

# Overview of AC Master & Mass Sine sine wave inverters

|                                                                                                                                                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                         |  |  |  |  |  |  |  |  |                                                         |                                                         |                                                         |
| Article no. 230 V                                                                                                                                                                       | 12/200 AC Master                                                                    | 12/350 AC Master                                                                    | 12/800 Mass Sine                                                                    | 12/1200 Mass Sine                                                                   | 12/2000 Mass Sine                                                                   | 24/200 AC Master                                                                  | 24/350 AC Master                                                                  | 24/800 Mass Sine                                                                  | 24/1500 Mass Sine                                                                                                                        | 24/2500* Mass Sine                                                                                                                       | 24/5000 Mass Sine                                                                                                                        |
| Article no. 120 V**                                                                                                                                                                     | n.a.                                                                                | 28010200                                                                            | 28010350                                                                            | 28520350                                                                            | 24010800                                                                            | 24011200                                                                          | 24012000                                                                          | 28020200                                                                          | 28020350                                                                                                                                 | 24020800                                                                                                                                 | 24022500                                                                                                                                 |
| GENERAL SPECIFICATIONS                                                                                                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| Nominal battery voltage                                                                                                                                                                 | 12 V                                                                                | 12 V                                                                                | 12 V                                                                                | 12 V                                                                                | 12 V                                                                                | 12 V                                                                              | 24 V                                                                              | 24 V                                                                              | 24 V                                                                                                                                     | 24 V                                                                                                                                     | 24 V                                                                                                                                     |
| P30 power Tamb= 25°C, cos phi 1                                                                                                                                                         | 200 VA                                                                              | 350 VA                                                                              | 800 VA                                                                              | 1200 VA                                                                             | 2000 VA                                                                             | 200 VA                                                                            | 350 VA                                                                            | 800 VA                                                                            | 1500 VA                                                                                                                                  | 2500 VA                                                                                                                                  | 5000 VA                                                                                                                                  |
| Nom. power Tamb= 40°C, cos phi 1                                                                                                                                                        | 200 VA                                                                              | 350 VA                                                                              | 650 VA                                                                              | 1000 VA                                                                             | 1800 VA                                                                             | 200 VA                                                                            | 350 VA                                                                            | 650 VA                                                                            | 1200 VA                                                                                                                                  | 2000 VA                                                                                                                                  | 4000 VA                                                                                                                                  |
| Maximal peak load                                                                                                                                                                       | 400 VA                                                                              | 700 VA                                                                              | 1600 VA                                                                             | 2400 VA                                                                             | 4000 VA                                                                             | 400 VA                                                                            | 700 VA                                                                            | 1600 VA                                                                           | 2900 VA                                                                                                                                  | 5000 VA                                                                                                                                  | 10000 VA                                                                                                                                 |
| Output waveform                                                                                                                                                                         | true sine                                                                           | true sine                                                                           | true sine                                                                           | true sine                                                                           | true sine                                                                           | true sine                                                                         | true sine                                                                         | true sine                                                                         | true sine                                                                                                                                | true sine                                                                                                                                | true sine                                                                                                                                |
| Max. efficiency                                                                                                                                                                         | 90%                                                                                 | 86%                                                                                 | 92%                                                                                 | 92%                                                                                 | 92%                                                                                 | 93%                                                                               | 89%                                                                               | 92%                                                                               | 92%                                                                                                                                      | 92%                                                                                                                                      | 90%                                                                                                                                      |
| Output voltage**                                                                                                                                                                        | 230 V ± 5%                                                                          | 230 V ± 5%                                                                          | 230 V ± 5%                                                                          | 230 V ± 5%                                                                          | 230 V ± 5%                                                                          | 230 V ± 5%                                                                        | 230 V ± 5%                                                                        | 230 V ± 5%                                                                        | 230 V ± 5%                                                                                                                               | 230 V ± 5%                                                                                                                               | 230 V ± 5%                                                                                                                               |
| Frequency                                                                                                                                                                               | 50/60 Hz, ± 0.03 Hz                                                                 | 50/60 Hz, ± 0.03 Hz                                                                 | 50 Hz, ± 0.05 Hz                                                                    | 50 Hz, ± 0.05 Hz                                                                    | 50 Hz, ± 0.05 Hz                                                                    | 50/60 Hz, ± 0.03 Hz                                                               | 50/60 Hz, ± 0.03 Hz                                                               | 50 Hz, ± 0.05 Hz                                                                  | 50 Hz, ± 0.05 Hz                                                                                                                         | 50/60 Hz, ± 0.05 Hz                                                                                                                      | 50/60 Hz, ± 0.05 Hz                                                                                                                      |
| Dimensions, hwxwx.d. in mm                                                                                                                                                              | 74x152x242                                                                          | 74x152x242                                                                          | 325x220x111                                                                         | 340x261x130                                                                         | 420x318x130                                                                         | 74x152x242                                                                        | 74x152x242                                                                        | 325x220x111                                                                       | 340x261x130                                                                                                                              | 420x318x130                                                                                                                              | 475.5x318x254                                                                                                                            |
