

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

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 series

The ChargeMaster series is suitable for recreational and semi-professional use. It is easy to install and includes a detailed display 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.

■ EasyCharge

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

■ EasyCharge Portable

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. 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.



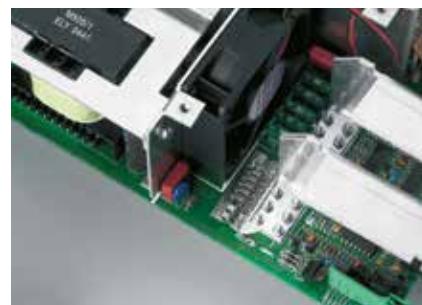
FEATURES

- 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.
- Parallel switching possible using multiple battery chargers.
- Connections in accordance with CE, ABYC A-31 and IEC60945.
- Certified by RRR, RMRS, DNV (24/25, 24/50, 24/75, 24/100 models) and Germanische Lloyd, Lloyds (24/75, 24/100 models).



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.



For professional use: GMDSS

Professional users will benefit from a front display with GMDSS alarm functions. GMDSS stands for Global Maritime Distress and Safety System, 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.

This front display is available for Mass 24/25-2 DNV, Mass 24/50-2, Mass 24/75, Mass 24/100 and Mass 24/100-3ph.

Specifications

Mass battery chargers



	Mass 24/15-2	Mass 24/25-2	Mass 24/25-2 DNV	Mass 24/50-2
Product code	40020156	40020256	40720266	40020506
Product code 120 V				
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			
Power supply mode	yes	yes	yes	yes
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxw	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, RRR, RMRS	CE, ABYC A-31, DNV, RRR, RMRS
TECHNICAL SPECIFICATIONS				
Charge characteristic	IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
Charge characteristic can be set to your requirements. See page 242 for default settings.				
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; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power
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

OPTIONS	MasterView Read-out 77010050	option	option	option	option
		Remote panel for reading the charge status of your battery charger, including error notifications.			
	EasyView 5 77010310	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.			
	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	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.			
	MasterBus USB Interface 77030100	option	option	option	option
		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).			
MasterVision panels	C3-RS 70403040	option	option	option	option
		Remote monitor for battery chargers, with a regulator for reducing grid power consumption.			
	GMDSS remote panel 70400050	option	option	option	option
		Remote monitoring for Mass battery chargers, with GMDSS system monitoring functions. Battery voltage and current are displayed on the digital panel.			



BATTERY CHARGERS
MASS 24 V
MASS 48 V

Mass 24/75 40020756	Mass 24/100 40021006	Mass 24/100-3ph 40031006	Mass 24/75 40120756	Mass 48/25 40040256	Mass 48/50 40040506
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24 V 75 A at 28.5 V	24 V 100 A at 28.5 V	24 V 100 A at 28.5 V	24 V 75 A at 28.5 V	48 V 25 A at 57 V	48 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	200-1000 Ah	200-1000 Ah	150-800 Ah	100-500 Ah	100-500 Ah
230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz	3 x 400 V (365-550 V) - 50/60 Hz	120 V (90-130 V) - 60/50 Hz	230 V (180-265 V) - 50/60 Hz	230 V (180-265 V) - 50/60 Hz
yes	yes	yes	yes	yes	yes
LED display					
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	4.6 kg / 10.1 lb	7.7 kg / 17 lb			
CE, ABYC A-31, RRR, RMRS, Lloyds, DNV	CE, ABYC A-31, RRR, RMRS, Lloyds, DNV	CE, ABYC A-31, DNV	CE, ABYC A-31, DNV	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	yes	yes	yes	yes	yes
< 1 mA					
2600 W	3500 W	3500 W	2770 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	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power	-25 °C to 80 °C; > 45 °C derating power
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						

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.
- 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	cable + plug	cable + plug	2 mtr AC cable	connector strips
Power supply mode	no	no	yes	yes
Display/read-out	1 LED	1 LED	LED display	LED display
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	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	IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
<i>Charge characteristic can be set to your requirements. See page 242 for default settings.</i>				
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, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power
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
Charger Status Interface (alarm contact)	yes, integrated	yes, integrated	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)

