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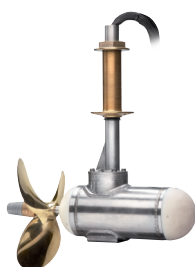
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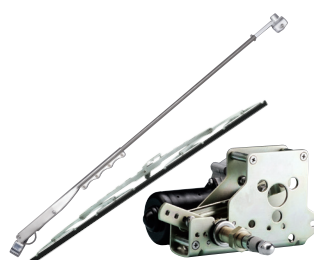
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MARINCO **MASTERVOLT** **ANCOR** **MARINCO**
BEP PRODUCTS

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Global Marine Catalog

MARINCO **MASTERVOLT** **ANCOR** **MARINCO**
BEP PRODUCTS

Dear Channel Partners & Customers,

It gives us great pleasure to introduce the new Global Marine Products Catalog. We've taken great care to provide you with a reference tool that organizes products clearly to make selection and comparison easier.

Three Geographic Regions to serve you better.

In addition to the newly designed catalog, we have organized our Global Marine Business into three geographic regions: the Americas, EMEA (Europe/Middle East/Africa) and APAC (Asia Pacific/China). Each region will support all brands locally, enabling us to meet your needs in a convenient time zone.

Focused on being the best in the world.

Over the years, we have been developing a portfolio of products that bring our customers the broadest range of top-quality marine electrical components and systems. Our goal is to become the single source of products for retailers, boat-builders and boaters alike. We have assembled some of the top brands all under one roof to promote greater brand awareness, consolidate global recognition and give our distributors the ease of doing business with a single partner.

Our solutions help boaters experience things like the convenience of a cool beverage, a hot stove, a light to guide the way and the ability to easily connect in any port and enjoy all the comforts of home on their boats. We provide the entire package with solutions such as shore power, spotlights, chargers and inverters, a full range of electrical accessories, electrical supplies and digital switching systems that help everything run together. Ongoing research has expanded our line with brand new products such as the Pro Installer Series and Lithium Ion Ultra Series batteries. Each of our brands contribute a diverse range of products that meet or exceed the rigorous standards of the global marine industry.

Working together as one team, our brands have sent a clear and simple message to boaters everywhere: We provide everything you need to create the ideal marine experience from a single global marine source. We welcome your feedback on the new Global Marine Products Catalog, and we look forward to serving you in the years ahead.

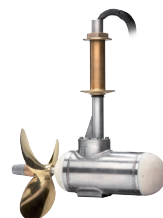
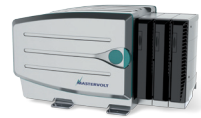
Best Regards,
Your Global Marine Team

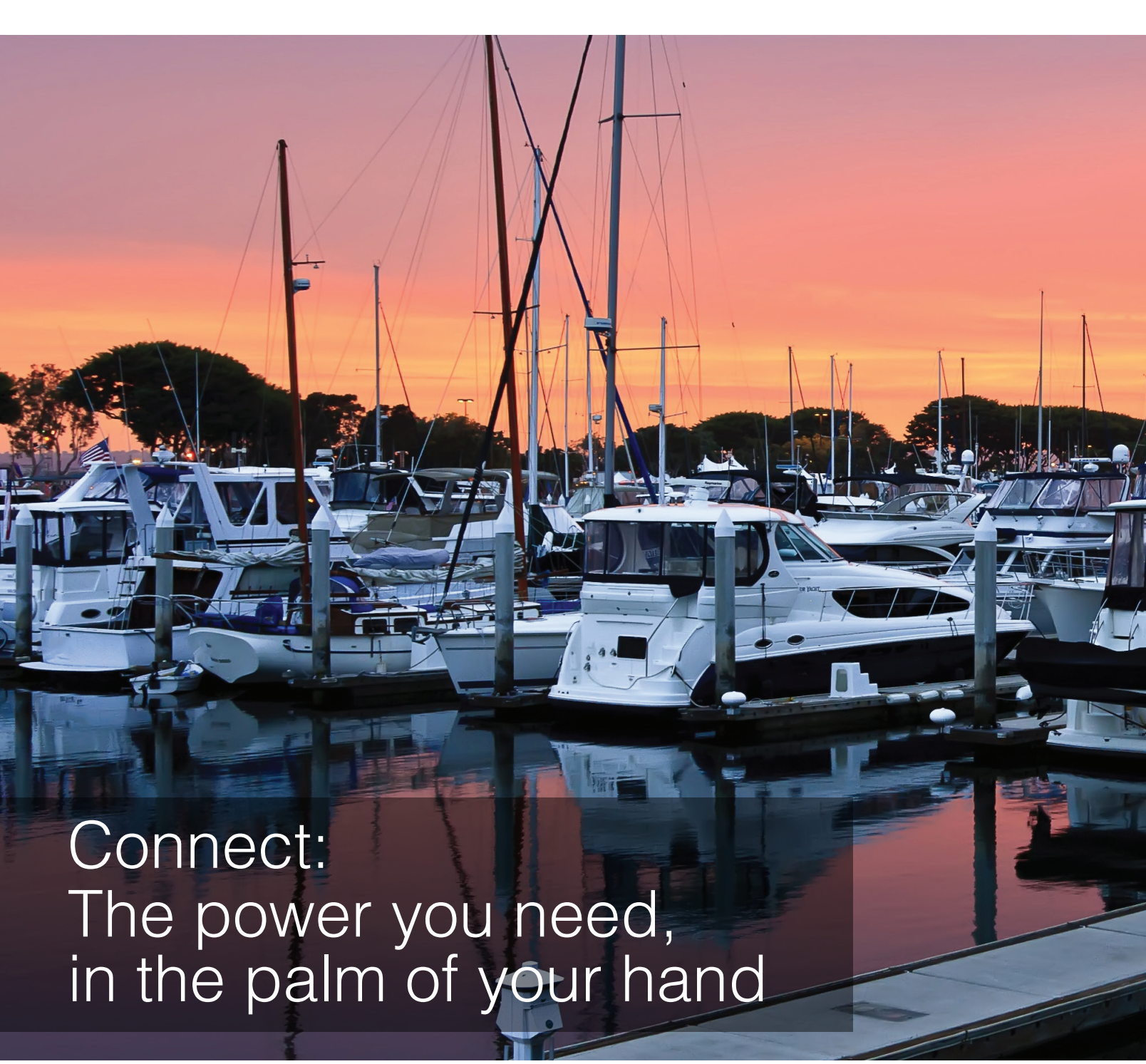
MARLINO MASTERVOLT ANCOR GUEST NICRO BEP AFI



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Connect: The power you need, in the palm of your hand

At the end of the day, it's comforting to know that the next port will be a safe haven for the night—and a time to recharge both literally and figuratively. Because as your vessel reaches its slip, you know you can connect to a shore power station with the sure power of Marinco and Mastervolt products.

Regardless of the location, trust our inlets, cordsets, adapters and accessories to keep you connected to reliable shore power, whether you're in South Beach or South Africa. That's because there is no other company that provides as many solutions to keep you connected.

Our inlets and cordsets provide a convenient and secure manner of connecting to power sources. Adapters ensure no matter the port of call you'll get the power you need. A complete array of accessories enables you to adapt the connection you need to the power source available.

International or domestic, AC or DC, we provide the power you need, right in the palm of your hand.



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| Dockside Products

| Cordsets

Marine Receptacles Corrosion resistant reinforced nylon construction	Weatherproof Covers Yellow LEXAN® polycarbonate with lift lid, for use with Marinco receptacles	Male Plugs Superior strain-relief system. Dust seal keeps contaminants out of terminals	Weatherproof Covers Heavy duty vinyl construction, use with male plugs for superior seal	Shore Power Cord Sets Marine Grade cable, watertight molded plug and connector, line-up ridge for easy blade alignment
--	---	---	--	--

30A 125V 2 Pole 3-Wire Locking	305CRR 	7420CR 	305CRPN 	102N 	199119 
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50A 125V 2 Pole 3-Wire Locking	6370CR 	7788CR 	6361CRN 	7717N 	6153SPP 
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50A 125/250V 3 Pole 4-Wire Locking	6369CR 	7788CR 	6365CRN 	7717N 	6152SPP 
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Cable TV / Internet	TV97 		TVHD 
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Marinco® Color Coding System

products for 15 AMP	products for 20 AMP	products for 30 AMP	products for 50 AMP 125V	products for 50 AMP 125V/250V
------------------------	------------------------	------------------------	-----------------------------	----------------------------------

LEXAN® is a registered trademark of Sabic Innovative Plastics IP B.V., Netherlands

| Boatside Products

Weatherproof Covers

Heavy duty vinyl construction, use with female connector for superior seal

Female Connectors

Ribbed nylon construction, color coded terminal pockets and screws

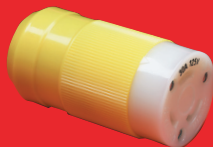
Power Inlets

Styled to complement any boat, Marinco® power inlets are simple to install and feature a protective rear safety enclosure that provides safe, reliable strain relief

103RN



305CRCN



303SSEL-B



301EL-B



304EL-B



7715CRN



6360CRN



6371EL-B



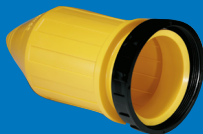
6351EL-B



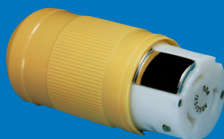
6343EL-B



7715CRN



6364CRN



6373EL-B



6353EL-B



6344EL-B



PH6629



TV6592



TV6574



TV6444



For more information visit us at: marinco.com



Inlets

Marinco® Power Inlets are the industry standard. Offered in three styles, they all feature robust construction and corrosion-resistant materials for long life in the harsh marine environment. Each has technical features that make them easy to install and a pleasure to use for the marine professional or the casual recreational boater.

Stainless Steel

Marinco® stainless steel inlets are solid cast marine grade 316 stainless steel and include a heavy duty cap strap for strength and durability.



Contoured

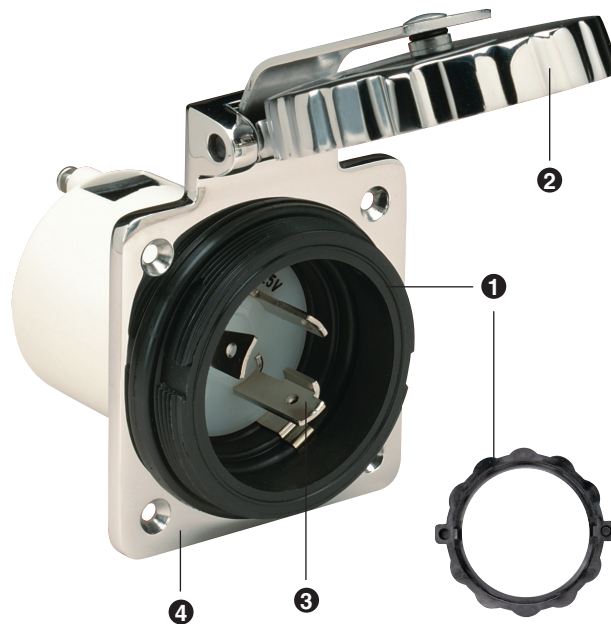
Marinco® contoured inlets feature UV stabilized glass-filled polyester construction for long-lasting strength.



Standard

Marinco® standard inlets feature UV stabilized glass-filled polyester construction for long-lasting strength.





- 1** Easy Lock™—Marinco's exclusive Easy Lock™ System has been designed to make hook-up quick and easy. Just connect the cordset (with an Easy Lock™ locking ring installed) to the inlet and turn the locking ring less than a quarter turn. The tabs on the locking ring lock into the inlet for a positive watertight hook-up while eliminating any chance of cross threading. The locking ring features lock locators positioned at 180° to improve finger grip during attachment.

Easy Lock™ inlets have a threaded boss that will accept threaded cordsets as well. The Easy Lock™ system is a standard feature on some Marinco® 30 amp and 50 amp inlets and cordsets.

- 2** The covers on all Marinco® inlets are designed to stay hinged open when the cover is lifted up. This allows the boater to connect their shore power cord while the cover remains open and out of the way. A soft touch unlocks it for closing.
- 3** Blades are nickel plated brass for maximum corrosion resistance.
- 4** Interior hardware is marine-grade stainless steel.

Rear Enclosure

- Made of flame-resistant UL94V0 plastic.
- All rear enclosures are glass-filled polyester for strength.
- Integral strain relief complies with ABYC requirements.
- Multiple positions allow for maximum installation flexibility.





**30
AMP
125V**

Stainless Steel Power Inlet

- Cast 316 stainless steel

Item # **303SSEL-B**
OEM # 303SSEL-B.OEM



**30
AMP
125V**

Contour Power Inlet

- Stainless steel trim

Item # **304EL-B**
OEM # 304EL-B.OEM



**30
AMP
125V**

Contour Power Inlet

- Without stainless steel trim

Item # **304EL-B.NT** white
Item # **199136** black



**30
AMP
125V**

Power Inlet

- Stainless steel trim

Item # **301EL-B** white
OEM # 301EL-B.OEM white
Item # **301ELCB** replacement cap & bezel



**30
AMP
125V**

Power Inlet

- Stainless steel trim

Item # **301EL-B.GRAY** gray
Item # **301EL-B.BLACK** black



**30
AMP
125V**

Power Inlet

- ABYC shore power warning label on cap

Item # **301EL-B.W/L**



**30
AMP
125V**

Power Inlet

- Stainless steel trim
- Hole in rear enclosure accommodates snap-in strain relief (not included)

Item # **301EL-B.FR**



**30
AMP
125V**

Breaker Inlet

- Includes cap & bezel and breaker plate
- Breaker not included

Item # **3050BI**



**30
AMP
125V**

Stainless Steel Power Outlet

- Female 30A 125V configuration

Item # **303SSO**



50 AMP
125V

Stainless Steel Power Inlet

Item # 6371EL-B
OEM # 6371EL-B.OEM



50 AMP
125V

Stainless Steel Power Inlet

- Without rear safety enclosure
- Item # 6371EL



50 AMP
125V

Power Inlet

- Stainless steel trim
- Without rear safety enclosure

Item # 6351EL



50 AMP
125V

Power Inlet

- Without stainless steel trim
- ABYC shore power warning label on cap

Item # 6351EL-B

There are two categories of 50A devices: 50A 125V (50A 3-wire) and 50A 125/250V (50A 4-wire). The 4-wire devices have two "hot" legs, each carrying 50A 125V. These two categories are not interchangeable. A 3-wire plug must never be altered to insert into a 4-wire connector or receptacle.

Connect: 50 Amp 125V/250V Inlets

NEMA
SS-2



50A
125/250V
Locking

Meets or Exceeds
ABYC
Standards



MARINE
UL LISTED



**50
AMP**
125/250V

Stainless Steel Power Inlet

Item # 6373EL-B

OEM # 6373EL-B.OEM

Item # 6373E-B.W/L w/separate
warning label



**50
AMP**
125/250V

Stainless Steel Power Inlet

- Without rear safety enclosure

Item # 6373EL

OEM # 6373EL.OEM



**50
AMP**
125/250V

Countour Chrome Power Inlet

- Chrome finish cover

OEM # 6344EL-BCR.OEM



**50
AMP**
125/250V

Contour Power Inlet

- Without stainless steel trim

Item # 6344EL-B.NT



**50
AMP**
125/250V

Power Inlet

- Stainless steel trim

Item # 6353EL-B

OEM # 6353EL-B.OEM

Item # 6353ELCB replacement cap
& bezel



**50
AMP**
125/250V

Power Inlet

- Stainless steel trim
- Black

OEM # 6353EL-B.BLACK.OEM



**50
AMP**
125/250V

Power Inlet

- Stainless steel trim
- Gray

Item # 6353EL-B.GRAY



**50
AMP**
125/250V

Power Inlet

- Stainless steel trim
- Without rear safety enclosure

Item # 6353EL

There are two categories of 50A devices: 50A 125V (50A 3-wire) and 50A 125/250V (50A 4-wire). The 4-wire devices have two "hot" legs, each carrying 50A 125V. These two categories are not interchangeable. A 3-wire plug must never be altered to insert into a 4-wire connector or receptacle.



ELCI inlets

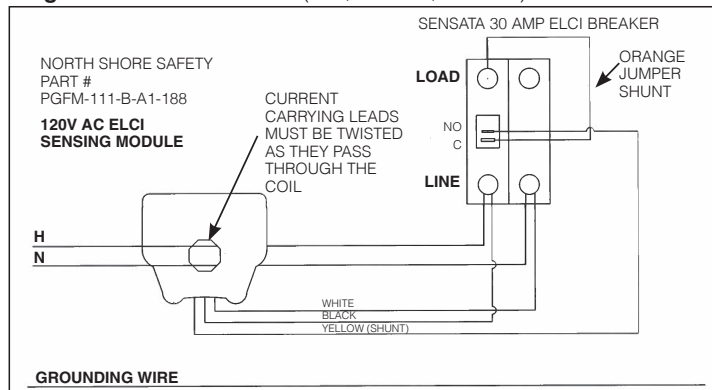
Marinco's solution to the ABYC E-11 requirement is based on our industry-standard marine inlets. We have taken the best available technology and built it into our inlets to provide boat builders and owners with the safest, best looking and most durable solution possible.

We provide two modules in addition to the standard inlet. One houses the ELCI Marine Sensing Module, the other the breaker. Unlike competing systems, our ELCI Marine sensing module has a 3/4" diameter coil that accepts up to three 6 gauge conductors. This sensing module, which also incorporates a test circuit, is compatible with 30A 125V, 50A 125V and 50A 125V/250V systems. There is a different breaker for 30A and 50 systems.

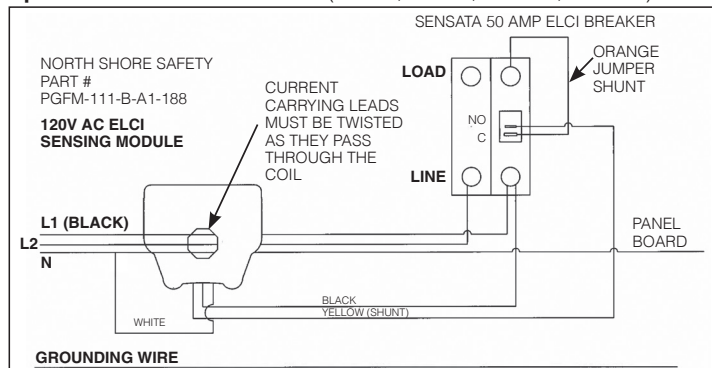
Ignition protected breakers & kits

Boat manufacturers that want to comply with ABYC standards should already be aware that potential electrical sources of ignition should not be located in certain compartments that contain gasoline machinery, gasoline tanks or potential gasoline/propane storage containers. To take the guess work out of which breaker fits your application, Marinco is pleased to offer all of our ELCI inlets with ignition protected breakers.

Single Phase 120V AC 30A (Hot, Neutral, Ground)



Split Phase 120/240V AC 50A (Line 1, Line 2, Neutral, Ground)





**Stainless Steel Housing for
30A or 50A Sensing Breakers**

OEM # 303SSRCDPL.OEM



**Stainless Steel Housing for
Sensing Modules**

OEM # 303SSBKRPL.OEM



**Standard Housing for 30A
or 50A Sensing Breakers**

OEM # 301RCDPL.OEM



**Standard Housing for
Sensing Modules**

OEM # 301BKRPL.OEM

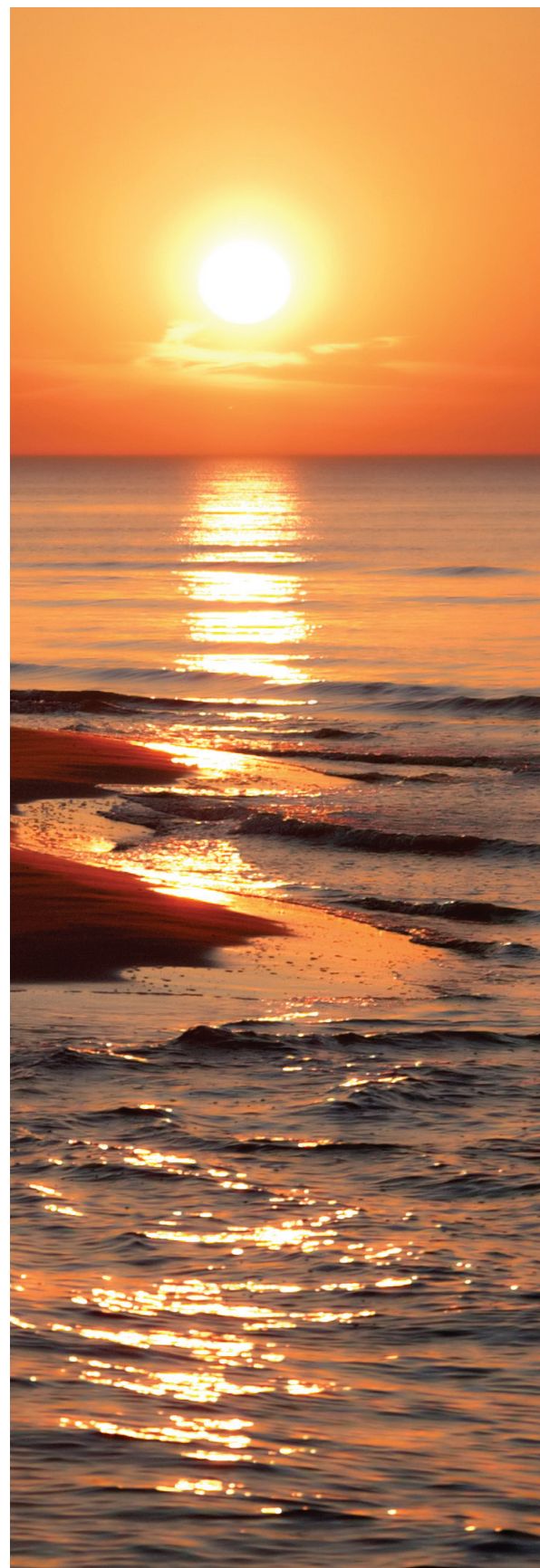


**Standard Sensing Breaker
& Module Kits**

- Module & breaker packaged together

OEM # 301RCDKITIGN.OEM 30A

OEM # 6353RCDKITIGN.OEM 50A





Stainless Steel Phone & Cable TV Inlet

Item # PH6592TV-SS
OEM # PH6592TV-SS.OEM



Phone & Cable TV Inlet

- Stainless steel trim

Item # PH6574TV
Item # PH6574TV.W/L w/ warning label



Stainless Steel Cable TV / Internet Inlet

Item # TV6592
OEM # TV6592.OEM



Cable TV / Internet Inlet

Item # TV6574



Contour Cable TV / Internet Inlet

Item # TV6444



Female Phone Plug

- MARINEGUARD II Cover

Item # PH6629



Telephone Adapter

- Use to hook up telephone to cordset PH6599. No inlet installation required.

Item # PH6600



Telephone Adapter

- Use to hook up a locking type inlet to a modular telephone connection

Item # PH6601



HDTV / Internet Cable

- 50 ft yellow cable
- 75 ohm, 3G Hz RG6 Quad Shield cable with gasket sealed
- Weatherproof F-type connections on both ends

Item # **TVHD**



Combo TV/Phone Cordset

- Both cables are jacketed together.
- Telephone and TV connections are molded on each end
- Features 18" of spliced cable at dockside for connections which are in separate power centers

Item # **PHTV6599** 50'



Telephone Cordset

- 3 conductor #16SJTO vinyl cord provides portable telephone connection for RV's and pleasure boats.

Item # **PH6599** 50'



TV Cable Cordset

- Standard 75 ohm, RG59-U with quick, slip-on connections and heavy duty boots included on both ends.

Item # **TV99-25** 25' yellow

Item # **TV99W** 50' white



NEW USB Port

- 6 ft
- USB extension cable with weatherproof cap

Item # **USBA6**
OEM # **USBA6.OEM**



Cable TV Outlet

- Spring-loaded lift cover
- Weatherproof closure
- Fits FS & FD boxes

Item # **TV97**
OEM # **TV97.OEM**



Telephone & Cable TV Outlet

- Spring-loaded lift cover
- Fits FS & FD boxes

Item # **PH6597TV**
OEM # **PH6597TV.OEM**



NEW EEL ShorePower Cordsets

One Hand. A simple twist. Full Power.

