kg / 13.9 lb

NEW  
MODEL**ChargeMaster Plus  
24/110-2**

44331105

24 V

110 A

n.a.

n.a.

n.a.

14.25 / 28.5 V (12/24 V)

15.75 A / 31.5 A

110 A at 28.8 V

2 (max.)

n.a.

400-1000 Ah

120/230 V (80-275 V)

50/60 Hz

yes

LED

384 x 250 x 127 mm

15.1 x 9.8 x 5 inch

6.3 kg / 13.9 lb

-60 mV/°C / -76 mV/°F - temperature sensor included

&lt; 2 mA (MasterBus off)

&lt; 2 mA (MasterBus off)

yes, &gt; 0.98

yes, &gt; 0.98

vario fan

IP23, vertical mounting

vario fan

IP23, vertical mounting

MasterBus, CZone, NMEA 2000

option

option

option

option

option

option

**QUOTE**

*"The milk collection can be done through a hydraulic system, while the engine of the vehicle is off, which means less noise and exhaust emissions, and less maintenance. This system fully respects the environment and also the population of the farms. We are very happy with the choice of products we made, and the support of the Mastervolt team."*

**PATRICE HALAIS, SALES MANAGER MILK LOGISTICS  
MAISONNEUVE GROUP, FRANCE**

**ACCESSORIES**

**Touch 5**  
80-911-0124-00

5 inch touchscreen with built-in WiFi connectivity and IPx7 water ingress protection. Comes with super bright widescreen display and the latest capacitive touchscreen technology.



**Touch 10**  
80-911-0100-00

10 inch LED-backlit projected capacitive touchscreen display with IPS technology. Offers full control of circuits plus important onboard system information (for AC and DC supplies).



**SmartRemote**  
77010500 (OEM)  
77010600 (retail)

CZone/MasterBus compatible color display for local device monitoring. Shows key parameters and allows simple device settings.



**Mastervolt-CZone**  
drop cable  
0.5 m: 77060050  
1 m: 77060100 (delivered as standard)  
2 m: 77060200  
5 m: 77060500

Adapter cable for connecting Mastervolt devices with CZone support to the CZone or NMEA 2000 network.



# ChargeMaster Series: Charge your batteries quickly and completely!



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.
- 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

## ChargeMaster battery chargers

### 12 V



	ChargeMaster 12/10	ChargeMaster 12/15-2	ChargeMaster 12/25-3	ChargeMaster 12/35-3
Product code	43011000	43011500	44010250	44010350
GENERAL SPECIFICATIONS				
Nominal output voltage	12 V	12 V	12 V	12 V
Total charge current	10 A at 14.25 V	15 A at 14.25 V	25 A at 13.25 V	35 A at 14.4 V
Number of battery outlets	1	2	3	3
Charge current second output	n.a.	15 A	25 A	35 A
Charge current third output	n.a.	n.a.	25 A	35 A
Recommended battery capacity	25-100 Ah	30-150 Ah	50-250 Ah	70-350 Ah
Nominal input voltage	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz	120/230 V (90-265 V) - 50/60 Hz	120/230 V (90-265 V) - 50/60 Hz
AC connection	connector	connector	2 mtr AC cable	connector strips
Power supply mode	no	no	yes	yes
Display/read-out	1 LED	1 LED	LED	LED
Dimensions, hwxwd	180 x 121 x 50 mm 7.1 x 4.8 x 2 inch	206 x 121 x 50 mm 8.1 x 4.8 x 2 inch	234 x 132 x 60 mm 9.2 x 5.2 x 2.4 inch	291 x 210 x 131 mm 11.5 x 8.3 x 5.2 inch
Weight	1 kg / 2.2 lb	1 kg / 2.2 lb	1.8 kg / 4 lb	4 kg / 9 lb
Fastening	4x screw	4x screw	4x screw	mounting bracket (included) or 4x screw
Approvals	CE, ABYC A-31, RRR, e-mark	CE, ABYC A-31, RRR	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RRR	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR
TECHNICAL SPECIFICATIONS				
Charge characteristic <i>Charge characteristic can be set to your requirements.</i>	IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
Temperature compensation	no	no	yes	yes
Voltage compensation	automatic	automatic	automatic	automatic
DC consumption	< 1 mA	< 1 mA	< 2 mA	< 5 mA
Full load consumption (230 V AC)	170 W	250 W	450 W	575 W
Current Control function	no	no	no	yes, via MasterBus
Power factor control	> 0.95	> 0.95	≥ 0.98	≥ 0.98
Temperature range (ambient temp.)	-25 °C to 60 °C, derating < 0 °C and > 40 °C / -13 °F to 140 °F, derating < 32 °F and > 104 °F			
Cooling	natural cooling	vario fan	vario fan	vario fan
Protection degree	IP65	IP21	IP23	IP23
Protections	over-temperature, overload, short circuit, high/low battery voltage			
MasterBus compatible	no	no	yes	yes

ACCESSORIES		MasterView Read-out 77010050	n.a.	n.a.	option	option
	Remote panel for reading the charge status of your battery charger, including error notifications.					
		EasyView 5 77010310	n.a.	n.a.	option	option
	Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.					
		MasterShunt 77020110	option	option	option	option
	MasterBus integrated battery monitor, with detailed information on the status of your batteries for an optimised charging process, incl. voltage, current, remaining time and consumption capacity in percentage.					
		DC Distribution 77020200	n.a.	n.a.	option	option
	Smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. With the included plug & play cable it can be easily connected to the MasterBus network.					
	MasterBus USB Interface 77030100	n.a.	n.a.	option	option	
Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterAdjust software (free to download).						
	Multipurpose Contact Output 77030500	n.a.	n.a.	option	option	
MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), usable as CSI alarm contact.						
	Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard	
	Temperature sensor 15m 41500800	option	option	option	option	



CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](http://MASTERVOLT.COM/REFERENCES)  
AND  
EXTENDED *TECHNICAL BACKGROUND*  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-  
BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-<br/>BACKGROUND)

BATTERY CHARGERS  
CHARGE MASTER 12 V



## ChargeMaster 12/50-3

44010500

12 V  
50 A at 14.4 V  
3  
50 A  
50 A  
100-500 Ah  
120/230 V (90-265 V)  
- 50/60 Hz  
connector strips  
yes  
LED  
291 x 210 x 131 mm  
11.5 x 8.3 x 5.2 inch  
4 kg / 9 lb  
mounting bracket  
(included) or 4x screw  
CE, ABYC A-31, SAE  
J1171/ISO 8846 ignition  
protected, RMRS, RRR

yes  
automatic  
< 5 mA  
825 W  
yes, via MasterBus  
≥ 0.98

vario fan  
IP23

yes

option

option

option

option

option

option

delivered as standard

option



The following models are also  
available in Quick Connect  
version with a WAGO 770-113  
connector and 25 cm cable:

- ChargeMaster 12/25-3,  
product code 44010252
- ChargeMaster 12/35-3,  
product code 44010352



In addition to  
Mastervolt battery  
chargers, we also supply  
ProMariner ProNauticP  
battery chargers.

For more information, please consult the  
ProMariner product catalogue and website.

**ProMariner™**  
[PROMARINER.COM](http://PROMARINER.COM)









# Specifications

## ChargeMaster

### battery chargers

#### 24 V

			
<b>ChargeMaster 24/6</b>	<b>ChargeMaster 24/12-3</b>	<b>ChargeMaster 24/20-3</b>	<b>ChargeMaster 24/30-3</b>
43020600	44020120	44020200	44020300
24 V	24 V	24 V	24 V
6 A at 28.5 V	12 A at 26.5 V	20 A at 28.8 V	30 A at 28.8 V
1	3	3	3
n.a.	12 A	20 A	30 A
n.a.	12 A	20 A	30 A
25-70 Ah	24-120 Ah	40-200 Ah	60-300 Ah
230 V (180-265 V) – 50/60 Hz	120/230 V (90-265 V) – 50/60 Hz	120/230 V (90-265 V) – 50/60 Hz	120/230 V (90-265 V) – 50/60 Hz
socket	2 mtr AC cable	connector strips	connector strips
no	yes	yes	yes
1 LED	LED	LED	LED
180 x 121 x 50 mm 7.1 x 4.8 x 2 inch	234 x 132 x 60 mm 9.2 x 5.2 x 2.4 inch	291 x 210 x 131 mm 11.5 x 8.3 x 5.2 inch	291 x 210 x 131 mm 11.5 x 8.3 x 5.2 inch
1 kg / 2.2 lb	1.8 kg / 4 lb	4 kg / 9 lb	4 kg / 9 lb
4x screw	4x screw	mounting bracket (included) or 4x screw	mounting bracket (included) or 4x screw
CE, ABYC A-31, RRR, e-mark	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RRR	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR
IUoUoo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
no	yes	yes	yes
automatic	automatic	automatic	automatic
< 1 mA	< 2 mA	< 2.5 mA	< 2.5 mA
210 W	435 W	660 W	925 W
no	no	yes, via MasterBus	yes, via MasterBus
> 0.95	≥ 0.98	≥ 0.98	≥ 0.98
-25 °C to 60 °C, derating < 0 °C and > 40 °C / -13 °F to 140 °F, derating < 32 °F and > 104 °F			
natural cooling	vario fan	vario fan	vario fan
IP65	IP23	IP23	IP23
over-temperature, overload, short circuit, high/low battery voltage			
no	yes	yes	yes

ACCESSORIES		MasterView Read-out 77010050	n.a.	option	option	option
	<i>Remote panel for reading the charge status of your battery charger, including error notifications.</i>					
		EasyView 5 77010310	n.a.	option	option	option
	<i>Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.</i>					
		MasterShunt 77020110	option	option	option	option
	<i>MasterBus integrated battery monitor, with detailed information on the status of your batteries for an optimised charging process, incl. voltage, current, remaining time and consumption capacity in percentage.</i>					
		DC Distribution 77020200	n.a.	option	option	option
	<i>Smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. With the included plug &amp; play cable it can be easily connected to the MasterBus network.</i>					
		MasterBus USB Interface 77030100	n.a.	option	option	option
	<i>Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterAdjust software (free to download).</i>					
		Multipurpose Contact Output 77030500	n.a.	option	option	option
	<i>MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), usable as CSI alarm contact.</i>					
		Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard
		Temperature sensor 15m 41500800	option	option	option	option



## QUOTE

*"Before we became the Mastervolt distributor for Spain more than a decade ago now, we had the experience of knowing and distributing other products by competing brands. Based on our wide knowledge of the marine and automotive sectors, we can affirm that the price/quality ratio of Mastervolt products is excellent and represents a smart choice for the customer."*

VICENTE SANLORENZO, CEO  
AZIMUT ELECTRONICS, SPAIN



The following models are also available in Quick Connect version with a WAGO 770-113 connector and 25 cm cable:

- ChargeMaster 24/20-3, product code 44020202
- ChargeMaster 24/30-3, product code 44020302

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
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EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-  
BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-BACKGROUND)



# EasyCharge: Waterproof fixed-mount battery chargers

The fixed-mount, waterproof units are fully sealed in an epoxy-filled, non-corrosive enclosure, and built to IP68 waterproofing standards, easily meeting global regulations like CE, CSA, CEC, and ABYC. The outputs are completely isolated, and can be used in either series or parallel for higher voltage or current, including 12 or 24 V outputs.

Highly efficient and simple to use, these chargers are designed for harsh environments, and are fully salt, shock and vibration tested. Currently, 6 A single bank and 10 A dual bank types models are available.

A key feature is the 'sense and send' technology, which allows the chargers to detect which batteries need the most charge and prioritise accordingly. The battery chargers have the ability to charge wet, AGM and Gel batteries, with a universal input (120-230 V) for total worldwide freedom.



## FEATURES

- Entry level model with Mastervolt 3-step+ charge characteristic.
- Suitable for charging Gel, AGM and flooded batteries.
- Full power up to 40 °C.
- Quick charging function to extend battery life.
- Includes cable & Euro plug.
- Can charge one or two battery banks.
- Sense-Send™ (10 A model): determines which battery is being charged first.
- Series and parallel configuration.
- Stain resistant and waterproof.
- International certification.