OPTIONS	MasterView Read-out 77010050	n.a.	n.a.	option	option
<i>Remote panel for reading the charge status of your battery charger, including error notifications.</i>					
	EasyView 5 77010310	n.a.	n.a.	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.	n.a.	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 & play cable it can be easily connected to the MasterBus network.</i>					
	MasterBus USB Interface 77030100	n.a.	n.a.	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.	n.a.	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>					



**ChargeMaster
12/50-3**

44010500

**ChargeMaster
12/70-3**

44010700

**ChargeMaster
12/100-3**

44011000

12 V

12 V

12 V

50 A at 14.4 V

70 A at 14.4 V

100 A at 14.4 V

3

3

3

50 A

10 A

10 A

50 A

10 A

10 A

100-500 Ah

140-700 Ah

200-1000 Ah

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

connector strips

connector strips

connector strips

yes

yes

yes

LED display

LCD display

LCD display

291 x 210 x 131 mm
11.5 x 8.3 x 5.2 inch

362 x 277 x 150 mm
14.3 x 11 x 5.9 inch

362 x 277 x 150 mm
14.3 x 11 x 5.9 inch

4 kg / 9 lb

7 kg / 16 lb

7 kg / 16 lb

mounting bracket
(included) or 4x screw

mounting bracket
(included) or 4x screw

mounting bracket
(included) or 4x screw

CE, ABYC A-31, SAE
J1171/ISO 8846 ignition
protected, RMRS, 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

IUoUo, automatic /
3-step+ for Gel/AGM/
flooded/Lithium Ion

IUoUo, automatic /
3-step+ for Gel/AGM/
flooded/Lithium Ion

IUoUo, automatic /
3-step+ for Gel/AGM/
flooded/Lithium Ion

yes

yes

yes

automatic

automatic

automatic

< 5 mA

< 5 mA

< 5 mA

825 W

1200 W

1700 W

yes, via MasterBus

yes, via MasterBus

yes, via MasterBus

≥ 0.98

≥ 0.98

≥ 0.98

-25 °C to 60 °C,
> 40 °C derating power

-25 °C to 60 °C,
> 40 °C derating power

-25 °C to 60 °C,
> 40 °C derating power

vario fan

vario fan

vario fan

IP23

IP23

IP23

over-temperature,
overload, short circuit,
high/low battery voltage

over-temperature,
overload, short circuit,
high/low battery voltage

over-temperature,
overload, short circuit,
high/low battery voltage

yes

yes

yes

yes, using a Multipurpose
Contact Output (product
code 77030500)

yes, using a Multipurpose
Contact Output (product
code 77030500)

yes, using a Multipurpose
Contact Output (product
code 77030500)



The following models are also available
in Quick Connect (OEM) 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
- ChargeMaster 12/70-3, product code 44010702
- ChargeMaster 12/100-3, product code 44011002



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™

Specifications

ChargeMaster battery chargers

24 V



	ChargeMaster 24/6	ChargeMaster 24/12-3	ChargeMaster 24/20-3	ChargeMaster 24/30-3
Product code	43020600	44020120	44020200	44020300
GENERAL SPECIFICATIONS				
Nominal output voltage	24 V	24 V	24 V	24 V
Total charge current	6 A at 28.5 V	12 A at 26.5 V	20 A at 28.8 V	30 A at 28.8 V
Number of battery outlets	1	3	3	3
Charge current second output	n.a.	12 A	20 A	30 A
Charge current third output	n.a.	12 A	20 A	30 A
Recommended battery capacity	25-70 Ah	24-120 Ah	40-200 Ah	60-300 Ah
Nominal input voltage	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
AC connection	socket	2 mtr AC cable	connector strips	connector strips
Power supply mode	no	yes	yes	yes
Display/read-out	1 LED	LED display	LED display	LED display
Dimensions, hwxwd	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
Weight	1 kg / 2.2 lb	1.8 kg / 4 lb	4 kg / 9 lb	4 kg / 9 lb
Fastening	4x screw	4x screw	mounting bracket (included) or 4x screw	mounting bracket (included) or 4x screw
Approvals	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	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR
TECHNICAL SPECIFICATIONS				
Charge characteristic	IUoUoo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion			
<i>Charge characteristic can be set to your requirements. See page 242 for default settings.</i>				
Temperature compensation	no	yes	yes	yes
Voltage compensation	automatic	automatic	automatic	automatic
DC consumption	< 1 mA	< 2 mA	< 2.5 mA	< 2.5 mA
Full load consumption (230 V AC)	210 W	435 W	660 W	925 W
Current Control function	no	no	yes, via MasterBus	yes, via MasterBus
Power factor control	> 0.95	≥ 0.98	≥ 0.98	≥ 0.98
Temperature range (ambient temp.)	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 25 °C derating power	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power
Cooling	natural cooling	vario fan	vario fan	vario fan
Protection degree	IP65	IP23	IP23	IP23
Protections	over-temperature, overload, short circuit, high/low battery voltage			
MasterBus compatible	no	yes	yes	yes
Charger Status Interface (alarm contact)	yes, integrated	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)