| Weight                                                                                                                                                                                  | 1.65 kg                                                                             | 1.85 kg                                                                             | 3.9 kg                                                                              | 6 kg                                                                                | 9.4 kg                                                                              | 1.65 kg                                                                           | 1.85 kg                                                                           | 3.9 kg                                                                            | 6 kg                                                                                                                                     | 9.7 kg                                                                                                                                   | 19 kg                                                                                                                                    |
| Minimum battery capacity                                                                                                                                                                | >50 Ah                                                                              | >80 Ah                                                                              | >100 Ah                                                                             | >150 Ah                                                                             | >200 Ah                                                                             | >25 Ah                                                                            | >40 Ah                                                                            | >50 Ah                                                                            | >150 Ah                                                                                                                                  | >200 Ah                                                                                                                                  | >400 Ah                                                                                                                                  |
| OPTIONS                                                                                                                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| Model C4-RI (art. no. 70404110)                                                                                                                                                         | n.a.                                                                                | n.a.                                                                                | remote control on/off for Mass sine wave inverter .....                             | n.a.                                                                                | n.a.                                                                                | n.a.                                                                              | n.a.                                                                              | n.a.                                                                              | remote control on/off for Mass sine wave inverter .....                                                                                  | remote control on/off for Mass sine wave inverter .....                                                                                  | remote control on/off for Mass sine wave inverter .....                                                                                  |
| Masterlink/MICC (art. no. 70403105)                                                                                                                                                     | n.a.                                                                                | n.a.                                                                                | remote control for Mass Sine inverter and battery charger or Mass Combi             | n.a.                                                                                | n.a.                                                                                | n.a.                                                                              | n.a.                                                                              | n.a.                                                                              | battery consumption meter, 12/24 V DC with LCD readout and remote control for Mass Sine inverter and battery charger or Mass Combi       | battery consumption meter, 12/24 V DC with LCD readout and remote control for Mass Sine inverter and battery charger or Mass Combi       | battery consumption meter, 12/24 V DC with LCD readout and remote control for Mass Sine inverter and battery charger or Mass Combi       |
| System Manager MICC (art. no. 70400115)                                                                                                                                                 | n.a.                                                                                | n.a.                                                                                | remote control for Mass Sine inverter and Mass charger                              | n.a.                                                                                | n.a.                                                                                | n.a.                                                                              | n.a.                                                                              | n.a.                                                                              | battery consumption meter, 12/24 V DC with LCD readout and LED bar. Comprehensive remote control for Mass Sine inverter and Mass charger | battery consumption meter, 12/24 V DC with LCD readout and LED bar. Comprehensive remote control for Mass Sine inverter and Mass charger | battery consumption meter, 12/24 V DC with LCD readout and LED bar. Comprehensive remote control for Mass Sine inverter and Mass charger |
| Universal connection cables for the remote controls (please state when ordering): • 6 metre - art. no. 6502001030 / • 10 metre - art. no. 6502100100 / • 15 metre - art. no. 6502100150 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| Transfer system .....                                                                                                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| TECHNICAL SPECIFICATIONS                                                                                                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| Technology                                                                                                                                                                              | HF                                                                                  | HF                                                                                  | HF                                                                                  | HF                                                                                  | HF                                                                                  | HF                                                                                | HF                                                                                | HF                                                                                | HF                                                                                                                                       | HF                                                                                                                                       | HF                                                                                                                                       |
| Switch off voltage low battery                                                                                                                                                          | 10.3V, ±0.5V                                                                        | 10.3V, ±0.5V                                                                        | 10.5V, ±0.5V                                                                        | 10V, ±0.5V                                                                          | 10V, ±0.5V                                                                          | 20.6V, ±0.5V                                                                      | 20.6V, ±0.5V                                                                      | 19V, ±0.5V                                                                        | 19V, ±0.5V                                                                                                                               | 19V, ±0.5V                                                                                                                               | 19V, ±0.5V                                                                                                                               |
| Switch on voltage low battery                                                                                                                                                           | 12.3V, ±0.5V                                                                        | 12.3V, ±0.5V                                                                        | 12.3V, ±0.5V                                                                        | 11V, ±0.5V                                                                          | 11V, ±0.5V                                                                          | 24.6V, ±0.5V                                                                      | 24.6V, ±0.5V                                                                      | 22 V, ±0.5V                                                                       | 22 V, ±0.5V                                                                                                                              | 22 V, ±0.5V                                                                                                                              | 22 V, ±0.5V                                                                                                                              |
| Switch off voltage high battery                                                                                                                                                         | 15.3V, ±0.5V                                                                        | 15.3V, ±0.5V                                                                        | 15.3V, ±0.5V                                                                        | 15.5V, ±0.5V                                                                        | 15.5V, ±0.5V                                                                        | 30.6V, ±0.5V                                                                      | 30.6V, ±0.5V                                                                      | 31V, ±0.5V                                                                        | 33V, ±0.5V                                                                                                                               | 33V, ±0.5V                                                                                                                               | 33V, ±0.5V                                                                                                                               |
| Switch on voltage high battery                                                                                                                                                          | 14.6V, ±0.5V                                                                        | 14.6V, ±0.5V                                                                        | 14.5V, ±0.5V                                                                        | 14.5V, ±0.5V                                                                        | 14.5V, ±0.5V                                                                        | 29.2 V, ±0.5V                                                                     | 29.2 V, ±0.5V                                                                     | 30V, ±0.5V                                                                        | 31V, ±0.5V                                                                                                                               | 31V, ±0.5V                                                                                                                               | 31V, ±0.5V                                                                                                                               |
