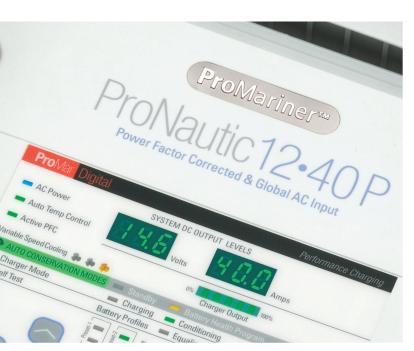
# **Vented Charger** Selection Guide















### We have the right battery charger for you

Our vented battery chargers are designed and engineered to provide you a high level of functionality with high power in a small package size as well as flexibility for various battery chemistries. Our selection chart will help you narrow your choices so you can pick the charger that's right for you.

### Selecting a charger couldn't be easier...

- Select the voltage
- 2 Determine your Total Battery Bank Amp Hours
- 3 Select charge time needed for the battery bank

Make a selection by simply understanding the number and sizes of each battery on board and compare it to the battery group size list on the right. Select a recovery time that is suitable for your needs. Batteries are categorized into "Group" size designations and each group size has an average number of amp hours (AH) available in each battery classification. The combined total of all batteries to be charged provides your total amp hours.

Start batteries only require a maintenance charge and are typically not included in the total charge capacity.

Example 1: Two group 27 start batteries (100 AH each) and two group 8D (225 AH) house bank combined a **total of 450Ah**.

Example 2: One group 31 start battery (115Ah) and one group 8D (225Ah) house and one group 4D (200 Ah) electronics battery combined a **total of 425Ah**.

### **Battery Group Size**

GROUP 24	70-85 Amp Hours
GROUP 27	85-105 Amp Hours
GROUP 31	95-125 Amp Hours
GROUP 4D	180-215 Amp Hours
GROUP 8D	225-255 Amp Hours

	•		3 Charge Time									
	Total Number Of All Battery Amp Hours On-board				ery							
1 Volts	100-	200- 299	300- 399	400- 599	600- 799	Brand	Model	Part #	AC In 50/60 Hz	Charger Output	No. of Banks	Battery Type
12V	9 Hrs					ProMariner	ProNautic 1210P	63110	100-240	10 Amps	2 Bank	Lead acid, Gel, AGM or Lithium (LiFePO4)
	6 Hrs	9 Hrs				ProMariner	ProNautic 1215P	63115	100-240	15 Amps	3 Bank	
	5 Hrs	7 Hrs	10 Hrs			ProMariner	ProNautic 1220P	63120	100-240	20 Amps	3 Bank	
		6 Hrs	8 Hrs	10 Hrs		ProMariner	ProNautic 1230P	63130	100-240	30 Amps	3 Bank	
		5 Hrs	6 Hrs	8 Hrs	11 Hrs	ProMariner	ProNautic 1240P	63140	100-240	40 Amps	3 Bank	
			6 Hrs	7 Hrs	9 Hrs	ProMariner	ProNautic 1250P	63150	100-240	50 Amps	3 Bank	
			5 Hrs	6 Hrs	8 Hrs	ProMariner	ProNautic 1260P	63160	100-240	60 Amps	3 Bank	
12V	5 Hrs	7 Hrs	10 Hrs			Mastervolt	PowerCharger	44210200	120-230	20 Amps	3 Bank	Lead acid, Gel, AGM or Lithium (LiFePO4)
		5 Hrs	6 Hrs	8 Hrs	11 Hrs	Mastervolt	PowerCharger	44210400	120-230	40 Amps	3 Bank	
12V		6 Hrs	9 Hrs			Mastervolt	ChargeMaster	44010250	90-265	25 Amps	3 Bank	Lead acid, Gel, AGM or Lithium (LiFePO4)
		5 Hrs	7 Hrs	9 Hrs		Mastervolt	ChargeMaster	44010350	90-265	35 Amps	3 Bank	
			6 Hrs	7 Hrs	9 Hrs	Mastervolt	ChargeMaster	44010500	90-265	50 Amps	3 Bank	
			4 Hrs	6 Hrs	7 Hrs	Mastervolt	ChargeMaster	44010700	90-265	70 Amps	3 Bank	
				5 Hrs	6 Hrs	Mastervolt	ChargeMaster	44011000	90-265	100 Amps	3 Bank	
12V		6 Hrs	9 Hrs			Blue Sea Systems	P12	7531-BSS	90-265	25 Amps	3 Bank	(de's alate and lead)
		5 Hrs	6 Hrs	8 Hrs	11 Hrs	Blue Sea Systems	P12	7532-BSS	90-265	40 Amps	3 Bank	
24V	5 Hrs	7 Hrs	10 Hrs			ProMariner	ProNautic 2420P	63170	100-240	20 Amps	3 Bank	Lead acid, Gel, AGM or Lithium (LiFePO4)
		6 Hrs	8 Hrs	10 Hrs		ProMariner	ProNautic 2430P	63180	100-240	30 Amps	3 Bank	
24V	8 Hrs	12 Hrs				Mastervolt	ChargeMaster	44020120	90-265	12 Amps	3 Bank	Lead acid, Gel, AGM or Lithium (LiFePO4)
	5 Hrs	7 Hrs	10 Hrs			Mastervolt	ChargeMaster	44020200	90-265	20 Amps	3 Bank	
		6 Hrs	8 Hrs	10 Hrs		Mastervolt	ChargeMaster	44020300	90-265	30 Amps	3 Bank	
		5 Hrs	6 Hrs	8 Hrs	11 Hrs	Mastervolt	ChargeMaster	44020400	90-265	40 Amps	3 Bank	
			5 Hrs	7 Hrs	8 Hrs	Mastervolt	ChargeMaster	44020600	90-265	60 Amps	3 Bank	
			4 Hrs	6 Hrs	7 Hrs	Mastervolt	ChargeMaster	44020800	90-265	80 Amps	3 Bank	
				5 Hrs	6 Hrs	Mastervolt	ChargeMaster	44021000	90-265	100 Amps	3 Bank	