## Specifications EasyCharge battery chargers



	EasyCharge 6A	EasyCharge 10A
Product code	43310600	43321000
With UK plug	43310602	43321002
<b>GENERAL SPECIFICATIONS</b>		
Total charge current	6 A at 12 V	10 A at 12 V 5 A at 24 V
Recommended battery capacity: charge (based on 50 % discharged battery)	to 120 Ah	to 120 Ah
Nominal input voltage	120/230 V (90-265 V), 50/60 Hz	120/230 V (90-265 V), 50/60 Hz
AC connection	1.2 m (4 ft) cable + Euro plug	1.2 m (4 ft) cable + Euro plug
DC connection	ring terminals	ring terminals
Dimensions, h x w x d	76 x 152 x 51 mm 3 x 6 x 2 inch	127 x 178 x 51 mm 5 x 7 x 2 inch
Weight	1.8 kg / 4 lb	2.8 kg / 6.2 lb
Approvals	CE, ABYC	CE, ABYC
<b>TECHNICAL SPECIFICATIONS</b>		
Charge characteristic	IUoUo, automatic 3-step+ for Gel/AGM/flooded	IUoUo, automatic 3-step+ for Gel/AGM/flooded
Temperature range (ambient temp.)	-20 °C to 50 °C	-20 °C to 40 °C
Protection degree	IP68	IP68
Protections	spark free, short circuit, reverse polarity, over- voltage, current limited, over-temperature	spark free, short circuit, reverse polarity, over- voltage, current limited, over-temperature
MasterBus compatible	no	no



# EasyCharge Portable: Waterproof portable battery chargers

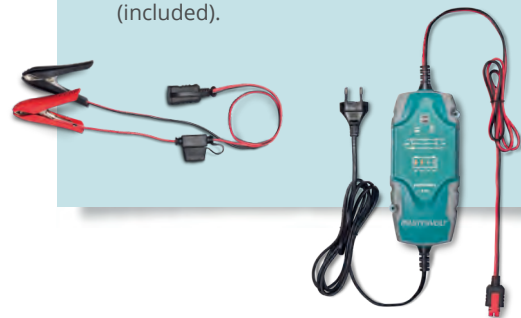
For people on the move, the EasyCharge portable battery charger offers a reliable solution that can be used on the boat, car, motorcycle, and camper van. With a rugged, ergonomic construction, and waterproof to IP65 standard, the portable chargers have an intuitive control panel and a universal input (120-230 V) for total worldwide freedom.

Users can quickly select between 6 V (ideal for toys, classic cars and motorcycles) and 12 V operation. The units include 1.8 m of DC cable that connects to either a 61 cm lead with ring terminals, or a 61 cm lead with alligator clips, for easy installation and a variety of applications; both leads are included in the package.



## FEATURES

- Entry level model with Mastervolt 3-step+ charge characteristic.
- Suitable for any type of battery, including Lithium Ion.
- Full power up to 40 °C.
- Includes cable & Euro plug.
- Simple switching between 6 V and 12 V.
- Portable and waterproof.
- Easy to connect through ring terminals, or alligator clips (included).



## Specifications EasyCharge Portable battery chargers

	EasyCharge Portable 1.1A	EasyCharge Portable 4.3A
Product code	43510100	43510400
With UK plug	43510102	43510402
<b>GENERAL SPECIFICATIONS</b>		
Total charge current	1.1 A	4.3 A
Recommended battery capacity: maintain	2.2 to 40 Ah	14 to 120 Ah
Recommended battery capacity: charge	2.2 to 25 Ah	14 to 90 Ah
Nominal input voltage	120/230 V (90-265 V), 50/60 Hz	120/230 V (90-265 V), 50/60 Hz
AC connection	1.8 m (6 ft) cable + Euro plug (CEE7/16)	1.8 m (6 ft) cable + Euro plug (CEE7/16)
DC connection	ring and alligator clip connections, with integrated fuse for additional safety	ring and alligator clip connections, with integrated fuse for additional safety
Dimensions, hxxwxd	152 x 63 x 35.5 mm 6 x 2.5 x 1.4 inch	161 x 72 x 43.7 mm 6.3 x 2.8 x 1.7 inch
Weight	0.5 kg / 1.1 lb	0.9 kg / 2 lb
Approvals	CE, ABYC	CE, ABYC
<b>TECHNICAL SPECIFICATIONS</b>		
Charge characteristic	IUoUo, automatic 3-step+ for Gel/AGM/flooded	IUoUo, automatic 3-step+ for Gel/AGM/flooded/Lithium Ion
Temperature range (ambient temp.)	-20 °C to 40 °C	-20 °C to 40 °C
Protection degree	IP65	IP65
Protections	short circuit, reverse polarity, over-voltage, current limited, over-temperature	short circuit, reverse polarity, ver voltage, current limited, over-temperature
MasterBus compatible	no	no



In addition to the waterproof Mastervolt battery chargers, we also supply ProMariner ProSport series waterproof battery chargers.

For more information, please consult the ProMariner product catalogue and ProMariner website.

**ProMariner™**  
PROMARINER.COM

# Mastervolt Sine Wave Inverters: Enjoy the comforts of home

**Your AC installation offers you a wealth of benefits by making the use of any domestic appliance possible, from microwave oven to hairdryer, DVD player to power tools. A Mastervolt inverter allows you to easily convert the voltage of your 12 V or 24 V battery to 230V/50Hz or 120V/60Hz, so you enjoy all the comforts of home wherever you choose to go.**

Mastervolt offers a complete range of inverters from 300 watt to 40 kwatt, for 230V/50Hz as well as 120V/60Hz (American voltage).

## Completely independent

Grid power regularly fluctuates and can cause your lights to flicker. Sometimes it may even drop below 180 volt, causing some devices to stop functioning. The Mastervolt sine wave inverter ensures a perfect AC voltage, and makes power problems a thing of the past. The pure sine wave technology also helps protect your equipment against failures, humming or interference on monitors or TV's and ensures a longer lifespan.

## Which Mastervolt sine wave inverter fits your needs?

### ■ Mass Sine Ultra

This model is intended for professional applications with high power demands, and extends the Mass Sine series. With 4 kW AC power, the Mass Sine Ultra meets the highest energy requirements. The latest technology increases the efficiency and enables multiple units to work in parallel and 3-phase configuration.

### ■ Mass Sine

These high quality sine wave inverters have proven themselves in the most extreme conditions for over twenty-five years. Although the dimensions and connections of the various models have remained the same, the technology has evolved, resulting in a fast, efficient, one-on-one replacement with minimal downtime.

### ■ AC Master

These affordable sine wave inverters convert 12 or 24 V battery voltage into reliable grid power, making it ideal for recreational and semi-professional applications.

## QUOTE

*"With Mastervolt we mount a reliable battery (management) system with variable components and very good documentation. Remote maintenance is possible through the Internet, and completes the whole system. We have been working for more than seven years with Mastervolt and projects are always solution-oriented and skilfully addressed. One can speak of truly outstanding technical support and we can certainly have trust in such a partnership."*

ARMIN DIETZ, HEAD CUSTOMER SERVICE  
CONCORDE REISMOBILE, GERMANY







## No humming with HF technology

Our use of high-frequency switch technology means you can say goodbye to humming transformers and hello to efficiency. Mastervolt inverters are also small and light-weight to ensure easy installation.

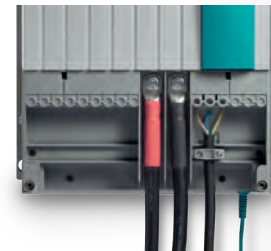


## High peak power during start up

Mastervolt sine wave inverters can deliver high peak power (up to 200 %) to equipment that requires extra current for a short period of time while powering up.



## Simple and safe to connect



The inverters feature robust connection technology, internal in the larger models and a plug & play socket with cable for the smaller models.



## Efficient use of batteries



A high efficiency when inverting and an automatic economy mode when there is no consumption gives you longer use of your batteries.



## Pure Sine Wave



Mastervolt inverters generate a sine wave shaped output current similar or even better than that of the public grid and perfectly suited for powering sensitive equipment.



## MasterBus Compatible



Every Mass Sine (Ultra) inverter can be easily connected to a MasterBus network with only one cable and one connection. You can also choose central, local or remote monitoring, configuration and control of your system.

# Mass Sine Ultra and Mass Sine: For the toughest tasks



Even under the most extreme conditions the products from the Mass series operate faultlessly, giving you round-the-clock output when necessary. With an MTBF of 180,000 hours at full capacity and 24/7 use, the Mass products are ideal for the toughest tasks and any situation that requires a reliable power supply.

## Optimal flexibility in system design

Choosing an independent sine wave inverter allows you complete freedom of choice of battery charging equipment. You can freely adapt the rating of these chargers, depending on the desired charge time. In case you want to use renewable energy sources, you may want to choose an MPPT solar charge regulator.



## High Efficiency

The high efficiency and automatic economy mode are designed to allow digital clocks to work properly and ensure you many more hours of operation from your batteries. The application of high-frequency technology prevents any annoying humming and zooming sounds, while the high peak capacity ensures that the high inrush current required for electrical tools, for example, is seamlessly produced.



## FEATURES

- For heavy duty work in professional and semi-professional applications.
- Full capacity at temperatures up to 40 °C.
- Pure sine wave output prevents failures and damage to connected sensitive equipment.
- High peak capacity for the seamless switching on of complex and heavy loads.
- Dynamic, battery-specific input current for an optimal use of every type of battery (Mass Sine Ultra).
- Parallel configuration of up to ten devices for a capacity up to 40 kW (Mass Sine Ultra).
- 3-Phase configuration for a capacity up to 36 kW (Mass Sine Ultra).
- Integrated MasterBus (Mass Sine Ultra) or MasterBus compatible (Mass Sine).
- Suitable for mobile applications.
- Professional connections.
- Automatic, reliable and safe operation.
- Optional: Masterswitch/Systemswitch for automatic selection of the desired energy source.



## Mass Sine Ultra



With an AC capacity of 4000 W in one unit, the Mass Sine Ultra can satisfy even the greatest energy demands. As ten units can be switched in parallel or 3x3 in a three-stage configuration, the Mass Sine Ultra can supply a capacity of up to 40 kW. The inverter provides full power at 40 °C and works smoothly even in extreme conditions such as engine rooms and technical spaces. Like all Mass products, the inverter is supplied in a compact and robust casing. This inverter is the best choice if you are looking for autonomous AC capacity of over 3 kW.



## Latest Technology

The extremely efficient power electronics save volume and weight with minimal sound levels and a very low ripple voltage which extends the lifespan of your batteries. At the same time, digital technology prevents any annoying flickering and voltage fluctuations.



## Make the most of your batteries

The Mass Sine Ultra is equipped with a dynamic battery voltage window. Taking into account the type of battery and current, this function ensures the inverter can supply AC longer without overtaxing the batteries.

## Mass Sine

Mastervolt's Mass Sine inverters have been proving their value in the most extreme conditions for over 25 years.

## Clear Indicators

The Mass Sine features easy controls on the device itself. As inverters are often built in, we also supply an effective remote control panel, the C4-RI. In addition, the Mass Sine can be controlled via its intuitive display, the

EasyView 5, thanks to the integration of MasterBus communication using a MasterBus Inverter Interface or AC Power Analyser.



## Easy and safe connections

The Mass Sine inverters provide robust and professional connections for fast and safe installation.