OPTIONS					
	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 & 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>			



ChargeMaster 24/40-3	ChargeMaster 24/60-3	ChargeMaster 24/80-3	ChargeMaster 24/100-3
44020400	44020600	44020800	44021000
24 V	24 V	24 V	24 V
40 A at 28.8 V	60 A at 28.8 V	80 A at 28.8 V	100 A at 28.8 V
3	3	3	3
10 A	10 A	10 A	10 A
10 A	10 A	10 A	10 A
80-400 Ah	120-600 Ah	160-800 Ah	200-1000 Ah
120/230 V (90-265 V) – 50/60 Hz			
connector strips	connector strips	connector strips	connector strips
yes	yes	yes	yes
LCD display	LCD display	LCD display	LCD display
362 x 277 x 150 mm 14.3 x 11 x 5.9 inch	362 x 277 x 150 mm 14.3 x 11 x 5.9 inch	432 x 277 x 150 mm 17 x 11 x 5.9 inch	432 x 277 x 150 mm 17 x 11 x 5.9 inch
7 kg / 16 lb	7 kg / 16 lb	8 kg / 18 lb	8 kg / 18 lb
mounting bracket (included) or 4x screw			
CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, 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	CE, ABYC A-31, SAE J1171/ISO 8846 ignition protected, RMRS, RRR
IUoUo, automatic / 3-step+ for Gel/AGM/ flooded/Lithium Ion			
yes	yes	yes	yes
automatic	automatic	automatic	automatic
< 5 mA	< 5 mA	< 5 mA	< 5 mA
1400 W	2000 W	2700 W	3375 W
yes, via MasterBus	yes, via MasterBus	yes, via MasterBus	yes, via MasterBus
≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power	-25 °C to 60 °C, > 40 °C derating power
vario fan	vario fan	vario fan	vario fan
IP23	IP23	IP23	IP23
over-temperature, overload, short circuit, high/low battery voltage			
yes	yes	yes	yes
yes, using a Multipurpose Contact Output (product code 77030500)			



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

The following models are also available in Quick Connect (OEM) 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*
- ChargeMaster 24/40-3, *product code 44020402*
- ChargeMaster 24/60-3, *product code 44020602*
- ChargeMaster 24/80-3, *product code 44020802*
- ChargeMaster 24/100-3, *product code 44021002*

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, battery isolators and VSR, ChargeMaster Plus reduces system complexity and cost. Designed for versatility, it charges virtually any combination of 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.
- 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, ChargeMaster Plus is CE, E-mark, ABYC, UL, SAE, CEC and RCM/C-Tick compliant.



System Simplicity

Nowadays, equipment must be self-explaining.

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



Powerful Connections

In modern applications, all components work together. CAN-based MasterBus enables the charger to communicate with displays, shunts and power systems including communication standards like CZone®, NMEA and CANopen. The ChargeMaster Plus can operate as a power supply for delicate communication equipment, or during the construction phase of a boat.



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 12/24 V battery banks on a single battery charger.
- Charges multiple batteries while being underway.
- Extended specifications: offers 20 % more output at 14.4 V and 80 % charging power at 60 °C.
- Safe Charge: quickly recognize the State of Charge for extended battery life.
- Very wide operating range of 80-275 V AC, 35-70 Hz.
- Compact, easy to connect and quick to install.