The EEL (Easily Engaged Lock) ShorePower Cordset has a patented, industry first, jaw-clamp design providing one-handed operation and a secure waterproof seal which completely eliminates the need for a locking ring. The EEL connection is built for the harshest environments and is UL approved. This easy-to-use cordset features a built-in cord light which serves as an alert to boaters when the cord is left plugged in. And, best of all, it works with your current inlet. In addition to cordsets with the EEL System, Marinco also has a full set of Pigtail and Y adapters all using the new EEL technology.

Patented EEL Technology:

- Designed for use with standard inlets (NEMA)
- Single-handed operation
- No sealing ring required
- Patented jaw-clamp technology provides a watertight seal every time

Features & Benefits:

- Built-in cord light for added safety – alert light indicates if you are plugged into the dock and cord is powered
- Power indicator light on both ends informs you full power is flowing through the cord
- Meets and exceeds rigorous UL testing standards
- 30 Amp and 50 Amp cordset models, 12', 25' and 50' lengths in white and yellow available
- EEL product line includes connectors, pigtail, straight and "Y" adapters

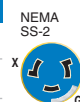
Length	Color	Item #
30 Amp 125V Cordsets		
12'	yellow	CS30-12
25'	yellow	CS30-25
50'	yellow	CS30-50
50'	white	CS30-50W
50 Amp 125V Cordsets		
25'	yellow	CS503-25
50'	yellow	CS503-50
50 Amp 125/250V Cordsets		
25'	yellow	CS504-25
25'	white	CS504-25W
50'	yellow	CS504-50
50'	white	CS504-50W



NEMA L5-30R
30A 125V Locking



NEMA SS-1
50A 125V Locking



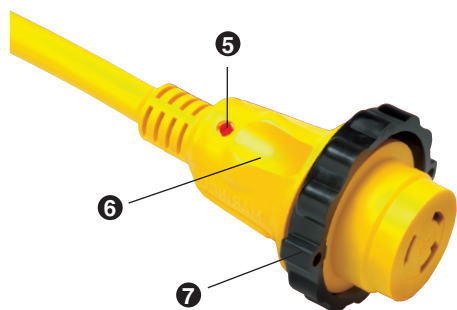
NEMA SS-2
50A 125/250V Locking



Standard Cordsets

All Marinc® cordsets are made of the highest quality, marine-grade construction with features you won't find on other power cords.

- ❶ Watertight molded plug and connector for safety and durability
- ❷ Heavy duty, super flexible marine-grade cable (30 amp 10 gauge, 50 amp 6 gauge)
- ❸ All models include a standard threaded ring for hook-up to ordinary threaded inlets
- ❹ Corrosion resistant, nickel plated contacts
- ❺ **Power Indicator Light:** Boatside connector features a molded-in LED light. When it glows red, you know you have power to the boat.
- ❻ **Contour Grip with Thumbprint Locator:** Both plug and connector ends are molded to fit the contour of your hand. When the thumbprint is in the 12 o'clock position, the blades line up for easy connection.
- ❼ **Marinco's Easy Lock™ system:** Quickly locks the cord set to the inlet in just 1/8 of a turn. The exclusive locking tabs engage slots built into all Marinc® inlets.



❻ Contoured Grip



❼ Easy Lock™



Length	Color	Pkg	Item #	OEM #
30 Amp Power Cord Plus® Cordsets				
12 ft	yellow	sleeve pack	199116	—
25 ft	yellow	sleeve pack	199117	—
25 ft	white	sleeve pack	25SPPW	—
35 ft	yellow	sleeve pack	35SPP	—
50 ft	yellow	sleeve pack	199119	50SPP.OEM
50 ft	white	sleeve pack	199120	50SPPW.OEM
75 ft	yellow	box	—	75SPP.OEM
50 Amp 125 Volt Power Cord Plus® Cordsets (3-Wire)				
25 ft	yellow	box	6153SPP-25	—
25 ft	white	box	6153SPPW-25	—
50 ft	yellow	box	6153SPP	—
50 ft	white	box	6153SPPW	—
75 ft	yellow	box	6153SPP-75	—
50 Amp 125/250 Volt PowerCord Plus® Cordsets (4-Wire)				
12 ft	yellow	box	6152SPP-12SC	—
12 ft	white	box	6152SPPW-12SC	—
25 ft	yellow	box	6152SPP-25	—
25 ft	white	box	6152SPPW-25	—
50 ft	yellow	box	6152SPP	—
50 ft	white	box	6152SPPW	—
75 ft	yellow	box	6152SPP-75	—
50 Amp Plug End Only Cordsets				
55 ft	white	box	6152SPPW-55.P/O	—
75 ft	white	box	6152SPPW-75.P/O	—



6153SPPW



6152SPP

5 YEAR WARRANTY


Combining EEL ShorePower Cordsets with other cordsets

Combining 30A cords—To combine (2) 30A cords, use a 50A ring (Item # 500R) and the 30A sealing collar (Item # 110R). Do not use a 30A ring on the plug end of any EEL product as the inner diameter of the ring is too small. Do not try to force a 30A ring on.

Combining 50A cords—To combine (2) 50A cords, use a 50A sealing collar and locking ring (Item # 510R).



The Marinc® Shore Power Adapters give you more power hook-up flexibility and resolve a variety of dockside power center / boat side inlet power incompatibility problems.

Types of Adapters



Straight Adapters are high-quality, one-piece adapters similar in usage to Pigtail Adapters. However, they do not have sealing collars and are not recommended for use in wet locations. Use only in an enclosed, dry location, such as powering your boat from a 15A power receptacle inside your house.



Pigtail Adapters allow you to connect from one dockside receptacle (or other power source receptacle) to one boatside inlet or equipment of dissimilar power configuration. These adapters are fully molded and equipped with Marinc®'s unique sealing collar (where indicated) and covers for use in wet locations.

*Available with standard locking rings or with the new EEL quick locking system



“Y” Adapters let you split one dock side receptacle between two boat inlets of similar or dissimilar power configurations. “Y” adapters are fully molded and equipped with Marinc®'s unique sealing collar and covers (where indicated) for use in wet locations.

The Reverse “Y” Adapter (Item # RY504-2-30) The reverse “Y” provides 50A 125/250V power when only two 30A 125V receptacles are available.

*Available with standard locking rings or with the new EEL quick locking system

Choosing the Correct Adapter

1 Boat Side – Identify your boat's Inlet Electrical System



The voltage and amperage should be printed on the outside cover of your existing boat inlet(s)



50A 125V

Check the blade orientation of the various inlets pictured and compare to your boat inlet(s)



The voltage and amperage should be printed inside the boat Inlet(s) next to the blades

30A 125V



50A 125/250V

Pay special attention to the differences in the 50A 125V and the 50A 125/250V. The blades look similar, but they are different. The plugs and receptacles for these systems are NOT interchangeable!!

Notice the additional grounding blade on the 50A 125/250V inlets.

2 Identify the Dock Side Power Source



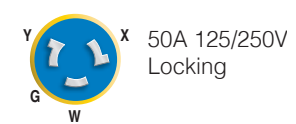
20A 125V Locking



50A 125V Locking



30A 125V Locking



50A 125/250V Locking

IMPORTANT 50 AMP INFORMATION:

If you are connecting to 50A dockside power service, it is **CRITICAL** to know the dockside receptacle's voltage rating (50A 125V or 50A 125/250V). An adapter designed for 50A 125V will not plug into a dockside receptacle rated for 50A 125/250V service, and vice versa.

3 Choose a Marinc® Adapter from page 20–25

Match your boat side inlet(s) to the appropriate dock side receptacle or other power source. Adapter ends are color coded for easier selection.

NEW Straight Adapters

Not recommended for use in wet locations. Includes power LED.

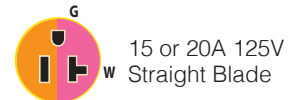
Item

S20-15

Replaces the 80A.



20A 125V Locking



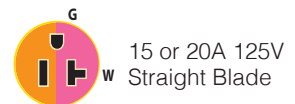
15 or 20A 125V Straight Blade

S30-15

Replaces the 81A.



30A 125V Locking



15 or 20A 125V Straight Blade

S15-30

Replaces the 83A.



15A 125V Straight Blade



30A 125V Locking

S20-30

Replaces the 84A.



20A 125V Locking



30A 125V Locking

NEW EEL Pigtail Adapters

These adapters are equipped with sealing collars and are for use in wet locations.

Item #

P15-30

25 ft

P15-30-25

25 ft white

P15-30-25W



P30-15



P503-30



P30-503



P504-30



P30-504



P504-503



DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset



15A 125V
Straight Blade
w/ Locking Screw



30A 125V
Locking



50A 125V
Locking



30A 125V
Locking



50A 125/250V
Locking



30A 125V
Locking



50A 125/250V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset



30A 125V
Locking w/
Sealing
Collar System



15A 125V
Straight Blade



30A 125V
Locking w/
Sealing
Collar System



50A 125V
Locking w/
Sealing
Collar System



30A 125V
Locking w/
Sealing
Collar System



50A 125/250V
Locking w/
Sealing
Collar System



50A 125V
Locking w/
Sealing
Collar System

Pigtail Adapters

These adapters are equipped with covers and sealing collars (where indicated), and are for use in wet locations.

Item

104SPP

104SPP.OEM
Features an LED
Power-on indicator
and thumbgrip locator

25 ft

104SPP-25.OEM

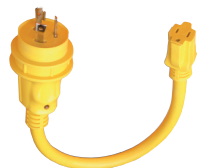
50 ft

104SPP-50.OEM



105SPP

Features a power-on
indicator and
thumbgrip locator



106A



110A



111A



115A



117A



118A



DOCK SIDE

MALE PLUG

Attaches to dockside
receptacle or cordset



15A 125V
Straight Blade
w/ Locking Screw



30A 125V
Locking



20A 125V
Locking



50A 125V
Locking



30A 125V
Locking



15 125V
Straight Blade
w/ Locking Screw



30A 125V
Locking



50A 125V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet
or cordset



30A 125V
Locking w/
Sealing
Collar System



15A 125V
Straight Blade



30A 125V
Locking w/
Sealing
Collar System



30A 125V
Locking w/
Sealing
Collar System



50A 125V
Locking w/
Sealing
Collar System



50A 125V
Locking w/
Sealing
Collar System



50A 125/250V
Locking w/
Sealing
Collar System



50A 125/250V
Locking w/
Sealing
Collar System

Pigtail Adapters

Item #

121A



123A



DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset



50A 125/250V
Locking



50A 125/250V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset



30A 125V
Locking w/
Sealing
Collar System



50A 125V
Locking w/
Sealing
Collar System

NEW EEL “Y” Adapters

These adapters are equipped with sealing collars and are for use in wet locations.

Item #

Y503-2-30



50A 125V
Locking



2-30A 125V
Locking
w/ Sealing
Collar System

Y504-2-30



50A
125/250V
Locking



2-30A 125V
Locking
w/ Sealing
Collar System

Y504-2-503



50A
125/250V
Locking



2-50A 125V
Locking
w/ Sealing
Collar System

Y30-2-30



30A 125V
Locking



2-30A 125V
Locking
w/ Sealing
Collar System

Y504-2-504



50A 125V
Locking



2-50A 125V
Locking
w/ Sealing
Collar System

Connect: Shore Power Adapters

“Y” Adapters

These adapters are equipped with covers and sealing collars (where indicated), and are for use in wet locations.

Item #



152AY

DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset



50A 125V Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset



2-30A 125V Locking w/ Sealing Collar System



153AY



50A 125/250V Locking



2-30A 125V Locking w/ Sealing Collar System



154AY



50A 125/250V Locking



2-50A 125V Locking w/ Sealing Collar System



157AY



30A 125V Locking



2-30A 125V Locking w/ Sealing Collar System



162AY



50A 125V Locking



2-50A 125V Locking w/ Sealing Collar System



165AY



50A 125/250V Locking



2-50A 125/250V Locking w/ Sealing Collar System

Reverse “Y” Adapter

Item #

RY504-2-30



DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset



2-30A 125V Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset



50A 125/250V w/ Sealing Collar System

The Reverse “Y” Adapter has two male plugs with special power isolation circuitry for added safety. When one plug is connected to a receptacle, the circuitry isolates the second plug. The reverse “Y” provides 50A 125/250V power when only two 30A 125V receptacles are available.

Note: Reverse “Y” will NOT work with 50A, 125V, 3-wire inlets. Power is provided in both circuits to the 4-wire inlet, but the dock side receptacles limit the current in each circuit to 30A. The two 30A 125V receptacles must be supplied from a single power source providing from 208V to 250V between them for proper operation.

Right Angle Adapters

Item #

1RPC
(30 amp)

1RPC50
(50 amp)


DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset


30A 125V
Locking

50A 125/250V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset


30A 125V
Locking w/
Sealing
Collar System

50A 125/250V
Locking w/
Sealing
Collar System

GalvanAlert® Shore Power Corrosion Detector

Item #

G30


The world's only shore power corrosion detector with reverse polarity indicator. GalvanAlert® easily attaches to your existing 30A shore power inlet and cordset to constantly monitor unsafe corrosion activity or a reverse polarity condition.

- Can save you thousands of dollars in potential corrosive damage to your boat
- Detects reverse polarity that can create a shock or fire hazard

DOCK SIDE

MALE PLUG

Attaches to dockside receptacle or cordset


30A 125V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset


30A 125V
Locking w/
Sealing
Collar System

How does GalvanAlert® work?

GalvanAlert® incorporates sensor-based technology that monitors unsafe galvanic or stray current corrosion flowing through the green ground wire of your shore power system.

Why GalvanAlert® if I have a galvanic isolator?

Galvanic isolators only protect against galvanic action. They will not block corrosion currents driven by more than 1.5 volts that can be highly destructive to your boat. GalvanAlert® will detect such currents so you can protect your boat in instances where galvanic isolators do not.

Dockside 30A to 15A Adapter with GFI

Item #

199128


DOCK SIDE

MALE PLUG

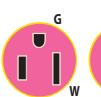
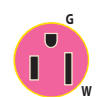
Attaches to dockside receptacle or cordset


30A 125V
Locking

BOAT SIDE

FEMALE CONNECTOR

Attaches to boat inlet or cordset


3-15A 125V
Straight Blade

- Provides safer hook-up to 30A dockside power
- Provides protection against harmful electric shock
- Reduces the possibility of fire
- Offers protection for up to 3 attached tools
- Corrosion resistant and rain-proof rated for outdoor use
- GFI trip level of 4-6 mA

- Can also be used for other outdoor, harsh environments such as construction sites or wherever ground fault protection is desired.

Note: A Ground Fault Circuit Interrupter (GFCI) limits the duration of an electrical shock to a period considered safe for healthy people. It does not prevent electric shock. This device does not protect against electric shock due to contact with both circuit conductors or a fault in any wiring supplying this device.



Male Plug

Item # 305CRPN
OEM # 305CRPN.OEM



Female Connector

Item # 305CRCN
OEM # 305CRCN.OEM



Male Plug & Cover

- Weather resistant cover
- Item # 305CRPN.VPK



Female Connector w/ Cover & Rings

- Weather resistant cover with threaded sealing ring
- Easy Lock™ sealing ring

Item # 305CRCN.VPK



Locking Receptacle

- Corrosion resistant
- Reinforced nylon construction
- Yellow

Item # 305CRR



Locking Receptacle

- Corrosion resistant
- Reinforced nylon construction
- Black

Item # 305CRRB
OEM # 305CRRB.OEM



Weatherproof Cover w/ Threaded Sealing Ring

- Use with 305CRCN or 205CRCN

Item # 103RN
OEM # 103RN.OEM



Weatherproof Cover w/ Easy Lock™ Sealing Ring

- Use with 305CRCN or 205CRCN

Item # 103ELN



Weatherproof Cover

- Use with 305CRPN or 205CRPN

Item # 102N



Easy Lock™ Sealing Ring

- Use with 30 amp Marinco Inlets

Item # 100EL



Threaded Sealing Ring

- Use with 30 amp systems

Item # 100R



Sealing Collar w/ Threaded Ring

- Provides maximum moisture protection between cordset & adapter
- Use with 20 & 30 amp locking systems
- Use when combining 30A EEL cordset with another cordset (See page 19).

Item # 110R



50
AMP
125V

Male Plug

- 2 pole, 3 wire

Item # 6361CRN



50
AMP
125V

Female Connector

- 2 pole, 3 wire

Item # 6360CRN

OEM # 6360CRN.OEM



50
AMP
125V

Wire Dockside Receptacle

- 2 pole, 3 wire

Item # 6370CR



50
AMP
125/250V

Male Plug

- 3 pole, 4 wire

Item # 6365CRN

OEM # 6365CRN.OEM



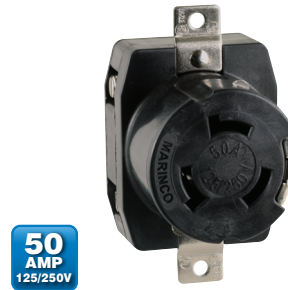
50
AMP
125/250V

Female Connector

- 3 pole, 4 wire

Item # 6364CRN

OEM # 6364CRN.OEM



50
AMP
125/250V

Wire Dockside Receptacle

- 3 pole, 4 wire

Item # 6369CR

OEM # 6369CR.OEM



Weatherproof Cover w/ Threaded Sealing Ring

- Use with 6360CRN or 6364CRN

Item # 7715CRN

OEM # 7715CRN.OEM



Weatherproof Cover w/ Easy Lock™ Sealing Ring

- Use with 6360CRN or 6364CRN

Item # 7715ELN

OEM # 7715ELN.OEM



Weatherproof Cover

- Use with 6361CRN or 6365CRN
- Can be used on both Male & Female ends

Item # 7717N

OEM # 7717N.OEM

Item # 102182

yellow

yellow

white



Easy Lock™ Sealing Ring

- Use with 50 amp Marincos Inlets

Item # 500EL



Threaded Locking Sealing Ring

- Use with 50 amp systems
- Use when combining 30A EEL cordset with another cordset (See page 19).

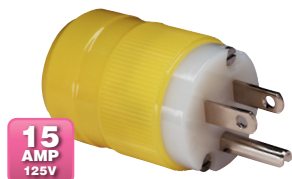
Item # 500R



Sealing Collar w/ Threaded Ring

- Provides maximum moisture protection between cordset & adapter
- Use with 50 amp only systems

Item # 510R



Male Plug

- Straight blade

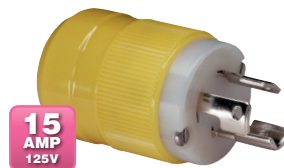
Item # 5266CR



Female Connector

- Straight blade

Item # 5269CR



Male Plug

- Locking type

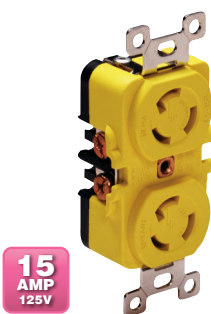
Item # 4721CR



Female Connector

- Locking type

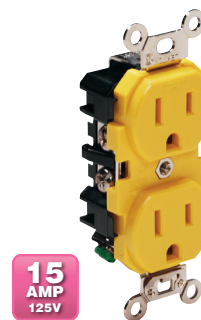
Item # 4731CR



Duplex Locking Receptacle

- Yellow

Item # 4700CR



Duplex Straight Receptacle

Item # 5262CRR yellow

Item # 5262CRR.GRY gray



Male Plug

- Straight blade

Item # 5366CR

OEM # 5366CR.OEM



Female Connector

- Straight blade

OEM # 5369CR.OEM



Male Plug

- Locking type
- Uses weatherproof cover 102N

Item # 205CRPN



Female Connector

- Locking type
- Uses weatherproof cover 103RN

Item # 205CRCN



Locking Receptacle

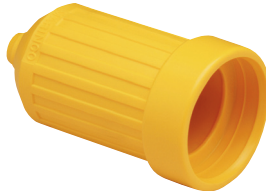
Item # 205CRR



Weatherproof Cover

- Use with 5366CR or 5266CR plugs

Item # 6017Y



Weatherproof Cover

- Use with 5369CR or 5269CR connectors

Item # 6018Y



Weatherproof Cover

- Can be used on 15 & 20 amp

OEM # 1520BI.OEM



Watertight Connector Cap

- For use on 16 or 32 amp products for CE compliance
- For use on 30 or 50 amp products to protect the connector when not in use

Item # 199109PK 16A/30A

Item # 199110PK 32A/50A



Ground Fault Circuit Interrupter (GFCI)

CAUTION: Ground Fault Circuit Interrupter protection is required when using electrical products outdoors or near water. GFCI Protection is required by the ABYC where a receptacle is in a head, galley, machinery space or weather deck.

Item # 1591-FI ivory

Item # 1591-FI.WHT white

OEM # 1591-FI.GRY.OEM gray

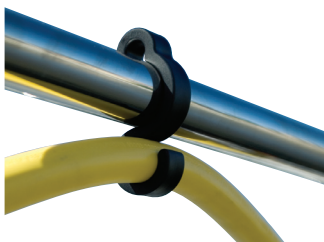




Cable Clips

- Includes 6 Cable Clips with stainless steel mounting screws
- Keeps shore power cable out of the water
- Holds 10 gauge 30A cable
- Easy to install
- Use on deck or edge of dock
- Organize shore power cable

Item # **CLIP**



Shore Power Cord Clips

- For 30A cords
- Organize shore power cords quickly and easily
- Can be used on tube or wire rails
- Packaged as set of 6 clips
- UV stable
- Practically unbreakable

Item # **CLIP-01** black



Organizer Bag

- Heavy duty nylon zippered bag with handle
- Ideal for storing cordsets and adapters

Item # **BAG**

Shore Power Cord Cover

- Keep shore power cables neat and bundled
- Holds 50A or 30A cordsets, can hold multiple cables
- UV resistant, machine washable marine grade fabric
- 24 ft

Item # **ZIP-01** black



Shore Power Carrying Strap

Bundle and organize your shore power cables or hoses with this durable and flexible Nylon carrying strap. Its' adjustable design fits around cord sets or hoses up to 9" in diameter while, the ergonomic, rubber handle makes carrying even larger 50 amp cord sets easy on your hand. A metal, reinforced grommet allows for hanging and storage.