# Specifications

## Mass Sine (Ultra) sine wave inverters



	Mass Sine 12/2000	Mass Sine 24/800	Mass Sine 24/1500	Mass Sine 24/2500
Product code 230 V	24012000	24020800	24021500	24022500
Product code 230 V 60 Hz	24112000	24120800	24121500	24122500
<b>GENERAL SPECIFICATIONS</b>				
Nominal battery voltage	12 V	24 V	24 V	24 V
Recommended battery capacity	> 200 Ah	> 50 Ah	> 150 Ah	> 200 Ah
Output voltage	230 V (± 5 %) – 50 Hz (± 0.01 Hz)	230 V (± 5 %) – 50 Hz (± 0.01 Hz)	230 V (± 5 %) – 50 Hz (± 0.01 Hz)	230 V (± 5 %) – 50 Hz (± 0.01 Hz)
P30 power at 40 °C, cos phi 1	2000 W	800 W	1500 W	2500 W
Continuous power at 40 °C, cos phi 1	1800 W	650 W	1200 W	2000 W
Peak load	4000 W	1600 W	2900 W	5000 W
Output waveform	true sine	true sine	true sine	true sine
AC connection	internal	internal	internal	internal
Efficiency	92 %	92 %	92 %	92 %
Display/read-out	LED	LED	LED	LED
Parallel configuration	no	no	no	no
3-Phase configuration	no	no	no	no
Dimensions, hxxwxd	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch	325 x 220 x 111 mm 12.8 x 8.7 x 4.4 inch	340 x 261 x 130 mm 13.4 x 10.3 x 5.1 inch	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch
Weight	14.6 kg / 32.2 lb	3.8 kg / 8.4 lb	6.2 kg / 13.7 lb	10.1 kg / 22.3 lb
Approvals	CE, E-mark, ABYC A-31, RRR	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
<b>TECHNICAL SPECIFICATIONS</b>				
Technology	HF switch mode	HF switch mode	HF switch mode	HF switch mode
Max. ripple on DC (battery)	5 % RMS	5 % RMS	5 % RMS	5 % RMS
Input current (nominal load)	183 A	36 A	68 A	115 A
No-load power consumption (ON mode)	480 mA – 6 W	240 mA – 5.6 W	200 mA – 5 W	250 mA – 6 W
No-load power consumption (energy saving mode)	50 mA – 0.6 W	35 mA – 0.8 W	25 mA – 0.6 W	25 mA – 0.6 W
Minimal DC fuse (slow blow) <i>DC fuse depends on the cable size</i>	250 A	63 A	100 A	160 A
Minimal cable size	70 mm <sup>2</sup>	16 mm <sup>2</sup>	25 mm <sup>2</sup>	50 mm <sup>2</sup>
Harmonic distortion typical	< 5 %	< 5 %	< 5 %	< 5 %
Power factor control	all power factors allowed	all power factors allowed	all power factors allowed	all power factors allowed
Transfer system	Masterswitch/Systemswitch compatible, see page 134 for more information			
Temperature range (ambient temp.)	-25 °C to 80 °C; > 40 °C derating / -13 °F to 176 °F; > 104 °F derating			
Cooling	natural/forced	natural/forced	natural/forced	natural/forced
Protection degree	IP23	IP23	IP23	IP23
Protections	over-temperature, overload, short circuit, high battery, low battery			
MasterBus compatible	yes, using a MasterBus Inverter Interface or AC Power Analyser			

ACCESSORIES		C4-Ri 70404110	option	option	option	option
		EasyView 5 77010310	option	option	option	option
		MasterBus USB Interface 77030100	option	option	option	option
		MasterBus Inverter Interface 77030700	option	option	option	option
		AC Power Analyser 77031200	option	option	option	option



**Mass Sine Ultra  
24/4000**

26024000

n.a.



**Mass Sine  
24/5000**

24095100

24195100

24 V	24 V
> 350 Ah	> 400 Ah
230 V (± 2 %) – 50/60 Hz selectable (± 0.005 %)	230 V (± 5 %) – 50 Hz (± 0.01 Hz)
--	5000 W
4000 W	4000 W
7000 W	9000 W
true sine	true sine
internal	internal
≥ 92 %	92 %
LED	LED
yes, up to 10 standard	no
yes, up to 3x3	no
472 x 318 x 178 mm 18.6 x 12.5 x 7 inch	470 x 315 x 254 mm 18.5 x 12.4 x 10 inch
15 kg / 33.1 lb	19 kg / 41.9 lb
CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31

HF switch mode	HF switch mode
5 % RMS	5 % RMS
200 A	230 A
660 mA – 16 W	250 mA – 6 W
300 mA – 7 W	50 mA – 1.2 W
250 A	1x 250 A of 2x 125 A
70 mm <sup>2</sup>	2x 70 mm <sup>2</sup>
< 1 %	< 5 %
all power factors allowed	all power factors allowed
Masterswitch/Systems switch compatible, see page 128 for more information	
-25 °C to 80 °C; > 40 °C derating -13 °F to 176 °F; > 104 °F derating	
natural/forced	natural/forced
IP23	IP23
over-temperature, overload, short circuit, high battery, low battery	
yes	yes, using a MasterBus Inverter Interface or AC Power Analyser

n.a.	option
option	option
option	option
n.a.	option
n.a.	option

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](http://MASTERVOLT.COM/REFERENCES)  
AND  
EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-  
BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-<br/>BACKGROUND)



The following model is also available in Quick  
Connect (OEM) version with a WAGO 770-103  
connector and 25 cm cable:

- Mass Sine 12/2000 230 V, product code 24021002



# AC Master Series:

## Reliable AC power for recreational and semi-professional use



**These affordable sine wave inverters convert 12 or 24 V battery voltage into reliable 230 V 50/60 Hz or 120 V 50/60 Hz power, making them ideal for recreational and semi-professional applications.**

The AC Master series is easy to install and delivers full output, even under the most demanding conditions. The pure sine wave technology provides an outstanding power quality, ensuring the correct functioning of sensitive equipment.





The usage of high frequency switching technology eliminates any annoying humming and buzzing sounds.

Representing complete value for money, these ruggedly built inverters provide essential home comforts when you're far from the nearest grid connection.

## Applications

Both recreational and semi-professional use, where grid power varies or is unavailable. Applications include lighting, appliances, electric cooking and power tools. For (mobile) applications in your home, office or service vehicle, or during your holidays.



## FEATURES

- Pure sine wave technology protects sensitive equipment.
- Delivers full output at high peak power under the most demanding conditions.
- Automatic power saving system for extended runtime.
- Compact and lightweight design, saving valuable installation time.
- Reliable and safe operation; protected against over-temperature, overload, short circuit, high or low battery voltage.
- Variable speed fan for quiet operation at low power.
- Optional remote control for instant switch off of the inverter and all connected equipment.
- Convenient plug connection for all models, 2500/3500 Watt models also hard wired.

*In addition, the 2500/3500 Watt models offer:*

- Combine 2 up to 15 units to obtain high power or 3-phase systems.
- Integrated transfer system, switches automatically between AC power sources.



# Specifications

## AC Master

### sine wave inverters

### 12 V



	AC Master 12/300	AC Master 12/500	AC Master 12/700	AC Master 12/1000
Product code 230 V	28010302	28010502	28010700	28011000
With UK plug	n.a.	n.a.	28210700	28211000
With NZ/AU plug	n.a.	n.a.	28410700	28411000
Product code 120 V <b>NEW</b>	n.a.	n.a.	28510700	n.a.
<b>GENERAL SPECIFICATIONS</b>				
Output voltage	230 V – 50 Hz (± 0,1%)	230 V – 50 Hz (± 0,1%)	200/220/230/240 V 50/60 Hz (selectable)	200/220/230/240 V 50/60 Hz (selectable)
Output waveform	true sine	true sine	true sine	true sine
Nominal battery voltage	12 V	12 V	12 V	12 V
Recommended battery capacity	≥ 60 Ah	≥ 100 Ah	≥ 100 Ah	≥ 130 Ah
Continuous power at 25 °C / 77 °F, cos phi 1	300 W	500 W	700 W	1000 W
Continuous power at 40 °C / 104 °F, cos phi 1	250 W	400 W	700 W	1000 W
Peak load	600 W	800 W	< 810 W (1 min) < 1230 W (1 s)	< 1150 W (1 min) < 1750 W (1 s)
AC connection	universal	universal	plug connection EU (Schuko) or UK	plug connection EU (Schuko) or UK
Efficiency	90 %	90 %	91 %	92 %
Parallel configuration	n.a.	n.a.	n.a.	n.a.
3-Phase configuration	n.a.	n.a.	n.a.	n.a.
Display/read-out	LED display	LED display	LED indication: battery voltage, load level, status	
Dimensions, hxxwx d	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch	200 x 330 x 83 mm 7.9 x 13 x 3.3 inch	200 x 372 x 83 mm 7.9 x 14.6 x 3.3 inch
Weight	1.16 kg / 2.55 lb	1.22 kg / 2.69 lb	2.7 kg / 6 lb	3.3 kg / 7.3 lb
Alarms	4 alarm modes	4 alarm modes	potential free alarm contact	potential free alarm contact
Approvals	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, RCM	CE, E-mark, RCM
<b>TECHNICAL SPECIFICATIONS</b>				
Technology	high frequency, input & output fully isolated			
Input current (nominal load)	22.5 A	37.5 A	70 A	100 A
No-load power consumption (energy saving mode)	0.33 A – 4 W	0.33 A – 4 W	< 0.1 A	< 0.1 A
Minimal DC fuse (slow blow)	2x 40 A	2x 40 A	100 A	125 A
Minimal cable size	1.5 mtr DC cable delivered as standard		25 mm <sup>2</sup>	35 mm <sup>2</sup>
Harmonic distortion typical	< 6 %	< 6 %	< 5 %	< 5 %
Cos phi	all power factors allowed			
Transfer system	n.a.	n.a.	n.a.	n.a.
Temperature range (ambient temp.)	-20 °C to 60 °C, derating power > 40 °C / -4 °F to 140 °F, derating power > 104 °F			
Protection degree	IP23, vertical wall mounting	IP23, vertical wall mounting	IP21, horizontal wall mounting	
Protections	over-temperature, over load, short circuit, high/low battery voltage		over-temperature, overload, short circuit, high/low voltage, reverse polarity (fuse)	
Cooling	natural/forced	natural/forced	temperature and load controlled fan	
MasterBus compatible	no	no	yes, using a MasterBus AC Master Interface	

ACCESSORIES		AC Master Remote Control 70405080	n.a.	n.a.	option	option
		MasterBus AC Master Interface 77032700	n.a.	n.a.	option	option

On/off control for the AC Master sine wave inverter with a clear on/off indicator which indicates when the inverter is active. In addition, the AC Master Remote Control makes it possible to turn the inverter on or off automatically by means of a 12-volt input, for example when switching on the onboard AC power or while starting an engine. The AC Master Remote Control comes with 8 m (25 ft) cable.

The MasterBus AC Master Interface allows seamless integration of an AC Master inverter into every MasterBus network. By adding the AC Master Interface to your installation, you can now control your AC Master inverter via our MasterBus communication network. A communication cable is included in the delivery.

NEW  
MODEL**AC Master  
12/1500****AC Master  
12/2000****AC Master  
12/2500****AC Master  
12/3500**

28011500

28012000

28012500

28013500

28211500

n.a.

28212500

28213500

28411500

n.a.

28412500

28413500

n.a.

28512000

n.a.

n.a.

