# CombiMaster 24/2000-60 (120 V)


Product code: 35522000

MASTERVOLT
THE POWER TO BE INDEPENDENT

Designed with the customer in mind and using the latest technology, the CombiMaster range is all about user-friendliness and reliability. But don't let that friendly appearance misguide you: the powerful CombiMaster range drives even the heaviest and most sensitive loads with ease!

With the CombiMaster, power dips and failures belong to the past. The automatic AC transfer system switches between generator or mains and inverter output, ensuring a constant power supply. Its *Power Assist* function prevents tripping of the mains fuse in case you're connected to a weak land line or small generator.

The CombiMaster range delivers unmatched performance and value for money. As you would expect from Mastervolt, the CombiMaster is completed with MasterBus, CZone and NMEA 2000 compatible communication, allowing for a broad range of monitoring and system integration options.

## Features

- Most compact and lightweight Combi in its class.
- Reliable, hum-free and longer operation from your batteries.
- Starts even the heaviest and most sensitive loads.
- Intelligent 3-step+ battery charger for faster and safer charging.
- Automatic switching between mains and inverter mode.
- Power Assist prevents blown mains fuses.
- Generator compatible.
- Integrated CZone*, MasterBus and NMEA 2000 communication.
- Quick installation with heavy duty connections.
- E-mark certified.

## Remote Control and Monitoring options

- MasterBus compatible via SmartRemote or EasyView 5 display.
- CZone* / NMEA 2000 compatible via Touch 5 or Touch 10 display.
- NMEA 2000 compatible via 3rd party multifunctional display.

(*) Full CZone compatibility expected September 2019.

# Specifications

## Specifications sine wave inverter

| | |
|---|---|
| Nominal DC voltage | 24 V (20.4-32 V) |
| Output voltage | 120 V |
| Output frequency | 60/50 Hz (configurable) |
| Output waveform | true sine |
| Continuous power at 40 °C / 104 °F, cos phi 1 | 2000 W |
| Peak power (30 sec) | 3000 W |
| Surge power (5 sec) | 4000 W |
| Max. efficiency | 93 % |
| Battery no-load power consumption | 25 W (on mode) / < 1 mA (off mode) |
| Energy saving mode consumption | 10 W |
| Synchronise with mains | yes |

## Specifications battery charger

| | |
|---|---|
| Input voltage range | 90-140 V |
| Max. input current | 21 A (adjustable) |
| Max. charge current at 40 °C / 104 °F | 60 A at 28.5 V (configurable) |
| Battery temperature sensor | yes, included |
| Battery voltage sense | automatic compensation |

## Specifications transfer system

| | |
|---|---|
| AC input | 30 A (switched) |
| AC output | 47 A |
| AC input fuse | yes |
| Transfer speed | 10 ms |
| Transfer voltage range | wide: 70-140 V / narrow: 90-140V |
| Transfer frequency range | 40-65 Hz |

## General specifications

| | |
|---|---|
| Display/read-out | LED display |
| Dimensions, hxwxd | 448 x 284 x 155 mm<br>17.6 x 11.2 x 6.1 inch |
| Weight | 9.3 kg<br>20.5 lb |
| Approvals | ABYC A31, UL1236, UL1741, SAEJ1171 |

## Technical specifications

| | |
|---|---|
| Charge characteristic | UoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable |
| Recommended battery capacity | 120-320 Ah (based on gel batteries, may differ for other types) |
| Ground relay | yes, configurable by means of mechanical jumper |
| Temperature range (ambient temp.) | -25 °C to 60 °C, derating > 40 °C<br>-13 to 140 °F |
| Cooling | vario fan |
| Protection degree | IP23 (vertical mounting) |
| Safety class | IEC protection class I |
| Humidity protection | conformal coating, max. 95 % relative humidity, non condensing |
| Protections | over-temperature, overload, short circuit, high/low battery voltage |
| Power Assist | yes, supports AC input with power from the battery |
| Power Sharing | yes, allows you to select AC Input fuse setting |
| MasterBus compatible | yes |
| CZone / NMEA 2000 compatible | yes, pending (expected September 2019) |