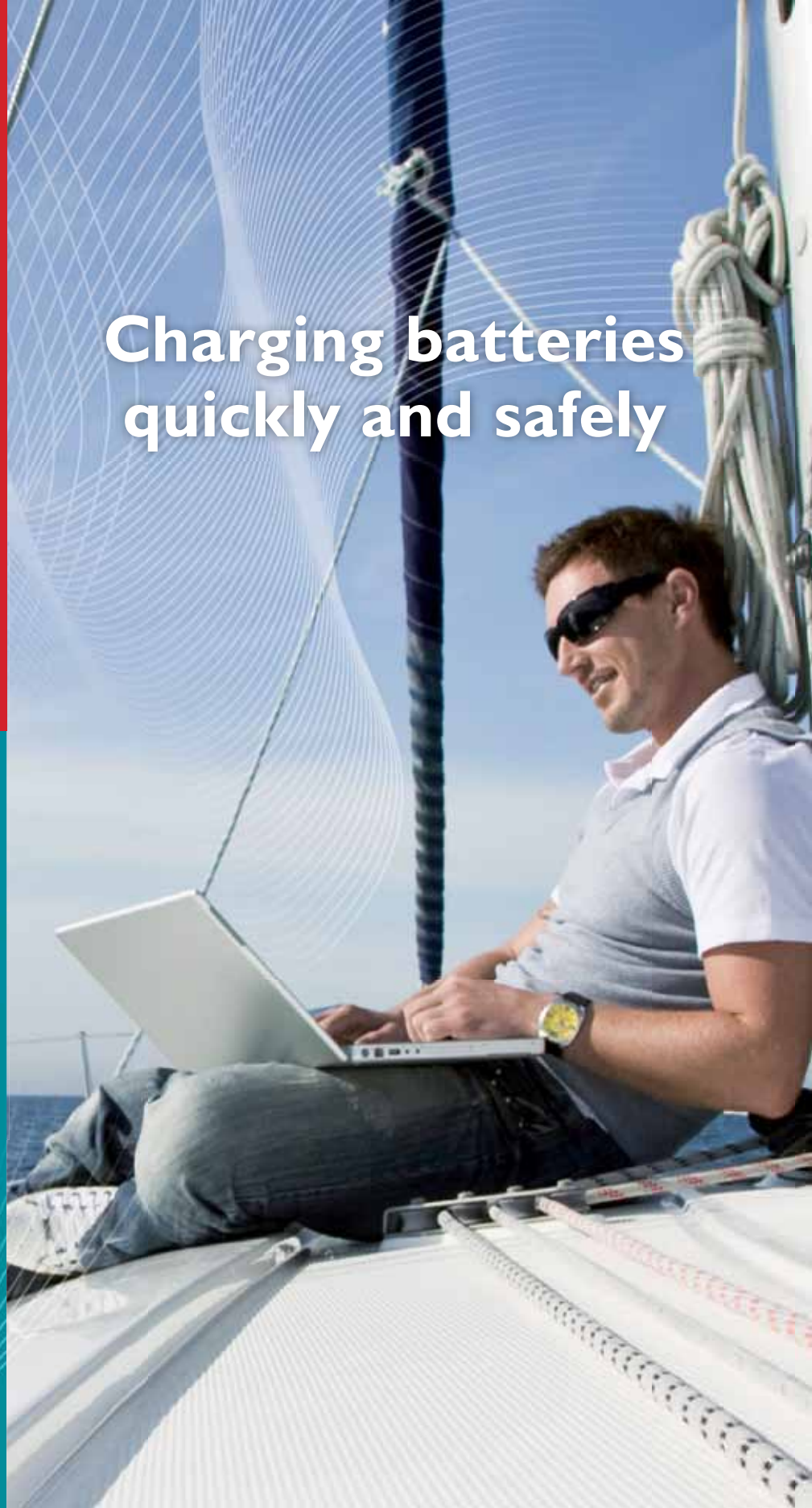


ChargeMaster PowerCharger



Charging batteries
quickly and safely

Efficient charging to
extend battery life

Simultaneous charging
of up to three batteries
or battery banks

Easy to install and operate

Universal input for
worldwide use

MASTERVOLT
THE POWER TO BE INDEPENDENT



Charge your batteries quickly and completely

Mastervolt is known for offering 'The power to be independent' and the ChargeMaster series of fully automated battery chargers certainly lives up to this reputation. With the ability to plug in anywhere in the world, you can rest assured that your batteries are always quickly and fully charged. And thanks to Mastervolt's innovative 3-step[®] charging process, batteries also perform better and last longer.

Complete range 12 V and 24 V models

The low amperage ChargeMaster models include 6.5 feet of cable pre-assembled to the inlet, making them truly plug & play! Models of 60 A and larger include a large single output for the house bank of batteries and two 10 A output, which are perfect for your engine start and thruster batteries.

Plug & play battery chargers

The ChargeMaster is a genuine plug & play battery charger, made all the easier by the MasterBus™ one cable system. This intelligent, user-friendly communication platform enables Mastervolt components within your system to talk to each other, optimizing your onboard power. MasterBus allows you to control and monitor your power system from any desired onboard or off board location. From the control panel to your computer, you have a comprehensive overview and the latest system status at your fingertips.

PowerChargers - your entrance into the world of Mastervolt

If you are looking for a high-quality, easy to install and operate, reasonably priced battery charger for your battery bank or bow thruster application, PowerCharger is the battery charger for you! PowerChargers include many of the features of Mastervolt's ChargeMaster series including simultaneous charging of up to three batteries/battery banks, charging of lead acid, gel, AGM batteries, DC power supply, ability to revive a 'dead' battery, universal input for worldwide use, etc. PowerChargers do NOT connect to Mastervolt's MasterBus network nor its MasterView touch screen panel and the battery temperature sensor is sold separately.

