

Mass Combi Pro 24/3500-100 (230 V)



Product code: 38523500

The Mass Combi Pro series consists of two models, ranging in 3000 and 3500 watt. For higher capacities up to 40 kW the Combi Pro can be used in parallel or 3-phase configurations.

The Mass Combi Pro is equipped with the latest technologies. The new 'V6' inverter technology ensures a uniquely low stand-by use, while an ultra-fast Digital Signal Processor guarantees seamless switching between all available energy sources. Power Assist prevents power dips and failures, even with a weak electricity connection or small generator. Moreover, all Mass Combi Pro models are equipped with MasterBus.

'Pro' models

For professional applications, Mastervolt offers a 'Pro' model, featuring all Ultra functions, but without the solar input and secondary battery charger.

Quiet operation

The Combi Pro can provide up to 50 % of the charging current or inverter capacity without fan cooling. This is perfect for night-time operation; if little power is consumed, the fan stops turning and goes silent. When maximum capacity is required, or the ambient temperature is very high, the Active Optima Cooling concept regulates the fan speed in a linear way, ensuring that it never spins too fast or makes any unnecessary ticking noises.

Exceptional performance

The inverter is quiet, clean and efficient, and offers the full capacity even in extreme ambient temperatures. Pure sine wave energy and a peak capacity of 200 % guarantee a problem-free start, even for the heaviest loads.

Optimal battery use

The powerful battery charger provides a full charge current in ambient temperatures up to 40 °C. Meticulous load properties and a low ripple current guarantee a long battery life.

Specifications

Specifications sine wave inverter

Nominal DC voltage	24 V (19-32 V)
Output voltage	230 V ($\pm 2\%$), adjustable 180-260 V
Output frequency	50/60 Hz ($\pm 0.005\%$), configurable
Output waveform	true sine, Thd < 1 % under standard conditions
Continuous power at 40 °C / 104 °F, cos phi 1	3500 W
Max. peak load	7000 W
Max. efficiency	$\geq 92\%$
Max. ripple on DC (battery at full load)	< 5 %
No-load power consumption on DC (ON/inverter OFF/OFF/energy saving)	16 W / 4 W / 0 W / 7 W
Parallel configuration	yes, up to 10 standard
3-Phase configuration	yes, up to 3x3
Synchronise with mains/generator	yes

Specifications battery charger

Input voltage range	184-275 V
Max. input current	16 A
Max. charge current at 40 °C / 104 °F	100 A at 28.5 V, adjustable
Battery temperature sensor	yes, included
Battery voltage sense	through MasterShunt, otherwise automatic compensation

Specifications transfer system

AC input 1	50 A (generator only, switched)
AC input 2	30 A (mains only, switched)
AC output 1	67 A
AC output 2	50 A (switched)
AC input fuse	no
Transfer speed	seamless (< 1 ms)
Transfer voltage range	184-275 V, adjustable
Transfer frequency range	35-68 Hz, adjustable

General specifications

Display/read-out	LED display
Dimensions, hxxwx d	472 x 318 x 178 mm 18.6 x 12.5 x 7.0 inch
Weight	15.3 kg 33.7 lb
Approvals	CE, ABYC

Technical specifications

Charge characteristic	3-step+ (IUoUo, fully automatic)
Battery types	AGM/gel/MLI/flooded/spiral/traction
Recommended battery capacity	~ 200-600 Ah (based on gel batteries, may differ for other types)
Ground relay	yes, configurable
Temperature range (ambient temp.)	-25 °C to 60 °C, derating > 40 °C -13 to 140 °F
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
Cooling	maintenance free vario fans
Power Assist	yes
MasterBus compatible	yes