

# Master series



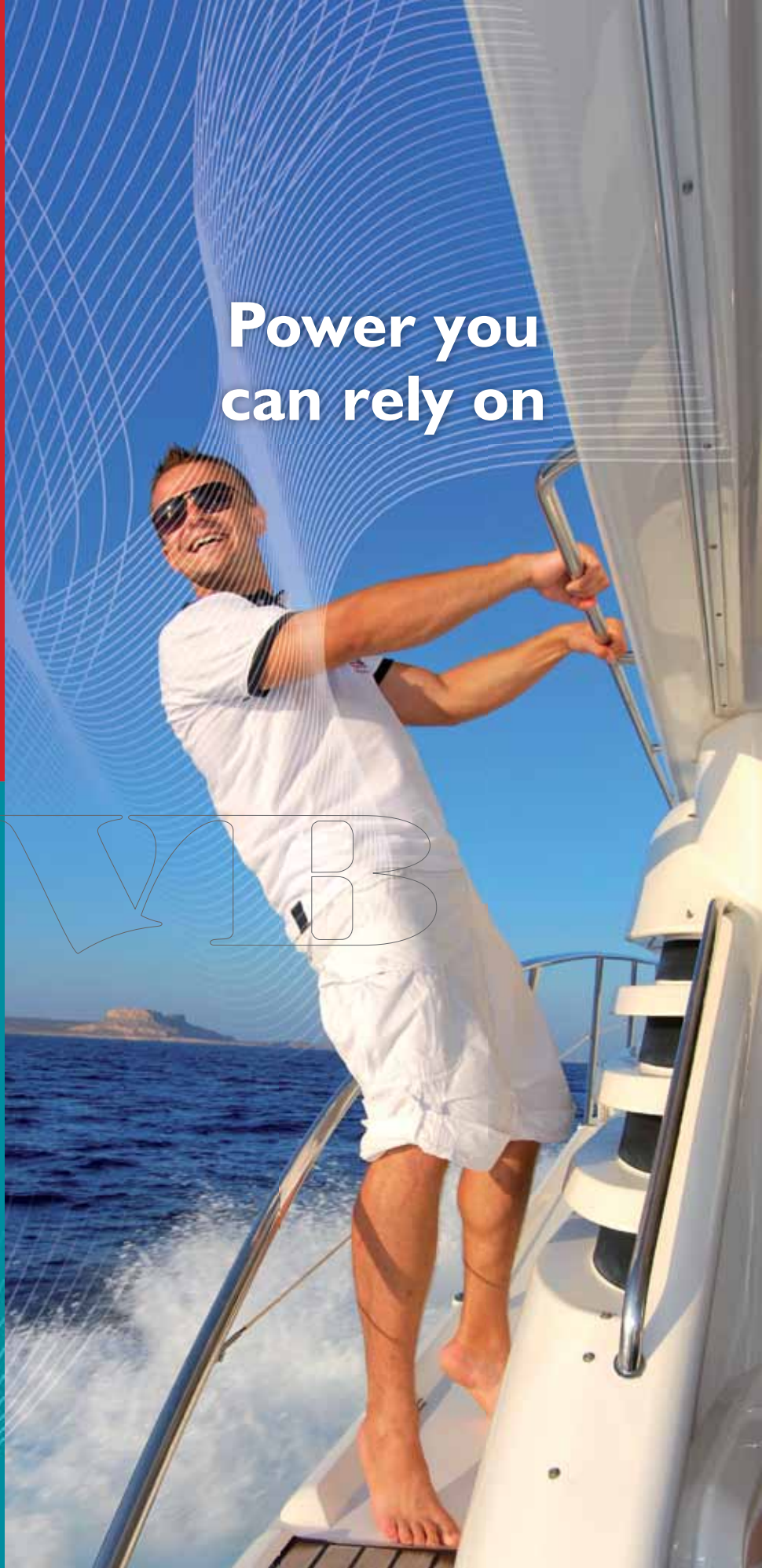
High-quality battery  
chargers and inverters

Lightweight

High efficiency

Easy to install

Power you  
can rely on



**MASTERVOLT**  
THE POWER TO BE INDEPENDENT



# Always on course with Mastervolt...

Mastervolt ensures you an electrical system with no weak links and a dependable and silent power supply. Whether for recreational or professional purposes, with Mastervolt you always have power you can rely on... The power to be independent.

## **ChargeMaster battery chargers**

Make the most of your batteries with the ChargeMaster, plugging in and charging anywhere in the world. Mastervolt's ChargeMaster guarantees fast and complete charging of your batteries no matter where you are. The ChargeMaster can charge multiple battery banks simultaneously thanks to its combined functionality. Moreover, all ChargeMasters can be easily connected to a MasterBus network with only one cable and one connection. You also have the option of central, local or remote monitoring, configuration and control of your system. The ChargeMaster is available in various models to guarantee you the ideal battery charger for any situation and demand.

## **AC Master sine wave inverters**

With a compact, lightweight and silent AC Master you can easily convert the voltage of a 12 or 24 V battery into 230 V/50 Hz AC current the same way you would at home or work. From microwave to hairdryer, DVD player to electrical tools, laptop to flatscreen; the pure sine wave preserves your equipment without disruption, humming or lines on the TV screen, while ensuring a longer lifespan of all connected equipment and saving you the costs of all those adapters.

## **DC Master DC-DC converters**

The required voltage for DC current can vary. Some equipment requires 24 V, while onboard equipment usually requires 12 V. For custom DC current, Mastervolt offers a series of compact and made to measure DC-DC converters for both 12 V and 24 V battery systems that offer stable power with the right current for any connected consumer. There is a wide range of DC Master converters available, including insulated and non-insulated models.