Clear read-out panel

A clearly lit display provides all essential information, including charge current, charge voltage, charge phase (bulk, absorption, float), battery content measurement and/or battery condition measurement as a percentage of available Ah capacity. The read-out panel also provides an indication of MasterBus communication. The system provides various alarms, including for excessive voltage. Three buttons adjacent to the read-out panel allow for easy operating of the entire system.

Charging Lithium Ion batteries

Although Lithium Ion batteries are increasingly popular, there can be a lack of clarity when it comes to the charging process. This is not a problem with a Mastervolt system as the Mastervolt ChargeMaster battery chargers communicate directly with the Li-ion battery.



MasterView Easy for remote monitoring

Our MasterView system with touchscreen panel can configure all settings and monitor in real time the charge phase, battery voltage, charge current and charge percentage. The MasterBus connection cable is used to transfer data and supply power to the display.



Make the most of your shore power

The Current Control function allows you to easily switch the battery charger back to shore power to prevent tripping of the shore breaker even if the shore power fluctuates.



DC power supply

Even if the batteries are not connected, Mastervolt ChargeMaster and PowerCharger battery chargers can provide a constant DC output allowing you to turn on lights or keep the fridge cold.

Works with any voltage

The Mastervolt ChargeMaster works at full output power in any port thanks to its auto-ranging capability. Auto-ranging guarantees you perfect, fully automated functionality, whichever the available voltage. The 3-stage[®] charging process ensures that your batteries are quickly and fully charged. And the memory function prevents equipment from overcharging during peak currents, meaning your battery lasts longer.

Robust connections

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

MasterBus compatible

All Mastervolt ChargeMaster battery chargers can be easily connected to a MasterBus network with only one cable and one connection. What's more, you have the option for central, local or remote monitoring, configuration and control of your system.