200/220/230/240 V  
50/60 Hz (selectable)200/220/230/240 V  
50/60 Hz (selectable)230/240 V - 50/60 Hz  
(selectable)230/240 V - 50/60 Hz  
(selectable)

true sine

true sine

true sine

true sine

12 V

12 V

12 V

12 V

≥ 160 Ah

≥ 200 Ah

≥ 270 Ah

≥ 360 Ah

1500 W

2000 W

2500 W

3500 W

1500 W

2000 W

2500 W

3500 W

< 1730 W (1 min)  
< 2650 W (1 s)< 2300 W (1 min)  
< 4000 W (1 s)< 3000 W (1 min)  
< 4000 W (1 s)< 4500 W (1 min)  
< 6000 W (1 s)plug connection EU  
(Schuko) or UKplug connection EU  
(Schuko)hardwired + plug connection EU  
(Schuko)hardwired + plug connection EU  
(Schuko)

93 %

94 %

88 %

90 %

n.a.

n.a.

yes, up to 15 units

yes, up to 15 units

n.a.

n.a.

yes, 3 units

yes, 3 units

LED indication: battery voltage, load level, status

248 x 421 x 83 mm  
9.8 x 16.6 x 3.3 inch248 x 443 x 83 mm  
9.8 x 17.4 x 3.3 inch283 x 436 x 128 mm  
11.1 x 17.2 x 5 inch283 x 496 x 128 mm  
11.1 x 19.5 x 5 inch

4.2 kg / 9.3 lb

5.2 kg / 9.3 lb

8 kg / 17.6 lb

10 kg / 22 lb

potential free alarm contact

potential free alarm contact

potential free alarm contact

potential free alarm contact

CE, E-mark, RCM

CE, E-mark, RCM

CE, E-mark, RCM

CE, E-mark, RCM

high frequency, input &amp; output fully isolated

150 A

200 A

250 A

350 A

&lt; 0.1 A

&lt; 0.1 A

&lt; 1.1 A

&lt; 1.4 A

175 A

250 A

300 A

400 A

50 mm<sup>2</sup>70 mm<sup>2</sup>95 mm<sup>2</sup>120 mm<sup>2</sup>

&lt; 3 %

&lt; 5 %

&lt; 3 %

&lt; 3 %

all power factors allowed

n.a.

n.a.

integrated, automatic (inverter to grid: 8–10 ms, grid to inverter:  
16–50 ms). Not for parallel & 3-phase operation (external transfer  
system possible).

-20 °C to 60 °C, derating power &gt; 40 °C / -4 °F to 140 °F, derating power &gt; 104 °F

IP21, horizontal wall mounting

over-temperature, overload, short circuit, high/low voltage, reverse polarity (fuse)

temperature and load controlled fan

yes, using a MasterBus AC Master Interface

option

option

option

option

option

option

option

option



# Specifications

## AC Master

### sine wave inverters

### 24 V



	AC Master 24/300	AC Master 24/500	AC Master 24/700	AC Master 24/1000
Product code	28020302	28020502	28020700	28021000
With UK plug	n.a.	n.a.	28220700	28221000
With NZ/AU plug	n.a.	n.a.	28420700	28421000
Product code 120 V <b>NEW</b>	n.a.	n.a.	28520700	n.a.
<b>GENERAL SPECIFICATIONS</b>				
Output voltage	230 V – 50 Hz (± 0,1%)	230 V – 50 Hz (± 0,1%)	200/220/230/240 V 50/60 Hz (selectable)	200/220/230/240 V 50/60 Hz (selectable)
Output waveform	true sine	true sine	true sine	true sine
Nominal battery voltage	24 V	24 V	24 V	24 V
Recommended battery capacity	≥ 30 Ah	≥ 50 Ah	≥ 50 Ah	≥ 65 Ah
Continuous power at 25 °C / 77 °F, cos phi 1	300 W	500 W	700 W	1000 W
Continuous power at 40 °C / 104 °F, cos phi 1	250 W	400 W	700 W	1000 W
Peak load	600 W	800 W	< 810 W (1 min) < 1230 W (1 s)	< 1150 W (1 min) < 1750 W (1 s)
AC connection	universal	universal	plug connection EU (Schuko) or UK	plug connection EU (Schuko) or UK
Efficiency	91 %	91 %	93 %	94 %
Parallel configuration	n.a.	n.a.	n.a.	n.a.
3-Phase configuration	n.a.	n.a.	n.a.	n.a.
Display/read-out	LED display	LED display	LED indication: battery voltage, load level, status	
Dimensions, hxxwx d	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch	200 x 330 x 83 mm 7.9 x 13 x 3.3 inch	200 x 372 x 83 mm 7.9 x 14.6 x 3.3 inch
Weight	1.16 kg / 2.55 lb	1.22 kg / 2.69 lb	2.7 kg / 6 lb	3.3 kg / 7.3 lb
Alarms	4 alarm modes	4 alarm modes	potential free alarm contact	
Approvals	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, RCM	CE, E-mark, RCM
<b>TECHNICAL SPECIFICATIONS</b>				
Technology	high frequency, input & output fully isolated			
Input current (nominal load)	11 A	19 A	35 A	50 A
No-load power consumption (energy saving mode)	0.16 A – 4 W	0.16 A – 4 W	< 0.06 A	< 0.05 A
Minimal DC fuse (slow blow)	40 A	40 A	50 A	63 A
Minimal cable size	1.5 mtr DC cable delivered as standard		16 mm <sup>2</sup>	16 mm <sup>2</sup>
Harmonic distortion typical	< 6 %	< 6 %	< 5 %	< 5 %
Cos phi	all power factors allowed			
Transfer system	n.a.	n.a.	n.a.	n.a.
Temperature range (ambient temp.)	-20 °C to 60 °C, derating power > 40 °C / -4 °F to 140 °F, derating power > 104 °F			
Protection degree	IP23, vertical wall mounting	IP23, vertical wall mounting	IP21, horizontal wall mounting	
Protections	over-temperature, over load, short circuit, high/low battery voltage		over-temperature, overload, short circuit, high/low voltage, reverse polarity (fuse)	
Cooling	natural/forced	natural/forced	temperature and load controlled fan	
MasterBus compatible	no	no	yes, using a MasterBus AC Master Interface	

ACCESSORIES		AC Master Remote Control 70405080	n.a.	n.a.	option	option
		MasterBus AC Master Interface 77032700	n.a.	n.a.	option	option

On/off control for the AC Master sine wave inverter with a clear on/off indicator which indicates when the inverter is active. In addition, the AC Master Remote Control makes it possible to turn the inverter on or off automatically by means of a 12-volt input, for example when switching on the onboard AC power or while starting an engine. The AC Master Remote Control comes with 8 m (25 ft) cable.

The MasterBus AC Master Interface allows seamless integration of an AC Master inverter into every MasterBus network. By adding the AC Master Interface to your installation, you can now control your AC Master inverter via our MasterBus communication network. A communication cable is included in the delivery.

NEW  
MODEL**AC Master  
24/1500**

28021500

28221500

28421500

n.a.

**AC Master  
24/2000**

28022000

n.a.

n.a.

28522000

**AC Master  
24/2500**

28022500

28222500

28422500

n.a.

200/220/230/240 V  
50/60 Hz (selectable)

true sine

24 V

≥ 80 Ah

1500 W

1500 W

&lt; 1730 W (1 min)

&lt; 2650 W (1 s)

plug connection EU (Schuko)  
or UK

94 %

n.a.

n.a.

LED indication: battery voltage, load level, status

248 x 421 x 83 mm

9.8 x 16.6 x 3.3 inch

4.2 kg / 9.3 lb

potential free alarm contact

CE, E-mark, RCM

200/220/230/240 V  
50/60 Hz (selectable)

true sine

24 V

≥ 110 Ah

2000 W

2000 W

&lt; 2300 W (1 min)

&lt; 4000 W (1 s)

plug connection EU (Schuko)

94 %

n.a.

n.a.

248 x 443 x 83 mm

9.8 x 17.4 x 3.3 inch

11.5 kg / 5.2 lb

CE, E-mark, RCM

230/240 V - 50/60 Hz  
(selectable)

true sine

24 V

≥ 135 Ah

2500 W

2500 W

&lt; 3000 W (1 min)

&lt; 4000 W (1 s)

hardwired + plug connection EU  
(Schuko)

88 %

yes, up to 15 units

yes, 3 units

high frequency, input &amp; output fully isolated

75 A

&lt; 0.05 A

100 A

25 mm<sup>2</sup>

&lt; 5 %

all power factors allowed

n.a.

100 A

&lt; 1.0 A

160 A

35 mm<sup>2</sup>

&lt; 5 %

n.a.

125 A

&lt; 0.7 A

160 A

50 mm<sup>2</sup>

&lt; 5 %

integrated, automatic (inverter  
to grid: 8~10 ms, grid to inverter:  
16~50 ms). Not for parallel &  
3-phase operation (external  
transfer system possible).

-20 °C to 60 °C, derating power &gt; 40 °C / -4 °F to 140 °F, derating power &gt; 104 °F

IP21, horizontal wall mounting

over-temperature, overload, short circuit, high/low voltage, reverse polarity (fuse)

temperature and load controlled fan

yes, using a MasterBus AC Master Interface

option

option

option

option

option

option



# Mastervolt Inverter/Chargers: High-quality power supply with first-class comfort, wherever you are

**Mastervolt inverter/charger combinations integrate a powerful battery charger, a quiet and efficient inverter and a versatile switching system in one robust, lightweight and compact device. This multi-faceted product offers a carefree power supply for recreational and professional use.**

Possible applications vary from launches to 16-metre yachts, from campers to demo trucks, from holiday homes to remote businesses, and from backup systems to grid connected systems with energy storage. Each CombiMaster, Mass Combi Ultra and Mass Combi Pro can be used as an automatic stand-alone device for a non-stop power supply or as part of a larger power system.



## MasterBus/CZone Compatible

The endless MasterBus configuration possibilities are ideal for advanced system integration. The MasterBus interface allows direct modification of system parameters with immediate result. For applications that require duplication (series build of systems) CZone communication is ideally suited. You simply design the configuration file and duplicate this to all systems with one click.

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](http://MASTERVOLT.COM/REFERENCES)  
AND  
EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-BACKGROUND)

## Which Mastervolt inverter/ charger suits you?

### ■ CombiMaster

This latest Mastervolt innovation delivers unmatched performance at an unprecedented price, and offers the best of both worlds: an advanced battery charger and a quiet inverter combined in one compact device. The CombiMaster is easy to install without expert know-how thanks to plug & play capability. Compatible for communication with MasterBus, CZone and NMEA 2000, the CombiMaster ranges from 1600 to 2600 watt. Suitable for recreational and semi-professional use.

### ■ Mass Combi Ultra

The Mass Combi Ultra is more compact, stronger and more efficient. In addition to easy installation and higher capacities, the Combi Ultra has various unique benefits such as full capacity in high temperatures, an integrated solar charge regulator, and separate grid power and generator inputs. Up to ten units can be parallel switched plus a 3-phase power supply. Available for systems ranging from 3,000 watt to 40 kW, designed for professional and semi-professional use.

### ■ Mass Combi Pro

The Mass Combi Pro is the perfect solution for professional applications. This version has all the Mass Combi Ultra features but without solar input and secondary charger. The Pro provides the optimal balance of strength, versatility and cost.







### Power Assist for extra power

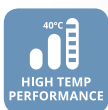
If you require more power than the grid or generator can provide, the Mastervolt Combi series will make up the shortfall by inverting from the battery. The combi also ensures that the battery is recharged once the peak demand has passed.



### Ease of installation

The integrated design of three devices into one, lightweight body and robust mounting clamps give considerable savings in (labour) time and costs.

### Exceptional Performance



The inverter is quiet, clean and efficient, and offers the full capacity even in extreme ambient temperatures. Pure sine wave energy and a peak capacity of 200 % guarantee a problem-free start, even for the heaviest loads.

### Not just any battery charger



The built-in battery charger uses Mastervolt's proven 3-step+ charging technology to allow the optimal charging of all battery types, including our advanced Lithium Ion models. The battery charger supplies a maximum charge current, even with a higher charge voltage, and speeds up the complete recharging of your batteries.

**NEW**

# CombiMaster series: Unmatched performance at an unprecedented price

**Designed with the customer in mind and using the latest technology, the CombiMaster inverter / charger is all about user-friendliness and reliability. But don't let that friendly appearance misguide you: the powerful CombiMaster range drives even the heaviest and most sensitive loads with ease!**

With the CombiMaster, power dips and failures belong to the past. The automatic AC transfer system switches between generator or mains and inverter output, ensuring a constant power supply. Its Power Assist function prevents tripping of the mains fuse in case you're connected to a weak land line or small generator.

The CombiMaster range delivers unmatched performance and value for money. As you would expect from Mastervolt, the CombiMaster is completed with MasterBus, CZone and NMEA 2000 compatible communication, allowing for a broad range of monitoring and system integration options.

## Remote Control and Monitoring options

- MasterBus compatible via SmartRemote or EasyView 5 display.
- CZone / NMEA 2000 compatible via Touch 5 or Touch 10 display.
- NMEA 2000 compatible via 3rd party multifunctional display.







