AC Master 12/500 IEC (230 V)

Product code: 28010502

MASTERVOLT
THE POWER TO BE INDEPENDENT

Reliable AC power for recreational and semi-professional use

These affordable sine wave inverters convert 12 or 24 V battery voltage into reliable 230 V 50/60 Hz or 120 V 50/60 Hz grid power, making them ideal for recreational and semi-professional applications. The AC Master series is easy to install and delivers full output, even under the most demanding conditions. The pure sine wave technology provides an outstanding power quality, ensuring the correct functioning of sensitive equipment. The usage of high frequency switching technology eliminates any annoying humming and buzzing sounds.

Representing complete value for money, these ruggedly built inverters provide essential home comforts when you're far from the nearest grid connection.

Features

- Pure sine wave technology protects sensitive equipment.
- Delivers full output at high peak power under the most demanding conditions.
- Automatic power saving system for extended runtime.
- Easy to install: convenient IEC socket with IEC plug included.
- Reliable and safe operation; protected against over-temperature, overload, short circuit, high or low battery voltage.

Applications

Both recreational and semi-professional use, where grid power varies or is unavailable. Applications include lighting, appliances, electric cooking and power tools. For (mobile) applications in your home, office or service vehicle, or during your holidays.

Specifications

General specifications

Output voltage	230 V - 50 Hz (± 0.1%)
Output waveform	true sine
Nominal battery voltage	12 V
Recommended battery capacity	>= 100 Ah
Continuous power at 25 °C / 77 °F, cos phi 1	500 W
Continuous power at 40 °C / 104 °F, cos phi 1	400 W
Peak load (5 s)	800 W
AC connection	universal
Galvanic isolation	yes
Efficiency	90 %
Display/read-out	LED display
Alarms	4 alarm modes
Dimensions, hxwxd	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch
Weight	1.22 kg 2.7 lb
Approvals	CE, E-mark, ABYC A-31

Technical specifications

Technology	high frequency, input & output fully isolated
Low battery voltage, switches off at	10 V, ± 0.5 V
Low battery voltage, switches on at	11 V, ± 0.5 V
High battery voltage, switches off at	16 V, ± 0.5 V
High battery voltage, switches on at	14.5 V, ± 0.5 V
Max. ripple on DC (battery)	10 % RMS
Input current (nominal load)	37.5 A
No-load power consumption (ON mode)	0.58 A - 7 W
No-load power consumption (energy saving mode)	0.33 A - 4 W
Minimal DC fuse (slow blow)	2x 40 A
Minimal cable size	1.5 mtr DC cable delivered as standard
Harmonic distortion typical	< 6 %
Cos phi	all power factors allowed
Temperature range (ambient temp.)	-20 °C to 40 °C, derating power > 40 °C -4 to 104 °F
Cooling	natural/forced
Switch off at (auto recover after cooling down)	50 °C 122 °F
Protection degree	IP23, vertical wall mounting
Protections	over temperature, over load, short circuit, high/low battery voltage
MasterBus compatible	no