

Mass Combi



The comforts of home
any time, any place

Battery charger and inverter
in one compact device

True sine wave technology

12 and 24 V versions

120 and 230 VAC versions

MASTERVOLT
THE POWER TO BE INDEPENDENT



Continuous power and peace of mind

The Mastervolt Mass Combi combines the best of both worlds, with an advanced battery charger and silent inverter rolled into one compact device. Whatever type of boat you have: power, sail, trawler, etc., the Mass Combi is the ideal solution to provide all of the creature comforts of home or office. It is also ideal for mobile applications.

One of the key reasons for the Mass Combi's popularity is its versatility. The engine start and house batteries are charged quickly and efficiently, while the inverter provides silent and clean true sine wave power. When insufficient shore power is available, the Mass Combi battery provides a power boost so that you can continue using your onboard equipment.

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

- Inverter, battery charger and automatic transfer switch.
- Charging of up to two individual battery banks.
- True sine wave power: ideal for use with sensitive electronics, entertainment centers, televisions, etc.
- High surge rating to handle the inrush current of motor loads such as air conditioning when turned on.
- Multiple features for the marine environment including power sharing, power boosting, inverter or charger only, etc.
- Economy mode for low power consumption at no load.
- Parallel operation.

For more information

Please contact your local dealer or go to www.mastervolt.us/combis



Power boosting ability for limited shore power

Continue to use your onboard equipment even if shore power is restricted. The Mass Combi will ensure that the batteries automatically provide a power boost when shore power is too limited to meet the onboard demand.

Clean true sine wave power and a high surge rating provide the power you need

Whether you need clean power to run sensitive electronics, flat screen TV's, laptops or coffeemakers, microwave ovens and other comforts of home or high surge motor loads such as air conditioning, the Mass Combi will provide the clean constant true sine wave power you need. In addition, the Mass Combi's high surge rating, ensures that it will be able to handle the potential start up inrush currents of onboard motor loads such as air conditioning.



Intuitive operation

Each Mass Combi can be operated easily and intuitively. The Mass Combi includes LED indication of charging phase and charge current, the 120 V system load and 12 or 24 V system, 'yes/no' availability of 120 V and 'failure'. It features an on/off switch with a 'charge only' position when the boat is in storage. Mastervolt also offers a complete selection of control panels, ranging from the compact 3.5-inch touch screen MasterView Easy to a large 10.4-inch version.



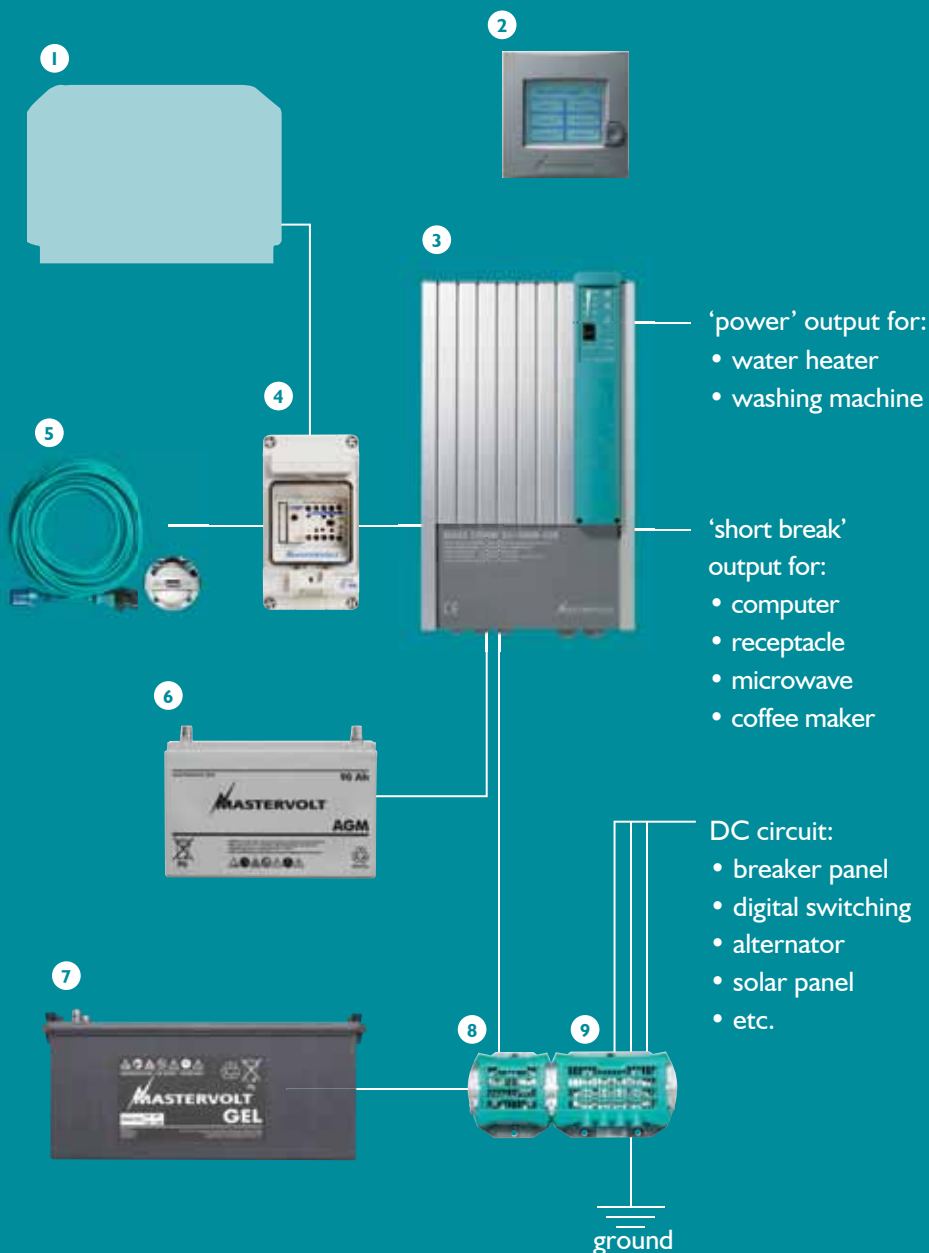
Save space, weight and battery power, easy to install

