

# Mass 24/50-2



Product code: 40020506

# For the toughest tasks

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 280,000 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.

## Making the best even better

The reliability and long lifespan of Mastervolt's battery chargers have been established beyond doubt over the past 20 years. While the Mass products have evolved with the latest technological developments, the dimensions and connections have remained the same. As a result it is exceptionally easy to replace one unit with another with only negligible downtime.

## Mastervolt Green by Heart

As part of our constant search for eco-friendly and long-lasting solutions, Mastervolt has developed the Green by Heart programme. Its impact on the Mass battery chargers include:

- An exceptionally effective use of the consumed input current ( $\cos \phi$ ) > 0.98!
- Faster charging of batteries, even when the input current is limited.
- Use of top quality components with a long lifespan.
- Savings in weight and space.
- Fewer installation materials.

# Specifications

## General specifications

|                                      |  |
|--------------------------------------|--|
| Nom. output voltage                  | 24 V   |
| Total charge current                 | 50 A   |
| 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                  |
| Supplies your system without battery | yes  |
| Display/read-out                     | LED display                                  |
| Dimensions, hxxxd                    | 340 x 261 x 130 mm<br>13.4 x 10.3 x 5.1 inch |
| Weight                               | 4.6 kg<br>10.1 lb                            |
| Approvals                            | CE, ABYC A-31, RRR, RS                       |

## 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 compensation                 | -60 mV/ °C<br>-33 mV/ °F   |
| Voltage compensation                     | voltage drop compensation in DC cables up to 3 V                     |
| 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<br>-13 to 176 °F                   |
| Cooling                                  | vario fan  |
| Sound level                              | < 48 dBA at 1 mtr  |
| Protection degree                        | IP23   |
| CSI/DC alarm                             | integrated in the battery charger as standard                        |
| Safety protections                       | over temperature, over load, short circuit, high/low battery voltage |
| MasterBus compatible                     | yes  |