## FEATURES








- Most compact and lightweight Combi in its class.
- Reliable, hum-free and longer operation from your batteries.
- Starts even the heaviest and most sensitive loads.
- Intelligent 3-step+ battery charger for faster and safer charging.
- Automatic switching between mains and inverter mode.
- Power Assist prevents blown mains fuses.
- Generator compatible.
- Integrated CZone, MasterBus and NMEA 2000 communication.
- Quick installation with heavy duty connections.
- E-mark certified.









# Specifications CombiMaster 230 V

	NEW MODEL	NEW MODEL	NEW MODEL	NEW MODEL
				
	<b>CombiMaster 12/2000-60</b>	<b>CombiMaster 12/3000-100</b>	<b>CombiMaster 24/2000-40</b>	<b>CombiMaster 24/3000-60</b>
Product code 230 V	35012000	35013000	35022000	35023000
<b>GENERAL SPECIFICATIONS SINE WAVE INVERTER</b>				
Nominal DC voltage	12 V (10.2–16 V)	12 V (10.2–16 V)	24 V (20.4–32 V)	24 V (20.4–32 V)
Output voltage	230 V	230 V	230 V	230 V
Output frequency	50/60 Hz, configurable	50/60 Hz, configurable	50/60 Hz, configurable	50/60 Hz, configurable
Output waveform	true sine	true sine	true sine	true sine
Continuous power at 40 °C / 104 °F	2000 VA / 1600 W	3000 VA / 2600 W	2000 VA / 1600 W	3000 VA / 2600 W
Peak power (30 sec)	3000 VA / 2400 W	4500 VA / 3900 W	3000 VA / 2400 W	4500 VA / 3900 W
Surge power (5 sec)	4000 VA / 3200 W	6000 VA / 5200 W	4000 VA / 3200 W	6000 VA / 5200 W
Max. efficiency	93 %	93 %	93 %	93 %
Battery no-load power consumption	20 W (on mode) / < 1 mA (off mode)	30 W (on mode) / < 1 mA (off mode)	20 W (on mode) / < 1 mA (off mode)	30 W (on mode) / < 1 mA (off mode)
Energy saving mode consumption	10 W	10 W	10 W	10 W
Synchronization with mains	yes	yes	yes	yes
<b>GENERAL SPECIFICATIONS BATTERY CHARGER</b>				
Input voltage range	170 – 280 V	170 – 280 V	170 – 280 V	170 – 280 V
Max. input current	6 A (adjustable)	10 A (adjustable)	8 A	13 A
Max. charge current at 40 °C / 104 °F	60 A at 14.25V, configurable	100 A at 14.25 V, configurable	40 A at 28.5 V, configurable	60 A at 28.5 V, configurable
Battery temperature sensor	yes, included	yes, included	yes, included	yes, included
Battery voltage sense	automatic compensation	automatic compensation	automatic compensation	automatic compensation
<b>SPECIFICATIONS TRANSFER SYSTEM</b>				
AC input (switched)	25 A	25 A	25 A	25 A
AC output	33 A	38 A	33 A	38 A
AC input fuse	yes	yes	yes	yes
Transfer speed	10 ms	10 ms	10 ms	10 ms
Transfer voltage range	wide: 90 – 280 V / narrow: 170 – 280 V	wide: 90 – 280 V / narrow: 170 – 280 V	wide: 90 – 280 V / narrow: 170 – 280 V	wide: 90 – 280 V / narrow: 170 – 280 V
Transfer frequency range	40-65 Hz	40-65 Hz	40-65 Hz	40-65 Hz
<b>GENERAL SPECIFICATIONS</b>				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hxxwxd	371 x 284 x 155 mm 14.6 x 11.2 x 6.1 inch	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch	371 x 284 x 155 mm 14.6 x 11.2 x 6.1 inch	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch
Weight	6,9 kg / 15.2 lb	9.3 kg / 20.5 lb	6,9 kg / 15.2 lb	9.3 kg / 20.5 lb
Approvals	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS	CE, E-mark, AZ/NZS
<b>TECHNICAL SPECIFICATIONS</b>				
Recommended battery capacity (based on gel batteries, may differ for other types)	180 – 500 Ah	300 – 800 Ah	120 – 320 Ah	180 – 500 Ah
Charge characteristic	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI (configurable)			
Ground relay	yes, configurable by means of mechanical jumper			
Temperature range (ambient temp.)	-25 °C to 60 °C, derating > 40 °C / -13 °F to 140 °F, derating > 104 °F			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)
Safety class	IEC protection class I	IEC protection class I	IEC protection class I	IEC protection class I
Humidity protection	conformal coating, max. 95 % relative humidity, non condensing			
Protections	over-temperature, overload, short circuit, high/low battery voltage			
Power Assist	yes, supports AC input with power from the battery			
Power Sharing	yes, allows you to select AC input fuse setting			
MasterBus / CZone / NMEA 2000 compatible delivered as standard with 1 mtr Mastervolt-CZone drop cable	yes	yes	yes	yes

<b>ACCESSORIES</b>				
	Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance.		5 Inch touchscreen with built-in WiFi connectivity and IPx7 water ingress protection. Comes with super bright widescreen display and the latest capacitive touchscreen technology.	
EasyView 5 77010310		Touch 5 80-911-0124-00		Touch 10 80-911-0100-00
				
				SmartRemote 77010500 (OEM) 77010600 (retail)
				
				CZone/MasterBus compatible color display for local device monitoring. Shows key parameters and allows simple device settings.
				
				Mastervolt-CZone drop cable 0.5 m: 77060050 1 m: 77060100 (delivered as standard) 2 m: 77060200 5 m: 77060500
				
				Adapter cable for connecting Mastervolt devices with CZone support to the CZone or NMEA 2000 network.

# Specifications CombiMaster 120 V

	NEW MODEL	NEW MODEL	NEW MODEL	NEW MODEL
				
	<b>CombiMaster 12/2000-100</b>	<b>CombiMaster 12/3000-160</b>	<b>CombiMaster 24/2000-60</b>	<b>CombiMaster 24/3000-70</b>
Product code 120 V	35512000	35513000	35522000	35523000
GENERAL SPECIFICATIONS SINE WAVE INVERTER				
Nominal DC voltage	12 V (10.2–16 V)	12 V (10.2–16 V)	24 V (20.4–32 V)	24 V (20.4–32 V)
Output voltage	120 V	120 V	120 V	120 V
Output frequency	60/50 Hz, configurable	60/50 Hz, configurable	60/50 Hz, configurable	60/50 Hz, configurable
Output waveform	true sine	true sine	true sine	true sine
Continuous power at 40°C / 104°F	2000 W	2600 W	2000 W	2600 W
Peak power (30 sec)	3000 W	4500 W	3000 W	4500 W
Surge power (5 sec)	4000 W	6000 W	4000 W	6000 W
Max. efficiency	93 %	93 %	93 %	93 %
Battery no-load power consumption	25 W (on mode) / < 1 mA (off mode)	30 W (on mode) / < 1 mA (off mode)	25 W (on mode) / < 1 mA (off mode)	30 W (on mode) / < 1 mA (off mode)
Energy saving mode consumption	10 W	10 W	10 W	10 W
Synchronization with mains	yes	yes	yes	yes
GENERAL SPECIFICATIONS BATTERY CHARGER				
Input voltage range	90-140 V	90-140 V	90-140 V	90-140 V
Max. input current	17 A (adjustable)	28 A (adjustable)	21 A	25 A
Max. charge current at 40 °C / 104 °F	100 A at 14.25V, configurable	160 A at 14.25 V, configurable	60 A at 28.5 V, configurable	70 A at 28.5 V, configurable
Battery temperature sensor	yes, included	yes, included	yes, included	yes, included
Battery voltage sense	automatic compensation	automatic compensation	automatic compensation	automatic compensation
SPECIFICATIONS TRANSFER SYSTEM				
AC input (switched)	30 A	30 A	30 A	30 A
AC output	47 A	55 A	47 A	55 A
AC input fuse	yes	yes	yes	yes
Transfer speed	10 ms	10 ms	10 ms	10 ms
Transfer voltage range	wide: 70–140 V / narrow: 90–140 V	wide: 70–140 V / narrow: 90–140 V	wide: 70–140 V / narrow: 90–140 V	wide: 70–140 V / narrow: 90–140 V
Transfer frequency range	40-65 Hz	40-65 Hz	40-65 Hz	40-65 Hz
GENERAL SPECIFICATIONS				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hxxwx d	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch	448 x 284 x 155 mm 17.6 x 11.2 x 6.1 inch
Weight	9.3 kg / 20.5 lb	9.3 kg / 20.5 lb	9.3 kg / 20.5 lb	9.3 kg / 20.5 lb
Approvals	ABYC A31, UL1236, UL1741, SAEJ1171			
TECHNICAL SPECIFICATIONS				
Recommended battery capacity (based on gel batteries, may differ for other types)	180 – 500 Ah	300 – 800 Ah	120 – 320 Ah	180 – 500 Ah
Charge characteristic	IUoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI (configurable)			
Ground relay	yes, configurable by means of mechanical jumper			
Temperature range (ambient temp.)	-25 °C to 60 °C, derating > 40 °C / -13 °F to 140 °F, derating > 104 °F			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)
Safety class	IEC protection class I	IEC protection class I	IEC protection class I	IEC protection class I
Humidity protection	conformal coating, max. 95 % relative humidity, non condensing			
Protections	over-temperature, overload, short circuit, high/low battery voltage			
Power Assist	yes, supports AC input with power from the battery			
Power Sharing	yes, allows you to select AC input fuse setting			
MasterBus / CZone / NMEA 2000 compatible	yes	yes	yes	yes
delivered as standard with 1 mtr Mastervolt-CZone drop cable				

## ACCESSORIES

 <b>EasyView 5</b> 77010310 Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance.	 <b>Touch 5</b> 80-911-0124-00 5 Inch touchscreen with built-in WiFi connectivity and IPx7 water ingress protection. Comes with super bright widescreen display and the latest capacitive touchscreen technology.	 <b>Touch 10</b> 80-911-0100-00 10 Inch LED-backlit projected capacitive touchscreen display with IPS technology. Offers full control of circuits plus important onboard system information (for AC and DC supplies).	 <b>SmartRemote</b> 77010500 (OEM) 77010600 (retail) CZone/MasterBus compatible color display for local device monitoring. Shows key parameters and allows simple device settings.	 <b>Mastervolt-CZone</b> drop cable 0.5 m: 77060050 1 m: 77060100 (delivered as standard) 2 m: 77060200 5 m: 77060500 Adapter cable for connecting Mastervolt devices with CZone support to the CZone or NMEA 2000 network.
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# Mass Combi Ultra & Mass Combi Pro: Powerful, complete and versatile

The Mass Combi Ultra series comprises several models, varying from 3000 W to 3500 W. For higher capacities up to 35 kW the Combi Ultra can be used in parallel or 3-phase configurations. An efficient and integrated solar charge regulator helps make the most of your solar panels.

The Mass Combi Ultra is equipped with the latest technologies. The new inverter technology ensures a uniquely low stand-by use, while an ultra-fast Digital Signal Processor guarantees seamless switching between all available energy sources. **Power Assist** prevents power dips and failures, even with a weak electricity connection or small generator. Moreover, all Mass Combi Ultra models are equipped with MasterBus.

## Higher yield from solar energy

At Mastervolt we used our knowledge gained in the grid connected solar sector to make a super-efficient built-in MPPT solar charge regulator.

Compared to most solar charge regulators on the market, the MPPT offers up to 30 % more yield from solar panels. The solar panels power 'hidden' consumers and keep your batteries in optimal condition.

## 'Pro' Models

For professional applications. Mastervolt offers a 'Pro' model, featuring all Ultra functions, but without the solar input and secondary battery charger.