MASTER TIP

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

Specifications ChargeMaster Plus battery chargers



Product code	ChargeMaster Plus 12/75-3	ChargeMaster Plus 12/100-3	ChargeMaster Plus 24/40-3	ChargeMaster Plus 24/60-3
GENERAL SPECIFICATIONS				
Nominal output voltage (output 1 & 2)	12 V	12 V	24 V	24 V
Nominal output voltage (output 3)	12 V	12 V	24 V / 12 V	24 V / 12 V
Number of battery outlets	2 + 1	2 + 1	2 + 1	2 + 1
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
Output current output 3 <small>In case of current limiting, otherwise full output.</small>	5-40 A at 12 V	5-40 A at 12 V	5-20 A at 24 V 10 A at 12 V	5-20 A at 24 V 10 A at 12 V
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			
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
AC connection	screw terminals, suitable up to up to 6 mm ²	screw terminals, suitable up to up to 6 mm ²	screw terminals, suitable up to up to 6 mm ²	screw terminals, suitable up to up to 6 mm ²
Power supply mode	yes	yes	yes	yes
Display/read-out	LED	LED	LED	LED
Dimensions, hwxw	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			
Zertifizierungen	CE, E-mark, ABYC, UL1236, SAE J1171, CEC, RCM/C-Tick	CE, E-mark, ABYC, UL1236, SAE J1171, CEC, RCM/C-Tick	CE, E-mark, ABYC, UL1236, SAE J1171, CEC, RCM/C-Tick	CE, E-mark, ABYC, UL1236, SAE J1171, CEC, RCM/C-Tick
TECHNICAL SPECIFICATIONS				
Charge characteristic <small>Charge characteristic can be set to your requirements. See page 242 for default settings.</small>	IUoUo, automatic / 3-step+ for Gel/AGM/Lithium Ion/traction/spiral			
Temperature compensation	-30 mV/°C / -17 mV/°F temperature sensor included			
Voltage compensation	through MasterShunt	through MasterShunt	through MasterShunt	through MasterShunt
DC consumption	< 2 mA (MasterBus off)			
Current Control function	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
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	-25 °C to 80 °C, derating > 40 °C	-25 °C to 80 °C, derating > 40 °C	-25 °C to 80 °C, derating > 40 °C
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
Charger Status Interface (alarm contact)	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)	yes, using a Multipurpose Contact Output (product code 77030500)

OPTIONS	MasterView Read-out 77010050	option	option	option	option
		Remote panel for reading the charge status of your battery charger, including error notifications.			
	EasyView 5 77010310	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.			
	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	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.			
	MasterBus USB Interface 77030100	option	option	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	option	option	option	option
		MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), usable as CSI alarm contact.			

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
GENERAL SPECIFICATIONS		
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, hwxw	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
TECHNICAL SPECIFICATIONS		
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.

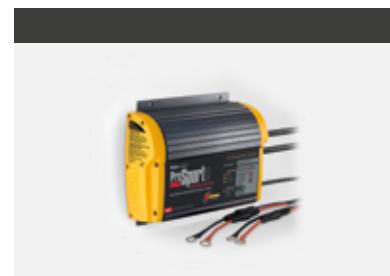
Users can quickly select between 6 V (ideal for toys, classic cars and motorcycles) and 12 V operation. The units include 1.8 m of DC cable that connects to either a 61 cm lead with ring terminals, or a 61 cm lead with alligator clips, for easy installation and a variety of applications; both leads are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

Specifications EasyCharge Portable battery chargers

	EasyCharge Portable 1.1A	EasyCharge Portable 4.3A
Product code	43510100	43510400
With UK plug	43510102	43510402
GENERAL SPECIFICATIONS		
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, hwxwd	152 x 63 x 35.5 mm 6 x 2.5 x 1.4 inch	161 x 72 x 34.7 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
TECHNICAL SPECIFICATIONS		
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, over voltage, current limited, over-temperature
MasterBus compatible	no	no

FEATURES

- Entry level model with Mastervolt 3-step+ charge characteristic.
- Suitable for any type of battery, including Lithium Ion (model 4.3 A).
- 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).

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™

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 V6 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 lightweight 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.