Item # **STRAP**

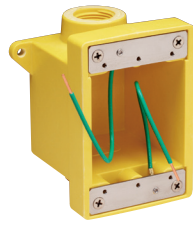




FS Box

- Black non-metallic, with two 3/4" K.O. holes
- Accepts 15A, 20A and 30A receptacles, and 7420CR weatherproof covers

Item # 6080



FD Box with 3/4" or 1" K.O. Holes

- Yellow fiberglass, with two K.O. holes
- Accepts 15A, 20A, 30A & 50A receptacles, and 7420CR & 7788CR covers

Item # 6083CR 3/4" holes
Item # 6084CR 1" holes



Weatherproof Cover

- Yellow LEXAN® polycarbonate with lift lid
- Fits 15A, 20A, & 30A single receptacles

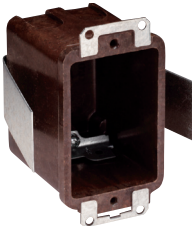
Item # 7420CR
OEM # 7420CR.OEM



Weatherproof Cover

- Yellow LEXAN® polycarbonate with lift lid
- Fits 50A receptacles 6369CR & 6370CR

Item # 7788CR



Plastic Switch/Outlet Box

- 3-9/32" x 2-3/16" x 2.5" D
- Can be secured against the back of wall or wall facing
- Accepts 15A, 20A & 30A receptacles, telephone outlets and TV coax connectors

Item # 6079



302 Stainless Steel Sealed Cover with Lift Lid

- Fits 4700CR, 5262CRR, & 5739CR duplex receptacles

Item # 7879CR



302 Stainless Steel Sealed Cover with Lift Lid

- Fits GFCI duplex receptacles

Item # 7879CR-FI
OEM # 7879CR-FI.OEM



Replacement Interior

- Fits 50A 125/250V Easy Lock 4-wire stainless steel or standard inlets manufactured after 8-1-93

Item # 6373ELMB



Replacement Interior

- Fits 303SSEL-B, 303SSI-B & 301EL-B boat inlets

Item # 305CRMB



Replacement Interior

- Fits 30A standard non-metallic inlets manufactured prior to 1/1/91

Item # 301CRMB



Replacement Boss Ring

- For use on 30A or 50A stainless steel inlets

Item # 102167 30A
Item # 102164 50A



Warning Labels

- For use on standard inlets
- For warning label placement use per ABYC standards

Item # 101739

16 Amp/230V, 50Hz Locking



Stainless Steel Inlet

- 316 stainless steel
- Easy Lock™ system
- Soft touch cap design
- Rear safety enclosure with strain relief

Item # 303SSEL-BXPK
OEM # 303SSEL-BX



Standard Inlet

- Easy Lock™ system
- Glass-filled polyester
- Watertight
- Rear safety enclosure with strain relief

OEM # 301EL-BX



Contour Inlet

- Easy Lock™ system
- Glass-filled polyester
- Watertight
- Rear safety enclosure with strain relief

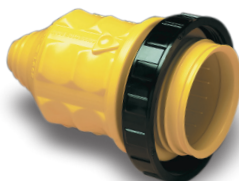
OEM # 304EL-BX.NT
OEM # 304EL-BX stainless steel trim



Female Connector

- Corrosion resistant contacts and terminals
- Use with cover 103RN and cap 199109

Item # 305CRCXNPK
OEM # 305CRCXN



Weatherproof Cover w/ Threaded Ring

- Use with 305CRCXN

Item # 103RNXPK
OEM # 103RNX



Connector Kit

- Includes female connector, weatherproof cover with threaded ring and watertight cap

Item # 199114



Locking Shore Power Cordset

- H07BQ-F 3G 2.50 mm² harmonized cable
- IEC 60309 plug 2P+E [6H], 250V/50Hz
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

Item # 25MSPPXP 25 meters
Item # 20MSPPXP 20 meters
Item # 15MSPPXP 15 meters
Item # 10MSPPXP 10 meters
Item # 1MSPPXP 1 meters



Harmonized Cable Cordset

- Blunt cut
- H07BQ-F 3G 2.50 mm² harmonized cable
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

Item # 25MSPPX 25 meters
Item # 20MSPPX 20 meters
Item # 15MSPPX 15 meters
Item # 10MSPPX 10 meters
Item # 1MSPPX 1 meters



12/3 Cable Cordset

- Blunt cut
- 12/3 (3.3 mm²) cable 16A/220V 50Hz
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

Item # 50SPPX 50 ft
Item # 25SPPX 25 ft

32 Amp/230V, 50Hz Locking

**Stainless Steel Inlet**

- 316 stainless steel
- Easy Lock™ system
- Soft Touch cap design
- Rear safety enclosure with strain relief
- No rear safety enclosure

Item # 6371EL-BX

OEM # 6371ELX

**Standard Inlet**

- Easy Lock™ system
- Glass-filled polyester
- Watertight
- Rear safety enclosure with strain relief

OEM # 6351EL-BX

**Contour Inlet**

- Easy Lock™ system
- Glass-filled polyester
- Watertight
- Rear safety enclosure with strain relief

OEM # 6343EL-BX

**Female Connector**

- Corrosion resistant contacts and terminals
- Use with cover 7715CRN and sealing cap 199110

Item # 6360CRNXPK

OEM # 6360CRNX

**Weatherproof Cover w/ Threaded Ring**

- Use with 6360CRNX, 6401CRCX, 6401CRPX, 6402CRCX, or 6402CRPX

Item # 7715CRNXPK

OEM # 7715CRNX

**Connector Kit**

- Includes female connector, weatherproof cover with treaded ring and watertight cap

Item # 199115**Locking Shore Power Cordset**

- H07BQ-F 3G 4 mm² harmonized cable
- IEC 60309 plug 2P+E [6H], 250V/50Hz
- Watertight connector sealing cap for CE compliance
- NEMA SS-1 moulded connector with LED power indicator light

Item # 15M32AXP 15 meters**Item # 1M32AXP** 1 meter**Harmonized Cable Cordset**

- Blunt cut
- H07BQ-F 3G 4 mm² harmonized cable
- Watertight connector sealing cap for CE compliance
- NEMA SS-1 moulded connector with LED power indicator light

Item # 15M32AX 15 meters**8/3 Cable Cordset**

- Male end blunt cut
- 8/3 (8.6 mm²) cable
- Moulded connector with LED power indicator light

Item # 6153SPPX 50 ft

**63 Amp/230V, 50Hz Locking
Single Phase, 3 Wire**



Stainless Steel Inlet

- 316 stainless steel
- Easy Lock™ System
- Soft touch cap design
- Rear safety enclosure with strain relief

Item # 6401EL-BX



Female Connector

- Corrosion resistant contacts and terminals

Item # 6401CRCX



Male Connector

- Corrosion resistant contacts and terminals

Item # 6401CRPX

**63 Amp/230V, 50Hz Locking
Three Phase, 4 Wire**



Stainless Steel Inlet

- 316 Stainless steel
- Easy Lock™ system
- Soft touch cap design
- Rear safety enclosure with strain relief

Item # 6402EL-BX



Female Connector

- Corrosion resistant contacts and terminals

Item # 6402CRCX



Male Connector

- Corrosion resistant contacts and terminals

Item # 6402CRPX



**Weatherproof Cover
w/ Threaded Ring**

- Use with 6360CRNX, 6401CRCX, 6401CRPX, 6402CRCX, or 6402CRPX

Item # 7715CRNXPK

OEM # 7715CRNX

16 Amp IEC Configuration**16A 230V Shore Power Cable**

- Wear-proof, UV resistant cable
- Molded IEC60309 3-pole plug and connector
- LED power indicator
- 2.5 mm² harmonized cable

Item # **121160150** 15 meters
 Item # **121160250** 25 meters

**16A 230V Shore Power Extension Cord**

- Wear-proof, UV resistant cable
- Molded IEC60309 3-pole plugs
- LED power indicator
- 2.5 mm² harmonized cable

Item # **121160151** 15 meters
 Item # **121160251** 25 meters

**16A 230V Inlet**

- Solid cast 316 stainless steel cap and bezel

Item # **121160000** 2+PE

**Adapter**

- CEE-7/7 connector to CE plug
- LED power indicator
- Wear-proof, UV resistant cable

Item # **121160900**

**Adapter**

- CE connector to CEE-7/7 plug
- Wear-proof, UV resistant cable

Item # **121160910**

**Splitter**

- LED power indicator
- Wear-proof, UV resistant cable

Item # **121160920**

32 Amp IEC Configuration**32A 230V Shore Power Cable**

- Wear-proof, UV resistant cable
- Molded IEC60309 3-pole plug and connector
- LED power indicator
- 4.0 mm² harmonized cable

Item # **121320250** 25 meters

**32A 230V Inlet**

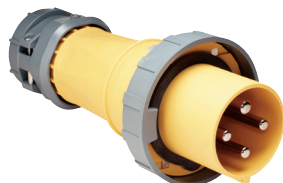
- Solid cast 316 stainless steel cap and bezel

Item # **121320000**

Practical tips

- Based on the maximum load for onboard power consumption, choose either a 16A or a 32A connection.
- For high loads choose multiple parallel connections to shore.
- Choose the appropriate connection to the shore: Standard is an earthed two-pole plug or the more familiar blue CEE three-pole plug.

100 Amp 125V/250V 3 Pole 4-Wire



**Plug w/
Gasketed Locking Ring**

- Mate with M4100R12 Receptacle

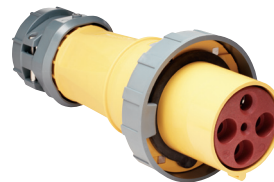
Item # M4100P12



Connector Body

- Mate with plug on extension cords or adapters. Note: It does not mate with shore power inlet.

Item # M4100C12



**Connector Body w/
Gasketed Locking Ring**

- Mate with M4100B12R Inlet

Item # M4100C12R

Dockside Receptacle

- Spring loaded cover providing a IP67 watertight rating when tightened.

Item # M4100R12



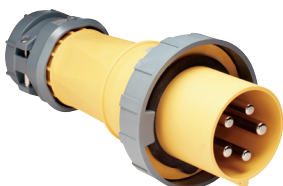
Shore Power Inlet

- Spring loaded cover providing a IP67 watertight rating when tightened.

Item # M4100B12R



100 Amp 3ØY 120V/208V 4 Pole 5-Wire



**Plug w/
Gasketed Locking Ring**

- Mate with M5100R9 receptacle

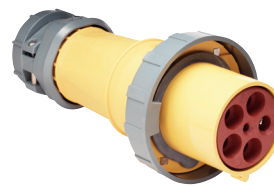
Item # M5100P9



Connector Body

- Mate with plug on extension cords or adapters. Note: It does not mate with shore power inlet.

Item # M5100C9



**Connector Body w/
Gasketed Locking Ring**

- Mate with M5100B9R Inlet

Item # M5100C9R

Dockside Receptacle

- Spring loaded cover providing a IP67 watertight rating when tightened.

Item # M5100R9



Shore Power Inlet

- Spring loaded cover providing a IP67 watertight rating when tightened.

Item # M5100B9R





The importance of a quality DC electrical system

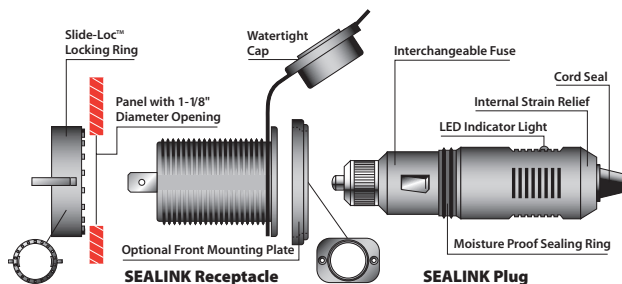
There's an old axiom that states, "The strongest chain is only as reliable as its weakest link," and the same analogy can be applied to your boat's DC electrical system. Put it in a harsh salt water or fresh water environment, where a vessel's wiring and components are subjected to more concentrated abuse in one season than your family car would experience in five years, and it's easy to realize that small electrical problems can get out of hand very quickly.

Safety onboard starts with a reliable DC electrical system that is installed and designed with the proper high quality wiring, components and connections to fulfill all of your intended DC tasks. If you're tempted to take shortcuts when wiring your boat, don't, as these types of cost-cutting measures can come back to bite you at the worst possible moments, potentially compromising the safety of your boat and crew.

So, whether you ply fresh water lakes, back bays, coastal areas or make long distance blue water runs to the edge of the continental shelf, Marinc® offers a wide selection of high quality, low voltage DC electrical products designed specifically for the harsh marine environments.

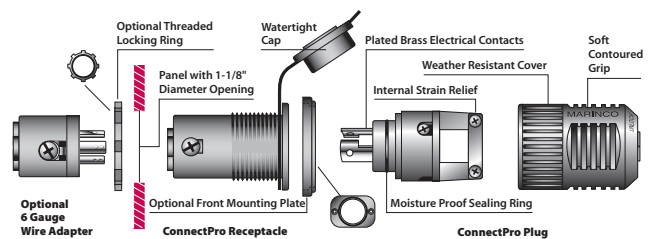
Now you can spend more time enjoying your boating experience and less time dealing with unwanted electrical hassles.

SeaLink® 12 Volt



The SeaLink® 12 volt family of products are manufactured from corrosion resistant marine grade materials. Exclusive to SeaLink® products is a unique interconnecting system that securely locks the plug into the receptacle resulting in a positive and moisture-proof connection. The plug and receptacle feature optimized metal connection points for maximum conductivity.

ConnectPro® Charging & Trolling



The ConnectPro® trolling motor plug and receptacle is a revolutionary concept in trolling motor DC connections. The ConnectPro® system has superior electric current carrying capacity that eliminates problems that rob motors of power and reduce battery life. The ConnectPro® system features locking plug and receptacle and spring clamping connection which provides a secure electrical contact.



SeaLink® Deluxe 12 Volt Receptacle

- Available in black or white
- Watertight sealing cap
- Easy to install, with supplied mounting plate for front panel installation, or locking ring for rear access installation

Item # 12VRC black
 Item # 12VRC.PG black w/gasket
 Item # 12VRCW white



SeaLink® Deluxe 12 Volt Receptacle

- Available in black or white
- Watertight sealing cap
- Easy to install with locking ring for rear access installation
- Compatible with standard 12V plugs
- No mounting plate

OEM # 12VRC.OEM black
 OEM # 12VRCW.OEM white



SeaLink® Deluxe 12 Volt Receptacle w/ Old Style Ring

- Available in black or white
- Watertight sealing cap
- Easy to install with locking ring for rear access installation
- Compatible with standard 12V plugs

OEM # 12VRCO black
 OEM # 12VRCO.PG black w/gasket



SeaLink® Deluxe 12 Volt Plug

- Moisture proof sealing ring
- LED power indicator light
- Interchangeable 10A fuse
- Internal strain relief and cord seal
- Compatible with standard 12V receptacles
- Max. rating is 10 amps

Item # 12VPG
 OEM # 12VPG.OEM



SeaLink® Deluxe 12 Volt Sealed Receptacle

- Sealed seams at electrical connections
- 4mm hole directs water away from electrical connections

OEM # 12VRCY



12 Volt Receptacle with Protective Cap

- Stainless Steel
- Includes stainless steel mounting plate and wire set

Item # 20036



SeaLink® Deluxe 12 Volt Receptacle & Plug

- 12VRC and 12VPG packaged together

Item # 12VPK



SeaLink® Mounting Plate

- Easy to install or retrofit
- 12MP.OEM use with 12VRCY, 12VRC.OEM, 12VRCO, or 12VBR.OEM
- 300259 use with 12VRCW.OEM

OEM # 12MP.OEM
 OEM # 300259 white



SeaLink® Receptacle Mounting Bracket

- Bracket for under dash mounting of the SeaLink® or ConnectPro® receptacles
- Receptacle installs with rear mounting threaded nut
- Marine grade anodized aluminum
- Dimensions: 2" W x 2-1/2" H

Item # 12BKT



SeaLink® Deluxe 12 Volt Extension Cord

- Heavy duty 18 gauge wire, extends to over 6 feet
- Watertight cap
- Plug features an LED indicator light, moisture proof sealing ring, strain relief and built-in 10A fuse
- SeaLink® locking system
- Works with any standard 12V plug and receptacle

Item # 12VXT



SeaLink® Deluxe 12 Volt Dual Outlet Cord

- Heavy duty 18 gauge wire, extends to over 1 foot
- Watertight caps
- Plug features an LED indicator light, moisture proof sealing ring, strain relief and built-in 10A fuse
- SeaLink® locking system
- Works with any standard 12V plug and receptacle

Item # 12VAD



5 YEAR WARRANTY

SeaLink® 12 Volt Extension Cord with Receptacle and Alligator Clips

- 6 feet heavy duty straight cable wire
- Watertight cap
- Corrosion resistant alligator clips
- Accepts SeaLink® plug or standard 12V plug

Item # 12VXC



Trolling Motor Adapter Terminal

- 6 gauge

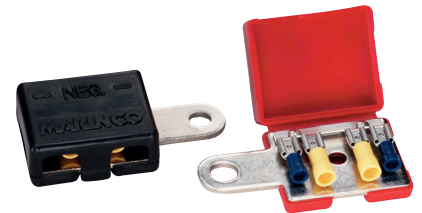
Item # 12VPL.OEM



Boot

- For use with 12V products
- Creates a weatherproof seal

Item # 300275

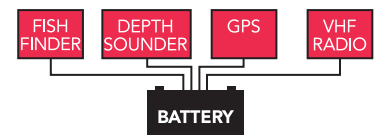


Battery Direct Connect™ Multi Connection Battery Terminals

- Terminate up to four electronic instruments on each set of terminals
- Comes complete with quick-connect terminals
- Positive molded in red, negative molded in black
- All one piece, no screws or parts to lose
- Cover snaps tight when closed

Item # 12VTR

OEM # 12VTR.OEM



5 YEAR WARRANTY



3-Wire ConnectPro® Charging / Trolling System



PATENTED

ConnectPro® Receptacle

- Universal design for 2 or 3-wire configuration 12, 24, 12/24, 24/36 or 36 volt systems
- Watertight sealing cap
- Corrosion resistant, plated brass electrical components
- Drain holes in receptacle keep water away from electrical components
- Perma-Lock™ screw terminals will not loosen under extreme hull vibration
- Standard 1-1/8" diameter mounting hole
- Easy to install, with supplied mounting plate for front panel installation, or locking ring for rear access installation
- Accepts 10 and 8 gauge wire
- Easily replaces other trolling motor plugs and receptacles

Item # 12VBR

Item # 12VBR.PG w/ gasket
OEM # 12VBR.OEM

w/ Old Style Ring

Item # 12VBRO

Mounting plate not included with 12VBR.OEM



ConnectPro® Plug

- O-ring seal for waterproof connections
- Weather resistant plug cover
- Corrosion resistant, plated brass electrical components
- Accepts 16 to 8 gauge wire
- Ergonomic contoured grip for easy hook-up and ground blade alignment

Item # 12VBP

OEM # 12VBP.OEM



ConnectPro® Receptacle & Plug

- 12VBR and 12VBP packaged together

Item # 12VCP



6 Gauge ConnectPro® Wire Receptacle Adapter

- Allows 6 gauge wire connection to ConnectPro® receptacle
- Corrosion resistant, plated brass electrical components

Item # 12VBRAD

OEM # 12VBRAD.OEM



ConnectPro® Receptacle, Plug & 6 Gauge Adapter

- 12VBR and 12VBP and 12 VBRAD packaged together
- Max. rating is 40 amps

Item # 12VCP6

2-Wire ConnectPro™ Charging / Trolling System / Downrigger

5 YEAR WARRANTY



ConnectPro® Receptacle

- Works with 12, 24, or 36 volt 2-wire systems
- For front mount panel installations
- Weather resistant sealing cap
- Drain holes in receptacle keep water away from electrical components
- Perma-Lock™ screw terminals will not loosen under extreme hull vibration
- Fits standard 1-1/8" diameter mounting hole
- Accepts up to 10 gauge wire

Item # 12VBRS2

OEM # 12VBRS2.OEM



ConnectPro® Plug

- O-ring seal for waterproof connections
- Weather resistant plug cover
- Corrosion resistant, plated brass electrical components
- Accepts 16 to 8 gauge wire
- Ergonomic contoured grip for easy hook-up and ground blade alignment
- Max. rating is 40 amps

Item # 12VBPS2

OEM # 12VBPS2.OEM



ConnectPro® Receptacle & Plug

- 12VBRS2 and 12VBPS2 packaged together

Item # 12VCPS2

3-wire 30 Amp/125V Locking Charging/Trolling System**Male Plug**

Short housing, black nylon with internal strain relief system and recessed fasteners

Item # 305BP

OEM # 305BP.OEM

**Female Connector**

Short housing, black nylon with internal strain relief system and recessed fasteners

Item # 305BC

**Receptacle**

Corrosion resistant reinforced nylon. Accepts 8 gauge stranded wire or up to 6 gauge with ring terminals

Item # 305CRRB

OEM # 305CRRB.OEM

5 YEAR WARRANTY**4-Wire 12/24V Locking Charging / Trolling System**

The 4-wire Trolling/Charging System eliminates the need for a charge/run switch. Install the receptacle on the boat, mount the black trolling motor plug on the trolling motor, and the red charger plug on the leads of the battery charger. Simply plug in the black plug to troll, or plug in the red plug to charge.

**Charger Plug (Male)**

- Connects to a 12V battery charger to allow simultaneous charging of two 12V batteries when plugged into the receptacle. Red

Item # 2018BP-12

OEM # 2018BP-12.OEM

**Trolling Motor Plug (Male)**

- Connects to trolling motor
- Jumpered internally to supply 12V & 24V power to the trolling motor when plugged into the receptacle. Black
- Max. rating is 60 amps (new rating)

Item # 2018BP-24

OEM # 2018BP-24.OEM

**Receptacle & Bracket**

- Spring loaded flip lid cover and 2018BR receptacle, pre assembled

Item # 2018BR-MB

**Bracket**

- Spring loaded flip lid cover, without receptacle

Item # 2018MB

OEM # 2018MB.OEM

**Trolling-Charging System Package**

- Includes the 2018BP-12, 2018BP-24, and 2018BR-MB

Item # 2018PKG

**Receptacle**

- Glass-reinforced corrosion resistant nylon. Accepts 8 gauge stranded wire or up to 6 gauge with ring terminals.

Item # 2018BR

OEM # 2018BR.OEM

OEM # 2018BR.OEM.BPS (case pack)



Generate: Your own power on board

Mastervolt powers your independence; whether for a single night at anchor or during a complete world trip. Being independent for a long period of time requires a great deal of power, and your batteries will often be insufficient on their own. Ultimately you require an energy source that generates its own power, and Mastervolt offers you a wide range of solutions.

The most comfortable option is to install a GPX. This combined charger/inverter/generator will provide you with independent power on board. When required, the ultra-efficient generator automatically starts up to charge your batteries or supply major consumers with power. Let your GPX do the work for you and enjoy an entirely carefree stay onboard...

If you don't have the space for a compact GPX, you can also choose to install a high-output alternator on your main engine. The accompanying intelligent 3-step regulator ensures that your batteries are charged quickly and safely. This allows you to

keep your batteries sufficiently powered on only an hour of energy (depending on system design).

A Solar ChargeMaster provides the quietest power generation, using the available energy from your solar panels to charge your batteries. The Solar ChargeMaster is completely independent, and works on the very first rays.

For sail yachts Mastervolt offers an even quieter way of generating power: The HybridMaster Ultra electric drive contains a regeneration mode that captures energy from the free spinning propeller.

For a more detailed description see the E-Pulsion segment in this catalog.



Hybrid Power	44
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Solar ChargeMaster	50





Hybrid Power: Just like home

Can a generator that is between two and four times smaller still meet your onboard power demands? Can such a generator start your air conditioning, while you are also cooking dinner and turning on the lights, as is the case at home? The answer is a resounding yes.

Meet the Mastervolt GPX, the first hybrid marine power system to include a generator, inverter, battery charger and generator/inverter/shore transfer system. Unlike a "classic" setup, the GPX reduces volume by 40% and weight by 50%, providing you with a pure sine wave 230V onboard AC power. You can even combine shore power with power from the generator and batteries.

Smaller generator, more efficiency, less budget

In conventional setups the size of the generator is dictated by the highest load demand. Although the average load on the generator is much lower, you end up with a generator that is far too big for your power needs. The result is a waste of budget and space, and way too much time spent running at an inefficient low load level. The new Mastervolt GPX brings an end to this over-specification, and reduces fuel consumption and noise levels in the process.

Full automatic operation

With the Mastervolt GPX you have no more concerns about peak loads. For instance, there is no need to start the generator itself first to switch on your air conditioning. The inverter will power this load from the batteries for the first 30 seconds, after which the generator will start automatically. And it's all fully automatic. The GPX will operate according to your chosen user profile: Silent, Normal or Power.

Easy installation

Installing a Mastervolt GPX is easy as it consists of a compact box that includes all the essentials for your power needs. Via MasterBus, Mastervolt's intelligent one-cable system, you can connect all components on your boat quickly and without fuss. The MasterView Easy or MasterView System touchscreen displays allow you to operate and monitor your system, even from a distance with GPRS/SMS text messages.

Green at heart

Green at heart and with 10 kW of starting power, the GPX offers 2 kW of continuous power via the Mastervolt batteries. The diesel engine is only activated in case of a continuous load of more than 2 kW. This way the GPX saves fuel, materials, space and weight.