PowerCharger & ChargeMaster battery



	PowerCharger 12/20-3	PowerCharger 12/40-3	ChargeMaster 12/25-3	ChargeMaster 12/35-3
Article no.	44210200	44210400	44010250	44010350






GENERAL SPECIFICATIONS

Nominal output voltage	12 V	12 V	12 V	12 V
Total charge current	20 A at 14.25 V	40 A at 14.4 V	25 A at 13.25 V	35 A at 14.4 V
Number of battery outlets	3	3	3	3
Charge current second output	20 A	40 A	25 A	35 A
Charge current third output	20 A	40 A	25 A	35 A
Recommended battery capacity	50-250 Ah	100-450 Ah	50-250 Ah	70-350 Ah
Nominal input voltage	120/230 V – 50/60 Hz		120/230 V (90-265 V) – 50/60 Hz	
AC connection	6.5 ft / 2 mtr AC cable	connector strips	6.5 ft / 2 mtr AC cable	connector strips
Supplies your system without battery	yes			
Display/read-out	LED display			
Dimensions, hxxwxd	234x132x60 mm 9,2x5,2x2,4 inch	291x210x131 mm 11,5x8,3x5,2 inch	234x132x60 mm 9,2x5,2x2,4 inch	291x210x131 mm 11,5x8,3x5,2 inch
Weight	1,8 kg / 4 lbs	4 kg / 9 lbs	1,8 kg / 4 lbs	4 kg / 9 lbs
Fastening	screw	***	screw	with the supplied
Approvals	UL including marine supplement FCC Class B, CE, E-mark,			

TECHNICAL SPECIFICATIONS

Charge characteristic*	IUoUo, automatic / 3-stage [⊕] for gel/AGM/lead acid/Lithium Ion			
Charge voltage Bulk (25 °C)**	14.4 V (8 hours)	14.4 V (8 hours)	14.4 V (8 hours)	14.4 V (8 hours)
Charge voltage Absorption (25 °C)**	14.25 V (4 hours)	14.25 V (4 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	-22 mV/°F	-22 mV/°F	-22 mV/°F	-22 mV/°F
Voltage compensation	automatic			
DC consumption	< 2 mA	< 5 mA	< 2 mA	< 5 mA
Full load consumption (230 V AC)	420 W	700 W	450 W	575 W
Current Control function	no	no	yes, through MasterBus	yes, through MasterBus
Cos phi	> 0.98	> 0.98	≥ 0.98	≥ 0.98
Temperature range (ambient temp.)	-13 °F to 149 °F		-13 °F to 140 °F, > 77 °F derating	-13 °F to 140 °F, > 104 °F derating
Cooling	natural cooling	maintenance vario fan to ensure optimized cooling		
Sound level	< 52 dbA at 1 mtr		< 52 dbA at 1 mtr	
Protection degree	IP23	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	no	no	yes	yes
CSI/DC alarm	yes, using a Multipurpose Contact Output (art. no. 77030500)			

OPTIONS

MasterView Read-out (art. no. 77010050)		Remote panel for reading the charge status of your battery charger, including error notifications. For use with PowerChargers and ChargeMasters.
MasterView Easy (art. no. 77010305)		Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting. For use with ChargeMasters.
MasterShunt (art. no. 77020100)		MasterBus integrated battery monitor, with detailed information on the status of your batteries for a optimised charging process,
MasterBus USB Interface (art. no. 77030100)		Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your (free to download).
Multipurpose Contact Output (art. no. 77030500)		MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC),

* Charge algorithm can be changed to your requirements.

