

# Mass Sine 12/2000 (230V/50Hz)



Product code: 24012000

## 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.

Mastervolt's Mass Sine inverters have been proving their value in the most extreme conditions for 30 years.

## 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.

## 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.

## Features

- For heavy duty work in professional and semiprofessional 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.
- MasterBus compatible.
- Suitable for mobile applications.
- Professional connections.
- Automatic, reliable and safe operation.
- Optional: Masterswitch/Systems switch for automatic selection of the desired energy source.

# Specifications

## General specifications

Output voltage ( $\pm 5\%$ )	230 V - 50 Hz ( $\pm 0.01$ Hz)
Output waveform	true sine
Nominal battery voltage	12 V
Recommended battery capacity	> 200 Ah
Continuous power at 40 °C / 104 °F, cos phi 1	1800 W
P30 power at 40 °C, cos phi 1	2000 W
Peak load	4000 W
AC connection	internal
Galvanic isolation	yes
Efficiency	92 %
Display/read-out	LED display
Dimensions, hxxwx	420 x 318 x 130 mm 16.5 x 12.5 x 5.1 inch
Weight	14.6 kg 32.2 lb
Compliance	CE, E-mark, ABYC A-31, RRR

## Technical specifications

Technology	HF switch mode
Low battery voltage, switches off at	10 V, $\pm 0.5$ V
Low battery voltage, switches on at	11 V, $\pm 0.5$ V
High battery voltage, switches off at	15.5 V, $\pm 0.5$ V
High battery voltage, switches on at	14.5 V, $\pm 0.5$ V
Max. ripple on DC (battery)	5% RMS
Input current (nominal load)	183 A
No-load power consumption (ON mode)	480 mA - 6 W
No-load power consumption (energy saving mode)	50 mA - 0.6 W
Minimal DC fuse (slow blow)	250 A
Minimal cable size	70 mm <sup>2</sup>
Harmonic distortion typical	< 5%
Cos phi	all power factors allowed
Transfer system	the Masterswitch and Systemswitch can be connected to all sine wave inverters
Temperature range (ambient temp.)	-25 °C to 80 °C, derating > 40 °C -13 to 176 °F
Cooling	natural/forced
Protection degree	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage
MasterBus compatible	yes, using a MasterBus Inverter Interface or AC power analyser