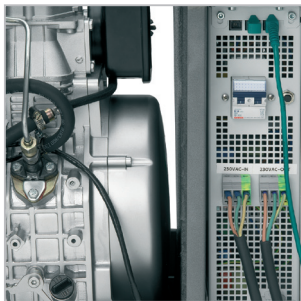
- Smaller generator required due to auxiliary batteries for peak loads.
- No inefficient running of the generator, lower fuel consumption.
- 10 to 20% more efficient conversion of the rotating diesel power via the permanent magnet generator.
- No power loss due to conversion of generator energy via the batteries to the inverter.
- Compact size saves space and weight.

**Combined power**

Combines shore power, battery power and generator power in the most economical way.

Perfect AC power

The AC output is controlled by power electronics and ensures a perfect AC power. Even while running the generator and turning on and off heavy loads.

**State-of-the-art technology**

Variable speed generator with ultra-efficient permanent magnet alternator.

**Total energy system**

The GPX fits perfectly in an e-propulsion system, thanks to the smart integration of inverter, generator, battery charger and transfer system. To use the Mastervolt GPX in a system, check the Mastervolt Powerbook Systems.

Mastervolt will introduce higher capacities with GPX technology. Keep checking mastervolt.us/gpx for the latest information.

PRELIMINARY
SPECS




GPX-6.5



GPX-8E*



GPX-12E*

Item #	--	--	--
General Specifications			
Output voltage	230V / 50Hz	230V / 50Hz	230V / 50Hz
Peak output (silent)	10 kW (5 seconds)	10 kW (5 seconds)	10 kW (5 seconds)
Output power (silent)	2.5 kW cont.	2.5 kW cont.	2.5 kW cont.
Propulsion* power (silent)	n.a.	4 kW cont.	8 kW cont.
Output power (running)	6.5 kW cont.	6.5 kW cont.	6.5 kW cont.
Propulsion* power (running)	n.a.	8 kW cont.	12 kW cont.
Dimensions, hwxwd	27.6"x17.9"x20.7" 700x455x525 mm	31.5"x17.9"x20.7" 800x455x525 mm	35.4"x17.9"x20.7" 900x455x525 mm
Weight (dry weight)	176.4 lbs / 80 kg	194 lbs / 88 kg	211.6 lbs / 96 kg
Low Voltage DC Specifications			
Battery voltage	12/24/48V	12/24/48V	12/24/48V
Battery charging current	120/80/40A	120/80/40A	120/80/40A
Min. battery capacity	320/160/80 Ah	400/200/100 Ah	600/320/160 Ah
Battery type settings	open lead / gel / traction / AGM / spiral / Li-Ion		
Charge characteristic	standard Mastervolt 3-stepⓈ	standard Mastervolt 3-stepⓈ	standard Mastervolt 3-stepⓈ
Alternator Specifications			
Type	brushless permanent magnet alternator		
Cont. rated power	3000 rpm 4.2 kW	3000 rpm 4.2 kW	3000 rpm 4.2 kW
Diesel Engine Specifications			
Number of cylinders	1	1	1
Cylinder capacity	300 cc	300 cc	300 cc
Engine cooling	indirect water cooled	indirect water cooled	indirect water cooled
Governing system	electronic	electronic	electronic
Specifications Transfer System Shore Power			
Max. current	32A	32A	32A
Ground relay	yes	yes	yes
Transfer relay & RCD	yes	yes	yes
Technical Specifications			
Temperature range operational	-20°C to 40°C, >40°C derating / -4°F to 104°F, >104°F derating		
Protection degree	IP23	IP23	IP23
Relative humidity	max. 95% non condensing, protected against humidity and condensing air by conformal coating on both sides of all PCB's		
AC connections	terminal block	terminal block	terminal block
DC connections	screw terminal M10	screw terminal M10	screw terminal M10
Communication ports MasterBus	2x RJ45	2x RJ45	2x RJ45
Connection temperature sensor	1x RJ11	1x RJ11	1x RJ11
Options			
MasterView Easy 77010305		delivered as standard	delivered as standard
MasterView System 77010400		optional	optional
MasterShunt 77020100		provides state of charge information	
Temperature sensor	delivered as standard	delivered as standard	delivered as standard

* The GPX 'E' contains an additional module, which is the controller for the electric motor in an E-propulsion system. Now it is a real 'one box for all' solution; just connect the power cables of your electric motor to the GPX and you can drive the boat. Another advantage of the integrated motor control is the high overall efficiency, by taking the power directly from the source (grid, batteries, or diesel) with minimal conversion steps. A true hybrid power solution saving labor, costs, and energy, resulting in a simple and reliable installation.

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



Alternators and Charge Regulators: For rapidly recharged batteries

The already present alternator on the main engine is designed to charge the starter battery. As a result the combination is not ideal for fast and full charging of other batteries such as the service or bowthruster battery. Especially if you want to charge the batteries over a short time or when the batteries and onboard network require a little more power.

There are two options to solve this issue:

Equip the standard alternator with a Mastervolt Alpha Pro MB charge regulator. This will ensure that the existing alternator works in accordance with the 3-step charge technology instead of its standard 1-step method, and that the batteries are charged faster within a shorter period.

You can also choose a powerful second Mastervolt Alpha alternator with Alpha Pro MB charge regulator. This combination was specifically designed for charging service batteries, and allows you to charge quickly and turn off your engine when you moor.

Alpha alternator series

- Fast & complete charging of starter/service/bowthruster batteries.
- Power supply for all consumers.
- 12V and 24V versions.
- 75A to 150A charge current.
- Standard delivered with Alpha Pro MB charge regulator for an optimal performance and longer-lasting batteries.

Alpha Pro MB charge regulators

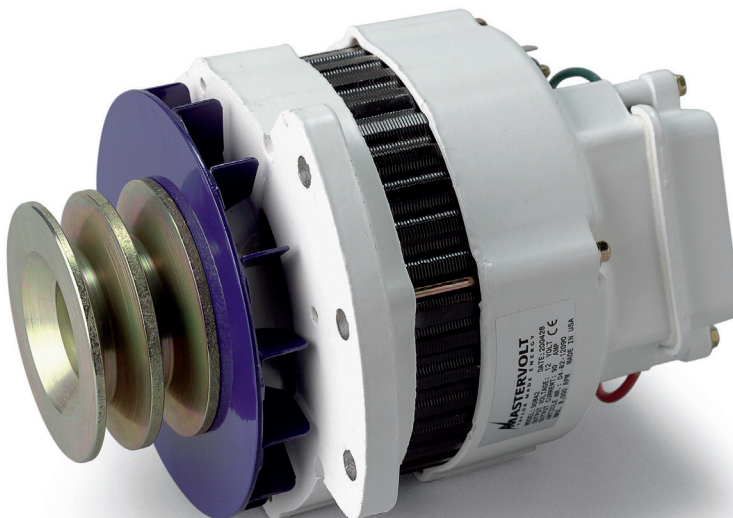
- Suitable for 12 and 24 V.
- Including plug & play connection cable, also for Bosch alternators.
- Automatic voltage and temperature compensation.
- MasterBus compatible.

The charge voltage is automatically adjusted if there is any risk of gas formation. Electronics permanently regulate the voltage, ensuring that the battery is always kept in good condition.

Tip: Become independent of shore power and choose a powerful charge system on your main engine.

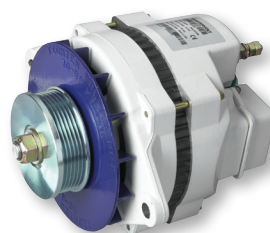
Fast charging, even at a stationary rpm

Standard alternator only supply the specified capacity at a high rpm. The Mastervolt Alpha generator was specifically designed to charge powerfully, even with a low engine rpm.



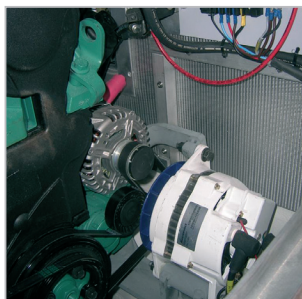
For all engine types

Alpha alternators are equipped with several fixations for customized alternator brackets, available from your installer or engine supplier. Some engine brands come with Mastervolt alternator brackets as an option.



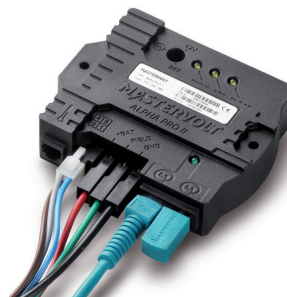
Multi-belt pulley

The 12/130 and 24/75 models are also available with a multi-belt pulley.



Performs above 40°C

Forced cooling via the ventilator action of the pulley provides a lot of power in higher temperatures, even in enclosed engine rooms where the temperature can easily rise above 40°C.



Alpha Pro MB charge regulator: Easy to install

The Alpha Pro MB charge regulator is designed as a 'fit all' solution, just one unit is needed for both 12 and 24 V applications, with a simple selector switch to set the regulator to the right voltage. The unit can also be used on any other brand of alternator that has a standard Bosch connector, with a cable supplied as standard in the box. Easy operation LEDs on the body of the regulator indicate the charge phase.

Alpha Alternator Specifications

	12/90	12/130*	24/75*	24/110	24/150
Item #	48512090	48512130	48524075	48524110	48524150
Type cabinet	A	B	B	B	C
Charge current	90A	130A	75A	110A	150A
Alpha Pro charge regulator	standard	standard	standard	standard	standard
Charge voltage absorption	14.25V	14.25V	28.5V	28.5V	28.5V
Charge voltage float	13.25V	13.25V	26.5V	26.5V	26.5V
Cable length regulator/alternator	1.5 meter / 4.9 ft, oil resistant marine connection cable — delivered as standard				
Pulley (double) diameter	ø 73 mm	ø 88 mm	ø 88 mm	ø 88 mm	ø 92 mm
Belt section	2xA	2xA	2xA	2xA	2xA
Isolated from mass	yes	yes	yes	yes	yes
Directions of revolutions	2	2	2	2	2
Weight	12.1 lbs 5.5 kg	22.3 lbs 10.1 kg	22.3 lbs 10.1 kg	22.3 lbs 10.1 kg	28.9 lbs 13.1 kg
Dimensions	go to mastervolt.us/alternators for the drawings				
Mounting	five to six, six o'clock & five past six	six o'clock	six o'clock	six o'clock	five to six, six o'clock & five past six
Charge regulation	the Alpha Pro regulator is standard with all models, see table hereunder				

* Available with multi-belt pulley (12/130 model = **48512131**, 24/75 model = **48524076**).

Alpha Pro MB Charge Regulator

45512000



Connection cable delivered
as standard



Plus connection cable for
Bosch alternator

Link to MasterShunt	yes
Connection to Mastervolt alternator	yes
Connection to Bosch alternator	yes
Cooling	fanless
Nominal output voltage	12 V / 24 V
Cable length regulator/alternator	5' (1.5 m) oil resistant connection cable
Cable length temperature sensor	20' (6 m)
Connection plug regulator/alternator	Alpha/Mastervolt
Display/read-out	LED display
Dimensions, hxxwxd	3.5"x4.3"x1.2" (90x109x30 mm)
Weight	0.88 lbs (0.4 kg)
Approvals	CE
Charge characteristic	IUoUo, automatic / 3-step+ for gel/ AGM/ wet/Lithium Ion
Charge voltage bulk	14.25 V / 28.5 V
Charge voltage absorption	14.25 V / 28.5 V
Absorbtion time	4 hours, adjustable from 2 minutes to 12 hours
Charge voltage float	13.25 V / 26.5 V
Temperature compensation	-22 mV / °F (-30 mV / °C)
Voltage compensation	voltage drop compensation in DC cables up to 3 V
Alternator type	various
Protection degree	IP65
MasterBus compatible	yes

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



The sun as extra energy source

As photovoltaic cells generate energy when exposed to sunlight, they can provide a sustainable energy source and charge the batteries on your yacht.

All Mastervolt's know-how in the field of solar power has been included in the Solar ChargeMaster, which offers maximum efficiency from the often irregular availability of sunlight. Power electronics provide a pure charge current in all conditions while the 3-step charging method ensures a safe charging process and a longer lifespan for your batteries.

Features

- Works with nearly all solar panels (PV-modules).
- Suitable for 12V and 24V.
- Clear LCD display and graphics.
- 3-Step charging method adjustable for all battery types.
- Automatic night detection.
- Extensive alarm system (buzzer).
- Automatically switches off load when battery current is low.
- Comes as standard with temperature sensor for batteries.
- Optional PC-Link for PC and laptop.

Solar ChargeMaster Specifications



SCM-N 20



SCM-N 40

Item #	131802000	131804000
Charge current	20A	40A
Max. DC load	20A	40A
Solar input voltage window	12–50V DC	12–50V DC
System voltage (battery)	12/24V auto detect	12/24V auto detect
No load	< 4 mA	< 4 mA
Functions LCD display	battery status/V/A/charge & discharge	
Connections	screw terminal	screw terminal
Settings	load/disconnect, 3-step charge characteristic	
Dimensions, hxxwxd	5.5"x4.1"x1.6" 140x105x41 mm	5.5"x4.1"x1.6" 140x105x41 mm
Protection degree cabinet	IP20	IP20
Weight	2 lbs / 189 gr	2 lbs / 189 gr
PC-Link	21730400 option	21730400 option





Convert: The latest technology for maximum pleasure

It is only right that you wish to enjoy the same luxuries onboard as you have at home, including a microwave, LCD TV, coffee maker, phone charger and music system – all without glitches, dips or errors and in complete safety. Mastervolt has the solution you require. All our power conversion products are based on the latest technologies, and designed for a maritime environment. This results in smarter, smaller, lighter and quieter products. What's more, you benefit from the reliability and long lifespan for which Mastervolt products have been renowned for over 20 years.

While all our products work very well with other brands, a perfect synergy is achieved when you exclusively combine Mastervolt products. Most are equipped with a MasterBus communication protocol with high-speed CANbus technology.

This ensures seamless synchronisation and all the necessary system information via the MasterView control panels at a glance. Add in the astonishing ease of installation and Mastervolt standards of reliability and you have an integrated electrical system onboard offering far more than the sum of its parts. It is this that sets Mastervolt apart from all other brands!



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Battery Chargers: A long life for your battery!

Do you want to charge your batteries safely, reliably, and preferably, quickly, even when you are in a marina with poor shore power or a limited power supply? Do you also value batteries that have a long lifespan while maintaining their capacity? Mastervolt offers you the best possible solution. The Mastervolt 3-step[®] charging method ensures more power and a longer life for your batteries. Our battery chargers integrate multiple functions, charging your battery safely and completely even when they are depleted. Fast battery charging is guaranteed by the efficient use of the available shore or generator power (all Mastervolt battery chargers have a power factor correction). Mastervolt is Green by Heart.

Which battery charger best meets your needs?

We offer three types of battery chargers:

Charge Pro™: range of waterproof battery chargers for recreational use and sport fisherman. Multiple outputs allow for flexibility.

ChargeMaster: Suitable for recreational and semi-professional use. Easy to install, it includes a detailed display and easy three-button controls. The ChargeMaster safely charges multiple battery banks at the same time.

Mass: For the tougher tasks in professional and semi-professional situations. With its integrated alarm functions and various certificates, the Mass is the best choice for professionals.



Choosing your battery charger?

Determine:

- How many battery banks do I want to charge?
- What voltage do I need to supply. The battery charger must have the same voltage as the battery bank.
- Rule of thumb is that 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.

The best battery charger for every application

The ChargeMaster can charge multiple battery banks at once, providing the ease and comfort of combined functionalities. The Mass battery charger has one main outlet to optimally charge a battery bank and guarantee a long lifespan for your batteries even with daily and intensive use. The second outlet is used for the maintenance charge of your starter battery.

**Charging Lithium Ion batteries**

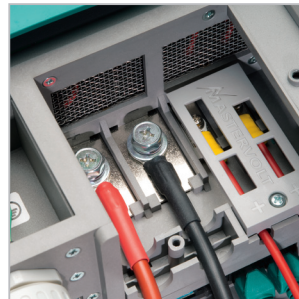
Although Lithium Ion batteries are increasingly popular, there can be a lack of clarity when it comes to the charging process. This is not a problem with a Mastervolt system as the Mastervolt battery charger communicates directly with the Li-ion battery.

**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 blowing the shore fuse, even when the shore power drops.










**MasterBus compatible**

All ChargeMaster & Mass 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.

**Robust connections**

Solid metal-to-metal connections prevent corrosion and/or overheating.

Convert: PowerCharger & ChargeMaster Specifications – 12V

				
	PowerCharger 12/20-3	PowerCharger 12/40-3	ChargeMaster 12/10-1	ChargeMaster 12/15-2
Item #	44210200	44210400	43011000	43011500
General Specifications				
Nominal output voltage	12V	12V	12V	12V
Total charge current	20A	40A	10A at 14.25V	15A at 14.25V
Number of battery outlets	3	3	1	2
Charge current second output	20A	40A	n.a.	15A
Charge current third output	20A	40A	n.a.	n.a.
Recommended battery capacity	50–250 Ah	100–450 Ah	25–100 Ah	30–150 Ah
Nominal input voltage	120/230V (50/60 Hz)	120/230V (50/60 Hz)	230V (180–265V) – 50/60Hz	230V (180–265V) – 50/60Hz
AC connection	6.5 ft AC cable	connector strips	socket	socket
Supplies your system without battery	yes	yes	no	no
Display/read-out	LED display	LED display	1 LED	1 LED
Dimensions, hwxwd	9.21"x5.2"x2.36" 234x132x60 mm	11.46"x8.27"x5.16" 291x210x131 mm	7.1"x4.8"x2" 180x121x50 mm	8.1"x4.8"x2" 206x121x50 mm
Weight	1.8 kg / 3.97 lbs	4 kg / 8.82 lbs	1 kg / 2.2 lbs	1 kg / 2.2 lbs
Fastening	screw	mounting bracket/screws	screw	screw
Approvals	CE, E-mark (95/54/EG), SAE J1171/ISO 8846 ignition protected, ABYC A-31, UL (incl. marine suppl)		CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
Technical Specifications				
Charge characteristic*	IUoUo, automatic / 3-stepⓈ for gel/AGM/wet/Lithium Ion		IUoUo, automatic / 3-stepⓈ for gel/AGM/wet/Lithium Ion	
Charge voltage Bulk (25°C)**	14.4V	14.4V	14.25V (6 hours)	14.25V (6 hours)
Charge voltage Absorption (25°C)**	14.25V	14.25V	14.25V (6 hours)	14.25V (6 hours)
Charge voltage Float – wet (25°C)**	4 hours	4 hours	13.25V	13.25V
Charge voltage Float – gel/AGM (25°C)**	13.25V	13.25V	13.8V	13.8V
Temperature compensation	13.8V, -22 mV/°C or -7.6 mV/°F		no	no
Voltage compensation	automatic	automatic	automatic	automatic
DC consumption	<2 mA	<5 mA	<1 mA	<1 mA
Full load consumption (230V AC)	420 W	700 W	170 W	250 W
Current Control function	no	no	no	no
Cos phi	>0.98	>0.98	>0.95	>0.95
Temperature range (ambient temp.)	-25°–65°C -13°–149°F	-25°–70°C -13°–158°F	-25°C–60°C, >40°C derating -13°F–140°F, >104°F derating	
Cooling	natural cooling	vario fan	maintenance vario fan to ensure optimized cooling	
Sound level	<52 dbA at 1 mtr	<52 dbA at 1 mtr	<30 dbA at 1 mtr	<52 dbA at 1 mtr
Protection degree	IP23	IP23	IP65	IP21
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	no	no	no	no
CSI/DC alarm	yes, Multipurpose Contact Output (Item # 77030500)		no	no
Options				
MasterView Read-out 77010050		n.a.	n.a.	n.a.
MasterView Easy 77010305		n.a.	n.a.	n.a.
MasterShunt 77020100		n.a.	n.a.	n.a.
MasterBus USB Interface 77030100		n.a.	n.a.	n.a.
Multipurpose Contact Output 77030500		n.a.	n.a.	n.a.

* The charge characteristic can be set to your requirements.










** The battery charge current can sometimes be specified at 20°C/68°F, so take temperature compensation into account.

ChargeMaster
12/25-3ChargeMaster
12/35-3ChargeMaster
12/50-3ChargeMaster
12/70-3ChargeMaster
12/100-3

44010250	44010350	44010500	44010700	44011000
12V	12V	12V	12V	12V
25A at 13.25V	35A at 14.4V	50A at 14.4V	70A at 14.4V	100A at 14.4V
3	3	3	3	3
25A	35A	50A	10A	10A
25A	35A	50A	10A	10A
50–250 Ah	70–350 Ah	100–500 Ah	140–700 Ah	200–1000 Ah
120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz
2 mtr AC cable	connector strips	connector strips	connector strips	connector strips
yes	yes	yes	yes	yes
LED display	LED display	LED display	LCD display	LCD display
9.2"x5.2"x2.4" 234x132x60 mm	11.5"x8.3"x5.2" 291x210x131 mm	11.5"x8.3"x5.2" 291x210x131 mm	14.3"x11"x5.9" 362x277x150 mm	14.3"x11"x5.9" 362x277x150 mm
1,8 kg / 4 lbs	4 kg / 9 lbs	4 kg / 9 lbs	7 kg / 16 lbs	7 kg / 16 lbs
screw	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			
IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion				
14.4V (8 hours)	14.4V (8 hours)	14.4V (8 hours)	14.4V (8 hours)	14.4V (8 hours)
14.25V (4 hours)	14.25V (4 hours)	14.25V (4 hours)	14.25V (4 hours)	14.25V (4 hours)
13.25V	13.25V	13.25V	13.25V	13.25V
13.8V	13.8V	13.8V	13.8V	13.8V
-30 mV/°C or -17 mV/°F	-30 mV/°C or -17 mV/°F	-30 mV/°C or -17 mV/°F	-30 mV/°C or -17 mV/°F	-30 mV/°C or -17 mV/°F
automatic	automatic	automatic	automatic	automatic
<2 mA	<5 mA	<5 mA	<5 mA	<5 mA
450 W	575 W	825 W	1200 W	1700 W
no	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus	yes, through MasterBus
≥0.98	≥0.98	≥0.98	≥0.98	≥0.98
-25°C–60°C, >25°C derating -13°F–140°F, >77°F derating		-25°C–60°C, >40°C derating -13°F–140°F, >104°F derating		
maintenance vario fan to ensure optimized cooling				
<52 dBA at 1 mtr	<52 dBA at 1 mtr	<52 dBA at 1 mtr	<52 dBA at 1 mtr	<52 dBA at 1 mtr
IP23	IP23	IP23	IP23	IP23
over temperature, over load, short circuit, high battery, low battery				
yes	yes	yes	yes	yes
yes, using a Multipurpose Contact Output (Item # 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.				
MasterBus integrated battery monitor, with detailed information on the status of your batteries for a optimized charging process, incl. voltage, current, remaining time and consumption capacity in percentage.				
Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterView System software (free to download).				
MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), replacement of the CSI alarm contact.				

