

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

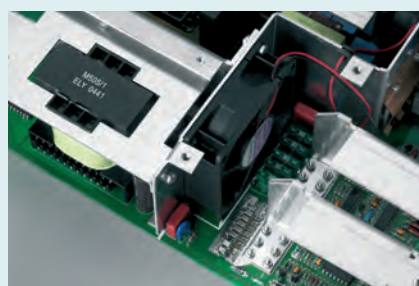
- Designed for the most difficult conditions.
- Lightweight, stainless steel, anodised aluminium casing.
- Coating of internal components prevents damage from damp or condensation to ensure a longer lifespan.
- Insensitive to electromagnetic effects from other devices.
- Suitable for every type of battery, 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 AND EXTENDED TECHNICAL BACKGROUND ON OUR PRODUCTS: 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









	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				
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, hxxwx	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 <i>Charge characteristic can be set to your requirements.</i>			
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

ACCESSORIES				
	MasterView Read-out 77010050	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
<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
<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
<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	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
	Temperature sensor 15m 41500800	option	option	option
MasterVision panels				
	C3-RS 70403040	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
<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

					
Mass 24/75	Mass 24/75 (120 V)	Mass 24/100	Mass 24/100-3ph	Mass 48/25	Mass 48/50
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.