## **More information?**

Contact your nearest dealer or go to [www.mastervolt.com](http://www.mastervolt.com)

### Charging your batteries with every voltage

The Mastervolt ChargeMaster supplies a maximum capacity wherever you are via auto-ranging. Auto-ranging ensures perfect fully automatic operation anywhere in the world, regardless of the available mains voltage (90-265 V AC, 50 or 60 Hz). The 3-step+ charging technology guarantees fast and complete charging, while the cos phi I regulation gets the most out of limited generator capacity.



### Sturdy connections

Metal-on-metal fitting gives a firm connection, and prevents corrosion or overheating of contact surfaces.



### Efficient use of batteries

The high conversion efficiency and automatic no-consumption economy mode ensure a longer lifespan for your batteries.

### Charging multiple battery banks

The ChargeMaster series has three equal charge outputs. Those of the smaller ChargeMaster models are pre-installed with two metres of cable for a plug & play solution, while the heavier models have one full output (for example for your service battery) and two outputs of 10 A, ideal for your starter batteries.

SINE WAVE POWER



### High peak loads for start-up

The AC Master sine wave inverters can supply up to 200% capacity for equipment that requires a short boost of extra power when starting up.



### Intelligent DC-DC converters

A large benefit of the DC Master models is their two minutes of extra capacity; ideal if you need a short power boost.



### Complete package DC Master

All DC Master converters are delivered with mounting bracket, screws and fasteners.

# Specifications ChargeMaster



**ChargeMaster**  
**12/10**

**ChargeMaster**  
**12/15-2**

**ChargeMaster**  
**12/25-3**

**ChargeMaster**  
**12/35-3**

|              |          |          |          |          |
|--------------|----------|----------|----------|----------|
| Product code | 43011000 | 43011500 | 44010250 | 44010350 |
|--------------|----------|----------|----------|----------|






## GENERAL SPECIFICATIONS

|                                      |                              |                 |   |                   |
|--------------------------------------|------------------------------|-----------------|---|-------------------|
| Nominal output voltage               | 12 V                         | 12 V            | 12 V  | 12 V              |
| Total charge current                 | 10 A at 14.25 V              | 15 A at 14.25 V | 25 A at 13.25 V   | 35 A at 14.4 V    |
| Number of battery outlets            | 1                            | 2               | 3   | 3                 |
| Charge current second output         | n.a.                         | 15 A            | 25 A  | 35 A              |
| Charge current third output          | n.a.                         | n.a.            | 25 A  | 35 A              |
| Recommended battery capacity         | 25-100 Ah                    | 30-150 Ah       | 50-250 Ah   | 70-350 Ah         |
| Nominal input voltage                | 230 V (180-265 V) – 50/60 Hz |                 | 120/230 V (90-265 V) – 50/60 Hz                               |                   |
| AC connection                        | cable + plug                 | cable + plug    | 2 mtr AC cable  | connector strips  |
| Supplies your system without battery | no                           | no              | yes   | yes               |
| Display/read-out                     | 1 LED                        | 1 LED           | LED display   | LED display       |
| Dimensions, hxxwxd                   | 180x121x50 mm                | 206x121x50 mm   | 234x132x60 mm   | 291x210x131 mm    |
|                                      | 7.1x4.8x2 inch               | 8.1x4.8x2 inch  | 9.2x5.2x2.4 inch  | 11.5x8.3x5.2 inch |
| Weight                               | 1 kg / 2.2 lbs               | 1 kg / 2.2 lbs  | 1.8 kg / 4 lbs  | 4 kg / 9 lbs      |
| Fastening                            | 4x screw                     | 4x screw        | 4x screw  |                   |
| Approvals                            | CE, E-mark, ABYC A-31        |                 | CE, E-mark, ABYC A-31, SAE J1171/ISO 8846 ignition protected, |                   |

## TECHNICAL SPECIFICATIONS

|   |   |                   |  |                                      |
|---|---|-------------------|--|--------------------------------------|
| Charge characteristic**                   | IUoUo, automatic / 3-step+ for gel/AGM/wet/Lithium Ion                |                   |  |                                      |
| Charge voltage Bulk (25 °C)***            | 14.25 V (6 hours)   | 14.25 V (6 hours) | 14.4 V (8 hours)   | 14.4 V (8 hours)                     |
| Charge voltage Absorption (25 °C)***      | 14.25 V (6 hours)   | 14.25 V (6 hours) | 14.25 V (4 hours)  | 14.25 V (4 hours)                    |
| Charge voltage Float - wet (25 °C)***     | 13.25 V   | 13.25 V           | 13.25 V  | 13.25 V                              |
| Charge voltage Float - gel/AGM (25 °C)*** | 13.8 V  | 13.8 V            | 13.8 V   | 13.8 V                               |
| Temperature compensation                  | no  | no                | -30 mV/°C  | -30 mV/°C                            |
| Voltage compensation                      | automatic   | automatic         | automatic  | automatic                            |
| DC consumption                            | < 1 mA  | < 1 mA            | < 2 mA   | < 5 mA                               |
| Full load consumption (230 V AC)          | 170 W   | 250 W             | 450 W  | 575 W                                |
| Current Control function                  | no  | no                | no   | yes, via MasterBus                   |
| Cos phi                                   | > 0.95  | > 0.95            | ≥ 0.98   | ≥ 0.98                               |
| Temperature range (ambient temp.)         | -25 °C to 60 °C, > 40 °C derating                                     |                   | -25 °C to 60 °C,<br>> 25 °C derating                             | -25 °C to 60 °C,<br>> 40 °C derating |
| Cooling                                   | natural cooling   |                   | maintenance vario fan to ensure optimized cooling                |                                      |
| Sound level                               | < 30 dBA at 1 mtr   | < 52 dBA at 1 mtr | < 52 dBA at 1 mtr  | < 52 dBA at 1 mtr                    |
| Protection degree                         | IP65  | IP21              | IP23   | IP23                                 |
| Protections                               | over temperature, over load, short circuit, high battery, low battery |                   |  |                                      |
| MasterBus compatible                      | no  | no                | yes  | yes                                  |
| CSI/DC alarm                              | no  | no                | yes, using a Multipurpose Contact Output (product code 77030500) |                                      |