With its intelligent design including high frequency switch mode technology and an anodized aluminum housing, the Mass Combi is compact, lightweight and efficient. For instance, the 2500 Watt unit weighs only 24.3 lbs. Designed for the marine environment with multiple safety features, the Mass Combi has a very low amp draw when turned on and no load is present decreasing the drain on the batteries. Connection points are within easy reach and external mounting key hole slots allow speedy installation. Customizing a system is easily accomplished through MasterBus (see Mass Combi in a MasterBus System). Mass Combi inverter/chargers meet global industry standards including CE, ABYC and UL.

Mastervolt Mass Combi in a MasterBus system



The Mastervolt Mass Combi fits perfectly within a MasterBus system. The system allows all components to be connected easily, provides a simple and intuitive operation 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 decentralized Digital Switching system.



- 1 3.5 kW generator
- 2 MasterView Easy
- 3 Mass Combi
- 4 Masterswitch
- 5 Shore connection
- 6 AGM starter battery
- 7 MVG gel battery
- 8 MasterShunt
- 9 DC Distribution



Specifications 230 V Combi



12/1200-60



12/2000-100



12/2500-100



12/4000-200



24/1200-35

Part #	36011205	36012005	36012505	36014005	36021205
Dimensions, hwxwx in inch	14.6x12.5x5.6	19.5x12.5x6.1	19.5x12.5x6.1	19.5x12.5x11	14.6x12.5x5.6
Weight	17.2 lbs	24.3 lbs	24.3 lbs	46.3 lbs	17.2 lbs

SPECIFICATIONS SINE WAVE INVERTER

Nominal DC input voltage	12 V (10-15 V)	12 V (10-15 V)	12 V (10-15 V)	12 V (10-15 V)	24 V (20-31 V)
Continuous power @ 77 °F	1200 W - 5.3 A	2000 W - 8.7 A	2500 W - 10.9 A	3750 W - 16.5 A	1200 W - 5.3 A
Surge capability (5 sec, resistive)	2400 W - 10.5 A	4000 W - 17.5 A	5000 W - 21.8 A	7500 W - 32 A	2400 W - 10.5 A
Parallel use (to double the power)	no	yes	yes	no	no
Parallel with shore/generator (for more power)	yes	yes	yes	yes	yes
Max. efficiency	90%	90%	90%	90%	92%
No load consumption 230 V / stand-by	<9 W / 0.5 W	<9 W / 0.5 W	<9 W / 0.5 W	<9 W / 1 W	<9 W / 0.5 W

SPECIFICATIONS AUTOMATIC BATTERY CHARGER

Max. charge rate (adjustable)	60 A at 14.25 V	100 A at 14.25 V	100 A at 14.25 V	200 A at 14.25 V	35 A at 28.5 V
Charge voltage 25 °C (absorption/float)	14.25/13.25 V	14.25/13.25 V	14.25/13.25 V	14.25/13.25 V	28.5/26.5 V
Second charge output, 3-step	5 A	5 A	5 A	2x 5 A	5 A



24/2000-60



24/2500-60



24/4000-120



48/2500-35



48/5000-70

Part #	36022005	36022505	36024005	36042505	36045005
Dimensions, hwxwx in inch	19.5x12.5x6.1	19.5x12.5x6.1	19.5x12.5x11	19.5x12.5x6.1	19.5x12.5x11
Weight	24.3 lbs	24.3 lbs	46.3 lbs	24.3 lbs	46.3 lbs