** The maximum charge current may sometimes be specified at 68 °F, take temperature compensation into account.

*** With the supplied mounting bracket or 4x screw for wall mounting or 4x screw for floor installation.

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	
LED display		LCD display
291x210x131 mm		362x277x150 mm
11,5x8,3x5,2 inch		14,3x11x5,9 inch
4 kg / 9 lbs		7 kg / 16 lbs
mounting bracket or 4x screw for wall mounting or 4x screw for floor installation		
ABYC A-31, SAE J1171/ISO8846 ignition protected		

IUoUo, automatic / 3-stage [Ⓢ] for gel/AGM/lead acid/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
-22 mV/°F	-22 mV/°F	-22 mV/°F
automatic		
< 5 mA	< 5 mA	< 5 mA
825 W	1200 W	1700 W
yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
≥ 0.98	≥ 0.98	≥ 0.98
-13 °F to 140 °F, > 104 °F derating		
maintenance vario fan to ensure optimized cooling		
< 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 (art. no. 77030500)		

Remote panel for reading the charge status of your battery charger, including error notifications. For use with PowerChargers and ChargeMasters.

Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting. For use with ChargeMasters.

incl. voltage, current, remaining time and consumption capacity in percentage

MasterBus system on the PC when combined with MasterView System software

replacement of the CSI alarm contact.



ChargeMaster battery chargers - 24 V



ChargeMaster
24/12-3



ChargeMaster
24/20-3



ChargeMaster
24/30-3

Article no.

44020120

44020200

44020300






GENERAL SPECIFICATIONS

Nominal output voltage	24 V	24 V	24 V
Total charge current	12 A at 26.5 V	20 A at 28.8 V	30 A at 28.8 V
Number of battery outlets	3	3	3
Charge current second output	12 A	20 A	30 A
Charge current third output	12 A	20 A	30 A
Recommended battery capacity	24-120 Ah	40-200 Ah	60-300 Ah
Nominal input voltage	120/230 V (90-265 V) – 50/60 Hz		
AC connection	6.5 ft / 2 mtr AC cable	connector strips	connector strips
Supplies your system without battery	yes	yes	yes
Display/read-out	LED display		
Dimensions, hxxwxd	234x132x60 mm 9,2x5,2x2,4 inch	291x210x131 mm 11,5x8,3x5,2 inch	
Weight	1,8 kg / 4 lbs	4 kg / 9 lbs	
Fastening	4x screw	with supplied mounting bracket or 4x screw for wall mounting or floor installation	
Approvals	UL including marine supplement FCC Class B, CE,E-mark,		

TECHNICAL SPECIFICATIONS

Charge characteristic*	IUoUo, automatic / 3-stage [Ⓞ] for gel/AGM/lead acid/Lithium Ion		
Charge voltage Bulk (25 °C)**	28.8 V (8 hours)	28.8 V (8 hours)	28.8 V (8 hours)
Charge voltage Absorption (25 °C)**	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
Charge voltage Float - gel/AGM (25 °C)**	27.6 V	27.6 V	27.6 V
Temperature compensation	-76 mV/°F	-76 mV/°F	-76 mV/°F
Voltage compensation	automatic		
DC consumption	< 2 mA	< 2.5 mA	< 2.5 mA
Full load consumption (230 V AC)	435 W	660 W	925 W
Current Control function	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
Cos phi	≥ 0.98	≥ 0.98	≥ 0.98
Temperature range (ambient temp.)	-13 °F to 140 °F, > 77 °F derating	-13 °F to 140 °F, > 104 °F derating	
Cooling	maintenance free vario fan for optimal cooling		
Sound level	< 52 dBA at 1 mtr		
Protection degree	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery		
MasterBus compatible	yes	yes	yes
CSI/DC alarm	yes, using a Multipurpose Contact Output (art. no. 77030500)		

OPTIONS

MasterView Read-out (art. no. 77010050)		Remote panel for reading the charge status of your battery charger, incl. error notifications. For use with PowerChargers and ChargeMasters.
MasterView Easy (art. no. 77010305)		Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting. For use with ChargeMasters.
MasterShunt (art. no. 77020100)		MasterBus integrated battery monitor, with detailed information on the status of your batteries
MasterBus USB Interface (art. no. 77030100)		Communication port between MasterBus and the USB port of your PC; makes possible reading
Multipurpose Contact Output (art. no. 77030500)		MasterBus controllable potential-free contact, with alarm notification on the onboard system

* Charge algorithm can be changed to your requirements.