## OPTIONS

|  |   |      |      |   |
|--|---|------|------|---|
| MasterView Read-out<br>(product code 77010050)         |  | n.a. | n.a. | Remote panel for reading the charge status of your battery  |
| MasterView Easy<br>(product code 77010305)             |  | n.a. | n.a. | Touch screen panel for reading charge status, current fold-back   |
| MasterShunt<br>(product code 77020100)                 |  | n.a. | n.a. | MasterBus integrated battery monitor, with detailed information and consumption capacity in percentage.       |
| MasterBus USB Interface<br>(product code 77030100)     |  | n.a. | n.a. | Communication port between MasterBus and the USB port on the PC when combined with MasterView System software |
| Multipurpose Contact Output<br>(product code 77030500) |  | n.a. | n.a. | MasterBus controllable potential-free contact, with alarm   |

\* At request also available with 90-400 V DC input voltage.

\*\* The charge characteristic can be set to your requirements.

\*\*\* The battery charge current can sometimes be specified at 20 °C, so take temperature compensation into account.

See [www.mastervolt.com/chargers](http://www.mastervolt.com/chargers) for detailed specifications, dimension drawings, certificates and manuals.



# battery chargers - 12 V



**ChargeMaster**  
**12/50-3**  
44010500



**ChargeMaster**  
**12/70-3\***  
44010700



**ChargeMaster**  
**12/100-3\***  
44011000

|   |                                 |                  |
|---|---------------------------------|------------------|
| 12 V  | 12 V                            | 12 V             |
| 50 A at 14.4 V  | 70 A at 14.4 V                  | 100 A at 14.4 V  |
| 3   | 3                               | 3                |
| 50 A  | 10 A                            | 10 A             |
| 50 A  | 10 A                            | 10 A             |
| 100-500 Ah  | 140-700 Ah                      | 200-1000 Ah      |
|   | 120/230 V (90-265 V) – 50/60 Hz |                  |
| connector strips  | connector strips                | connector strips |
| yes   | yes                             | yes              |
| LED display   | LCD display                     | LCD display      |
| 291x210x131 mm  | 362x277x150 mm                  | 362x277x150 mm   |
| 11.5x8.3x5.2 inch   | 14.3x11x5.9 inch                | 14.3x11x5.9 inch |
| 4 kg / 9 lbs  | 7 kg / 16 lbs                   | 7 kg / 16 lbs    |
| with supplied mounting bracket or 4x screw for wall mounting or 4x screw for floor installation |                                 |                  |
| UL incl. marine supplement FCC Class B  |                                 |                  |

|   |  |                    |
|---|--|--------------------|
| ULoUo, automatic / 3-step+ for gel/AGM/wet/Lithium Ion                |  |                    |
| 14.4 V (8 hours)  | 14.4 V (8 hours)   | 14.4 V (8 hours)   |
| 14.25 V (4 hours)   | 14.25 V (4 hours)  | 14.25 V (4 hours)  |
| 13.25 V   | 13.25 V  | 13.25 V            |
| 13.8 V  | 13.8 V   | 13.8 V             |
| -30 mV/°C   | -30 mV/°C  | -30 mV/°C          |
| automatic   | automatic  | automatic          |
| < 5 mA  | < 5 mA   | < 5 mA             |
| 825 W   | 1200 W   | 1700 W             |
| yes, via MasterBus  | yes, via MasterBus   | yes, via MasterBus |
| ≥ 0.98  | ≥ 0.98   | ≥ 0.98             |
|   | -25 °C to 60 °C, > 40 °C derating                                |                    |
|   | maintenance vario fan to ensure optimized cooling                |                    |
| < 52 dBA at 1 mtr   | < 52 dBA at 1 mtr  | < 52 dBA at 1 mtr  |
| IP23  | IP23   | IP23               |
| over temperature, over load, short circuit, high battery, low battery |  |                    |
| yes   | yes  | yes                |
|   | yes, using a Multipurpose Contact Output (product code 77030500) |                    |

charger, including error notifications.

and/or Power Sharing setting.

on the status of your batteries for a optimised charging process, incl. voltage, current, remaining time

of your PC; enables reading and configuration of your MasterBus system  
(free to download).

notification on the onboard system (low voltage or no AC), replacement of the CSI alarm contact.

The following models are also available with a WAGO 770-113 connector and 25 cm cable:

- ChargeMaster 12/25-3
- ChargeMaster 12/35-3
- ChargeMaster 12/70-3
- ChargeMaster 12/100-3



## Benefits

- 3-Step+ charging technology for fast and complete charging.
- Safe and complete charging due to standard safety features.
- Memory function prevents overcharging in case of an unstable power supply.
- Clear control panel.
- Easy to install.
- Built-in system functionality (MasterBus) in combination with other Mastervolt products.