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

Convert: ChargeMaster Specifications – 24V

				
	ChargeMaster 24/6-1	ChargeMaster 24/12-3	ChargeMaster 24/20-3	ChargeMaster 24/30-3
Item #	43020600	44020120	44020200	44020300
General Specifications				
Nominal output voltage	24V	24V	24V	24V
Total charge current	6A at 28.5V	12A at 26.5V	20A at 28.8V	30A at 28.8V
Number of battery outlets	1	3	3	3
Charge current second output	n.a.	12A	20A	30A
Charge current third output	n.a.	12A	20A	30A
Recommended battery capacity	25–70 Ah	24–120 Ah	40–200 Ah	60–300 Ah
Nominal input voltage	230V (180–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz	120/230V (90–265V) – 50/60Hz
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, hwxwd	7.1"x4.8"x2" 180x121x50 mm	9.2"x5.2"x2.4" 234x132x60 mm	11.5"x8.3"x5.2" 291x210x131 mm	11.5"x8.3"x5.2" 291x210x131 mm
Weight	1 kg / 2.2 lbs	1.8 kg / 4 lbs	4 kg / 9 lbs	4 kg / 9 lbs
Fastening	4x screw	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)**	28.5V (6 hours)	28.8V (8 hours)	28.8V (8 hours)	28.8V (8 hours)
Charge voltage Absorption (25°C)**	28.5V (6 hours)	28.5V (4 hours)	28.5V (4 hours)	28.5V (4 hours)
Charge voltage Float – wet (25°C)**	26.5V	26.5V	26.5V	26.5V
Charge voltage Float – gel/AGM (25°C)**	27.6V	27.6V	27.6V	27.6V
Temperature compensation	no	-60 mV/°C or -33 mV/°F	-60 mV/°C or -33 mV/°F	-60 mV/°C or -33 mV/°F
Voltage compensation	automatic	automatic	automatic	automatic
DC consumption	<1 mA	<2 mA	<2.5 mA	<2.5 mA
Full load consumption (230V AC)	210 W	435 W	660 W	925 W
Current Control function	no	no	yes, through MasterBus	yes, through MasterBus
Cos phi	>0.95	≥0.98	≥0.98	≥0.98
Temperature range (ambient temp.)	-25°C–60°C, >40°C derating -13°F–140°F, >104°F derating	-25°C–60°C, >25°C derating -13°F–140°F, >77°F derating	-25°C–60°C, >40°C derating -13°F–140°F, >104°F derating	
Cooling	natural cooling	-13°F–140°F, >77°F derating		
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		
77030500				
Options				
MasterView Read-out 77010050		n.a.	Remote panel for reading the charge status of your battery charger, incl. error notifications.	
MasterView Easy 77010305		n.a.	Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting.	
MasterShunt 77020100		n.a.	MasterBus integrated battery monitor, with detailed information on the status of your batteries for a optimized charging process, incl. voltage, current, remaining time...	
MasterBus USB Interface 77030100		n.a.	Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when...	
Multipurpose Contact Output 77030500		n.a.	MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), replacement of the CSI alarm contact.	

* The charge characteristic can be set to your requirements.

** The battery charge current can sometimes be specified at 20°C/68°F, so take temperature compensation into account.

ChargeMaster
24/40-3ChargeMaster
24/60-3ChargeMaster
24/80-3ChargeMaster
24/100-3**44020400****44020600****44020800****44021000**

24V

24V

24V

24V

40A at 28.8V

60A at 28.8V

80A at 28.8V

100A at 28.8V

3

3

3

3

10A

10A

10A

10A

10A

10A

10A

10A

80–400 Ah

120–600 Ah

160–800 Ah

200–1000 Ah

120/230V (90–265V) –
50/60Hz120/230V (90–265V) –
50/60Hz120/230V (90–265V) –
50/60Hz120/230V (90–265V) –
50/60Hz

connector strips

connector strips

connector strips

connector strips

yes

yes

yes

yes

LCD display

LCD display

LCD display

LCD display

14.3"x11"x5.9"
362x277x150 mm14.3"x11"x5.9"
362x277x150 mm17"x11"x5.9"
432x277x150 mm17"x11"x5.9"
432x277x150 mm

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

IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion

28.8V (8 hours)

28.8V (8 hours)

28.8V (8 hours)

28.8V (8 hours)

28.5V (4 hours)

28.5V (4 hours)

28.5V (4 hours)

28.5V (4 hours)

26.5V

26.5V

26.5V

26.5V

27.6V

27.6V

27.6V

27.6V

-60 mV/°C or -33 mV/°F

-60 mV/°C or -33 mV/°F

-60 mV/°C or -33 mV/°F

-60 mV/°C or -33 mV/°F

automatic

automatic

automatic

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

-25°C–60°C, >40°C derating
-13°F–140°F, >104°F derating-25°C–60°C, >40°C derating
-13°F–140°F, >104°F derating

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

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

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

and consumption capacity in percentage.

combined with MasterView System software (free to download).

MasterBus controllable potential-free contact, with alarm notification on the onboard system (low voltage or no AC), replacement of the CSI alarm contact.

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

Convert: Mass Specifications – 12, 24 & 48V



Mass
24/15-2









Mass
24/25-2



Mass
24/25-2 DNV



Mass
24/50-2

Item #	40020156	40020256	40720266	40020506
General Specifications				
Nominal output voltage	24V	24V	24V	24V
Total charge current	15A at 28.5V	25A at 28.5V	25A at 28.5V	50A at 28.5V
Number of battery outlets	2	2	2	2
Charge current second output	3A	3A	3A	3A
Recommended battery capacity	30–150 Ah	50–250 Ah	50–250 Ah	100–500 Ah
Nominal input voltage	230V (180–265V) – 50/60Hz		230V (180–265V) – 50/60Hz	
Supplies your system without battery	yes	yes	yes	yes
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	12.8"x8.7"x4.4" 325x220x111 mm	12.8"x8.7"x4.4" 325x220x111 mm	14.4"x8.7"x4.4" 365x220x111 mm	13.4"x10.3"x5.1" 340x261x130 mm
Weight	3.3 kg / 7.3 lbs	3.3 kg / 7.3 lbs	3.5 kg / 7.7 lbs	4.6 kg / 10.1 lbs
Approvals*	CE, E-mark, ABYC A-31 / RRR, RS		CE, E-mark, ABYC A-31 / RRR, RS, DNV	CE, E-mark, ABYC A-31 / RRR, RS
Technical Specifications				
Charge characteristic**	IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion			
Charge voltage Bulk (25°C)***	28.5V (8 hours)	28.5V (8 hours)	28.5V (8 hours)	28.5V (8 hours)
Charge voltage Absorption (25°C)***	28.5V (4 hours)	28.5V (4 hours)	28.5V (4 hours)	28.5V (4 hours)
Charge voltage Float – wet (25°C)***	26.5V	26.5V	26.5V	26.5V
Charge voltage Float – gel/AGM (25°C)***	27.6V	27.6V	27.6V	27.6V
Temperature compensation	-33 mV/°F -60 mV/°C	-33 mV/°F -60 mV/°C	-33 mV/°F -60 mV/°C	-33 mV/°F -60 mV/°C
Voltage compensation	voltage drop compensation in DC cables up to 3 volt			
DC consumption	<1 mA	<1 mA	<1 mA	<1 mA
Full load consumption (230V AC)	550 W	880 W	880 W	1800 W
Cos phi	>0.95	>0.95	>0.95	>0.95
Temperature range (ambient temp.)	-25°C–80°C, >45°C derating		-25°C–80°C, >45°C derating	
Cooling	vario fan	vario fan	vario fan	vario fan
Sound level	<48 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr
Protection degree	IP23	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	yes	yes	yes	yes
CSI/DC alarm (Charger Status Interface)	integrated in the battery charger as standard			
GMDSS function	GMDSS panel is available for all models			
Options				
MasterView Read-out 77010050		Remote panel for reading the charge status of your battery charger, including error notifications.		
MasterView Easy 77010305		Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting.		
MasterShunt 77020100		MasterBus integrated shunt, with detailed information on the status of your batteries for a optimized charging process, incl. voltage, current, remaining time and consumption capacity in percentage.		
MasterBus USB Interface 77030100		Communication port between MasterBus and the USB port of your PC; makes possible reading and configuration of your MasterBus system on the PC when combined with MasterView System software...		
MasterVision panels	Model C3-RS 70403040		Masterlink MICC 70403105	

* Check our website for the certificates per model.

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

*** The battery charge current can sometimes be specified at 20°C/68°F, so take temperature compensation into account.



Mass
24/75
40020756



Mass
24/100
40021006



Mass
24/100-3ph
40031006



Mass
48/25
40040256



Mass
48/50
40040506

24V	24V	24V	48V	48V
75A at 28.5V	100A at 28.5V	100A at 28.5V	25A at 57V	50A at 57V
1	1	1	1	1
n.a.	n.a.	n.a.	n.a.	n.a.
150–750 Ah	200–1000 Ah	200–1000 Ah	100–500 Ah	100–500 Ah
230V (180–265V) – 50/60Hz		3x400V (360–485V)	230V (180–250V) – 50/60Hz	
yes	yes	yes	yes	yes
LED display	LED display	LED display	LED display	LED display
13.4"x10.3"x5.1"	13.4"x10.3"x5.1"	16.5"x12.5"x5.1"	16.5"x12.5"x5.1"	16.5"x12.5"x5.1"
340x261x130 mm	340x261x130 mm	420x318x130 mm	420x318x130 mm	420x318x130 mm
7.7 kg / 17 lbs	7.7 kg / 17 lbs	7.7 kg / 17 lbs	4.6 kg / 10.1 lbs	7.7 kg / 17 lbs
CE, E-mark, ABYC A-31 / RRR, RS, Lloyds, Bureau Veritas, Germanischer Lloyds		CE, E-mark, ABYC A-31 / RRR, RS		
IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion				
28.5V (8 hours)	28.5V (8 hours)	28.5V (8 hours)	57V (8 hours)	57V (8 hours)
28.5V (4 hours)	28.5V (4 hours)	28.5V (4 hours)	57V (4 hours)	57V (4 hours)
26.5V	26.5V	26.5V	53V	53V
27.6V	27.6V	27.6V	55.2V	55.2V
-33 mV/°F	-33 mV/°F	-33 mV/°F	-62 mV/°F	-62 mV/°F
-60 mV/°C	-60 mV/°C	-60 mV/°C	-120 mV/°C	-120 mV/°C
voltage drop compensation in DC cables up to 3 volt				
<1 mA	<1 mA	<1 mA	<1 mA	<1 mA
2600 W	3500 W	3500 W	1800 W	3500 W
>0.95	>0.95	>0.95	>0.95	>0.95
-25°C–80°C, >45°C derating		-25°C–80°C, >45°C derating		
vario fan	vario fan	vario fan	vario fan	vario fan
<48 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr
IP23	IP23	IP23	IP23	IP23
over temperature, over load, short circuit, high battery, low battery				
yes	yes	yes	yes	yes
integrated in the battery charger as standard				
GMDSS panel is available for all models				
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.				
MasterBus integrated shunt, with detailed information on the status of your batteries for a optimized charging process, incl. voltage, current, remaining time and consumption capacity in percentage.				
(free to download).				
go to mastervolt.us/chargers for an extended overview of the MasterVision panels.				



Charge Pro™ Battery Chargers

Guest Charge Pro battery chargers are built to provide fast, efficient charging in harsh environments. These are proven designs with many years of satisfying owners by charging their batteries quickly and keeping their batteries in excellent shape. Guest chargers are epoxy filled to resist water and dust from damaging the electrical components and extend the charger life in harsh environments.

- Fast charging
- LED's indicates charge status
- Epoxy filled to resist water and dust



6 Amp Single Output



6 Amp Dual Output



10 Amp Dual Output

Item #	2608A	2607A	2610A
OEM #	2608A-B	2607A-B	—
Total Amps	6	6	10
Outputs	1	2	2
Amps per out	6	3/3	5/5
Battery System	12V	12V+12V or 24V	12V+12V
Input Voltage	100–130V AC / 60Hz	100–130V AC / 60Hz	100–130V AC / 60Hz
Output Voltage	12V	12V	12V
AC	6' cord w/ ConnectCharge™ plug	6' cord w/ ConnectCharge™ plug	Studs
DC	4' with ring terminals	4' with ring terminals	Studs
Dimensions	3.50" x 6.40" x 2.25" 89x163x57 mm	3.50" x 6.40" x 2.25" 89x163x57 mm	5.50" x 7.75" x 2.42" 140x197x61 mm
Weight	4.0 lbs	4.0 lbs	5.6 lbs



10 Amp Dual Output



15 Amp Triple Output



20 Amp Dual Output

Item #	2611A	2613A	2620A
OEM #	2611A-B	—	—
Total Amps	10	15	20
Outputs	2	3	2
Amps per out	5/5	5/5/5	10/10
Battery System	12V+12V or 24V	12V+12V+12V or 24V+12V	12V+12V or 24V
Input Voltage	100–130V AC / 60Hz	100–130V AC / 60Hz	100–130V AC / 60Hz
Output Voltage	12V	12V	12V
AC	6' cord w/ ConnectCharge™ plug	6' cord w/ ConnectCharge™ plug	6' cord w/ ConnectCharge™ plug
DC	4' with ring terminals	4'/4'/6' with ring terminals	6' with ring terminals
Dimensions	5.50" x 7.75" x 2.42" 140x197x61 mm	7.0" x 9.60" x 2.60" 178x244x66 mm	7.0" x 9.60" x 2.60" 178x244x66 mm
Weight	5.6 lbs	8.0 lbs	8.0 lbs



30 Amp Triple Output



35 Amp Four Output



10 Amp Single Output

Item #	2631A	2635-B	2611A-1-B
Total Amps	30	35	10
Outputs	3	4	1
Amps per out	10/10/10	5/10/10/10	10
Battery System	12V+12V+12V or 24V+12V or 36V	12V+12V+12V+12V or 24V+12V+12V or 36V+12V	12V
Input Voltage	100–130V AC / 60Hz	100–130V AC / 60Hz	100–130V AC / 60Hz
Output Voltage	12V	12V	12V
AC	6' cord w/ ConnectCharge™ plug	6' cord w/ ConnectCharge™ plug	6' cord w/ ConnectCharge™ plug
DC	6' with ring terminals	6' with ring terminals	4' with ring terminals
Dimensions	7.0" x 13.0" x 2.60" 178x330x66 mm	6.5" x 16.10" x 2.50" 165x409x64 mm	5.50" x 7.75" x 2.42" 140x197x61 mm
Weight	13.0 lbs	24.0 lbs	5.6 lbs

ConnectCharge™ Inlets



Universal Mount

- Mount to dash from rear with threaded locking ring or from the front with three screws through the face plate

Item # **150CCI**



Rear Mount

- Mounts to dash from rear with threaded locking ring
- Eliminates rewiring, plug snaps into Inlet locking tab
- Watertight lid protects AC plug

OEM # 150CCTM.OEM



Front Mount

- Mounts to panel from front with three screws through the face plate

OEM # 150CC.OEM

For use with
Battery chargers with
ConnectCharge™ Plug only!

Exclusive
molded notch on
plug locks into
ConnectCharge™ inlet



Hard Wired Charger Inlets

- 15A or 20A 125V straight blade inlet
- Low profile cap won't catch fishing line
- Mounts easily to fiberglass and aluminum hulls
- Perma-Lock™ terminals and color coded wire entrance holes make wiring a snap
- UV resistant housing/cap



Amp	Color	Universal Mount Item #	Front Mount OEM #	Rear Mount OEM #
15	Black	150BBI	150BBI.OEM	150BBI-TM
15	White	150BBIW	150BBIW.OEM	—
20	White	200BBIW	200BBIW.OEM	—



15A 125V
Straight Blade



20A 125V
Straight Blade

Convert: Maintainers/Chargers



Name:	.5 Amp Battery Maintainer	2 Amp Battery Charger	3 Amp Battery Charger
Item #	2602	2602A-12	2603
Total Amps:	0.5	2	3
Outputs:	1	1	1
Amps per out:	500mA/250mA	2	3
Battery System:	12V	12V	12V
Input Voltage:	100–130V AC/60Hz	100–130V AC/60Hz	100–130V AC/60Hz
Output Voltage:	12V	12V	12V
AC:	6' AC cord with standard plug	6' cord with ConnectCharge plug	18" AC cord with standard plug
DC:	4' with battery clips	4' with ring terminals	4' with battery clips
Dimensions:	1.50" x 3.0" x 2.0" 38x76x51 mm	2.75" x 4.50" x 1.50" 70x114x38 mm	3.10" x 3.50" x 2.34" 79x89x59 mm
Weight:	0.5 lbs / 0.2 kg	2.0 lbs / 0.9 kg	1.0 lbs / 0.5 kg



Name:	2 Amp Battery Charger	6 Amp Battery Charger	10 Amp Battery Charger
Item #	—	2606A	2612A
OEM #	2602A-24-B	—	—
Total Amps:	2	6	10
Outputs:	1	1	1
Amps per out:	2	6	10
Battery System:	24V	12V	12V
Input Voltage:	100–130V AC / 60Hz	100–130V AC / 60Hz	100–130V AC / 60Hz
Output Voltage:	24V	12V	12V
AC:	6' AC cord with standard plug	6' AC cord with standard plug	6' AC cord with standard plug
DC:	4' with battery clips	4' with battery clips	4' with battery clips
Dimensions:	2.75" x 4.50" x 1.50" 70x114x38 mm	5.5" x 5.0" x 2.4" 140x127x61 mm	7.5" x 5.0" x 2.4" 191x127x61 mm
Weight:	2.0 lbs / 0.9 kg	3.5 lbs / 1.6 kg	4.5 lbs / 2 kg

NEW Sine Wave Inverters

Clean, true sinewave inverter technology that delivers AC power to onboard devices.

- For sensitive onboard electronics such as monitors, TV and entertainment centers.
- Prevents draining the battery: low battery alarm and low battery shutdown.
- Protected against: Over-current, low voltage, reverse polarity and temperature
- Easy to install and operate
- Optional remote control panel. INVR-1
- 120V models comply to FCC class A & meet UL458
- 230V models comply to e-13 / CE

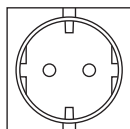
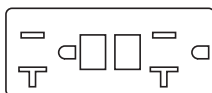
OEM Version

- Quick connect solution for volume builders.
- WAGO AC Connector. Contra part can be integrated in wireloom.
- DC Connector, upgraded to Twin Insulated stud (IS-10MM-2) + covers.
- Easy to upgrade. Same connections for all OEM Inverters.
- OEM versions include WAGO Plug (770-103) and twin insulated stud (IS-10MM-2)



Output			Input		Output Receptacle Type	Item #	OEM #
Continuous	Surge Capacity	Hz	Volts	Range			
120V AC Output							
700W	1400W	60Hz	12V DC	10.5-15.0V DC	NEMA 5-15R w/GFCI	INV20120700	INV20120700.OEM
			24V DC	21.0-30.0V DC	NEMA 5-15R w/GFCI	—	INV20240700.OEM
1000W	2000W	60Hz	12V DC	10.5-15.0V DC	NEMA 5-15R w/GFCI	INV20121000	—
1500W	3000W	60Hz	12V DC	10.5-15.0V DC	NEMA 5-15R w/GFCI	INV20121500	—
2000W	4000W	60Hz	12V DC	10.5-15.0V DC	NEMA 5-15R w/GFCI	INV20122000	INV20122000.OEM
			24V DC	21.0-30.0V DC	NEMA 5-15R w/GFCI	—	INV20242000.OEM
230V AC Output							
700W	1400W	50Hz	12V DC	10.5-15.0V DC	Schuko	INV10120700	INV10120700.OEM
			24V DC	21.0-30.0V DC	Schuko	INV10240700	INV10240700.OEM
		60Hz	12V DC	10.5-15.0V DC	Schuko	INV30120700	INV30120700.OEM
			24V DC	21.0-30.0V DC	Schuko	—	INV30240700.OEM
1000W	2000W	50Hz	12V DC	10.5-15.0V DC	Schuko	INV10121000	—
			24V DC	10.5-15.0V DC	Schuko	INV10241000	—
1500W	3000W	50Hz	12V DC	10.5-15.0V DC	Schuko	INV10121500	—
			24V DC	21.0-30.0V DC	Schuko	INV10241500	—
		60Hz	12V DC	10.5-15.0V DC	Schuko	INV30121500	—
			24V DC	21.0-30.0V DC	Schuko	INV30241500	—
2000W	4000W	50Hz	12V DC	10.5-15.0V DC	Schuko	—	INV10122000.OEM
			24V DC	21.0-30.0V DC	Schuko	—	INV10242000.OEM
		60Hz	12V DC	10.5-15.0V DC	Schuko	—	INV30122000.OEM
			24V DC	21.0-30.0V DC	Schuko	—	INV30242000.OEM

5-15R w/GFCI



Schuko



Sine wave inverters: Enjoy the comforts of home

An onboard AC installation offers you a wealth of benefits by making possible the use of any domestic appliance, from microwave oven to hair dryer, DVD player to power tools. An inverter allows you to easily convert the voltage of your 12V or 24V battery to 230V/50Hz or 120V/60Hz, so you enjoy all the comforts of home wherever you choose to cruise.

Complete range

Mastervolt offers a complete range of inverters from 300 Watt to 15 kWatt in **AC Master** and **Mass Sine** models. The AC Master is ideal for small and medium-sized vessels, while Mass Sine inverters are mainly intended for larger systems on superyachts and for (semi-) professional purposes. Mastervolt offers inverters for 230V/50Hz as well as 120V/60Hz (American voltage).

Proven technology

Mastervolt's Mass Sine sine wave inverters have proven themselves in the most extreme conditions for over ten years. Although the dimensions and connections of the various models have remained the same, the technology has evolved with the times, resulting in a fast, efficient, one-on-one replacement with minimal downtime.

The Mastervolt AC Master inverters are small, lightweight and silent. Installation and operation are incredibly easy.

Completely independent on shore power

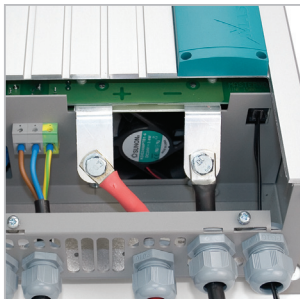
Shore power regularly fluctuates and can cause your lights to flicker. Sometimes it may even drop below 180 volt, causing some onboard devices to stop functioning. The Mastervolt sine wave inverter ensures a perfect 230 volt onboard, and makes shore power problems a thing of the past. The pure sine wave current also helps protect your equipment against failures, humming or lines on your TV and ensure a longer lifespan. Do make sure you have the correct match between your inverter power and the connected load.

An end to humming with HF technology

Our use of high-frequency switch technology means you can say goodbye to humming transformers. Mastervolt inverters are also small and lightweight to ensure easy installation.

High peak power during start up

The Mastervolt sine wave inverter can provide up to 200% capacity to equipment that requires extra power during start up.

**Simple and safe to connect**

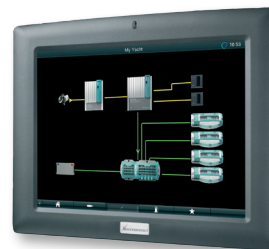
The inverters benefit from robust connection technology with internal connections for the larger models and a cable and plug & play inlet for smaller models.

**Efficient use of batteries**

A high degree of efficiency when inverting and the automatic economy mode when there is no consumption gives you longer use of your batteries and more hours on the water.

**MasterBus compatible**

Thanks to the MasterBus Inverter Interface or AC power analyser, every Mass Sine inverter can be easily connected to a MasterBus network with only one cable and one connection. You can also choose for central, local or remote monitoring, configuration and control of your system.

**Optimal ease of operation**

Mastervolt's Mass Sine inverters are easy to operate via controls on the device, via a control panel or remote control text messaging. Plus numerous options for central or local control and monitoring via the MasterBus platform.

Convert: AC Master Specifications – 230V



AC Master
12/300



AC Master
12/500



AC Master
24/300

Item # 230V (universal socket)	28010300	28010500	28020300
General Specifications			
Nominal battery voltage	12V	12V	24V
Recommended battery capacity	≥60 Ah	≥100 Ah	≥30 Ah
Output voltage (± 5%)	230V – 50Hz (± 0.1%)	230V – 50Hz (± 0.1%)	230V – 50Hz (± 0.1%)
Continuous power at 25°C, cos phi 1	300 W	500 W	300 W
Continuous power at 40°C, cos phi 1	250 W	400 W	250 W
Peak load	600 W	800 W	600 W
Output waveform	true sine	true sine	true sine
Efficiency	90%	90%	91%
Display/read out	LED display	LED display	LED display
Dimensions, hwxwd	8.3"x5.1"x2.4" 210x130x60 mm	8.3"x5.1"x2.4" 210x130x60 mm	8.3"x5.1"x2.4" 210x130x60 mm
Weight	1.16 kg / 2.55 lbs	1.22 kg / 2.69 lbs	1.16 kg / 2.55 lbs
Approvals	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
Technical Specifications			
Technology	HF switch mode	HF switch mode	HF switch mode
Low battery voltage, switches off at	10V, ± 0.5V	10V, ± 0.5V	20V, ± 0.5V
Low battery voltage, switches on at	11V, ± 0.5V	11V, ± 0.5V	22V, ± 0.5V
High battery voltage, switches off at	16V, ± 0.5V	16V, ± 0.5V	32V, ± 0.5V
High battery voltage, switches on at	14.5V, ± 0.5V	14.5V, ± 0.5V	29V, ± 0.5V
Max. ripple on DC (battery)	10% RMS	10% RMS	10% RMS
Input current (nominal load)	22.5A	37.5A	11A
No load power consumption: • on' mode (230V) • standby (scan mode)	0.58A – 7 W 0.33A – 4 W	0.58A – 7 W 0.33A – 4 W	0.29A – 7 W 0.16A – 4 W
Minimal DC fuse (slow blow)*	40A	80A	20A
Minimal cable size	included	included	included
Harmonic distortion typical	<6%	<6%	<6%
Cos Phi	all power factors allowed	all power factors allowed	all power factors allowed
Temperature range (ambient temp.)	-25°C–60°C, >25°C derating -13°F–140°F, >77°F derating	-25°C–60°C, >25°C derating -13°F–140°F, >77°F derating	-25°C–60°C, >25°C derating -13°F–140°F, >77°F derating
Cooling	natural/forced	natural/forced	natural/forced
Sound level	53 dBA at 1 mtr	53 dBA at 1 mtr	53 dBA at 1 mtr
Protection degree	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery		
MasterBus compatible	no	no	no
AC connection	universal	universal	universal

* DC fuse depends on the cable size.

