

# Mass 24/50-2



Product code: 40020506



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.

### Powerful selling points

- 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 entirely empty 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 power supply of 24 and 48 V, even without batteries.
- The Current Control function allows you to reduce the battery charger power to prevent blowing the fuse, even when the voltage drops.
- Parallel switching possible using multiple battery chargers.
- Connections in accordance with CE, ABYC A-31 and IEC60945.
- Certified by RRR, RMRS (does not apply to 24/75 120 V).
- Certified by DNV GL (only 24/25, 24/50, 24/75, 24/75 (120 V), 24/100 models).
- Certified by Lloyd (only 24/75, 24/100 models).
- Type approval for application in safety zones A, B and C.

### 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 only available for Mass 24/25-2 DNV, Mass 24/50-2, Mass 24/75, Mass 24/75 (120 V), Mass 24/100 and Mass 24/100-3ph.

### Charging Lithium Ion batteries

Although Lithium Ion batteries are increasingly popular, there can be a lack of clarity when it comes to the charging process. This is not a problem with Mastervolt 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).

### MasterBus compatible

Mass 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.

# Specifications

## General specifications

Nominal output voltage	24 V
Total charge current	50 A at 28.5 V
Number of battery outlets	2
Charge current second output	3 A
Battery capacity range	100-500 Ah
Nominal input voltage	230 V (180-265 V), 50/60 Hz
Power supply mode	yes
Display/read-out	LED display
Dimensions, hxxwx	340 x 261 x 130 mm
	13.4 x 10.3 x 5.1 inch
Weight	4.6 kg
	10.1 lb
Approvals	CE, ABYC A-31, DNV-GL, RRR, RMRS

## Technical specifications

Charge characteristic	IUoUo, automatic 3-step+ for Gel/AGM/wet/Lithium Ion
Charge voltage Bulk	28.5 V
Charge voltage Absorption	28.5 V
Absorption time	4 hours
Charge voltage Float (wet batteries)	26.5 V
Charge voltage Float (Gel/AGM batteries)	27.6 V
Temperature sensor	yes (included)
DC voltage compensation	yes
Power consumption (DC side)	< 1 mA
Full load consumption (230 V AC)	1800 W
Current Control function	yes, through MasterBus
Power factor control	> 0.95
Temperature range (ambient temp.)	-25 °C to 80 °C, derating > 45 °C -13 to 176 °F
Cooling	vario fan
Protection degree	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage
MasterBus compatible	yes
Charger Status Interface (alarm contact)	yes