# Specifications ChargeMaster



## ChargeMaster

## ChargeMaster

## ChargeMaster

## ChargeMaster

|              | 24/6-1   | 24/12-3  | 24/20-3  | 24/30-3  |
|--------------|----------|----------|----------|----------|
| Product code | 43020600 | 44020120 | 44020200 | 44020300 |






### GENERAL SPECIFICATIONS

|                                      |                              |                  |  |                   |
|--------------------------------------|------------------------------|------------------|--|-------------------|
| Nominal output voltage               | 24 V                         | 24 V             | 24 V   | 24 V              |
| Total charge current                 | 6 A at 28.5 V                | 12 A at 26.5 V   | 20 A at 28.8 V   | 30 A at 28.8 V    |
| Number of battery outlets            | 1                            | 3                | 3  | 3                 |
| Charge current second output         | n.a.                         | 12 A             | 20 A   | 30 A              |
| Charge current third output          | n.a.                         | 12 A             | 20 A   | 30 A              |
| Recommended battery capacity         | 25-70 Ah                     | 24-120 Ah        | 40-200 Ah  | 60-300 Ah         |
| Nominal input voltage                | 230 V (180-265 V) – 50/60 Hz |                  | 120/230 V (90-265 V) – 50/60 Hz                              |                   |
| AC connection                        | socket                       | 2 mtr AC cable   | connector strips   | connector strips  |
| Supplies your system without battery | no                           | yes              | yes  | yes               |
| Display/read-out                     | 1 LED                        | LED display      | LED display  | LED display       |
| Dimensions, hxxwxd                   | 180x121x50 mm                | 234x132x60 mm    | 291x210x131 mm   | 291x210x131 mm    |
|                                      | 7.1x4.8x2 inch               | 9.2x5.2x2.4 inch | 11.5x8.3x5.2 inch  | 11.5x8.3x5.2 inch |
| Weight                               | 1 kg / 2.2 lbs               | 1.8 kg / 4 lbs   | 4 kg / 9 lbs   | 4 kg / 9 lbs      |
| Fastening                            | 4x screw                     | 4x screw         |  |                   |
| Approvals                            | CE, E-mark, ABYC A-31        |                  | CE, E-mark, ABYC A-31, SAE J1171/ISO 8846 ignition protected |                   |

### TECHNICAL SPECIFICATIONS

|   |  |   |  |                    |
|---|--|---|--|--------------------|
| Charge characteristic**                   |  | IUoUo, automatic / 3-step+ for gel/AGM/wet/Lithium Ion                |  |                    |
| Charge voltage Bulk (25 °C)***            | 28.5 V (6 hours)                           | 28.8 V (8 hours)  | 28.8 V (8 hours)   | 28.8 V (8 hours)   |
| Charge voltage Absorption (25 °C)***      | 28.5 V (6 hours)                           | 28.5 V (4 hours)  | 28.5 V (4 hours)   | 28.5 V (4 hours)   |
| Charge voltage Float - wet (25 °C)***     | 26.5 V                                     | 26.5 V  | 26.5 V   | 26.5 V             |
| Charge voltage Float - gel/AGM (25 °C)*** | 27.6 V                                     | 27.6 V  | 27.6 V   | 27.6 V             |
| Temperature compensation                  | no   | -60 mV/°C   | -60 mV/°C  | -60 mV/°C          |
| Voltage compensation                      | automatic                                  | automatic   | automatic  | automatic          |
| DC consumption                            | < 1 mA                                     | < 2 mA  | < 2.5 mA   | < 2.5 mA           |
| Full load consumption (230 V AC)          | 210 W                                      | 435 W   | 660 W  | 925 W              |
| Current Control functie                   | no   | no  | yes, via MasterBus   | yes, via MasterBus |
| Cos phi                                   | > 0.95                                     | ≥ 0.98  | ≥ 0.98   | ≥ 0.98             |
| Temperature range (ambient temp.)         | -25 °C to 60 °C,<br>> 40 °C derating power | -25 °C to 60 °C,<br>> 25 °C derating power                            | -25 °C to 60 °C, > 40 °C derating power                          |                    |
| Cooling                                   | natural cooling                            |   | maintenance free vario fan for optimal cooling                   |                    |
| Sound level                               | < 30 dBA at 1 mtr                          | < 52 dBA at 1 mtr   | < 52 dBA at 1 mtr  | < 52 dBA at 1 mtr  |
| Protection degree                         | IP65                                       | IP23  | IP23   | IP23               |
| Protections                               |  | over temperature, over load, short circuit, high battery, low battery |  |                    |
| MasterBus compatible                      | no   | yes   | yes  | yes                |
| CSI/DC alarm                              | no   |   | yes, using a Multipurpose Contact Output (product code 77030500) |                    |

### OPTIONS

|  |   |      |   |
|--|---|------|---|
| MasterView Read-out<br>(product code 77010050)         |  | n.a. | remote panel for reading the charge status of your battery charger, incl. error notifications               |
| MasterView Easy<br>(product code 77010305)             |  | n.a. | Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting                |
| MasterShunt<br>(product code 77020100)                 |  | n.a. | MasterBus integrated battery monitor, with detailed information on the status of your batteries             |
| MasterBus USB Interface<br>(product code 77030100)     |  | n.a. | Communication port between MasterBus and the USB port of your PC; makes possible reading (free to download) |
| Multipurpose Contact Output<br>(product code 77030500) |  | n.a. | MasterBus controllable potential-free contact, with alarm notification on the onboard system                |

\* At request also available with 90-400 V DC input voltage.