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



AC Master
24/500

28020500

24V
≥50 Ah
230V – 50Hz (± 0.1%)
500 W
400 W
800 W
true sine
91%
LED display
8.3"x5.1"x2.4"
210x130x60 mm
1.22 kg / 2.69 lbs
CE, E-mark, ABYC A-31

HF switch mode
20V, ± 0.5V
22V, ± 0.5V
32V, ± 0.5V
29V, ± 0.5V
10% RMS
19A

0.29A – 7 W
0.16A – 4 W
40A
included
<6%
all power factors allowed
-25°C–60°C, >25°C derating
-13°F–140°F, >77°F derating
natural/forced
53 dBA at 1 mtr
IP23

no
universal



Convert: Mass Sine Specifications – 230V / 120V



Mass Sine
12/800







Mass Sine
12/1200



Mass Sine
12/2000



Mass Sine
24/800

Item # 230V	24010800	24011200	24012000	24020800
Item # 120V	—	—	25012000	—
General Specifications				
Nominal battery voltage	12V	12V	12V	24V
Minimum battery capacity	>100 Ah	>150 Ah	>200 Ah	>50 Ah
Output voltage (± 5%)	230V – 50Hz (± 0 .01Hz)	230V – 50Hz (± 0 .01Hz)	230V – 50Hz (± 0 .01Hz)	230V – 50Hz (± 0 .01Hz)
P30 power at 40°C, cos phi 1	800 W	1200 W	2000 W	800 W
Continuous power at 40°C, cos phi 1	650 W	1000 W	1800 W	650 W
Peak load	1600 W	2400 W	4000 W	1600 W
Output waveform	true sine	true sine	true sine	true sine
Efficiency	92%	92%	92%	92%
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	12.8"x8.7"x4.4" 325x220x111 mm	13.4"x10.3"x5.1" 340x261x130 mm	16.5"x12.5"x5.4" 420x318x136 mm	12.8"x8.7"x4.4" 325x220x111 mm
Weight	3.9 kg / 8.6 lbs	8 kg / 17.4 lbs	14.6 kg / 32.2 lbs	3.9 kg / 8.6 lbs
Approvals	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
Technical Specification				
Technology	HF switch mode	HF switch mode	HF switch mode	HF switch mode
Low battery voltage, switches off at	10V, ± 0.5V	10V, ± 0.5V	10V, ± 0.5V	19V, ± 0.5V
Low battery voltage, switches on at	11V, ± 0.5V	11V, ± 0.5V	11V, ± 0.5V	22V, ± 0.5V
High battery voltage, switches off at	15.5V, ± 0.5V	15.5V, ± 0.5V	15.5V, ± 0.5V	32V, ± 0.5V
High battery voltage, switches on at	14.5V, ± 0.5V	14.5V, ± 0.5V	14.5V, ± 0.5V	30V, ± 0.5V
Max. ripple on DC (battery)	5% RMS	5% RMS	5% RMS	5% RMS
Input current (nominal load)	73A	110A	183A	36A
No load power consumption: • ‘on’ mode (230V) • stand-by (scan mode)	470 mA – 5.6 W 65 mA – 0.8 W	450 mA – 5 W 43 mA – 0.5 W	480 mA – 6 W 50 mA – 0.6 W	240 mA – 5.6 W 35 mA – 0.8 W
Minimal DC fuse (slow blow)**	100A	150A	250A	63A
Minimal cable size	25 mm²	50 mm²	70 mm²	16 mm²
Harmonic distortion typical	<5%	<5%	<5%	<5%
Cos Phi	all power factors allowed	all power factors allowed	all power factors allowed	all power factors allowed
Temperature range (ambient temp.)	-25°C–80°C, >40°C derating -13°F–176°F, >104°F derating		-25°C–80°C, >40°C derating -13°F–176°F, >104°F derating	
Cooling	natural/forced	natural/forced	natural/forced	natural/forced
Sound level	48 dBA at 1 mtr	48 dBA at 1 mtr	48 dBA at 1 mtr	48 dBA at 1 mtr
Protection degree	IP23	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	yes, using a MasterBus Inverter Interface or AC power analyser			
AC connection	internal	internal	internal	internal
Options				
Model C4-RI 70404110		Remote control on/off for the Mass Sine sine wave inverter.		
Masterlink/MICC 70403105		Battery consumption meter for 2 batteries, 12/24V DC with LCD read-out, remote control for Mass Sine inverter and Mass battery charger or Mass Combi.		
MasterBus Inverter Interface 77030700		Integrates the Mass Sine inverter in a MasterBus network in a MasterBus network.		
AC power analyser 77031200		Integrates the Mass Sine inverter in a MasterBus network and measures the AC voltage, current and power.		
Transfer system	The Masterswitch and Systemswitch can be connected to all inverters.			

* Also available in 60 Hz; item # 2500 W model = 24122500 / item # 5000 W model = 24195100.

** DC fuse depends on the cable size.

Mass Sine
24/1500Mass Sine
24/2500*Mass Sine
24/5000*Mass Sine
48/2500**24021500****24022500****24095100****24042500**

—

25022500

—

—

24V

24V

24V

48V

>150 Ah

>200 Ah

>400 Ah

>100 Ah

230V – 50Hz (± 0.01Hz)

230V – 50Hz (± 0.01Hz)

230V – 50Hz (± 0.01Hz)

230V – 50Hz (± 0.01Hz)

1500 W

2500 W

5000 W

2500 W

1200 W

2000 W

4000 W

2000 W

2900 W

5000 W

9000 W

5000 W

true sine

true sine

true sine

true sine

92%

92%

92%

92%

LED display

LED display

LED display

LED display

13.4"x10.3"x5.1"

16.5"x12.5"x5.1"

18.5"x12.4"x10"

16.5"x12.5"x5.4"

340x261x130 mm

420x318x130 mm

470x315x254 mm

420x318x130 mm

8 kg / 17.4 lbs

14.6 kg / 32.2 lbs

25 kg / 55.1 lbs

14.6 kg / 32.2 lbs

CE, E-mark, ABYC A-31

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

HF switch mode

19V, ± 0.5V

19V, ± 0.5V

19V, ± 0.5V

36V, ± 0.5V

22V, ± 0.5V

22V, ± 0.5V

22V, ± 0.5V

44V, ± 0.5V

32V, ± 0.5V

33V, ± 0.5V

32V, ± 0.5V

62V, ± 0.5V

30V, ± 0.5V

31V, ± 0.5V

30V, ± 0.5V

59V, ± 0.5V

5% RMS

5% RMS

5% RMS

5% RMS

68A

115A

230A

60A

200 mA – 5 W

250 mA – 6 W

250 mA – 6 W

150 mA – 6 W

25 mA – 0.6 W

25 mA – 0.6 W

n.a.

13 mA – 0.7 W

100A

160A

1x 250A or 2x 125A

80A

25 mm²50 mm²2x 70 mm²25 mm²

<5%

<5%

<5%

<5%

all power factors allowed

all power factors allowed

all power factors allowed

all power factors allowed

-25°C–80°C, >40°C derating

-25°C–80°C, >40°C derating

-13°F–176°F, >104°F derating

-13°F–176°F, >104°F derating

natural/forced

natural/forced

natural/forced

natural/forced

48 dBA at 1 mtr

48 dBA at 1 mtr

48 dBA at 1 mtr

48 dBA at 1 mtr

IP23

IP23

IP23

IP23

over temperature, over load, short circuit, high battery, low battery

yes, using a MasterBus Inverter Interface or AC power analyser

internal

internal

internal

internal

Remote control on/off for the Mass Sine sine wave inverter.

Battery consumption meter for 2 batteries, 12/24V DC with LCD read-out, remote control for Mass Sine inverter and Mass battery charger or Mass Combi.

Integrates the Mass Sine inverter in a MasterBus network in a MasterBus network.

Integrates the Mass Sine inverter in a MasterBus network and measures the AC voltage, current and power.

The Masterswitch and Systemswitch can be connected to all inverters.

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



Mass Combi: Charging, inverting and power support in one device

The Mastervolt Mass Combi combines the best of both worlds with an advanced battery charger and a silent inverter rolled into one compact device; ideal for most vessels from launches to 16-metre yachts.

Versatility in power supply

One of the key reasons for the Mass Combi's popularity is its versatile power supply. The starter and service batteries are charged quickly and completely. The inverter provides a silent and clean power supply. The Combi also has two separate AC outputs for light and heavy equipment. Heavy consumers, such as a washing machine or boiler, are only supplied with power if there is shore power or a generator present. This prevents any unintentional depletion of the battery.

Modern technology

The design of the Mass Combi is both unique and characteristic of Mastervolt. Rather than installing heavy transformers, our lightweight, high-frequency technology offers major benefits in terms of size, weight and sound (no hum!). The technology also ensures an exceptionally high efficiency with a minimal conversion loss and a low no-load consumption. The Mass Combi meets all your requirements and more!

Perfect in a MasterBus system



The Mastervolt Mass Combi fits perfectly within a MasterBus system. The platform allows all components to be connected easily, provides a simple and intuitive operation, and requires far fewer cables for installation. The system can be combined with a MasterView Easy, MasterShunt or decentralized Digital Switching system for instance.

Combined functionality

- Power boost from battery when shore power is limited (shore/generator support).
- Charging two individual battery terminals.
- Invert to 120V/60Hz or 230V/50Hz pure sine wave voltage.
- Supplies 12, 24 or 48 volt onboard power.
- Multiple distribution and switching systems.
- Two Combis parallel switched for more power.
- The Mass Combi meets the ABYC A-31 guideline.

Save space, weight and battery power

With its intelligent design including high frequency switch mode technology and an anodized aluminum housing, the Mass Combi is compact, lightweight and efficient. For instance, the 2500 Watt unit weighs only 24.3 lbs. Designed for the marine environment with multiple safety features, the Mass Combi has a very low amp draw when turned on and no load is present decreasing the drain on the batteries. Connection points are within easy reach and external mounting key hole slots allow speedy installation. Customizing a system is easily accomplished through MasterBus (see 'Mass Combi in a MasterBus System' on the next page). Mass Combi inverter/chargers meet global industry standards including CE and ABYC.

**Intuitive operation**

Each Mass Combi can be operated easily and intuitively. The Mass Combi includes LED indication of charging phase and charge current, the 230/120V system load and 12/24 or 48V

system, 'yes/no' availability of 120/230V and 'failure'. It features an on/off switch with a 'charge only' position when the boat is in storage. Mastervolt also offers a complete selection of control panels, ranging from the compact 3.5 inch panel called MasterView Easy (picture) to a large 10.4-inch touchscreen panel.

**Not just any charger**

The built-in battery charger uses Mastervolt's proven 3-step⁺ charging technology to allow easy charging of all battery types, including MLI Ultra. The battery charger

supplies a maximum charge current, even with a higher charge voltage, and speeds up the recharging of your batteries. The Mass Combi also functions as DC supply if there is no battery, allowing you, for instance, to use your lighting when your boat is hauled up for winter.

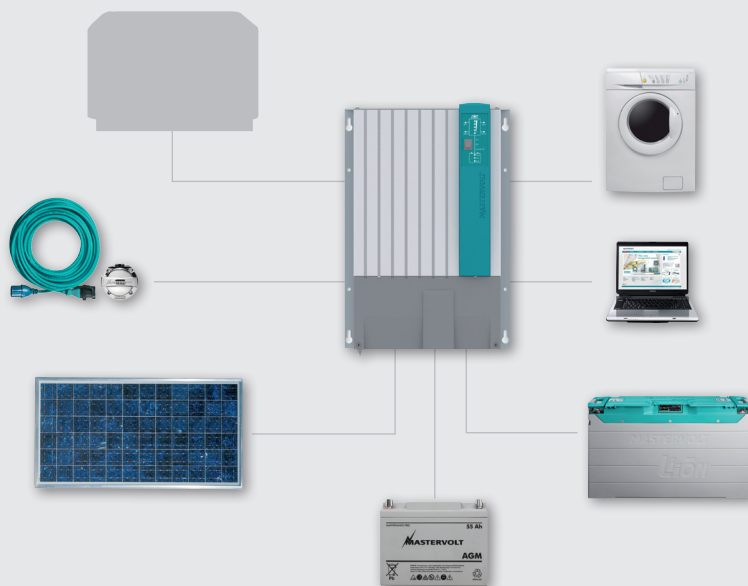
NEW Mass Combi Ultra

By the end of 2013 the Combi product family will start to be extended by the Mass Combi Ultra models.

These new models will exhibit special features like:

- 2 AC inputs (generator/mains), 2 AC outputs.
- Integrated solar charge regulator for panels up to 500 Wp.
- Charger output for second battery bank at voltage different.
- Yet increased power density, so more compact.
- Unlimited power availability through paralleling/3-phase.

The first models that will come are a 12V/3000W unit and a 24V & 48V/3500W unit, to be followed by 5000W and 7000W models.



Convert: Mass Combi Specifications – 120V



Mass Combi
12/2500-100








Mass Combi
12/4000-200



Mass Combi
24/2500-60



Mass Combi
24/4000-100

Item #	37012505	37014005	37022505	37024005
General Specifications Sine Wave Inverter				
Nominal DC voltage	12V (10–15V)	12V (10–15V)	24V (20–31V)	24V (20–31V)
Continuous power at 25°C/77°F, cos phi 1	2500W – 20.8A	3750W – 31A	2500W – 20.8A	3750W – 31A
Surge capability (5 sec, resistive)	4000W – 38A	4000W – 62A	4000W – 38A	4000W – 62A
Parallel use (to double the power)	yes	no	yes	no
Parallel with shore/generator (for more power)	yes	yes	yes	yes
Output voltage (± 5%)	120V – 60Hz, ±0,05%	120V – 60Hz, ±0,05%	120V – 60Hz, ±0,05%	120V – 60Hz, ±0,05%
Output waveform	true sine	true sine	true sine	true sine
Efficiency	90%	90%	93%	93%
DC consumption at 120V	<9 W	<18 W	<9 W	<18 W
Search mode consumption	0.5 W	1 W	0.5 W	1 W
General Specifications Battery Charger				
Nominal input voltage	120V – 45–65Hz	120V – 45–65Hz	120V – 45–65Hz	120V – 45–65Hz
Max. charge current (adjustable)	100A at 14.25V	200A at 14.25V	60A at 28.5V	100A at 28.5V
Primary AC consumption (full charge)	1700 W – 14.5A	3400 W - 29A	2000 W - 17A	3500 W - 29A
Charge voltage 25°C/77°F (absorption/float)*	14.25/13.25V	14.25/13.25V	28.5/26.5V	28.5/26.5V
Charge characteristic	IUoUo, automatic / 3-stepⓈ for gel/AGM/wet/Lithium Ion			
Second charge output, 3-step	5A	2x 5A	5A	2x 5A
Temperature sensor battery	delivered as standard with 6 metre cable and telejack plug			
General Specifications				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	19.5x12.5x6.1 inch 496x318x156 mm	19.5x12.5x11 inch 496x318x279 mm	19.5x12.5x6.1 inch 496x318x156 mm	19.5x12.5x11 inch 496x318x279 mm
Weight	11 kg / 24.3 lbs	21 kg / 46.3 lbs	11 kg / 24.3 lbs	21 kg / 46.3 lbs
Approvals	CE, ABYC A-31	CE, ABYC A-31	CE, ABYC A-31	CE, ABYC A-31
Technical Specifications				
Max. current first output	50A	50A	50A	50A
Max. current shortbreak / inverter output	35A	35A	35A	35A
Transfer time	10 ms	10 ms	10 ms	10 ms
Grounding	yes, adjustably by DIP switch		yes, adjustably by DIP switch	
Temperature range (ambient temp.)	-25 °C–80 °C, > 25 °C derating / -13°F–176°F, >77°F derating			
Cooling	maintenance free vario fans		maintenance free vario fans	
Sound level	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr
Protection degree	IP23	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	yes**	yes**	yes**	yes**
Options				
Remote ICC 70405000		delivered as standard	delivered as standard	delivered as standard
Remote APC 70405050		option	option	option
Masterlink/MICC 70403105		option	option	option
MasterView Easy 77010305		option**	option**	option**
MasterBus Combi Interface 77030475		option**	option**	option**
		Indication of DC consumption, charge phase, AC present, failure, with on/off/'charger only' switch & 6 m cable.		
		Indication of AC consumption, AC voltage, fuse value of the shore/generator connection, with Power Sharing.		
		Battery consumption metre for 2 batteries, 12/24V DC with LCD read-out, remote control for Mass Sine inverter and Mass battery charger or Mass Combi		
		Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting.		
		Integrates the Mass Combi in a MasterBus network.		

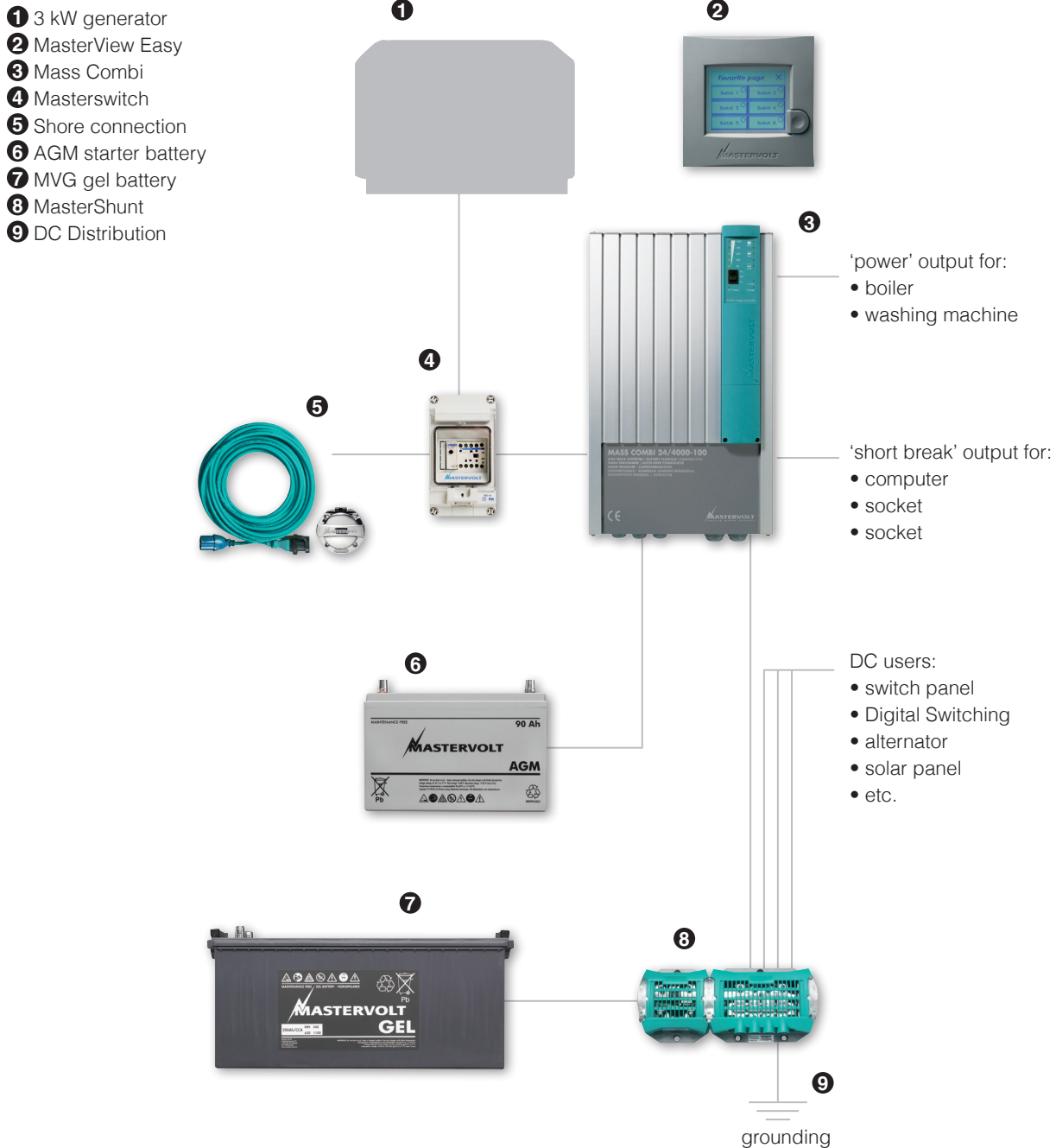
* The charge characteristic can be set to your requirements. ** In combination with a MasterBus Combi Interface – item # 77030475.

Mastervolt Mass Combi in a MasterBus System



The Mastervolt Mass Combi fits perfectly within a MasterBus system. The system allows all components to be connected easily, provides a simple and intuitive operation and requires far fewer cables for installation. One MasterView Easy touch screen panel controls the entire system, displays information about the Combi as well as the batteries (via the MasterShunt) and operates the generator. The system can also be combined with Mastervolt's decentralized Digital Switching system.

For more MasterBus information, check the Digital Distribution pages in the Manage section of this catalog.