## QUOTE

*"When working at an event or any outside location we can really trust the intelligence of this Mass Combi system. It regulates everything by itself without our involvement or the need for external power supplies, allowing us to focus on selling our products to the customers knowing that we always have power available in our mobile food truck."*

ANNA GEIGER,  
FOOD TRUCK OWNER





## FEATURES



- For professional and semi-professional use.
- Quiet, powerful inverter with 200 % peak power.
- Compact, lightweight and hum-free thanks to HF technology.
- Pure sine wave voltage prevents malfunctions and damage to sensitive equipment such as adapters.
- High yield and more power from your batteries.
- Intelligent 3-step+ battery charger with low DC ripple current for fast charging times and long battery life.
- Power Assist: prevents blown fuses.
- A dynamic battery voltage window allows you to enjoy AC power for longer without damaging your batteries.
- Active Optima Cooling concept prevents unnecessary fan noise.
- Charges two individual battery banks simultaneously (Mass Combi Ultra).
- An integrated MPPT solar charge controller allows for 30 % more yield from solar power for charging the batteries (Mass Combi Ultra).
- Quick installation and reliable professional connections.
- CE and ABYC certified.

## Quiet Operation



The Mass Combi Ultra and Mass Combi Pro can provide up to 50 % of the charging current or inverter capacity without fan cooling. This is perfect for night-time operation; if little power is consumed, the fan stops turning and goes silent. When maximum capacity is required, or the ambient temperature is very high, the Active Optima Cooling concept regulates the fan speed in a linear way, ensuring that it never spins too fast or makes any unnecessary ticking noises.

## Parallel and 3-phase operation



The Mass Combi Ultra and Mass Combi Pro functionality goes beyond stand-alone operation, the design also allows parallel and 3-phase configurations for larger applications up to 35 kW. For larger systems, an external transfer system is required.

## Dual AC inputs and outputs

The Mass Combi Ultra and Mass Combi Pro have inputs for generator or mains supply, each optimized for the power source. A robust intelligent transfer system switches seamlessly between AC power, generator and inverter, and ensures a constant power supply. Flickering lights or failure of electronic equipment belong to the past. Separate AC outputs provide the ability to power heavy users via mains and/or generator.



# Specifications

## Mass Combi Ultra

## Mass Combi Pro

## 230 V



	Mass Combi Ultra 12/3000-150	Mass Combi Ultra 24/3500-100	Mass Combi Ultra 48/3500-50	Mass Combi Pro 12/3000-150
Product code	38013000	38023500	38343500	38513000
<b>SPECIFICATIONS SINE WAVE INVERTER</b>				
Nominal DC voltage	12 V (9.5 – 16 V)	24 V (19 – 32 V)	48 V (38 – 62 V)	12 V (9.5 – 16 V)
Output voltage	180-260 V, adjustable	180-260 V, adjustable	180-260 V, adjustable	180-260 V, adjustable
Output waveform	true sine	true sine	true sine	true sine
Continuous power at 40 °C, cos phi 1	3000 W	3500 W	3500 W	3000 W
Surge capability	6000 W	7000 W	7000 W	6000 W
Parallel configuration	yes, up to 10 standard	yes, up to 10 standard	yes, up to 10 standard	yes, up to 10 standard
<i>For larger systems, an external transfer system is required.</i>				
3-Phase configuration	yes, up to 3x3	yes, up to 3x3	yes, up to 3x3	yes, up to 3x3
Max. efficiency	≥ 90 %	≥ 92 %	≥ 93 %	≥ 90 %
Energy saving mode consumption	7 W	7 W	7 W	7 W
<b>SPECIFICATIONS BATTERY CHARGER</b>				
Max. charge current at 40 °C	150 A at 14.25 V	100 A at 28.5 V	50 A at 57 V	150 A at 14.25 V
Secondary charger output voltage	12 V	12/24 V selectable, 3-step+	12/24 V selectable, 3-step+	n.a.
Secondary charger output current	10 A	10 A	10 A	n.a.
Battery temperature sensor	yes, included	yes, included	yes, included	yes, included
<b>SPECIFICATIONS TRANSFER SYSTEM</b>				
AC input (generator)	50 A (switched)	50 A (switched)	50 A (switched)	50 A (switched)
AC input (mains)	30 A (switched)	30 A (switched)	30 A (switched)	30 A (switched)
AC output 1	67 A	67 A	67 A	67 A
AC output 2	50 A (switched)	50 A (switched)	50 A (switched)	50 A (switched)
Transfer speed	seamless (< 1 ms)	seamless (< 1 ms)	seamless (< 1 ms)	seamless (< 1 ms)
<b>SOLAR INPUT DC SPECIFICATIONS</b>				
Input voltage range	25-50 V	25-100 V	n.a.	n.a.
Max. PV peak power	500 Wp	500 Wp	n.a.	n.a.
Max. input current	19 A	19 A	n.a.	n.a.
Max. charge current	30 A at 14.25 V	15 A at 28.5 V	n.a.	n.a.
MPP Tracker	full power at 25-50 V	full power at 35-80 V	n.a.	n.a.
<b>GENERAL SPECIFICATIONS</b>				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hxxwxd	472 x 318 x 178 mm 18.6 x 12.5 x 7 inch	472 x 318 x 178 mm 18.6 x 12.5 x 7 inch	472 x 318 x 178 mm 18.6 x 12.5 x 7 inch	472 x 318 x 178 mm 18.6 x 12.5 x 7 inch
Weight	15.3 kg / 33.7 lb	15.3 kg / 33.7 lb	15.3 kg / 33.7 lb	15.3 kg / 33.7 lb
Approvals	CE, E-mark, ABYC, RMRS	CE, E-mark, ABYC, RMRS	CE, E-mark, ABYC, RMRS	CE, E-mark, ABYC
<b>TECHNICAL SPECIFICATIONS</b>				
Charge characteristic	IUoUo, automatic 3-step+ for AGM/Gel/MLI/flooded/traction/spiral			
Ground relay	yes, configurable	yes, configurable	yes, configurable	yes, configurable
Temperature range (ambient temp.)	-25 °C to 60 °C, derating > 40 °C / -13 °F to 140 °F, derating > 104 °F			
Cooling	vario fan	vario fan	vario fan	vario fan
Protection degree	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)	IP23 (vertical mounting)
Protections	over-temperature, overload, short circuit, high/low battery voltage			
MasterBus compatible	yes	yes	yes	yes

ACCESSORIES		EasyView 5 77010310	option	option	option	option
		MasterBus USB Interface 77030100	option	option	option	option
		RJ12 communication / sync cable, available lengths: 1, 3, 6, 10 or 15 metre	option	option	option	option
		Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard
		Temperature sensor 15m 41500800	option	option	option	option

Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.

Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterAdjust software (free to download).

High quality communication cable fitted with RJ12 type modular plugs, suitable for connecting a remote control panel. Also suitable as a sync cable for Mass Combi Ultra or Mass Combi Pro models, both in parallel or 3-phase configurations.





**Mass Combi Pro**  
**24/3500-100**

38523500

24 V (19 – 32 V)  
180-260 V, adjustable  
true sine  
3500 W  
7000 W  
yes, up to 10 standard

yes, up to 3x3  
≥ 92 %  
7 W

100 A at 28.5 V  
n.a.  
n.a.  
yes, included

50 A (switched)  
30 A (switched)  
67 A  
50 A (switched)  
seamless (< 1 ms)

n.a.  
n.a.  
n.a.  
n.a.  
n.a.

LED display  
472 x 318 x 178 mm  
18.6 x 12.5 x 7 inch  
15.3 kg / 33.7 lb  
CE, E-mark, ABYC

yes, configurable

vario fan  
IP23 (vertical mounting)

yes

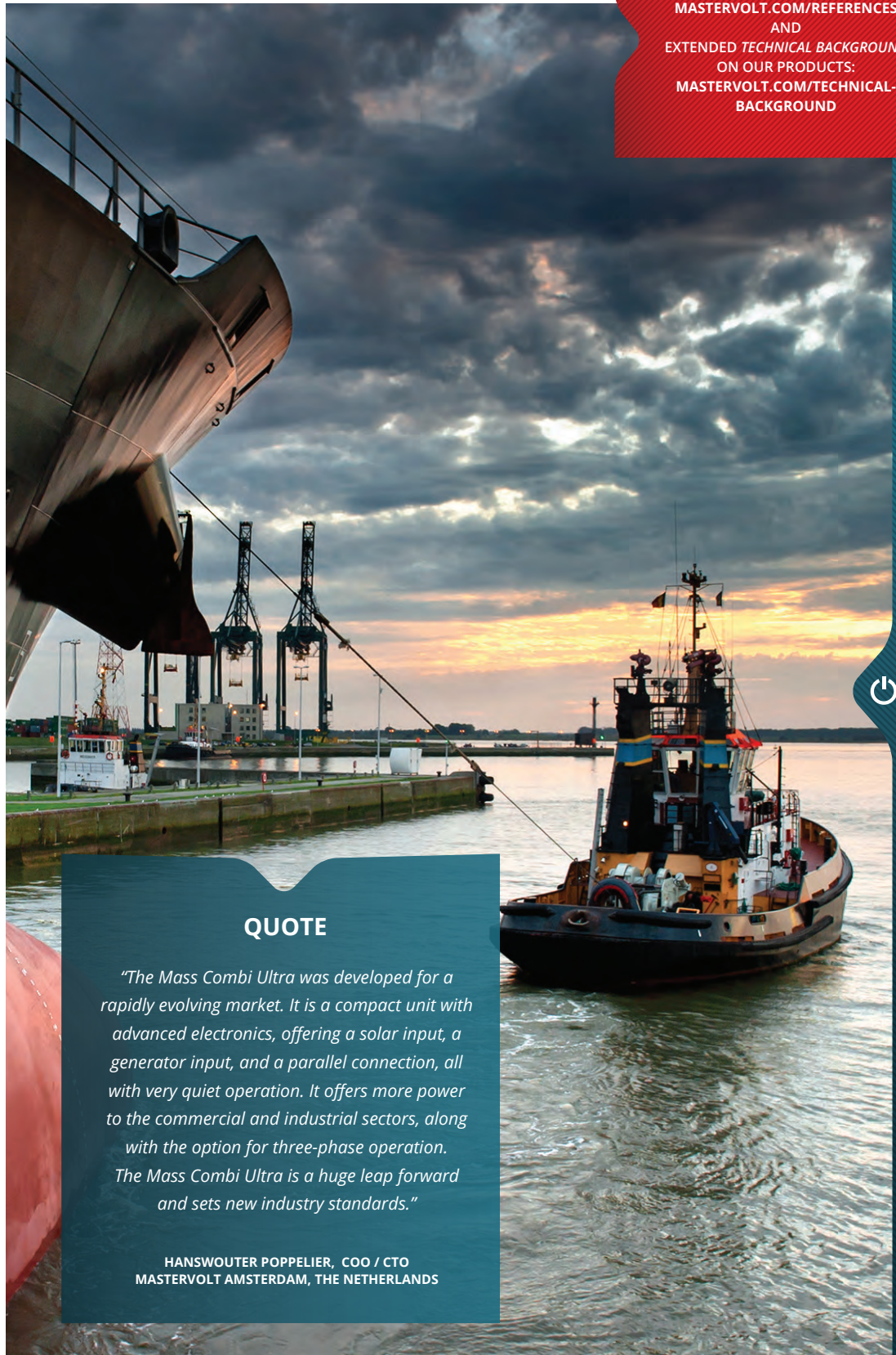
option

option

option

delivered as standard

option



**QUOTE**

*"The Mass Combi Ultra was developed for a rapidly evolving market. It is a compact unit with advanced electronics, offering a solar input, a generator input, and a parallel connection, all with very quiet operation. It offers more power to the commercial and industrial sectors, along with the option for three-phase operation. The Mass Combi Ultra is a huge leap forward and sets new industry standards."*

**HANSWOUTER POPPELIER, COO / CTO**  
**MASTERVOLT AMSTERDAM, THE NETHERLANDS**

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](https://mastervolt.com/references)  
AND  
EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-  
BACKGROUND](https://mastervolt.com/technical-background)





# Mastervolt DC-DC Converters: For 12, 24 and 48 volt

A DC-DC converter can provide other voltages than those applied in your basic system. By using a DC-DC converter, other voltages can be reached. They also ensure that all your equipment has a stable power supply with the right voltage.