\*\* The charge characteristic can be set to your requirements.

\*\*\* The battery charge current can sometimes be specified at 20 °C, so take temperature compensation into account.

See [www.mastervolt.com/chargers](http://www.mastervolt.com/chargers) for detailed specifications, dimension drawings, certificates and manuals.

# battery chargers - 24 V



**ChargeMaster**  
**24/40-3\***  
44020400

**ChargeMaster**  
**24/60-3\***  
44020600

**ChargeMaster**  
**24/80-3\***  
44020800

**ChargeMaster**  
**24/100-3\***  
44021000

| 24 V  | 24 V             | 24 V             | 24 V             |
|---|------------------|------------------|------------------|
| 40 A at 28.8 V  | 60 A at 28.8 V   | 80 A at 28.8 V   | 100 A at 28.8 V  |
| 3   | 3                | 3                | 3                |
| 10 A  | 10 A             | 10 A             | 10 A             |
| 10 A  | 10 A             | 10 A             | 10 A             |
| 80-400 Ah   | 120-600 Ah       | 160-800 Ah       | 200-1000 Ah      |
| 120/230 V (90-265 V) – 50/60 Hz   |                  |                  |                  |
| connector strips  | connector strips | connector strips | connector strips |
| yes   | yes              | yes              | yes              |
| LCD display   | LCD display      | LCD display      | LCD display      |
| 362x277x150 mm  | 362x277x150 mm   | 432x277x150 mm   | 432x277x150 mm   |
| 14.3x11x5.9 inch  | 14.3x11x5.9 inch | 17x11x5.9 inch   | 17x11x5.9 inch   |
| 7 kg / 16 lbs   | 7 kg / 16 lbs    | 8 kg / 18 lbs    | 8 kg / 18 lbs    |
| with the supplied mounting bracket or 4x screw for wall mounting or 4x screw for floor installation |                  |                  |                  |
| CE, E-mark, ABYC A-31, SAE J1171/ISO 8846 ignition protected  |                  |                  |                  |

| UoUo, automatic / 3-step+ for gel/AGM/wet/Lithium Ion                 |                    |                    |                    |
|---|--------------------|--------------------|--------------------|
| 28.8 V (8 hours)  | 28.8 V (8 hours)   | 28.8 V (8 hours)   | 28.8 V (8 hours)   |
| 28.5 V (4 hours)  | 28.5 V (4 hours)   | 28.5 V (4 hours)   | 28.5 V (4 hours)   |
| 26.5 V  | 26.5 V             | 26.5 V             | 26.5 V             |
| 27.6 V  | 27.6 V             | 27.6 V             | 27.6 V             |
| -60 mV/°C   | -60 mV/°C          | -60 mV/°C          | -60 mV/°C          |
| automatic   | automatic          | automatic          | automatic          |
| < 5 mA  | < 5 mA             | < 5 mA             | < 5 mA             |
| 1400 W  | 2000 W             | 2700 W             | 3375 W             |
| yes, via MasterBus  | yes, via MasterBus | yes, via MasterBus | yes, via MasterBus |
| ≥ 0.98  | ≥ 0.98             | ≥ 0.98             | ≥ 0.98             |
| -25 °C to 60 °C, > 40 °C derating power                               |                    |                    |                    |
| maintenance free vario fan for optimal cooling                        |                    |                    |                    |
| < 52 dBA at 1 mtr   | < 52 dBA at 1 mtr  | < 52 dBA at 1 mtr  | < 52 dBA at 1 mtr  |
| IP23  | IP23               | IP23               | IP23               |
| over temperature, over load, short circuit, high battery, low battery |                    |                    |                    |
| yes   | yes                | yes                | yes                |
| yes, using a Multipurpose Contact Output (product code 77030500)      |                    |                    |                    |

remote panel for reading the charge status of your battery charger, including error notifications

Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting

for a optimised charging process, incl. voltage, current, remaining time and consumption capacity in percentage

and configuration of your MasterBus system on the PC when combined with MasterView System software

(low voltage or no AC), replacement of the CSI alarm contact.

The following models are also available with a WAGO 770-113 connector and 25 cm cable:

- ChargeMaster 24/20-3
- ChargeMaster 24/30-3
- ChargeMaster 24/40-3
- ChargeMaster 24/60-3
- ChargeMaster 24/80-3
- ChargeMaster 24/100-3

# Specifications AC Master sine wave inverters



**AC Master  
12/300**

Product code 230 V (universal socket)

28010300

## GENERAL SPECIFICATIONS

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| Nominal battery voltage              | 12 V                              |
| Minimum battery capacity             | ≥60 Ah                            |
| Output voltage (± 5%)                | 230 V – 50 Hz (± 0.1%)            |
| Continuous power at 25 °C, cos phi I | 300 W                             |
| Continuous power at 40 °C, cos phi I | 250 W                             |
| Peak load                            | 600 W                             |
| Output waveform                      | true sine                         |
| Efficiency                           | 90%                               |
| AC connection                        | universal                         |
| Display/read out                     | LED display                       |
| Dimensions, hwxwd                    | 210x130x60 mm<br>8.3x5.1x2.4 inch |

|           |                       |
|-----------|-----------------------|
| Weight    | 1.16 kg<br>2.55 lbs   |
| Approvals | CE, E-mark, ABYC A-31 |