Convert: Mass Combi Specifications – 230V



Mass Combi
12/1200-60








Mass Combi
12/2000-100



Mass Combi
12/2500-100



Mass Combi
12/4000-200

Item #	36011205	36012005	36012505	36014005
General Specifications (sine wave inverter)				
Nominal DC voltage	12V (10–15V)	12V (10–15V)	12V (10–15V)	12V (10–15V)
Continuous power at 25°C/77°F, cos phi 1	1200 W - 5.3A	2000 W - 8.7A	2500 W - 10.9A	3750 W - 16.5A
Surge capability (5 sec, resistive)	2400 W - 10.5A	4000 W - 17.5A	5000 W - 21.8A	7500 W - 32A
Parallel use (to double the power)	no	yes	yes	no
Parallel with shore/generator (for more power)	yes	yes	yes	yes
Output voltage (± 5%)	230V – 50Hz, ±0,05% (60Hz adjustable, ±0,05%)			
Output waveform	true sine	true sine	true sine	true sine
Efficiency	90%	90%	90%	90%
DC consumption at 230V	<9 W	<9 W	<9 W	<9 W
Search mode consumption	0.5 W	0.5 W	0.5 W	1 W
General Specifications (battery charger)				
Nominal input voltage	230V (180–265V) – 45–65Hz			
Max. charge current (adjustable)	60A at 14.25V	100A at 14.25V	100A at 14.25V	200A at 14.25V
Primary AC consumption (full charge)	1035 W - 4.5A	1656 W - 7.2A	1656 W – 7.2A	3312 W - 14.4A
Charge voltage 25°C/77°F (absorption/float)*	14.25/13.25V	14.25/13.25V	14.25/13.25V	14.25/13.25V
Charge characteristic	IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion			
Second charge output, 3-step	5A	5A	5A	2x 5A
Temperature sensor battery	delivered as standard with 6 metre cable and telejack plug			
General Specifications				
Display/read-out	LED display	LED display	LED display	LED display
Dimensions, hwxwd	14.6"x12.5"x5.6" 371x318x143 mm	19.5"x12.5"x6.1" 496x318x156 mm	19.5"x12.5"x6.1" 496x318x156 mm	19.5"x12.5"x11" 496x318x279 mm
Weight	7.8 kg / 17.2 lbs	11 kg / 24.3 lbs	11 kg / 24.3 lbs	21 kg / 46.3 lbs
Approvals	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31
Technical Specifications				
Max. current first output	50A	50A	50A	50A
Max. current shortbreak / inverter output	25A	25A	25A	25A
Transfer time	10 ms	10 ms	10 ms	10 ms
Grounding	yes, adjustably by DIP switch		yes, adjustably by DIP switch	
Temperature range (ambient temp.)	-25°C–80°C, >25°C derating / -13°F–176°F, > 77°F derating			
Cooling	maintenance free vario fans		maintenance free vario fans	
Sound level	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr	≤ 48 dBA at 1 mtr
Protection degree	IP23	IP23	IP23	IP23
Protections	over temperature, over load, short circuit, high battery, low battery			
MasterBus compatible	yes**	yes**	yes**	yes**
Options				
Remote ICC 70405000		option delivered as standard	option delivered as standard	option delivered as standard
Remote APC 70405010		option Indication of DC consumption, charge phase, AC present, failure, with on/off/'charger only' switch...	option	option
Masterlink/MICC 70403105		option Battery consumption metre for 2 batteries, 12/24V DC with LCD read-out, remote control for Mass Sine...	option	option
MasterView Easy 77010305		option** Touch screen panel for reading charge status, current fold-back and/or Power Sharing setting.	option**	option**
MasterBus Combi Interface 77030475		option** Integrates the Mass Combi in a MasterBus network.	delivered as standard	option**

* The charge characteristic can be set to your requirements

** In combination with a MasterBus Combi Interface – Item # **77030475**.

Mass Combi
24/1200-35Mass Combi
24/2000-60Mass Combi
24/2500-60Mass Combi
24/4000-120Mass Combi
48/2500-35Mass Combi
48/5000-70**36021205****36022005****36022505****36024005****36042505****36045005**

24V (20–31V)

24V (20–31V)

24V (20–31V)

24V (20–31V)

48V (40–62V)

48V (40–62V)

1200 W - 5.3A

2000 W - 8.7A

2500 W - 10.9A

3750 W - 16.5A

2500 W - 10.9A

5000 W - 21.8A

2400 W - 10.5A

4000 W - 17.5A

5000 W - 21.8A

7500 W - 32A

5000 W - 21.8A

8000 W - 35A

no

yes

yes

no

yes

no

yes

yes

yes

yes

yes

yes

230V – 50Hz, ±0,05% (60Hz adjustable, ±0,05%)

true sine

true sine

true sine

true sine

true sine

true sine

92%

93%

93%

93%

93%

93%

<9 W

<9 W

<9 W

<9 W

<9 W

<9 W

0.5 W

0.5 W

0.5 W

1 W

0.5 W

1 W

230V (180–265V) – 45–65Hz

35A at 28.5V

60A at 28.5V

60A at 28.5V

120A at 28.5V

35A at 57V

70A at 57V

1170 W - 5.1A

1965 W - 8.5A

1965 W - 8.5A

3900 W - 17A

2295 W - 10A

4590 W - 20A

28.5/26.5V

28.5/26.5V

28.5/26.5V

28.5/26.5V

57/53V

57/53V

IUoUo, automatic / 3-step© for gel/AGM/wet/Lithium Ion

5A

5A

5A

2x 5A

n.a.

n.a.

delivered as standard with 6 metre cable and telejack plug

LED display

LED display

LED display

LED display

LED display

LED display

14.6"x12.5"x5.6"
371x318x143 mm19.5"x12.5"x6.1"
496x318x156 mm19.5"x12.5"x6.1"
496x318x156 mm19.5"x12.5"x11"
496x318x279 mm19.5"x12.5"x6.1"
496x318x156 mm19.5"x12.5"x11"
496x318x279 mm

7.8 kg / 17.2 lbs

11 kg / 24.3 lbs

11 kg / 24.3 lbs

21 kg / 46.3 lbs

11 kg / 24.3 lbs

21 kg / 46.3 lbs

CE, E-mark, ABYC A-31

CE, E-mark, ABYC A-31

CE, E-mark, ABYC A-31

CE, E-mark, ABYC A-31

CE, E-mark, ABYC A-31

CE, E-mark, ABYC A-31

50A

50A

50A

50A

50A

50A

25A

25A

25A

25A

25A

25A

10 ms

10 ms

10 ms

10 ms

10 ms

10 ms

yes, adjustably by DIP switch

yes, adjustably by DIP switch

yes, adjustably by DIP switch

-25°C–80°C, >25°C derating / -13°F–176°F, > 77°F derating

maintenance free vario fans

maintenance free vario fans

maintenance free vario fans

≤ 48 dBA at 1 mtr

≤ 48 dBA at 1 mtr

≤ 48 dBA at 1 mtr

≤ 48 dBA at 1 mtr

≤ 48 dBA at 1 mtr

≤ 48 dBA at 1 mtr

IP23

IP23

IP23

IP23

IP23

IP23

over temperature, over load, short circuit, high battery, low battery

yes**

yes**

yes**

yes**

yes**

yes**

option
& 6 metre cable.

delivered as standard

option

delivered as standard

option

option

option
Power Sharing.

option

option

option

option

option

option
inverter and Mass battery charger or Mass Combi.

option

option

option

option

option

option**

option**

option**

option**

option**

option**

option**

option**

delivered as standard

option**

delivered as standard

delivered as standard

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



Mastervolt DC-DC converters: For 12, 24 and 48V

The voltage required for direct current (DC) can vary considerably onboard a yacht. A bowthruster or a winch often works at 24V, while navigation and communication equipment mostly requires 12V. By using a DC-DC converter, other voltages than applied in your basic system can be reached. They also ensure that all your onboard equipment has a stable power supply with the right voltage.

DC Master series

- Recreational and semi-professional use.
- Easy to install using included mounting bracket.
- Excellent price/performance ratio.
- More power available for two minute intervals, ideal for active marine telephone use.

Mac & Magic series

- Professional use.
- Battery charger and dimmer function.
- Parallel connection.
- Adjustable output voltage.
- Voltage stabilization for a longer lifespan of halogen lights, etc.

The Magic models can regulate the voltage both up and down to ensure an optimal voltage stabilization, even when the battery voltage fluctuates due to heavy loads. The galvanic isolation between input and output prevents disruptions to, for instance, communication equipment.

Masterstrokes

- No unnecessary heat development due to the use of smart electronics.
- Continuous output voltage.
- Easy to install.

Please note:

- Choose the right input/output voltage.
- Do you require galvanic isolation?
- Desired capacity.

Programmable via a desktop or laptop PC

Remote control the Mac or Magic via your laptop or PC or configure your personal preferences. The device has a communication port and easy installation with a PC-Link and MasterAdjust software.

3-Step⁺ battery charger

Connected to the 24V main battery, the converter can also be used as an advanced 3-step⁺ chargers for 12/24V gel, AGM, wet or Lithium Ion batteries (Mac & Magic models only).

**Energy-saving dimmer function**

Many standard light dimmers convert part of the energy to heat and also lose unnecessary energy. The Mastervolt Mac & Magic converters regulate the power supply efficiently and without excessive heat build-up, up to 250 Watt for optimal safety (multiple Mac or Magic converters can be used for multiple lamps).

**Over 90% efficiency**

Advanced high-frequency technology with modern microprocessors ensures minimum power loss when switching from 24 to 12V and vice versa. If you have many power-consuming devices on-board, the parallel use of several units allows capacities of 40, 60 or more amps.





**Solid connections**





Chrome-plated brass connection block with screw terminal or chrome-plated fast-on for DC in/out.

**Complete package DC Master**

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

Convert: DC Master Specifications

				
	24/12-3A	24/12-6A	24/12-12A	24/12-24A
Item #	81400100	81400200	81400300	81400330
Input Specifications				
Nominal input voltage	24V	24V	24V	24V
Input range	20–32V DC	20–32V DC	20–32V DC	20–32V DC
Output Specifications				
Nominal output voltage	13.6V	13.6V	13.6V	13.6V
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	6A / 3A	10A / 6A	18A / 12A	30A / 24A
DC consumption	<10 mA	<10 mA	<10 mA	<10 mA
General Specifications				
Dimensions, hwxwd	2.6"x3.4"x2" 67x87x50 mm	3.5"x3.4"x2" 89x87x50 mm	5"x3.4"x2" 127x87x50 mm	5"x3.4"x2" 167x87x50 mm
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
Stabilized	yes	yes	yes	yes
Connections input/output	fast-on	fast-on	fast-on	fast-on
Temperature range (ambient temp.)	-25°C–80°C, >30°C derating / -13°F–176°F, >86°F derating			
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

				
	12/12-3A	12/12-6A	24/12-3A	24/12-6A
Item #	81500600	81500700	81500100	81500200
Input Specifications				
Nominal input voltage	12V	12V	24V	24V
Input range	10–15.5V DC	10–15.5V DC	20–32V DC	20–32V DC
Output Specifications				
Nominal output voltage	13.6V	13.6V	13.6V	13.6V
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	3A / 4A	8A / 6A	6A / 3A	10A / 6A
DC consumption	<100 mA	<100 mA	<10 mA	<10 mA
General Specifications				
Dimensions, hwxwd	3.5"x3.4"x2" 89x87x50 mm	8.5"x3.4"x2" 217x87x50 mm	3.5"x3.4"x2" 89x87x50 mm	5"x3.4"x2" 127x87x50 mm
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
Stabilized	yes	yes	yes	yes
Connections input/output	fast-on	fast-on	fast-on	fast-on
Temperature range (ambient temp.)	-25°C–80°C, >30°C derating / -13°F–176°F, >86°F derating			
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

* More power available for two minute intervals, ideal for active marine telephone use.

• All DC Master converters come with a mounting bracket, screws and fast-ons.



24/12-50A
81400350



12/24-3A
81400400



12/24-7A
81400500



48/12-6A
81400600



48/12-9A
81400700



48/12-20A
81400800

24V	12V	12V	48V	48V	48V
20-32V DC	10-15.5V DC	10-15.5V DC	40-62V DC	40-62V DC	40-62V DC
13.6V	27.2V	27.2V	13.6V	13.6V	13.6V
720 W	109 W	245 W	109 W	132 W	326 W
500 W	82 W	191 W	82 W	108 W	272 W
60A / 50A	4A / 3A	9A / 7A	8A / 6A	11A / 9A	24A / 20A
<10 mA	<110 mA	<120 mA	<15 mA	<15 mA	<15 mA
11.8"x3"x4.3" 300x76x110 mm	3.5"x3.4"x2" 89x87x50 mm	6.6"x3.4"x2" 167x87x50 mm	3.5"x3.4"x2" 89x87x50 mm	5"x3.4"x2" 127x87x50 mm	5"x3.4"x2" 217x87x50 mm
1.2 kg / 2.6 lbs	290 gr / 0.6 lbs	610 gr / 1.3 lbs	415 gr / 0.9 lbs	415 gr / 0.9 lbs	765 gr / 1.7 lbs
CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark
no	no	no	no	no	no
yes	yes	yes	yes	yes	yes
fast-on	fast-on	fast-on	fast-on	fast-on	fast-on
-25°C-80°C, >30°C derating / -13°F-176°F, >86°F derating					
natural cooling	natural cooling	natural cooling	natural cooling	natural cooling	natural cooling
<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr
IP53	IP53	IP53	IP53	IP53	IP53



24/12-12A
81500300



24/12-24A
81500350



24/24-3A
81500400



24/24-7A
81500500

24V	24V	24V	24V
20-32V DC	20-32V DC	20-32V DC	20-32V DC
13.6V	13.6V	27.2V	27.2V
245 W	408 W	109 W	245 W
164 W	326 W	82 W	191 W
18A / 12A	24A / 30A	4A / 3A	9A / 7A
<10 mA	<10 mA	<25 mA	<25 mA
6.6"x3.4"x2" 167x87x50 mm	8.5"x3.4"x2" 217x87x50 mm	5"x3.4"x2" 127x87x50 mm	7"x3.4"x2" 185x87x50 mm
590 gr / 1.3 lbs	850 gr / 1.9 lbs	590 gr / 1.3 lbs	820 gr / 1.8 lbs
CE, E-mark	CE, E-mark	CE, E-mark	CE, E-mark
yes	yes	yes	yes
yes	yes	yes	yes
fast-on	fast-on	fast-on	fast-on
-25°C-80°C, >30°C derating / -13°F-176°F, >86°F derating			
natural cooling	natural cooling	natural cooling	natural cooling
<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr	<30 dBA at 1 mtr
IP53	IP53	IP53	IP53

For detailed specifications,
scale drawings, 3D files,
certificates and manuals see
mastervolt.us/dcdc-converters

Convert: Mac & Magic Specifications





Mac 24/12-20



Magic 24/12-20



Magic 24/24-20

Item #	81200100	81300100	81300200
Specifications Input			
Nominal input voltage	24V	24V	24V
Input range	20–32V DC	19–32V DC	19–32V DC
Input range, 3-step charge mode	24–32V DC	24–32V DC	24–32V DC
Lower input set point	20V DC*	20V DC*	20V DC*
Delay lower input set point	30 sec.*	30 sec.*	30 sec.*
Specifications Output			
Factory setting	13.6V DC*	13.6V DC*	27.2V DC*
Voltage adjustable*	10–15V DC	10–15V DC	20–28.5V DC
Output voltage dimmer*	4–13V DC	4–13V DC	8–26V DC
Stabilized	2% at extremes of temperatures, load and input		
Ripple	max. 1% peak peak	max. 1% peak peak	max. 1% peak peak
Power (max./nominal)	300 / 270 W	300 / 300 W	580 / 580 W
Max. current	20A	20A	20A
Charge current – 3-step mode	16A	16A	16A
General Specifications			
Galvanic isolation	no	yes	yes
Voltage limited	yes	yes	yes
Efficiency	>90% (at nominal input voltage, full load); 92% peak		
Protected against over load	yes	yes	yes
Protected against over temperature	yes	yes	yes
Dimmer function	yes, by external momentary switch via fast-on connection, to be activated by DIP-switch setting		
Alarm contact	no	yes (fast-on connector)	yes (fast-on connector)
Dimensions, hwxwd	7.5"x5.1"x2.4" 190x130x61 mm	8.9"x6.1"x3.2" 227x154x81 mm	8.9"x6.1"x3.2" 227x154x81 mm
Weight	1.0 kg / 2.2 lbs	1.8 kg / 4 lbs	1.8 kg / 4 lbs
Approvals	CE	CE	CE
Technical Specifications			
3-Step charge option	yes (DIP switch settings)	yes (DIP switch settings)	yes (DIP switch settings)
DC consumption	<30 mA	<115 mA	<115 mA
Connections input/output	screw terminals, maximum wire size 16 mm² / AWG5		
Temperature range (ambient temp.)	-25°C–80°C, >40°C derating / -13°F–176°F, >104°F derating		
Cooling	natural cooling	maintenance free vario fans	
Sound level	<30 dBA at 1 mtr	<48 dBA at 1 mtr	<48 dBA at 1 mtr
Protection degree	IP21	IP21	IP21
MasterBus compatible	yes, by means of MasterBus Serial Interface (Item # 77030450)		
Options			
MasterView Easy 77010305		Touch screen panel for reading status and dimmer function settings.	
MasterBus Serial Interface 77030450		Integrates the Mac & Magic converters in a MasterBus network.	

* Adjustable with MasterAdjust software.

For detailed specifications, scale drawings, 3D files, certificates and manuals see mastervolt.us/dcdc-converters



Magic 12/12-20

81300400

Magic 12/24-10

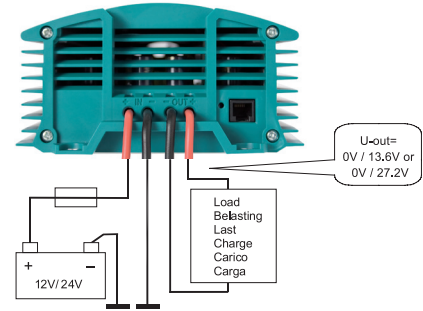
81300300

12V	12V
11–16V DC	11–16V DC
12–16V DC	12–16V DC
10V DC*	10V DC*
30 sec.*	30 sec.*
13.6V DC*	27.2V DC*
10–15V DC	20–28.5V DC
4–13V DC	8–26V DC
2% at extremes of temperatures, load and input	
max. 1% peak peak	max. 1% peak peak
300 / 300 W	300 / 300 W
20A	10A
16A	8A

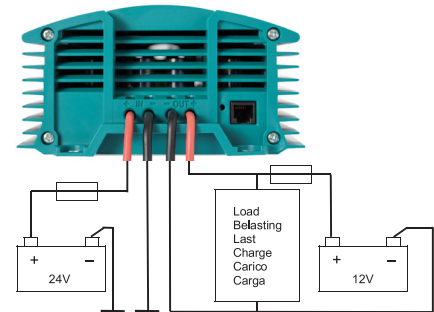
yes	yes
yes	yes
>90% (at nominal input voltage, full load); 92% peak	
yes	yes
yes	yes
yes, by external momentary switch via fast-on connection, to be activated by DIP-switch setting	
yes (fast-on connector)	yes (fast-on connector)
8.9"x6.1"x3.2"	8.9"x6.1"x3.2"
227x154x81 mm	227x154x81 mm
1.8 kg / 4 lbs	1.8 kg / 4 lbs
CE	CE
yes (DIP switch settings)	yes (DIP switch settings)
<115 mA	<115 mA
screw terminals, maximum wire size 16 mm ² / AWG5	
-25°C–80°C, >40°C derating / -13°F–176°F, >104°F derating	
maintenance free vario fans	
<48 dBA at 1 mtr	<48 dBA at 1 mtr
IP21	IP21
yes, by means of MasterBus Serial Interface (Item # 77030450)	

Touch screen panel for reading status and dimmer function settings.

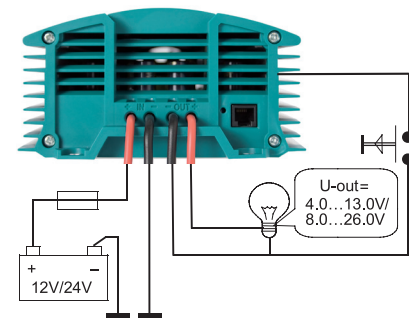
Integrates the Mac & Magic converters in a MasterBus network.

**Magic as power supply**

The Magic models can be fully used as a stabilised power supply: From 12–24V, from 24–12V or from 24–24V. Inputs and outputs are galvanically isolated.

**Mac & Magic as battery charger**

A 12V starter or emergency power battery can be charged as well as maintained by Mac or Magic units. The charging method is identical to the Mass 3-step with voltage levels adjustable by means of MasterBus PC-Link/MasterAdjust software.

**Mac & Magic as dimmer**

Light can be dimmed by means of a push button or plus switch, with a maximum load of 250 Watt for the Mac. A second Mac can be installed if there are multiple lamps.



From shore power to onboard network: Mastervolt isolation transformers

You need to be careful when introducing shore power onboard, especially when the yacht is made of aluminium or steel. An incorrectly configured system can result in electrolysis, which will slowly but surely corrode the metal components. It is also important to protect the engine, rudder, rudderstock, propeller and thruster on composite yachts. A Mastervolt isolation transformer will help preserve your valuable boat and provide you with the security of a correctly earthed 230V system.

Select the right transformer for your system:

Lightweight Mass GI transformer

- Ultramodern high-frequency electronic switch technology.
- Lightweight and compact.
- Integrated Soft Start function.
- Connect to currents from 90–255V and from 45–65Hz.
- Units can be parallel coupled for higher capacity.
- Higher efficiency, limited heat development.

IVET-D isolation transformers

- High-quality toroidal transformer in robust casing, including circuit breaker.
- Standard Soft Start for the suppression of inrush current at shore connection.
- Multi-tap version for both 230V/50Hz and 120V/60Hz shore voltage.

IVET heavy-duty series

- High-quality isolation transformers without casing (for self installation).
- Optional Soft Start, in synthetic casing.
- Capacities of 2.5–22 kW.



Modern transformer technology: Light, silent, reliable and easy

Mastervolt's Mass GI offers the latest high-frequency switching technology as well as Soft Start for peak loads when connecting to the shore.

Weighing a mere six kilos, LED lights on the casing indicate load and overload. The transformer can be remote controlled via a panel and has the option of automatically starting the generator when there is a shore current overload.

Higher capacity via parallel switching

Parallel switching of the Mass GI units increases the shore power capacity. Two 16A/3.5 kW units ensures 32A/7 kW, four units give 64A/14 kW.

Global solution

The IVET-D multi-tap is suitable for 230V/50Hz and 120V/60Hz (American or Caribbean).

Install anywhere

With its maritime, aluminium casing, this isolation transformer can be fitted in any position on a wall or floor. No rubber mountings are necessary because the unit does not vibrate or hum. The Mass GI also features professional connections with strain relief cable glands.

Practical tips:

- Determine shore and onboard current: 230V, 120V or both.
- Determine the capacity. Maximum load with onboard power usage: Amount of amps and kW.
- Note sizes and weight; the Mass GI is 75% lighter and 60% smaller compared to low frequency transformers.

Remember:

- Detection system for IVET heavy duty automatically supplies onboard system with 230V in case of a 120V/60Hz shore connection (or vice versa).
- Systemswitch or Masterswitch for integrating shore power, generator and/or inverter.
- Connects to 12V or 24V system, battery charger or Mass Combi.

Convert: Isolation Transformers Specifications



Mass GI 3.5



Mass GI 7



IVET-D 16A
3.5 kVA multi tap

Item #	88000355	88000705	86050351
Input			
Input voltage	90–255V	90–255V	220–240V (110–120V adjustable)
Input frequency	45–65Hz	45–65Hz	45–65Hz
Nominal input current at 230V	16A	32A	16A
No load consumption	22 W	44 W	<10 W
Earth leakage protection	no	no	no
Output			
Output voltage (equal to input)	90–255V, ± 5%	90–255V, ± 5%	220–240V, ± 5% (110–120V adjustable)
Output frequency (equal to input)	45–65Hz	45–65Hz	45–65Hz
Soft Start	yes	yes	yes
Switch off behaviour breaker	B-characteristic	B-characteristic	B-characteristic
Efficiency	>93%	>93%	>93%
General Specifications			
Power	3500 W*	7000 W	3500 W
Technology	high frequency	high frequency	torroidal
Dimensions, hwxwd	13.4"x10.3"x5.7" 340x261x144 mm	13.4"x10.3"x9.8" 340x261x250 mm	16"x11.6"x8.7" 407x295x220 mm
Weight	6 kg / 13.2 lbs	10 kg / 22 lbs	23 kg / 50.7 lbs
Ambient temperature	0–40°C, derating with 5% per °C (40–60°C) / 32–104°F, derating with 5% per °F (104–140°F)		
Switch off at	80°C / 176°F	80°C / 176°F	120°C / 248°F
Cooling	variofan	variofan	natural cooling forced cooling >80°C / 176°F
Operating humidity	max. 95%	max. 95%	max. 95%
Protection degree	IP23	IP23	IP23
MasterBus compatible	yes	yes	no
Optional remote control	yes, MasterView Easy	no	no

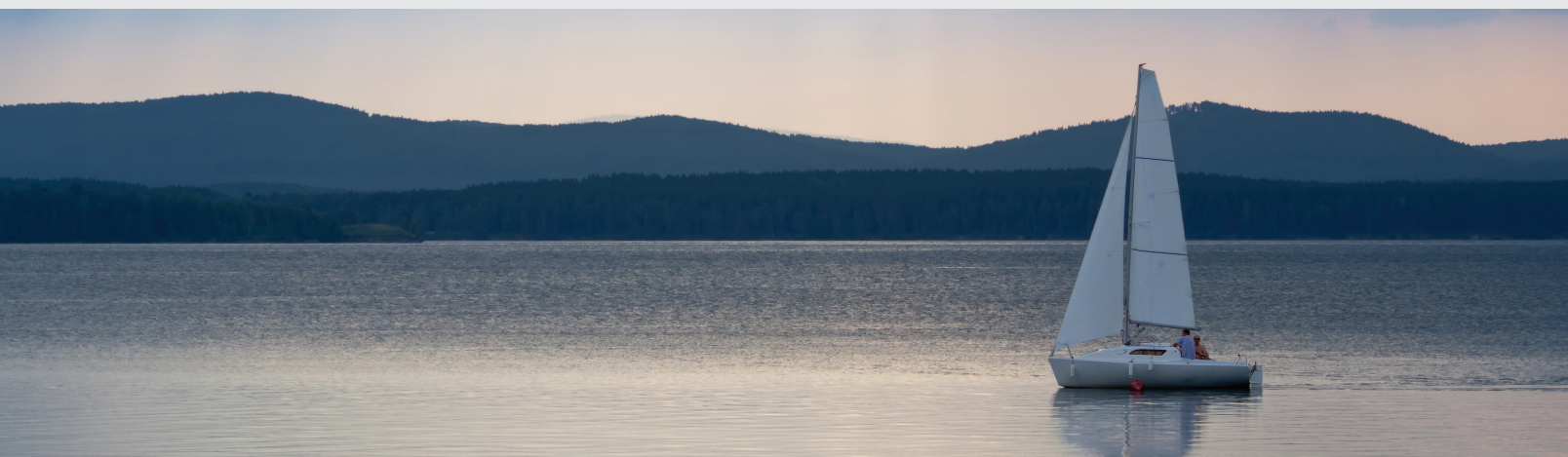


77010305

* Up to 4 units parallel (14 kW).