** The maximum charge current may sometimes be specified at 68 °F, take temperature compensation into account.



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			
362x277x150		432x277x150	
14,3x11x5,9 inch		17x11x5,9 inch	
7 kg / 16 lbs		8 kg / 18 lbs	
with the supplied mounting bracket or 4x screw for wall mounting or 4x screw for floor installation			
ABYC A-31, SAE J1171/ISO8846 ignition protected			

IUoUo, automatic / 3-stage [Ⓢ] for gel/AGM/lead acid/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
-76 mV/°F	-76 mV/°F	-76 mV/°F	-76 mV/°F
automatic			
< 5 mA	< 5 mA	< 5 mA	< 5 mA
1400 W	2000 W	2700 W	3375 W
yes, through MasterBus	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
≥ 0.98	≥ 0.98	≥ 0.98	≥ 0.98
-13 °F to 140 °F, > 104 °F derating			
maintenance free vario fan for optimal cooling			
< 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 (art. no. 77030500)			

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

For use with PowerChargers and ChargeMasters.

Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting. For use with ChargeMasters.

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 (free to download).

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

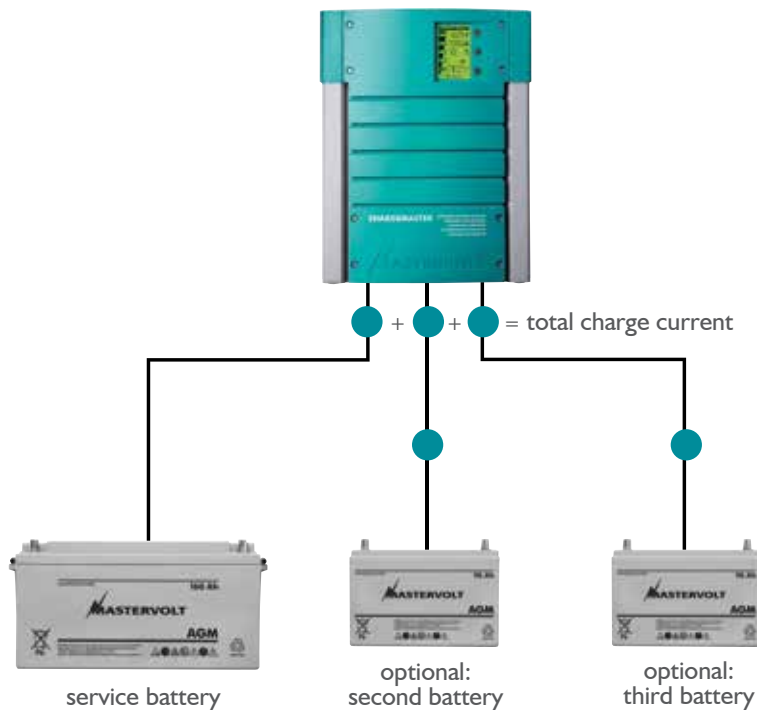
For detailed specifications, scale drawings, 3D files, certificates and manuals see www.mastervolt.us/chargers

Choosing your battery charger?

Take the following into account:

- How many battery banks do you wish to charge?
- The battery charger must have the same voltage as the battery bank, 12 V or 24 V.
- As a rule of thumb, 25% of the battery capacity (up to 50% for gel batteries) as a charge capacity is sufficient to safely and quickly charge batteries while still supplying power to the onboard network. For instance, a battery charger of 50 Amps is sufficient for a 200 Ah battery.

Battery Charging Diagram



Adding Mastervolt's MasterShunt™ and MasterView Easy remote panel, will provide you with vital information about your batteries and charging at any desired onboard location.

Subject to alterations. For more information please visit www.mastervolt.us/chargers