## TECHNICAL SPECIFICATIONS

|                                       |   |
|---------------------------------------|---|
| Technology                            | HF switch mode  |
| 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)          | 22.5 A  |
| No load power consumption:            |   |
| • 'on' mode (230 V)                   | 0.58 A – 7 W  |
| • standby (scan mode)                 | 0.33 A – 4 W  |
| Minimal DC fuse (slow blow)**         | 40 A  |
| Minimal cable size                    | included  |
| Harmonic distortion typical           | < 6%  |
| Cos Phi                               | all power factors allowed   |
| Temperature range (ambient temp.)     | -25 °C to 60 °C, > 25 °C derating power                               |
| Cooling                               | natural/forced  |
| Sound level                           | 53 dBA at 1 mtr   |
| Protection degree                     | IP23  |
| Protections                           | over temperature, over load, short circuit, high battery, low battery |
| MasterBus compatible                  | no  |

\* DC fuse depends on the cable size.

See [www.mastervolt.com/inverters](http://www.mastervolt.com/inverters) for detailed specifications, dimension drawings, certificates and manuals.





**AC Master**  
**12/500**  
28010500



**AC Master**  
**24/300**  
28020300



**AC Master**  
**24/500**  
28020500

|   |                        |                        |
|---|------------------------|------------------------|
| 12 V  | 24 V                   | 24 V                   |
| ≥ 100 Ah  | ≥ 30 Ah                | ≥ 50 Ah                |
| 230 V – 50 Hz (± 0.1%)  | 230 V – 50 Hz (± 0.1%) | 230 V – 50 Hz (± 0.1%) |
| 500 W   | 300 W                  | 500 W                  |
| 400 W   | 250 W                  | 400 W                  |
| 800 W   | 600 W                  | 800 W                  |
| true sine   | true sine              | true sine              |
| 90%   | 91%                    | 91%                    |
| universal   | universal              | universal              |
| LED display   | LED display            | LED display            |
| 210x130x60 mm   | 210x130x60 mm          | 210x130x60 mm          |
| 8.3x5.1x2.4 inch  | 8.3x5.1x2.4 inch       | 8.3x5.1x2.4 inch       |
| 1.22 kg   | 1.16 kg                | 1.22 kg                |
| 2.69 lbs  | 2.55 lbs               | 2.69 lbs               |
| CE, E-mark, ABYC A-31   | CE, E-mark, ABYC A-31  | CE, E-mark, ABYC A-31  |
| HF switch mode  | HF switch mode         | HF switch mode         |
| 10 V, ± 0.5 V   | 20 V, ± 0.5 V          | 20 V, ± 0.5 V          |
| 11 V, ± 0.5 V   | 22 V, ± 0.5 V          | 22 V, ± 0.5 V          |
| 16 V, ± 0.5 V   | 32 V, ± 0.5 V          | 32 V, ± 0.5 V          |
| 14.5 V, ± 0.5 V   | 29 V, ± 0.5 V          | 29 V, ± 0.5 V          |
| 10% RMS   | 10% RMS                | 10% RMS                |
| 37.5 A  | 11 A                   | 19 A                   |
| 0.58 A – 7 W  | 0.29 A – 7 W           | 0.29 A – 7 W           |
| 0.33 A – 4 W  | 0.16 A – 4 W           | 0.16 A – 4 W           |
| 80 A  | 20 A                   | 40 A                   |
| included  | included               | included               |
| < 6%  | < 6%                   | < 6%                   |
| all power factors allowed   |                        |                        |
| -25 °C to 60 °C, > 25 °C derating power                               |                        |                        |
| natural/forced  | natural/forced         | natural/forced         |
| 53 dBA at 1 mtr   | 53 dBA at 1 mtr        | 53 dBA at 1 mtr        |
| IP23  | IP23                   | IP23                   |
| over temperature, over load, short circuit, high battery, low battery |                        |                        |
| no  | no                     | no                     |



## Benefits

- Silent.
- Small & lightweight.
- Universal plug.
- Designed for recreational and semi-professional use.

# Specifications DC Master converters



**24/12-3A**  
81400100



**24/12-6A**  
81400200



**24/12-12A**  
81400300



**24/12-12A**  
81400330

Product code

## INPUT SPECIFICATIONS

|                       |            |            |            |            |
|-----------------------|------------|------------|------------|------------|
| Nominal input voltage | 24 V       | 24 V       | 24 V       | 24 V       |
| Input range           | 20-32 V DC | 20-32 V DC | 20-32 V DC | 20-32 V DC |

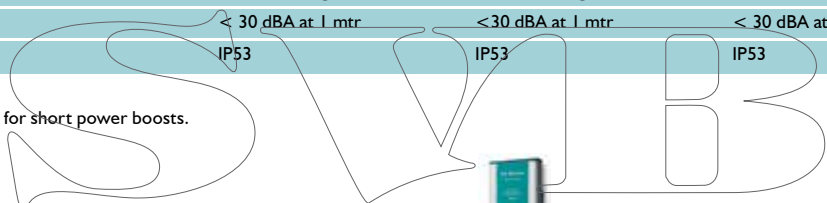
## OUTPUT SPECIFICATIONS

|                                      |           |            |             |             |
|--------------------------------------|-----------|------------|-------------|-------------|
| Nominal output voltage               | 13.6 V    | 13.6 V     | 13.6 V      | 13.6 V      |
| Maximum power                        | 82 W      | 136 W      | 245 W       | 408 W       |
| Nominal power                        | 41 W      | 82 W       | 164 W       | 326 W       |
| Current max. 2 minutes* / continuous | 6 A / 3 A | 10 A / 6 A | 18 A / 12 A | 30 A / 24 A |
| DC consumption                       | < 10 mA   | < 10 mA    | < 10 mA     | < 10 mA     |

