

Mass Combi 24/1800-35 MB (230 V)



Product code: 36021802

A Mastervolt Mass Combi offers best price/quality ratio. The exceptionally reliable Mass Combi series offers a lot of power at a highly competitive price. In addition, the four models are also available in two customer-friendly variations with remote control or MasterBus.

The powerful 3-step+ battery charger guarantees maximum battery life and can simultaneously charge two battery banks. The inverter with high peak power starts even the heaviest loads, with the Mass Combi 12/1600 being easily sufficient for your espresso machine. A built-in distribution system switches between grid and inverter power, while two separate AC outputs allow users to connect critical loads to a preferred group.

Grid connected solar power system with energy storage

The Mass Combi enables the expansion of a grid connected solar power system with energy storage in batteries. This way the majority of the generated energy is used, and users are less dependent on the electricity grid. In this setup, the Mass Combi is part of a MasterBus controlled system.

Benefits of the Mass Combi:

- Compact, lightweight and no hum thanks to HF technology.
- High yield and more power from your batteries.
- Intelligent 3-step+ battery charger with low DC ripple current for fast charging times and long battery life.
- Charges two individual battery banks simultaneously.
- Quiet, powerful inverter with 200 % peak power.
- Power Assist: prevents blown fuses.
- Pure sine wave energy prevents failures and damage to sensitive equipment such as adapters.
- Dual AC outputs to separate critical equipment from heavy loads.
- Higher yields possible via parallel switching (only for 2200 and 2600 W models).
- Professional connections ensure fast installation and operational security.
- CE approved and E-marking for mobile applications.

Maximise your convenience with a Mass Combi package deal

Combi deal with MasterBus (MB version)

To integrate the Mass Combi into a MasterBus system in a simple manner, Mastervolt can deliver all Mass Combi models in a MasterBus version. The relevant product code includes the Mass Combi model of your choice, complemented by a [MasterBus Combi interface](#) MasterBus Combi interface.

Combi deal with remote control (Remote version)

In addition, Mastervolt can provide all Mass Combi models in a Remote version so that the AC and DC power status can be monitored remotely. The relevant product code includes the Mass Combi model of your choice, plus an [ICC](#) ICC and an [APC](#) APC remote control panel.

Specifications

Specifications sine wave inverter

| | |
|--------------------------------------------------|--------------------------------------------------|
| Nominal DC voltage | 24 V (19-31 V) |
| Output voltage | 180-250 V (adjustable) 50/60 Hz ($\pm 0.05\%$) |
| Output waveform | true sine |
| Continuous power at 25 °C / 77 °F, $\cos \phi$ 1 | 1800 W |
| Max. peak load | 3000 W |
| Max. efficiency | $\geq 90\%$ |
| Max. ripple on DC (battery at full load) | $< 5\%$ |
| Energy saving mode consumption | 0,5 W |
| Parallel configuration | no |
| Synchronise with mains/generator | yes |
| DC consumption at 230 V | $< 9\text{ W}$ |

Specifications battery charger

| | |
|--------------------------------------|----------------------------|
| Input voltage range | 180-265 V |
| Max. charge current at 25 °C / 77 °F | 35 A at 28.5 V, adjustable |
| Primary AC consumption (full charge) | 5.2 A |
| Secondary charger output voltage | 24 V |
| Secondary charger output current | 5 A |
| No-load power consumption on AC | $< 15\text{ W}$ |
| Battery temperature sensor | yes, included |
| Battery voltage sense | automatic compensation |

Specifications transfer system

| | |
|--------------------------|---------------------------------------------|
| AC input 1 | 50 A (25 A switched, to short break output) |
| AC output 1 | 25 A (short break output) |
| AC output 2 | 50 A (power output) |
| AC input fuse | yes, resettable |
| Transfer speed | semi-seamless (10 ms typical) |
| Transfer voltage range | 180-265 V |
| Transfer frequency range | 45-65 Hz |

General specifications

| | |
|---------------------|----------------------------------------------|
| Display/read-out | LED display |
| Dimensions, hxxwx d | 371 x 318 x 143 mm 14.6 x 12.5 x 5.6 inch |
| Weight | 7.8 kg 17.2 lb |
| Delivered with | MasterBus Combi Interface |
| Compliance | CE, ABYC, E4, RMRS |

Technical specifications

| | |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Charge characteristic | IUoUo, automatic / 3-step+ for Gel/AGM/MLI/ flooded/spiral/traction |
| Max. current power output | 50 A |
| Max. current shortbreak / inverter output | 25 A |
| Recommended battery capacity | $\sim 70\text{-}210\text{ Ah}$ (based on gel batteries, may differ for other types) |
| Ground relay | yes, configurable |
| Temperature range (ambient temp.) | $-25\text{ }^{\circ}\text{C}$ to $60\text{ }^{\circ}\text{C}$, derating $> 25\text{ }^{\circ}\text{C}$ -13 to $140\text{ }^{\circ}\text{F}$ |
| Cooling | maintenance-free vario fans |
| Protection degree | IP23 (vertical mounting) |
| Safety class | IEC protection class I |
| Humidity protection | conformal coating, max. 95 % relative humidity, non condensing |
| Protections | over temperature, over load, short circuit, high/low battery voltage |
| Power Assist | yes |
| MasterBus compatible | yes |