| Max. allowable ripple on DC                                                                                                                                                             | 5% RMS                                                                              | 5% RMS                                                                              | 5% RMS                                                                              | 5% RMS                                                                              | 5% RMS                                                                              | 5% RMS                                                                            | 5% RMS                                                                            | 5% RMS                                                                            | 5% RMS                                                                                                                                   | 5% RMS                                                                                                                                   | 5% RMS                                                                                                                                   |
| Input current (nominal load)                                                                                                                                                            | 23A                                                                                 | 38A                                                                                 | 38A                                                                                 | 42A                                                                                 | 68A                                                                                 | 15A                                                                               | 25A                                                                               | 34A                                                                               | 70A                                                                                                                                      | 120A                                                                                                                                     | 240A                                                                                                                                     |
| No load power consumption:                                                                                                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
| • off mode                                                                                                                                                                              | 0 mA                                                                                | 0 mA                                                                                | 0 mA                                                                                | 0 mA                                                                                | 0 mA                                                                                | 0 mA                                                                              | 0 mA                                                                              | 0 mA                                                                              | 0 mA                                                                                                                                     | 0 mA                                                                                                                                     | 0 mA                                                                                                                                     |
| • stand-by mode                                                                                                                                                                         | n.a.                                                                                | n.a.                                                                                | 65mA/0.8W                                                                           | 43mA/0.5W                                                                           | 50mA/0.6W                                                                           | n.a.                                                                              | n.a.                                                                              | 35mA/0.8W                                                                         | 25mA/0.6W                                                                                                                                | 25mA/0.8W                                                                                                                                | n.x.t.                                                                                                                                   |
| • 'low energy' mode (208 V)                                                                                                                                                             | n.a.                                                                                | n.a.                                                                                | 410mA/4.9W                                                                          | 420mA/4.5W                                                                          | 420mA/4.5W                                                                          | n.a.                                                                              | n.a.                                                                              | 180mA/4.5W                                                                        | 225mA/4.5W                                                                                                                               | 225mA/5.4W                                                                                                                               | n.x.t.                                                                                                                                   |
| • 'high power' mode (230 V)                                                                                                                                                             | 0.8A/9.6W                                                                           | 0.8A/9.6W                                                                           | 470mA/5.6W                                                                          | 450mA/5W                                                                            | 480mA/6W                                                                            | 1.4A/16.8W                                                                        | 0.5A/13W                                                                          | 240mA/5.6W                                                                        | 200mA/5W                                                                                                                                 | 250mA/6W                                                                                                                                 | 250mA/6W                                                                                                                                 |
| DC fuse required (slow blow)                                                                                                                                                            | 30A                                                                                 | 40A                                                                                 | 100A                                                                                | 120A                                                                                | 240A                                                                                | 160A                                                                              | 20A                                                                               | 63A                                                                               | 100A                                                                                                                                     | 160A                                                                                                                                     | 2x160A                                                                                                                                   |
| Minimum DC cable size                                                                                                                                                                   | supplied                                                                            | supplied                                                                            | supplied                                                                            | 16 mm²                                                                              | 25 mm²                                                                              | supplied                                                                          | supplied                                                                          | 16 mm²                                                                            | 25 mm²                                                                                                                                   | 50 mm²                                                                                                                                   | 2x 50 mm²                                                                                                                                |
| Harmonic distortion typical                                                                                                                                                             | 3%                                                                                  | 3%                                                                                  | 3%                                                                                  | 3%                                                                                  | 3%                                                                                  | 3%                                                                                | 3%                                                                                | 3%                                                                                | 3%                                                                                                                                       | 3%                                                                                                                                       | 3%                                                                                                                                       |
| AC connection (single phase, 3-wire)                                                                                                                                                    | CEE-7/7***                                                                          | CEE-7/7****                                                                         | internal                                                                            | internal                                                                            | internal                                                                            | CEE-7/7****                                                                       | CEE-7/7****                                                                       | internal                                                                          | internal                                                                                                                                 | internal                                                                                                                                 | internal                                                                                                                                 |
| Cos Phi                                                                                                                                                                                 | .....                                                                               | .....                                                                               | .....                                                                               | .....                                                                               | .....                                                                               | all power factors allowed                                                         | all power factors allowed                                                         | .....                                                                             | .....                                                                                                                                    | .....                                                                                                                                    | .....                                                                                                                                    |