## GENERAL SPECIFICATIONS

|                                   |                               |  |                              |                                |
|-----------------------------------|-------------------------------|--|------------------------------|--------------------------------|
| Dimensions, hwxwd                 | 67x87x50 mm<br>2.6x3.4x2 inch | 89x87x50 mm<br>3.5x3.4x2 inch          | 127x87x50 mm<br>5x3.4x2 inch | 167x87x50 mm<br>6.6x3.4x2 inch |
| Weight                            | 225 gr / 0.5 lbs              | 270 gr / 0.6 lbs                       | 405 gr / 0.9 lbs             | 635 gr / 1.4 lbs               |
| Approvals                         | CE, E-mark                    | CE, E-mark                             | CE, E-mark                   | CE, E-mark                     |
| Galvanic isolation                | no                            | no                                     | no                           | no                             |
| Stabilised                        | yes                           | yes                                    | yes                          | yes                            |
| Connections input/output          | fast-on                       | fast-on                                | fast-on                      | fast-on                        |
| Temperature range (ambient temp.) | _____                         | -25 °C to 80 °C, > 30 C derating power | _____                        | _____                          |
| Cooling                           | natural cooling               | natural cooling                        | natural cooling              | natural cooling                |
| Sound level                       | < 30 dBA at 1 mtr             | < 30 dBA at 1 mtr                      | < 30 dBA at 1 mtr            | < 30 dBA at 1 mtr              |
| Protection degree                 | IP53                          | IP53                                   | IP53                         | IP53                           |

\* Two minutes of extra power for short power boosts.



**12/12-3A**  
81500600



**12/12-6A**  
81500700



**24/12-3A**  
81500100



**24/12-6A**  
81500200

Product code

## INPUT SPECIFICATIONS

|                       |            |            |            |            |
|-----------------------|------------|------------|------------|------------|
| Nominal input voltage | 12 V       | 12 V       | 24 V       | 24 V       |
| Input range           | 20-32 V DC | 20-32 V DC | 20-32 V DC | 20-32 V DC |

## OUTPUT SPECIFICATIONS

|                                      |           |           |           |            |
|--------------------------------------|-----------|-----------|-----------|------------|
| Nominal output voltage               | 13.6 V    | 13.6 V    | 13.6 V    | 13.6 V     |
| Maximum power                        | 54 W      | 108 W     | 82 W      | 136 W      |
| Nominal power                        | 41 W      | 81 W      | 41 W      | 82 W       |
| Current max. 2 minutes* / continuous | 4 A / 3 A | 8 A / 6 A | 6 A / 3 A | 10 A / 6 A |
| DC consumption                       | < 100 mA  | < 100 mA  | < 10 mA   | < 10 mA    |

## GENERAL SPECIFICATIONS

|                                   |                               |  |                               |                              |
|-----------------------------------|-------------------------------|--|-------------------------------|------------------------------|
| Dimensions, hwxwd                 | 89x87x50 mm<br>3.5x3.4x2 inch | 217x87x50 mm<br>8.5x3.4x2 inch         | 89x87x50 mm<br>3.5x3.4x2 inch | 127x87x50 mm<br>5x3.4x2 inch |
| Weight                            | 290 gr / 0.6 lbs              | 820 gr / 1.8 lbs                       | 290 gr / 0.6 lbs              | 410 gr / 0.9 lbs             |
| Approvals                         | CE, E-mark                    | CE, E-mark                             | CE, E-mark                    | CE, E-mark                   |
| Galvanic isolation                | yes                           | yes                                    | yes                           | yes                          |
| Stabilised                        | yes                           | yes                                    | yes                           | yes                          |
| Connections input/output          | fast-on                       | fast-on                                | fast-on                       | fast-on                      |
| Temperature range (ambient temp.) | _____                         | -25 °C to 80 °C, > 30 C derating power | _____                         | _____                        |
| Cooling                           | natural cooling               | natural cooling                        | natural cooling               | natural cooling              |
| Sound level                       | < 30 dBA at 1 mtr             | < 30 dBA at 1 mtr                      | < 30 dBA at 1 mtr             | < 30 dBA at 1 mtr            |
| Protection degree                 | IP53                          | IP53                                   | IP53                          | IP53                         |

no picture available yet



**24/12-50A**  
81400350

**12/24-3A**  
81400400

**12/24-7A**  
81400500

**48/12-6A**  
81400600

**48/12-9A**  
81400700

**48/12-20A**  
81400800

24 V  
20-32 V DC

12 V  
10-15.5 V DC

12 V  
10-15.5 V DC

48 V  
40-62 V DC

48 V  
40-62 V DC

48 V  
40-62 V DC

13.6 V  
720 W  
500 W  
60 A / 50 A  
< 10 mA

27.2 V  
109 W  
82 W  
4 A / 3 A  
< 110 mA

27.2 V  
245 W  
191 W  
9 A / 7 A  
< 120 mA

13.6 V  
109 W  
82 W  
8 A / 6 A  
< 15 mA

13.6 V  
132 W  
108 W  
11 A / 9 A  
< 15 mA

13.6 V  
326 W  
272 W  
24 A / 20 A  
< 15 mA

300x76x110 mm  
11.8x3x4.3 inch  
1.2 kg / 2.6 lbs  
CE, E-mark  
no  
yes  
fast-on