SPECIFICATIONS SINE WAVE INVERTER

Nominal DC input voltage	24 V (20-31 V)	24 V (20-31 V)	24 V (20-31 V)	48 V (40-62 V)	48 V (40-62 V)
Continuous power @ 77 °F	2000 W - 8.7 A	2500 W - 10.9 A	3750 W - 16.5 A	2500 W - 10.9 A	5000 W
Surge capability (5 sec, resistive)	4000 W - 17.5 A	5000 W - 21.8 A	7500 W - 32 A	5000 W - 21.8 A	8000 W
Parallel use (to double the power)	yes	yes	no	yes	no
Parallel with shore/generator (for more power)	yes	yes	yes	yes	yes
Max. efficiency	93%	93%	93%	93%	93%
No load consumption 230 V / stand-by	<9 W / 0.5 W	<9 W / 0.5 W	<9 W / 1 W	<9 W / 0.5 W	<9 W / 1 W

SPECIFICATIONS AUTOMATIC BATTERY CHARGER

Max. charge rate (adjustable)	60 A at 28.5 V	60 A at 28.5 V	120 A at 28.5 V	35 A at 57 V	70 A at 57 V
Charge voltage 77 °F (absorption/float)	28.5/26.5 V	28.5/26.5 V	28.5/26.5 V	57/53 V	57/53 V
Second charge output, 3-step	5 A	5 A	2x 5 A	n.a.	n.a.

DOUBLE POLE TRANSFER SYSTEM

Max. current first output	50 A
Max. current shortbreak / inverter output	25 A

GENERAL SPECIFICATIONS

Output voltage sine wave inverter, adjustable	230 V, ±5%, 50/60 Hz
Nominal input voltage battery charger	230 V (180-265 V)
Battery type settings	open lead, gel, AGM, traction, spiral, Lithium Ion
Temperature sensor for the battery	delivered as standard with 6 mtr cable and telejack plug
Ground relay	yes, adjustable by DIP switch
Forced air cooling	maintenance free vario fans
Listings	fully CE and E-marking according Automotive Directive 95/54/EG, ABYC A-31
MasterBus compatible via	yes
MasterBus Combi Interface (part # 77030475)	yes

Specifications 120 V Combi



12/2500-100

12/4000-200

24/2500-60

24/4000-100

Part # 120 V/60 Hz	37012505	37014005	37022505	37024005
Dimensions, hxxwxd in inch	19.5x12.5x6.1	19.5x12.5x11	19.5x12.5x6.1	19.5x12.5x11
Weight	24.3 lbs	46.3 lbs	24.3 lbs	46.3 lbs

SPECIFICATIONS SINE WAVE INVERTER

Nominal DC input voltage	12 V (10-15 V)	12 V (10-15 V)	24 V (20-31 V)	24 V (20-31 V)
Continuous power @ 77 °F	2500 VA - 20.8 A	3750 VA - 31 A	2500 VA - 20.8 A	3750 VA - 31 A
Surge capability (5 sec, resistive)	5000 VA - 38 A	7500 VA - 62 A	5000 VA - 38 A	7500 VA - 62 A
Parallel use (to double the power)	yes	no	yes	no
Parallel with shore/generator (for more power)	yes	yes	yes	yes
Max. efficiency	90%	90%	93%	93%
No load consumption / stand-by	<9 W / 0.5 W	<9 W / 1 W	<9 W / 0.5 W	<9 W / 1 W

SPECIFICATIONS AUTOMATIC BATTERY CHARGER

Max. charge rate (adjustable)	100 A at 14.25 V	200 A at 14.25 V	60 A at 28.5 V	100 A at 28.5 V
Charge voltage 77 °F (absorption/float)	14.25/13.25 V	14.25/13.25 V	28.5/26.5 V	28.5/26.5 V
Second charge output, 3-step	5 A	2x 5 A	5 A	2x 5 A

DOUBLE POLE TRANSFER SYSTEM

Max. current first output	50 A		
Max. current shortbreak / inverter output	35 A	35 A	35 A
Transfer time	10 ms	10 ms	10 ms

GENERAL SPECIFICATIONS

Output voltage sine wave inverter, adjustable	120 V, ±5%, 60 Hz, ±0.0038% (50 Hz selectable, ±0.003%)
Nominal input voltage battery charger	120 V (90-135 V)
Battery type settings	wet cel / gel - AGM - spiral / traction / forced float
Temperature sensor for the battery	delivered as standard with 20 ft cable and telejack plug
Temperature range	according specifications: 32 to 77 °F, thereafter derating
Ground relay	yes
Forced air cooling	maintenance free vario fans
Listings	fully CE, ABYC A-31
MasterBus compatible via	yes
MasterBus Combi Interface (part # 77030475)	yes

- All Mass Combi inverter/chargers include the following safety features: over-current, short circuit, over temperature.
- All Mass Combi inverter/chargers meet the following global industry standards: CE, ABYC.

For more information plus an overview of our control panels, see www.mastervolt.us/combis