The Battery Charger Selector Guide is meant to be used as a guide to help determine the right charger for your needs. All charge times given are using the longest time it would take to charge a 50% discharged set of batteries. In most cases, your set of batteries will recharge much faster. See battery group size table above.

## **Pro**Mariner<sup>™</sup> **ProNautic P Series**

For 12V (10A-60A) or 24V systems (20A, 30A)

- Universal input (100-240V AC/50-60Hz), one charger for domestic and international applications
- Fully automatic, multi-stage battery charging of up to 3 battery banks
- · Settings for lead acid, Gel, AGM or Lithium Iron Phosphate (LiFePO4) batteries
- · Battery Temperature Sensor Included—adjusts charge voltage based on battery temperature
- Distributed-On-Demand™ Technology automatically senses and distributes up to full capacity to any one bank or combination of all banks
- ProMar Digital Charging Performance—12 selectable profiles and programmable
- Conservation Energy Saver Mode After fully charging and conditioning batteries, ProNauticP's Energy Saver Mode will monitor and Auto Maintain batteries only when needed, maintaining a full state of charge
- Digital Self-Calculating Absorption and Battery Health Reconditioning Mode Automatically programs conditioning time based on discharge state of batteries
- -20° to 60°C (-4° to 140°F), IP23
- 5 year warranty

## **MASTERVOLT**PowerCharger

12V, 20A and 40A models

- Universal input (90–265V AC, 50/60 Hz), one charger for domestic and international applications
- Fully automatic, multi-stage battery charging of up to 3 battery banks
- · Settings for lead acid, Gel, AGM or spiral batteries
- Battery Temperature Sensor Included—adjusts charge voltage based on battery temperature
- · Compatible with low-quality power sources, will not decrease charging power
- Safety features: Over temp. shutdown, ignition protection, overload protection, surge and short circuit protection
- Meets global industry standards including: CE certified, meet ABYC and UL 1236 including marine supplement, ignition-protected, EMC FCC Class B
- -25° to 65°C (-13° to 149°F), IP23
- · 2 year warranty