89x87x50 mm  
3.5x3.4x2 inch  
290 gr / 0.6 lbs  
CE, E-mark  
no  
yes  
fast-on

167x87x50 mm  
6.6x3.4x2 inch  
610 gr / 1.3 lbs  
CE, E-mark  
no  
yes  
fast-on

89x87x50 mm  
3.5x3.4x2 inch  
415 gr / 0.9 lbs  
CE, E-mark  
no  
yes  
fast-on

127x87x50 mm  
5x3.4x2 inch  
415 gr / 0.9 lbs  
CE, E-mark  
no  
yes  
fast-on

217x87x50 mm  
8.5x3.4x2 inch  
765 gr / 0.9 lbs  
CE, E-mark  
no  
yes  
fast-on

-25 °C to 80 °C, > 30 C derating power

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53



**24/12-12A**  
81500300

**24/12-24A**  
81500350

**24/24-3A**  
81500400

**24/24-7A**  
81500500

24 V  
20-32 V DC

24 V  
20-32 V DC

24 V  
20-32 V DC

24 V  
20-32 V DC

13.6 V  
245 W  
164 W  
18 A / 12 A  
< 10 mA

13.6 V  
408 W  
326 W  
24 A / 30 A  
< 10 mA

27.2 V  
109 W  
82 W  
4 A / 3 A  
< 25 mA

27.2 V  
245 W  
191 W  
9 A / 7 A  
< 25 mA

167x87x50 mm  
6.6x3.4x2 inch  
590 gr / 1.3 lbs  
CE, E-mark  
yes  
yes  
fast-on

217x87x50 mm  
8.5x3.4x2 inch  
850 gr / 1.9 lbs  
CE, E-mark  
yes  
yes  
fast-on

127x87x50 mm  
5x3.4x2 inch  
590 gr / 1.3 lbs  
CE, E-mark  
yes  
yes  
fast-on

217x87x50 mm  
8.5x3.4x2 inch  
820 gr / 1.8 lbs  
CE, E-mark  
yes  
yes  
fast-on

-25 °C to 80 °C, > 30 C derating power

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

natural cooling  
< 30 dBA at 1 mtr  
IP53

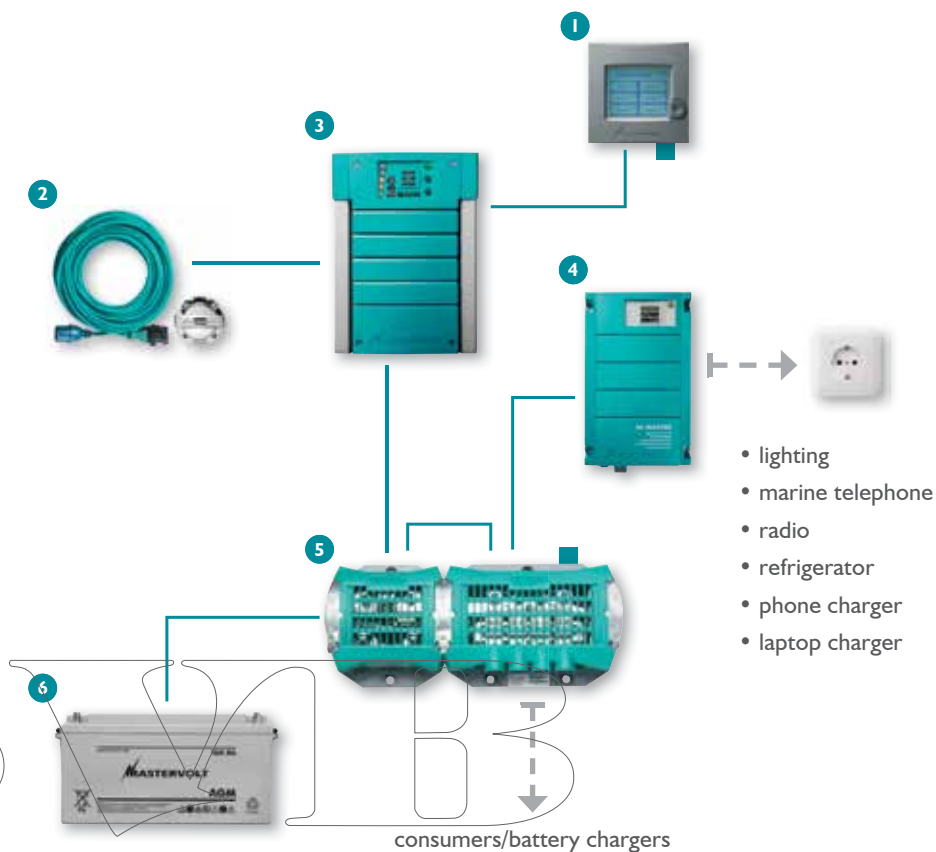
natural cooling  
< 30 dBA at 1 mtr  
IP53

## Benefits

- Recreational and semi-professional use.
- Easy to install using included mounting bracket, screws and fasteners.
- Smart electronics mean no unnecessary heat generation.
- Continuous output.
- Insulated and non-insulated models available.
- Two minutes of extra power for short power boosts.
- Excellent price/performance ratio.



# Everything under control with a MasterBus system



- 1 MasterView Easy control panel.
- 2 Shore power connection.
- 3 ChargeMaster battery charger.
- 4 AC Master sine wave inverter.
- 5 MasterShunt + DC Distribution.
- 6 AGM service battery.

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E info@mastervolt.com



More information? See

[www.mastervolt.com](http://www.mastervolt.com)