

# CombiMaster 24/3500-100 (120 V)



Product code: 35523500

## Unmatched performance at an unprecedented price

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.

## 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.

## Parallel and Split-phase operation

The CombiMaster 3500/4500/5000 functionality goes beyond stand-alone operation, the design also allows parallel and split phase configurations for larger applications up to 35 kW.

## 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.

# 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	3500 W
Peak power (30 sec)	5250 W
Surge power (5 sec)	7000 W
Max. efficiency	93 %
Battery no-load power consumption	47 W (on mode) / < 1 mA (off mode)
Energy saving mode consumption	25 W
Synchronise with mains	yes

## Specifications battery charger

Input voltage range	90-140 V
Max. input current	32 A (adjustable)
Max. charge current at 40 °C / 104 °F	100 A at 28.5 V (configurable)
Battery temperature sensor	yes, included
Battery voltage sense	automatic compensation

## Specifications transfer system

AC input	50 A (switched) max
AC output	85 max A
AC input fuse	Yes
Transfer speed	10 ms
Transfer voltage range	90-140V
Transfer frequency range	40-65 Hz

## General specifications

Galvanic isolation	yes
Display/read-out	LED display
Dimensions, hxxwxd	568 x 359 x 170 mm 22.4 x 14.1 x 6.7 inch
Weight	17 kg 37.5 lb
Compliance	ABYC A31, UL1236, UL1741, SAEJ1171

## Technical specifications

Charge characteristic	UoUo, automatic / 3-step+ for flooded, Gel/AGM and MLI, configurable
Recommended battery capacity	200-1000 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 above 40°C, shutdown above 60°C °C -13 to 32 °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