

Mass Combi 12/1600-60 (230 V)



Continuous power and peace of mind in all conditions

Mass Combi: charging, inverting and power support in one device

The Mastervolt Mass Combi combines the best of both worlds, with an advanced battery charger and silent inverter rolled into one compact device. It is ideal for most boats, from sloops to 16-metre yachts, as well as for heavy mobile applications. With two 48 V models added to Mastervolt's extensive range, the Mass Combi is now also applicable in 48 Volt systems.

Versatile power supply

One of the key reasons for the Mass Combi's popularity is its versatility in power supply. The starter and service batteries are charged quickly and completely, while the inverter provides silent and clean power. The Combi also has two separate AC outputs for light and heavy consumers. To prevent unnecessary depletion of the batteries, heavy consumers such as washing machines or air conditioning are only powered when mains voltage or a generator is available.

Modern technology

The design of the Mass Combi is both unique and characteristic of Mastervolt. Rather than installing heavy transformers, our lightweight, high-frequency technology offers major benefits regarding size, weight and sound (no hum!). The technology also ensures an exceptionally high efficiency with a minimal conversion loss and a low no-load consumption. The Mass Combi meets all your requirements and more!

Combined functionality

- Powerboost from battery when mains voltage is limited (mains/generator support).
- Charging two individual battery banks.
- Invert to 230 V/50 Hz pure sine wave voltage.
- Available in 12, 24 or 48 V version.
- Multiple distribution and switching systems.
- Parallel function; two parallel Combis for even more power.
- The Mass Combi is CE and E-mark certified (E-mark does not apply for Mass Combi 12/1600, 24/1800, 12/2200 & 24/2600).

Mass Combi in a MasterBus network

The Mass Combi fits seamlessly within a MasterBus system. All components can be easily connected, the system is simple and intuitive to use and requires far fewer cables for installation. One MasterView Easy touch screen panel controls the entire system, displays information about the Combi as well as the batteries (via the MasterShunt) and operates the generator. The system can also be combined with Mastervolt's decentralised Digital Switching system.

Specifications

General specifications

Display/read-out	LED display
Dimensions, hxwx d	371 x 318 x 143 mm 14.6 x 12.5 x 5.6 inches
Weight	11 kg 24.3 pounds
Approvals	CE, ABYC A-31

Technical specifications

Charge characteristic	IUoU, automatic 3-step+ for gel/AGM/wet/Lithium Ion
Max. current power output	50 A
Max. current shortbreak / inverter output	25 A
Transfer time	10 ms
Ground relay	yes, adjustable by DIP switch
Temperature range (ambient temp.)	-25 °C to 80 °C, derating > 25 °C -13 to 176 °F
Cooling	maintenance-free vario fans
Sound level	<= 48 dBA at 1 mtr
Protection degree	IP23
Protections	over temperature, over load, short circuit, high battery, low battery
MasterBus compatible	yes, in combination with a MasterBus Combi Interface

Specifications sine wave inverter

Nom. battery voltage	12 V (10-15 V)
Output waveform	true sine
Cont. power at 25 °C, cos phi 1	1600 W - 7 A
Surge capability	3000 W - 13 A
Parallel configuration	no
Parallel with grid/generator	yes
Output voltage (± 5%)	230 V - 50 Hz, ± 0.05% (60 Hz adjustable, ± 0.05%)
Efficiency	>= 90 %
DC consumption at 230 V	< 9 W
Search mode consumption	0.5 W

Specifications battery charger

Nom. input voltage	230 V (180-265 V) - 45-65 Hz
Max. charge current (adjustable)	60 A at 14.25 V
Primary AC consumption (full charge)	1035 W - 4.5 A

Charge voltage 25 °C (Absorption/Float)

14.25/13.25 V

Charge current second output

5 A

Temperature sensor battery

delivered as standard with 6 mtr cable and telejack plug