\* Also available for 48 V, art. no. 48/500: 24040500 / art. no. 48/2500: 24042500.

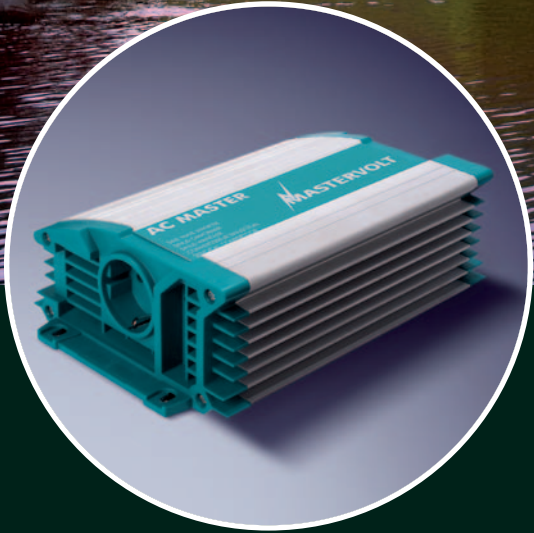
\*\* 15% load reduction for the 120 V/60 Hz models.

\*\*\* 120 V models: 120 Volt, ± 5%.

\*\*\*\* The 120 V models are standard equipped with an US/NEMA5-15 AC connection. IEC320 or hardwiring optional.



THE POWER TO BE INDEPENDENT



Sine wave inverters:  
from battery to 230 V outlet

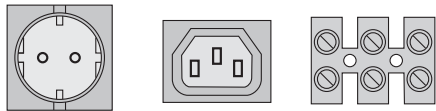
There are times on the road or at your destination when all you need is a normal outlet with 230 V/50 Hz power. The AC Master inverter offers you the easiest possible solution. A connection to your vehicle battery converts the 12 or 24 V battery voltage to 230 V/50 Hz electricity without any hassle. The tiny device offers tailored power from 200 to 1200 W, and is fully Plug and Play: From now on, you can use practically any device with a plug in the same way you would at home, wherever you are.

Models for 12 V and 24 V batteries

- 230 V/50 Hz output.
- Also available with an output of 120 V/ 60 Hz.
- Capacity range from 200 to 1200 W.

Easy to integrate

- Instantly integrates into existing systems.
- Your vehicle engine charges the battery.
- In larger systems, the battery can be charged by timely connection to the grid or solar power. Ask your Mastervolt representative about this solution.



Several different versions

- 230 V/50 Hz outlet for standard West European plugs.
- 120 V/60 Hz with outlets for US plugs.
- Fixed connection for semi-professional applications such as delivery vans.



Longer-lasting battery power

Advanced high-frequency technology allows the AC Master to make the most of the electricity from the battery. You can rest easy knowing that you have to charge less often yet still enjoy more power.



Clear reception and high-quality picture

The AC Master is perfectly suited to premium TFT screens. The pure sine wave voltage results in clear sound and a longer life for your equipment.



PC Power

Laptops and small desktop PCs work superbly with the AC Master. Do ensure that you choose a version with the right capacity.



Charging wireless equipment

Batteries small and large must be charged regularly. And it's especially important to remember this in places where no mains power is available. The AC Master provides the solution.



All home appliances work smoothly

If you would like to use a blow-drier or curling iron, the 700 or 1200 Watt AC Master provides the necessary power.



Warmly recommended for meals

The AC Master 1200 supplies just the right power to heat up a meal in the microwave. Need to keep other equipment on at the same time? Check also the Mass Sine inverters.

Order the complete Mastervolt Mobile Powerbook 2007

The brand-new Mastervolt Mobile Powerbook 2007 will be published soon. This fully updated and comprehensive product catalogue offers you a wealth of information on all Mastervolt products. Also included are full specifications, the latest introductions and a wide variety of suggestions for your system. As a visitor to The Commercial Vehicle Show, you can order the Mobile Powerbook 2007 free of charge by filling in the coupon and be in the running for **winning one of the 10 iPods!**