## Mac Plus & Magic Series

- Professional use.
- Converter and 3-step battery charger.
- Parallel switchable.
- Adjustable and programmable output voltage.
- Voltage stabilisation for a longer lifespan of halogen lights, etc.
- Dimmer function for Mac & Magic models.
- Mac Plus: optimal charging in Euro 5/6 applications.

The **Magic** models can regulate the voltage both up and down to ensure an optimal voltage stabilisation, even when the battery voltage fluctuates due to heavy loads. The galvanic isolation between input and output prevents disruptions to, for instance, communication equipment.

The **Mac Plus** is ideal for charging service batteries in vehicles with a smart Euro 5/6 alternator. The Mac Plus charges the batteries quickly, even when the alternator is inactive and the battery voltage very low. The automatic start/stop function ensures that empty starter batteries become a thing of the past. The Mac Plus comes with integrated MasterBus (CAN) communication and E-mark certification. It seamlessly charges Lithium Ion, Gel and AGM batteries via the tried and tested Mastervolt 3-stage charging method.

## DC Master Series

- Recreational and semi-professional use.
- Easy to install using included mounting bracket.
- Excellent price/performance ratio.
- Available in isolated and non-isolated version.

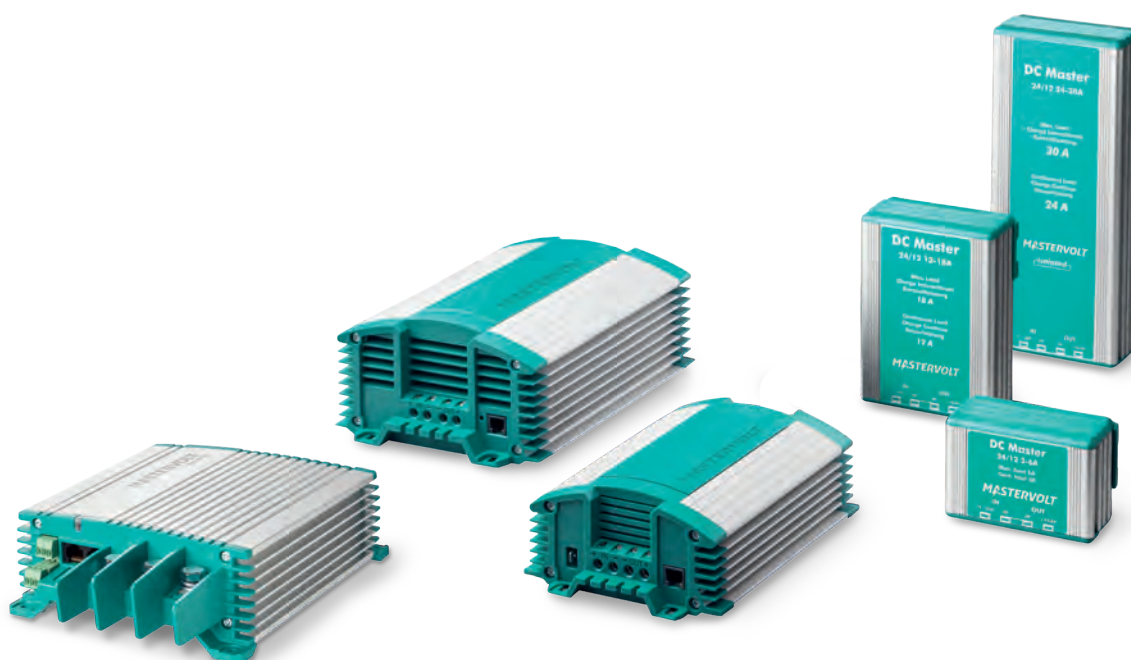


### QUOTE

*"During our fantastic journey to the South Pole, it became clear that the Mastervolt system did the job extremely well. Not once did the system let us down or enter a critical situation. If any part of the Mastervolt system had failed, it would have meant the end of our expedition and could have put us in a dangerous situation, as charging the system using mains power is simply not an option in Antarctica."*

EDWIN & LIESBETH TER VELDE  
CLEAN2ANTARCTICA.COM, THE NETHERLANDS





## Euro 5/6 solution



Charging service batteries in Euro 5/6 applications? The Mac Plus provides constant power to the service battery, even when the alternator is inactive.

## Programmable via laptop or PC



Remote control the Mac/Magic via your laptop or PC, or configure your personal preferences.

The device has a communication port and easy installation with a PC-Link and MasterAdjust software.



## Energy-saving dimmer function



Many standard light dimmers convert part of the energy to heat and also lose unnecessary energy. The Mastervolt Mac/Magic converters regulate the power supply efficiently and without excessive heat build-up, for optimal safety (multiple converters can be used for multiple lamps).

## 3-Step battery charger



Connected to the 12 or 24 V service battery, the Mac/Magic series can also be used as an advanced 3-step battery charger for Gel, AGM, flooded or Lithium Ion batteries.



## Parallel Operation



Lots of consumers on board? The parallel configuration of several units will provide you over 100 amperes. Advanced high-frequency technology with modern microprocessors ensures minimum power loss when switching from 24 to 12 V and vice versa.

## Solid Connections



Galvanized brass connection block with screw terminal or chrome-plated fast-on for DC in/out for the Mac/Magic models. The robust M8 connections of the Mac Plus prevent any loosening due to vibrations.

# Mac Plus series: Boost the charging voltage of your service battery!

Charging the service batteries on board of a vehicle or vessel can be challenging. Recharging tends to take a long time and batteries may not receive a full charge. This is a common problem found in boats, service vans, campers and trucks. Smart alternators and start/stop systems make the problem even worse.

## Robust DC-DC charger guarantees optimal condition of your service battery

Traditionally, a service battery is linked to the starter battery by means of a charge relay. The starter battery is located close to the alternator and receives most of the charge current. However, the service battery is usually further away. Long cables cause voltage drop, leading to slow charging, resulting in failing appliances and premature failure of the battery.

Modern, fuel efficient engines are equipped with smart alternators, following regulations such as Euro 5 and Euro 6. Instead of a constant output, smart alternators provide a variable voltage; after a brief charging period, voltage is reduced and the charging stops. Furthermore, the energy produced by regenerative braking leads to voltage peaks. Service batteries coupled in the traditional way will receive hardly any charge and may be damaged by these peak voltages.

To solve these issues, Mastervolt introduces the Mac Plus DC-DC chargers, available in 12 V or 24 V. The Mac Plus monitors the service battery and compensates the voltage loss. The proven 3-step charge method ensures a quick and safe charge. Moreover, by stabilizing the charge voltage, Mac Plus protects your service battery and sensitive equipment.

## Applications

Boost charge voltage when service battery is located further from charging source or in systems with a smart alternator. When a stable power supply or different system voltage is needed.



## FEATURES

- Fast and safe charging during short trips.
- Fanless design for silent operation.
- Suitable for flooded, Gel, AGM and Li-Ion batteries (incl. LiFePO4).
- Charges even fully depleted batteries.
- Engine run detection protects starter battery.
- Adjustable current limits to meet Euro 5/6 requirements.
- Voltage stabilisation protects sensitive equipment, lights and loads.
- Parallel operation to obtain charging capacities well over 100 Amps.
- MasterBus for intelligent system monitoring and automation.
- Temperature compensation and voltage sense for an optimal charging result.
- E-mark certification for mobile applications.
- Power supply mode.
- Heavy duty connections for easy installation and quick set up via DIP switches.

## Battery's Best Friend



The Mac Plus is your battery's best friend. It monitors your service battery and makes sure it's always fully charged, maximising the lifetime of your battery.



## Parallel operation



The parallel configuration of several units will provide you over 100 amperes. Advanced high-frequency technology with modern microprocessors ensures minimum power loss when switching from 24 to 12 V and vice versa.



# Specifications

## Mac & Mac Plus

### DC-DC converters



	Mac 24/12-20	Mac Plus 12/12-50	Mac Plus 12/24-30	Mac Plus 24/12-50	Mac Plus 24/24-30
Product code	81200100	81205100	81205300	81205200	81205400
GENERAL SPECIFICATIONS					
Battery voltage sense	n.a.	yes	yes	yes	yes
Status indicator	n.a.	yes, 3-color LED	yes, 3-color LED	yes, 3-color LED	yes, 3-color LED
Output voltage	10-15 V DC	10-15 V DC	20-30 V DC	10-15 V DC	20-30 V DC
Nominal output voltage*	13.6 V DC	12 V DC	24 V DC	12 V DC	24 V DC
Output voltage dimmer*	4-13 V DC	n.a.	n.a.	n.a.	n.a.
Output voltage stabilisation	2 % at extremes of temps, load and input				
Output voltage ripple	max. 1 % peak peak	max. 1 % peak peak	max. 1 % peak peak	max. 1 % peak peak	max. 1 % peak peak
Output power (max./nominal)	300 / 270 W	725 / 675 W	725 / 675 W	750 / 710 W	850 / 810 W
Max. output current	20 A	50 A	30 A	50 A	30 A
Output charge current - 3-step mode	16 A	50 A	30 A	50 A	30 A
Nominal input voltage	24 V	12 V	12 V	24 V	24 V
Input voltage range	20-32 V DC	10-16 V DC	10-16 V DC	19-30 V DC	19-30 V DC
Max. input current	n.a.	50 A	50 A	50 A	50 A
Galvanic isolation	no	no	no	no	no
Voltage limited	yes	yes	yes	yes	yes
Efficiency	>90 % (nom. input voltage, full load); 92 % peak	> 95 % (at nom. input voltage, full load); 97 % peak			
Parallel configuration	yes	yes	yes	yes	yes
Alarm contact	no	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
MasterBus powering	no	no	no	no	no
Engine run signal input	n.a.	yes (active high/active low)			
DIP switches	n.a.	yes, for basic setup	yes, for basic setup	yes, for basic setup	yes, for basic setup
Dimensions, hxxwxd	190 x 130 x 61 mm 7.5 x 5.1 x 2.4 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch
Weight	1 kg / 2.2 lb	2 kg / 4.4 lb	2 kg / 4.4 lb	2 kg / 4.4 lb	2 kg / 4.4 lb
Approvals	CE	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected			
TECHNICAL SPECIFICATIONS					
No-load consumption	n.a.	< 2 mA	< 2 mA	< 2 mA	< 2 mA
Battery types	flooded, Gel, AGM, spiral, Lithium Ion, traction, user defined				
3-Step charge option (dip switch settings)	yes	yes	yes	yes	yes
DC consumption	< 30 mA	< 5 mA	< 5 mA	< 5 mA	< 5 mA
Connections input/output	screw terminals, max. wire size 16 mm² / AWG5	3 x M8 terminal for cable diameters of 10-50 mm², (positive input, positive output, joint negative connection) 6-pole screw connection for cable diameters of 0.75-1.5 mm² (remote on/off, temperature sensor, voltage measurement)			
Temperature range (ambient temp.)	-25 °C to 60 °C; > 40 °C derating power / -13 °F to 140 °F; > 104 °F derating power				
Cooling	natural cooling	natural cooling	natural cooling	natural cooling	natural cooling
Protection degree	IP21	IP23	IP23	IP23	IP23
Protections	overload, over-temperature	overload, over-temperature, DC short circuit, reversed polarity (fuse)			
MasterBus compatible	yes, in combination with MasterBus Serial Interface	yes	yes	yes	yes

\* Adjustable with MasterAdjust software.