### **MASTERVOLT** ChargeMaster

12V and 24V up to 100A models

- Universal input (90–265V AC, 50/60 Hz), one charger for domestic and international applications
- Fully automatic, multi-stage battery charging of up to 3 battery banks
- 3-Step+ charging technology for fast and complete charging
- Settings for lead acid, Gel, AGM or Lithium Iron Phosphate (LiFePO4) batteries
- · Battery Temperature Sensor Included—adjusts charge voltage based on battery temperature
- Masterbus network capabilities for central, local or remote monitoring, configuration and control of your system (not available on ChargeMaster 12/10 and ChargeMaster 12/15-2)
- -25° to 60°C (-13° to 140°F), IP23
- 2 year warranty

### BLUE SEAS P12

12V (25A and 40A models)

- Universal input (90–265V AC, 50/60 Hz), one charger for domestic and international applications
- Four stage, three output, dry mount design, for use in harsh environments
- PreFloat™ stage prevents over charging
- Settings for lead acid, AGM, Gel and TPPL (thin plate pure lead) batteries
- Charge Coordination with Blue Sea Systems Automatic Charging Relays (ACR) controls ACR state ensuring proper float stage for each battery
- · Battery Temperature Sensor Included—adjusts charge voltage based on battery temperature
- AC over and under voltage shut down and automatic restart
- Over and under battery temperature protection—charger will not operate if battery temperature rises above or falls below a set value
- DC over voltage and reverse polarity protection
- Surge and short circuit protection
- -20° to 70°C (-4° to 158°F), IP32
- · 5 year warranty

Automatic Temperature Compensation and Built-In Safety



Compact Size, remote panel option for reading charge status



Masterbus network capabilities



Charge coordination with automatic charging relays



## Don't forget the batteries

Whether you choose an economical battery such as the AGM or an innovative and technologically advanced Lithium Iron phosphate (LiFePO4) battery, Mastervolt has the best solution for every power need you have. Mastervolt has divided its entire battery range of 35 types into seven series and five different battery technologies. Each series has its specific benefits.

### All Mastervolt batteries offer you these advantages:

Maintenance-free

Built for safety—no degassing

Easy to install

Designed for cyclic use (charge/discharge)

Minimum self-discharge

Two-year warranty



#### A variety of choices to match your application:

### Lithium Iron Phosphate (LiFePO4) batteries

Lithium Iron Phosphate batteries have a high energy density, offering savings of up to 70% in volume and weight compared to traditional lead-acid batteries. They are perfect for cyclic applications, making over 2000 cycles with very deep (80%) discharges effectively storing 5 times as much energy over its lifespan compared to lead-acid.

#### **AGM battery**

In AGM batteries, the electrolyte (mixture of water and sulfuric acid) is largely absorbed in glass fiber. This type of battery is entirely maintenance-free and there is no gas formation with normal use. Not requiring any ventilation, these batteries can be installed anywhere. Their construction gives a very fast discharge at very high currents so AGM batteries are ideal for systems that require high currents (for instance when starting an engine).

#### **Traction batteries**

This robust gel battery is designed for regular and deep discharging (>1000 full cycles), and is ideal for large systems that require intensive use and a very long lifespan.

#### **Gel batteries**

In gel batteries, the electrolyte is absorbed by a gel. This type of battery is entirely maintenance-free and has no gas formation with normal use. As no extra ventilation is required gel batteries can be installed anywhere. They are ideal as service battery and for cyclical use, and can be charged very quickly.

N85 W12545 Westbrook Crossing Menomonee Falls, WI 53051 p 800.307.6702 mastervolt.us

### **Pro**Mariner<sup>™</sup>

15 Dartmouth Drive, Suite 101 Auburn, NH 03032 p 603.433.4440 promariner.com



425 Sequoia Drive Bellingham, WA 98226 p 360.738.8230 bluesea.com