<b>ACCESSORIES</b>		PC-Link 21730300	option	n.a.	n.a.	n.a.	n.a.
	Interface between Mac converter and PC, in combination with the MasterAdjust software (free to download). The PC-Link can be directly connected to a computer serial port.						
		EasyView 5 77010310	option	option	option	option	option
	In combination with a MasterBus Serial Interface. Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.						
		MasterBus Serial Interface 77030450	option	n.a.	n.a.	n.a.	option
Integrates the Mac & Magic converters in a MasterBus network.							
	Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard	delivered as standard	delivered as standard
	Temperature sensor 15m 41500800	option	option	option	option	option	option

# Specifications Magic converters



	Magic 24/12-20	Magic 24/24-20	Magic 12/12-20	Magic 12/24-10
Product code	81300100	81300200	81300400	81300300
GENERAL SPECIFICATIONS				
Output voltage	10-15 V DC	20-28.5 V DC	10-15 V DC	20-28.5 V DC
Nominal output voltage*	13.6 V DC	27.2 V DC	13.6 V DC	27.2 V DC
Output voltage dimmer*	4-13 V DC	8-26 V DC	4-13 V DC	8-26 V DC
Output voltage stabilisation	2 % at extremes of temps, load and input			
Output voltage ripple	max. 1 % peak peak	max. 1 % peak peak	max. 1 % peak peak	max. 1 % peak peak
Output power (max./nominal)	300 / 300 W	580 / 580 W	300 / 300 W	300 / 300 W
Max. output current	20 A	20 A	20 A	10 A
Output charge current - 3-step mode	16 A	16 A	16 A	8 A
Nominal input voltage	24 V	24 V	12 V	12 V
Input voltage range	19-32 V DC	19-32 V DC	11-16 V DC	11-16 V DC
Input range, (3-step charge mode)	24-32 V DC	24-32 V DC	12-16 V DC	12-16 V DC
Lower input set point	20 V DC*	20 V DC*	10 V DC*	10 V DC*
Delay lower input set point	30 sec.*	30 sec.*	30 sec.*	30 sec.*
Galvanic isolation	yes	yes	yes	yes
Voltage limited	yes	yes	yes	yes
Efficiency	>90 % (nom. input voltage, full load); 92 % peak			
Parallel configuration	yes	yes	yes	yes
Dimmer function	yes, by external momentary switch via fast-on connection, to be activated by DIP-switch setting			
Alarm contact	no	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
Dimensions, hxxwx d	190 x 130 x 61 mm 7.5 x 5.1 x 2.4 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch	255 x 165 x 66 mm 10 x 6.5 x 2.6 inch
Weight	1 kg / 2.2 lb	2 kg / 4.4 lb	2 kg / 4.4 lb	2 kg / 4.4 lb
Approvals	CE	CE, E-Mark, SAE J1171 & ISO 8846 Ignition Protected		
TECHNICAL SPECIFICATIONS				
No-load consumption	n.a.	< 2 mA	< 2 mA	< 2 mA
Battery types	flooded, Gel, AGM, spiral, Lithium Ion, traction, user defined			
3-Step charge option (dip switch settings)	yes	yes	yes	yes
DC consumption	< 115 mA	< 115 mA	< 115 mA	< 115 mA
Connections input/output	screw terminals, maximum wire size 16 mm² / AWG5			
Temperature range (ambient temp.)	-25 °C to 60 °C; > 40 °C derating power / -13 °F to 140 °F; > 104 °F derating power			
Cooling	maintenance-free vario fans	maintenance-free vario fans	maintenance-free vario fans	maintenance-free vario fans
Protection degree	IP21	IP21	IP21	IP21
Protections	against over load & over temperature			
MasterBus compatible	yes, in combination with a MasterBus Serial Interface			

\* Adjustable with MasterAdjust software.

<b>ACCESSORIES</b>		PC-Link 21730300	option	option	option	option
	Interface between Mac converter and PC, in combination with the MasterAdjust software (free to download). The PC-Link can be directly connected to a computer serial port.					
		EasyView 5 77010310	option	option	option	option
	In combination with a MasterBus Serial Interface. Waterproof system monitor with 'daylight readable' colour display and intuitive multi-language touchscreen to show the key system information at a glance. There is also a logbook feature for warnings and alarms, along with a buzzer and alarm notifications. The home button gives access to favorite pages.					
		MasterBus Serial Interface 77030450	option	option	option	option
	Integrates the Mac & Magic converters in a MasterBus network.					
	Temperature sensor 6m 41500500	delivered as standard	delivered as standard	delivered as standard	delivered as standard	delivered as standard
	Temperature sensor 15m 41500800	option	option	option	option	option

## ISOLATED OR NON-ISOLATED?

The non-isolated Mac (Plus) and DC Master models have an electrical connection between the input and output.

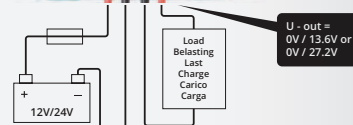
Features:

- Low costs.
- Efficient: low heat generation.
- Compact.
- Suited to applications with negative earthing.

The isolated Magic and DC Master models provide galvanic isolation between input and output circuits.

Features:

- Extra touch-proof.
- Interference suppression for sensitive equipment.
- Available with negative or positive grounding.



## Magic as power supply

The Magic models can be fully used as a stabilised power supply: From 12 to 24 V, from 24 to 12 V or from 24 to 24 V. Inputs and outputs are galvanically isolated.

CHECK THE MASTERVOLT SITE FOR  
INTERESTING REAL-LIFE SYSTEMS:  
[MASTERVOLT.COM/REFERENCES](http://MASTERVOLT.COM/REFERENCES)  
AND  
EXTENDED TECHNICAL BACKGROUND  
ON OUR PRODUCTS:  
[MASTERVOLT.COM/TECHNICAL-BACKGROUND](http://MASTERVOLT.COM/TECHNICAL-BACKGROUND)













# Specifications

## DC Master converters

### Non-isolated

	 <b>DC Master 24/12-3</b>	 <b>DC Master 24/12-6</b>	 <b>DC Master 24/12-12</b>	 <b>DC Master 24/12-24</b>
Product code	81400100	81400200	81400300	81400330
<b>INPUT SPECIFICATIONS</b>				
Nominal input voltage	24 V	24 V	24 V	24 V
Input range (max.)	20-32 V DC (35 V)	20-32 V DC (35 V)	20-32 V DC (35 V)	20-32 V DC (35 V)
<b>OUTPUT SPECIFICATIONS</b>				
Nominal output voltage	13.6 V	13.6 V	13.6 V	13.6 V
Maximum power	82 W	136 W	245 W	408 W
Nominal power	41 W	82 W	164 W	326 W
Current max. 2 minutes / continuous	6 A / 3 A	10 A / 6 A	18 A / 12 A	30 A / 24 A
<i>Two minutes of extra power for short power boosts.</i>				
DC consumption	< 15 mA	< 15 mA	< 15 mA	< 15 mA
<b>GENERAL SPECIFICATIONS</b>				
Dimensions, hwxwd	67 x 87 x 50 mm 2.6 x 3.4 x 2 inch	89 x 87 x 50 mm 3.5 x 3.4 x 2 inch	127 x 87 x 50 mm 5 x 3.4 x 2 inch	167 x 87 x 50 mm 6.6 x 3.4 x 2 inch
Weight	200 g / 0.44 lb	250 g / 0.55 lb	405 g / 0.9 lb	620 g / 1.4 lb
Approvals	CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark
Galvanic isolation	no	no	no	no
Stabilised	yes	yes	yes	yes
Connections input/output	fast-on	fast-on	fast-on	fast-on
Temperature range (ambient temp.)	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power
Cooling	natural cooling	natural cooling	natural cooling	natural cooling
Protection degree	IP53	IP53	IP53	IP53

### Isolated

	 <b>DC Master 12/12-3</b>	 <b>DC Master 12/12-6</b>	 <b>DC Master 24/12-3</b>	 <b>DC Master 24/12-6</b>
Product code	81500600	81500700	81500100	81500200
<b>INPUT SPECIFICATIONS</b>				
Nominal input voltage	12 V	12 V	24 V	24 V
Input range (max.)	10-15.5 V DC (16 V)	10-15.5 V DC (16 V)	20-32 V DC (35 V)	20-32 V DC (35 V)
<b>OUTPUT SPECIFICATIONS</b>				
Nominal output voltage	13.6 V	13.6 V	13.6 V	13.6 V
Maximum power	54 W	108 W	82 W	136 W
Nominal power	41 W	82 W	41 W	82 W
Current max. 2 minutes / continuous	4 A / 3 A	8 A / 6 A	6 A / 3 A	10 A / 6 A
<i>Two minutes of extra power for short power boosts.</i>				
DC consumption	< 15 mA	< 15 mA	< 15 mA	< 15 mA
<b>GENERAL SPECIFICATIONS</b>				
Dimensions, hwxwd	89 x 87 x 50 mm 3.5 x 3.4 x 2 inch	127 x 87 x 50 mm 5 x 3.4 x 2 inch	89 x 87 x 50 mm 3.5 x 3.4 x 2 inch	127 x 87 x 50 mm 5 x 3.4 x 2 inch
Weight	280 g / 0.6 lb	440 g / 1 lb	289 g / 0.6 lb	505 g / 1.1 lb
Approvals	CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark
Galvanic isolation	yes	yes	yes	yes
Stabilised	yes	yes	yes	yes
Connections input/output	fast-on	fast-on	fast-on	fast-on
Temperature range (ambient temp.)	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power	-25 °C to 80 °C, > 30 °C derating power
Cooling	natural cooling	natural cooling	natural cooling	natural cooling
Protection degree	IP53	IP53	IP53	IP53

**DC Master  
12/24-3**

81400400

12 V  
10-15.5 V DC (16 V)

27.2 V

109 W

82 W

4 A / 3 A

&lt; 15 mA

89 x 87 x 50 mm  
3.5 x 3.4 x 2 inch

300 g / 0.66 lb

CE, E-mark

no

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
12/24-7**

81400500

12 V  
10-15.5 V DC (16 V)

27.2 V

245 W

191 W

9 A / 7 A

&lt; 25 mA

167 x 87 x 50 mm  
6.6 x 3.4 x 2 inch

640 g / 1.3 lb

CE, E-mark

no

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
48/12-6**

81400600

48 V  
40-62 V DC (65 V)

13.6 V

109 W

82 W

8 A / 6 A

&lt; 15 mA

89 x 87 x 50 mm  
3.5 x 3.4 x 2 inch

270 g / 0.6 lb

CE, E-mark

no

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
48/12-9**

81400700

48 V  
40-62 V DC (65 V)

13.6 V

132 W

108 W

11 A / 9 A

&lt; 15 mA

127 x 87 x 50 mm  
5 x 3.4 x 2 inch

370 g / 0.8 lb

CE, E-mark

no

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
48/12-20**

81400800

48 V  
40-62 V DC (65 V)

13.6 V

326 W

272 W

24 A / 20 A

&lt; 25 mA

217 x 87 x 50 mm  
8.5 x 3.4 x 2 inch

770 g / 1.7 lb

CE, E-mark

no

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
24/12-12**

81500300

24 V  
20-32 V DC (35 V)

13.6 V

245 W

164 W

18 A / 12 A

&lt; 15 mA

167 x 87 x 50 mm  
6.6 x 3.4 x 2 inch

590 g / 1.3 lb

CE, E-mark

yes

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
24/12-24**

81500350

24 V  
20-32 V DC (35 V)

13.6 V

408 W

326 W

30 A / 24 A

&lt; 15 mA

217 x 87 x 50 mm  
8.5 x 3.4 x 2 inch

785 g / 1.7 lb

CE, E-mark

yes

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
24/24-3**

81500400

24 V  
20-32 V DC (35 V)

27.2 V

109 W

82 W

4 A / 3 A

&lt; 15 mA

127 x 87 x 50 mm  
5 x 3.4 x 2 inch

440 g / 1 lb

CE, E-mark

yes

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

**DC Master  
24/24-7**

81500500

24 V  
20-32 V DC (35 V)

27.2 V

245 W

191 W

9 A / 7 A

&lt; 25 mA

217 x 87 x 50 mm  
8.5 x 3.4 x 2 inch

780 g / 1.7 lb

CE, E-mark

yes

yes

fast-on

-25 °C to 80 °C,  
> 30 °C derating power

natural cooling

IP53

All DC Master converters  
come with a mounting  
bracket, screws and fast-ons.**Mastervolt also offers four-  
step DC-DC chargers by  
ProMariner, available in  
12V/40A and 24V/20A.**For more information, please  
consult the ProMariner product  
catalogue and website.**ProMariner™**  
PROMARINER.COM