Automatically adjust shore power to the onboard system

Mastervolt supplies three automatic switching systems for capacities of 6, 9 and 13 kW that — combined with an IVET transformer — adjust shore power to the onboard system. As a result a 230V/50Hz system can easily function with an American or Caribbean shore connection. Do ensure that the frequency on board (50 or 60Hz) is the same as the frequency of the shore current.





IVET 6



IVET 8



IVET 10



IVET 13

85000600	85000800	85001000	85001300
110/220/240V	110/220/240V (adjustable)	110/220/240V (adjustable)	110/220/240V (adjustable)
45–65Hz	45–65Hz	45–65Hz	45–65Hz
26A	35A	44A	57A
<10 W	<10 W	<10 W	<10 W
no	no	no	no
120/220/240V, ± 5%	120/220/240V, ± 5%	120/220/240V, ± 5%	120/220/240V, ± 5%
45–65Hz	45–65Hz	45–65Hz	45–65Hz
option	option	option	option
n.a.	n.a.	n.a.	n.a.
>93%	>93%	>93%	>93%
6000 W	8000 W	10 kW	13 kW
E-core	E-core	E-core	E-core
15"x9.5"x8.5" 380x240x215 mm	16.9"x11"x8.3" 430x280x210 mm	16.9"x11"x9.5" 430x280x240 mm	19.3"x12.6"x9" 490x320x230 mm
50 kg / 110.2 lbs	59 kg / 130 lbs	75 kg / 165.4 lbs	90 kg / 198.4 lbs
0–40°C, derating with 5% per °C (40–60°C) / 32–104°F, derating with 5% per °F (104–140°F)			
n.a.	n.a.	n.a.	n.a.
natural cooling	natural cooling	natural cooling	natural cooling
max. 95%	max. 95%	max. 95%	max. 95%
IP00	IP00	IP00	IP00
no	no	no	no
no	no	no	no

Transfer systems with Soft Start and automatic detection of the input voltage
6 kVA 9 kVA 13 kVASoft Start
13 kVASoft Start
22 kVA

Item #	55010600	55010900	55011300	55003300	55003400
Voltage	120/230V	120/230V	120/230V	230V	230V
Power	6 kW	9 kW	13 kW	2.5–13 kW	13–22 kW
Max. input current	60A at 120V 30A at 230V	80A at 120V 40A at 230V	130A at 120V 70A at 230V	n.a.	n.a.
Dimensions, hwxwd	15.7"x11.8"x8.3" 400x300x210 mm	15.7"x11.8"x8.3" 400x300x210 mm	15.7"x11.8"x8.3" 400x300x210 mm	7.9"x7.1"x4.5" 200x180x115 mm	7.9"x7.1"x4.5" 200x180x115 mm
Weight	12 kg / 26.5 lbs	12.5 kg / 27.6 lbs	13 kg / 28.7 lbs	1.2 kg / 2.6 lbs	1.5 kg / 3.3 lbs

For detailed specifications, scale drawings, 3D files, certificates and manuals see mastervolt.us/isolation-transformers



Store: Constant Power with Mastervolt Batteries

When choosing the right batteries for your system, the key issue is not what you need but what you wish to have left over.

Mastervolt makes selecting the right battery easy. Whether you choose a low priced battery such as the AGM or an innovative and technologically advanced Lithium Ion battery, Mastervolt has the power solution for every application.

What's more, our batteries are extremely safe (no gas formation), maintenance free and very easy to install.

To make the choice even simpler, Mastervolt has divided its entire battery range of 32 types into six series and four different battery technologies. Each series has specific benefits as well as variations in price, capacity, dimensions, volume and lifespan.



Batteries	90
AGM Batteries	92
Gel Batteries	93
Lithium Ion Batteries	95

Mastervolt – Exclusive Supplier of Batteries for Camper Emirates Team New Zealand in the Volvo Ocean Race 2011





Reinforced Batteries

All Mastervolt batteries are equipped with shock-proof positive and negative battery plates with rubber separation, while the electrolyte is absorbed in gel or glass fibre (AGM). A high-grade lead/calcium compound guarantees you a constant capacity and minimum self-discharging. Mastervolt has the right battery for every marine application.

Mastervolt batteries are:

- Maintenance-free.
- Safe; no gas formation.
- Easy to install.
- Designed for cyclic use (charge/discharge).
- Leak-proof.
- With a two-year warranty.

Issues to take into account:

- Determining the correct battery capacity for your new battery/batteries is very important. For support and more information see **mastervolt.us/batteries**.
- Choosing the right battery charger lengthens the lifespan of your batteries considerably. For more information see **[mastervolt.us/chargers](http://mastervolt.uschargers)**. Mastervolt's modern 3-step+ charge technology charges your batteries safely and quickly.
- A control panel is the best way to make the most of your batteries. Go to **mastervolt.us/batterymonitor** for more information.

To choose the right battery, go to the table on the opposite page.



Which battery is best for your application?

	traditional open batteries	① MLI Lithium Ion	② MVG gel semi-traction	③ MVSV 2V gel traction	④ AGM semi-traction
Maintenance free	-	++++	++++	++++	++++
Gas formation during charging	+	+++++	+++	+++	+++
Self discharge while inactive	-	+++	++++	++++	+++
Lifespan with complete discharge	+	+++++	+++	++++	++
Lifespan with limited discharge	++	+++++	++++	++++	+++
Sensitivity to excessive charge voltage	++	+++++	+++	++++	++
Suitable for selection of battery bank with high capacity	+	++++	+++	++++	++
Suitable for E-propulsion	+	+++++	+++	++++	++++
Starting motors	++	++++	+++	++	++++
Shock-resistance	+	++++	++++	++++	++++
Number of charge/discharge cycles	+	+++++	+++	++++	++
Temperature-resistance	+	++++	++++	++++	++
Installation/angle of inclination	-	++++	++++	++++	++++
Return on investment with limited use	+	+++	+++	++++	+++
Return on investment with intensive use	+	+++++	+++	++++	++
Product warranty	± 1 year	2 year	2 year	7 year	2 year
Worldwide onboard service	+	++++	++++	++++	++++

+++++ = excellent ++++ = very good +++ = good ++ = adequate + = inadequate - = poor

① Lithium Ion batteries (LIB)

Lithium ion batteries have a high energy density and are perfect for cyclic applications. They offer savings of up to 70% in volume and weight compared to traditional lead-acid batteries, with three times as many charging cycles (2000 full cycles).

Another major benefit of the Mastervolt Li-ion battery is that it is equipped with a Battery Management System (BMS), which automatically compensates for any imbalance between the cells. This guarantees you a constant high capacity and longer battery lifespan. The new Lithium Ion Ultra series now includes integrated battery monitoring.



② 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.



③ 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.



④ AGM battery

In AGM batteries, the electrolyte (mixture of water and sulphuric acid) is largely absorbed in glass fibre. 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).

The battery poles can be unscrewed and this type of battery can be combined with every standard battery terminal.



AGM Series

- Ideal universal battery.
- Excellent starter function.
- Perfect upgrade for wet lead acid batteries.
- Same initial power surge in an AGM 12/90 Ah as in a 180 Ah wet lead-acid battery.
- Glass-fiber technology ensures low internal resistance.
- Use of thicker plates allows deep discharging.
- Also for cyclic use.
- Two year warranty



	AGM 12/55	AGM 12/70	AGM 12/90	AGM 12/130	AGM 12/160	AGM 12/225	AGM 12/270
Item #	62000550	62000700	62000900	62001300	62001600	62002250	62002700
Nominal voltage	12V	12V	12V	12V	12V	12V	12V
Capacity C20*	55 Ah	70 Ah	90 Ah	130 Ah	160 Ah	225 Ah	270 Ah
CCA to DIN	300A	385A	535A	585A	630A	815A	1000A
CCA to SAE	480A	615A	850A	935A	1000A	1300A	1600A
Max. outer Dimensions** l x w x h	10.1x5.2x8.2" 257x132x207 mm	13.7x6.6x7.2" 348x167x183 mm	13x6.8x9.3" 330x173x237 mm	16.1x7x9" 410x177x228 mm	19.1x6.7x9.6" 485x170x245 mm	20.6x9.4x9.5" 522x240x241 mm	20.6x10.6x9.6" 522x268x243 mm
Weight	37.5 lbs / 17 kg	47 lbs / 21.5 kg	62 lbs / 28 kg	83 lbs / 37.6 kg	93 lbs / 42.3 kg	140 lbs / 63.5 kg	161 lbs / 73 kg

* C20 = battery capacity at a discharge time of 20 hours, till 1.75V per cell.

**Including terminals and grip handles

AGM SlimLine Series

- Ideal universal battery; also for starter functions.
- Compressed AGM technology.
- Saves up to 15% in volume.
- Saves up to 15% in weight.
- Miniscule footprint; 2x 200 Ah for a 200 Ah battery footprint.
- Two-year warranty.



	AGM-SL 12/150	AGM-SL 12/200
Item #	63001500	63001851
Nominal voltage	12V	12V
Capacity C20*	150 Ah	200 Ah
CCA to DIN	610A	750A
CCA to SAE	1020A	1250A
Max. outer Dimensions** l x w x h	22x4.3x11 in 560x110x280 mm	22x5x11 in 560x126x280 mm
Weight	89 lbs / 40.5 kg	113 lbs / 51.2 kg

* C20 = battery capacity at a discharge time of 20 hours, till 1.75V per cell.

**Including terminals and grip handles

AGM 6 Volt Series

- Ideal solution for cyclic applications, such as electric propulsion, wheelchairs, golf carts, etc.
- Easy configuration of 12/24/48V battery terminals, with high capacity.
- Double pole for easy installation.
- No gas formation with normal use.
- Two-year warranty.









	AGM 6/260	AGM 6/340	AGM 6/400
Item #	61002600	61003400	61004000
Nominal voltage	6V	6V	6V
Capacity C20*	260 Ah	340 Ah	400 Ah
Max. outer Dimensions** l x w x h	11.6x7.1x11.7 in 295x180x298 mm	11.6x7.1x14.4 in 295x180x366 mm	11.6x7.1x16.9 in 295x180x428 mm
Weight	77.8 lbs / 35.3 kg	104.7 lbs / 47.5 kg	116.8 lbs / 53 kg

* C20 = battery capacity at a discharge time of 20 hours, till 5.25V.

**Including terminals and grip handles

MVG Gel Series

- Perfect service battery for medium and large 12V and 24V systems.
- Extremely long lifespan.
- No gas formation with normal use.
- Fast recharge, high charge current possible.
- For intensive cycle use with a high number of charge/discharge cycles.
- Very low self discharge.
- Two-year warranty.

						
	MVG 12/25	MVG 12/55	MVG 12/85	MVG 12/120	MVG 12/140	MVG 12/200
Item #	64000250	64000550	64000850	64001200	64001400	64002000
Nominal voltage	12V	12V	12V	12V	12V	12V
Capacity C20*	25 Ah	55 Ah	85 Ah	120 Ah	140 Ah	200 Ah
CCA to DIN	110A	230A	270A	450A	540A	630A
CCA to SAE	175A	380A	450A	760A	920A	1100A
Max. outer Dimensions** l x w x h	6.6x6.9x5 in 167x176x126 mm	10.3x5.4x9 in 261x136x230 mm	13x6.7x9.3 in 330x171x236 mm	20.2x7.4x8.8 in 513x189x223 mm	20.2x8.8x8.8 in 513x223x223 mm	20.4x10.8x9.4 in 518x274x238 mm
Weight	21.2 lbs / 9.6 kg	41.9 lbs / 19 kg	71.9 lbs / 32.6 kg	90.4 lbs / 41 kg	108 lbs / 49 kg	154.3 lbs / 70 kg

* C20 = battery capacity at a discharge time of 20 hours, till 10.5V.

**Including terminals and grip handles



MVSV 2 Volt Gel Series

- Long lifespan.
- Many charging and discharging cycles.
- Charges quickly.
- Extremely sustainable battery for large installations.
- Robust build for longer lifespan.
- Deep discharging without problems.
- Can be installed horizontally or vertically.
- Seven-year warranty (pro rate).



	MVSV 280	MVSV 420	MVSV 500	MVSV 580	MVSV 750	MVSV 1000
Item #	68000280	68000420	68000500	68000580	68000750	68001000
Nominal voltage	2V	2V	2V	2V	2V	2V
Capacity C10*	280 Ah	420 Ah	500 Ah	580 Ah	750 Ah	1000 Ah
Max. outer Dimensions** l x w x h	5"x8.2"x15.7" 126x208x399 mm	5"x8.2"x20.3" 126x208x515 mm	5.8"x8.2"x20.3" 147x208x515mm	6.6"x8.2"x20.3" 168x208x515 mm	5.8"x8.2"x27.2" 147x208x690 mm	8.3"x7.6"x27.2" 212x193x690 mm
Weight	23 kg / 50.7 lbs	30 kg / 66.1 lbs	35 kg / 77.2 lbs	39 kg / 86 lbs	49 kg / 108 lbs	66 kg / 146 lbs

* C10 = battery capacity at a discharge time of 10 hours, till 1.80V per cell. **Including terminals and grip handles



	MVSV 1250	MVSV 1500	MVSV 1650	MVSV 2200	MVSV 2700
Item #	68001250	68001500	68001650	68002200	68002700
Nominal voltage	2V	2V	2V	2V	2V
Capacity C10*	1250 Ah	1500 Ah	1650 Ah	2200 Ah	2700 Ah
Max. outer Dimensions** l x w x h	8.3"x9.3"x27.2" 212x235x690 mm	8.3"x10.9"x27.2" 212x277x690 mm	8.3"x10.9"x29.9" 212x277x759 mm	8.5"x15.7"x32.1" 216x400x816 mm	8.4"x19.3"x32.1" 214x489x816 mm
Weight	80 kg / 176 lbs	95 kg / 209 lbs	115 kg / 254 lbs	160 kg / 353 lbs	198 kg / 437 lbs

* C10 = battery capacity at a discharge time of 10 hours, till 1.80V per cell. **Including terminals and grip handles

Lithium Ion Ultra Series Battery



Having perfected the legendary Lithium Ion battery in a few key areas, Mastervolt has developed an unrivalled 5000 and 2500 Wh powerhouse. The MLI Ultra has an ultra-long lifespan that offers over 2000 cycles; a recharge time of less than an hour; active cell balancing for efficient and safe use of the eight Li-ion cells; and integrated battery monitoring to further simplify your system. What's more, the Ultra communicates directly with your Mastervolt battery charger via MasterBus to ensure the best possible recharging. Add in the fact that it takes up 70% less space and weight compared to lead acid batteries, and you'll see why this battery is the ultimate choice.

- Highly advanced technology.
- Multifunctional battery of 5 kWh and 2.5 kWh.
- Saves up to 70% in space.
- Saves up to 70% in weight.
- Three times the lifespan of traditional batteries (2000 cycles).
- Ultra-fast charging and discharging.
- High efficiency.
- MasterBus communication with every Mastervolt battery charger.
- Integrated Battery Management System (BMS).
- Common-rail technology optimizes series connection.
- Safest Lithium Ion technology available.
- Integrated battery monitoring.

2 YEAR WARRANTY

	<div>NEW</div> MLI Ultra 12/2500	MLI Ultra 12/5000	MLI Ultra 24/5000
Item #	66012500	66015000	66025000
Nom. battery voltage	13.25 V	13.25 V	26.5 V
Battery capacity range	180 Ah	360 Ah	180 Ah
Nom. battery power	2500 Wh	5000 Wh	5000 Wh
Technology	LiFePO4	LiFePO4	LiFePO4
Battery monitoring	integrated	integrated	integrated
Battery terminals	M8	M8	M8
Common-rail technology	up to 2 batteries in series	up to 2 batteries in series	up to 2 batteries in series
Switch off relais controls	integrated	integrated	integrated
MasterBus compatible	yes	yes	yes
Max. outer dimensions, lwxh	13.35"x7.83"x13" 339x199x355 mm	24.5"x8"x14" 622x197x355 mm	24.5"x8"x14" 622x197x355 mm
Weight	63.93 lbs / 29 kg	123.5 lbs / 56 kg	123.5 lbs / 56 kg





Manage: Everything under control with the right information

Ease of use is ease of comfort. We understand that you want to enjoy your peace and freedom without a care in the world. From busbars to battery monitors, from switch panels to intelligent digital switching systems, Marincos components and Mastervolt systems support your boating adventures while requiring minimum attention.

Any system is only as strong as its weakest link so in order to build a strong foundation for your electrical system our distribution products are solidly engineered utilizing best quality materials to withstand the demands imposed by the harsh marine environment. Whether it's the use of ultra flexible tinned copper wire, or high temperature plastics in battery switch and busbar ranges, the result is a robust backbone for your boat's electrical system, and your peace of mind.

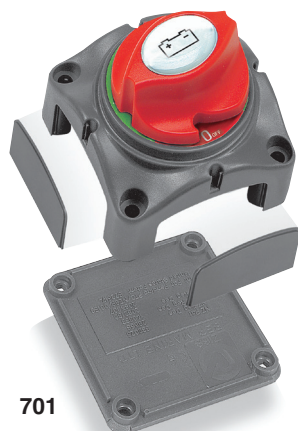
The complete system builds on this backbone, with world leading options for control and monitoring. Conventional switch and circuit breaker panels provide installation options for wet or dry areas, or for complete fingertip wireless control, Mastervolt offers the most completely integrated marine digital switching systems. Whether operating the system from home by text message or switching on the reading light in your cabin, everything works fast and fully digitally. Instead of a complex puzzle you can expect ease of installation and operation, leaving you free to enjoy what you love most and explore the world.

The Power to be Independent!



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701

Contour Battery Master Switch

This switch offers a number of unique features, the highlight being the patented Contour Locking System, allowing it to be a stand alone unit, or locked together with other switches.

- Features a control knob which can be removed by switching to an counter-clockwise 45° position. The control knob also features an interchangeable labeling system allowing a full range of applications (Item # 713 or 715 on page 142).
- Three removable side plates on sides for access of up to 1/0 cables plus a rear cover insulating the rear terminals against any short circuits. This ensures the switch meets ABYC requirements.
- Can be either surface or recess mounted by cutting a 2.1" (52 mm) hole.
- Available with house knob (OEM # 701B-HB) or with chassis knob (OEM # 701B-CH)

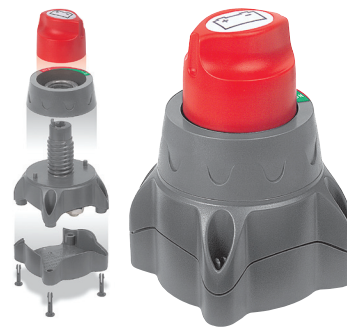


701S

Battery Selector Switch

The 701S is the most compact selector switch available on the market. Housed in the same dimensions as the 701, and includes the same removable side plates and back cover. While BEP recommends isolated battery systems as outlined with our distribution clusters, the 701S offers a simple economical way of separating two batteries.

Please note selector switches will not separate electronics from harmful engine starting spikes.



700

Easyfit™ Battery Switch

Created for installations where switches need to be recessed through varying thicknesses of panels. It achieves this through an easily removable threaded ring allowing for panel thicknesses up to 3/4" (19 mm). It uses the same features as the 701 with the removable key 45° past the off position, labelled handle and a removable back cover covering exposed terminals to meet ABYC specifications.

The switch can also be surface mounted offering a unique style compared to other switches available on the market.

The 700 Easyfit™ switch can easily be retro - fitted in place of most European post and lever type switches.

Now molded in high temperature, fiber reinforced plastics.

BEP Marine Battery Switch Test

Procedures (UL 1107) Continuous (1 hour), intermittent (5 minutes) & Cranking (engine starting – 10 seconds). The test is to determine the maximum current the switch can handle for the stated time, without the rear terminals exceeding 100°C (212°F) above the ambient temperature. The continuous and intermittent ratings are tested at 110% of specified ratings. All BEP switches are tested Independently to this specification by a 3rd party laboratory

Specifications - All recessed or surface mount, tin-plated copper studs & nuts, ignition-protected

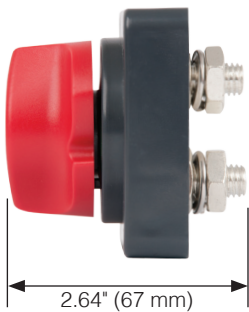
Item #	OEM #	in LxWxH	mm LxWxH	Rating (A DC)			Voltage (V DC)	Operation	Stud size Studs x (in/mm)
				Cont	Inter	Crank			
700	700B	2.7"x2.7"x4.3"	68x68x110 mm	275	455	1250	48	On/Off	2 x (3/8" / 10 mm)
701	701B	2.75"x2.75"x3"	69x69x75 mm	275	455	1250	48	On/Off	2 x (3/8" / 10 mm)
701S	701S-B	2.75"x2.75"x3"	69x69x75 mm	200	300	1000	48	1-2-Both-Off	3 x (5/16" / 8 mm)

Panel-Mounted Switches

Designed specifically for panel mount applications. This range gives a very compact, versatile solution.

- Compact, lightweight
- Removable key on 701-PM
- Countersunk recesses for surface mount application
- Standard 2-1/16" (52 mm) hole cut out (same as standard gauge hole)
- Inside: captive inserts for 3/16" (4.8 mm) nuts; full access for cables - no restrictions
- Standard interchange label system (see page 142)

Now molded in high temperature, fiber reinforced plastics.



Mounting Plates

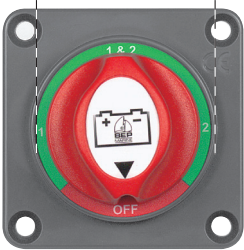
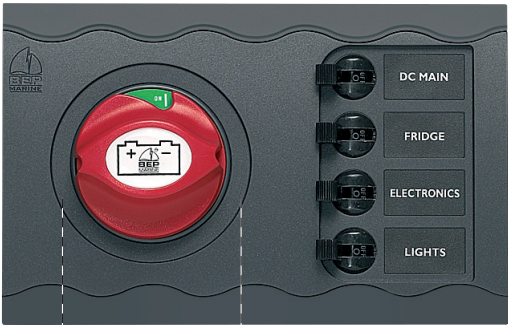
Single recessed. Supplied with all the mounting hardware and come in a matching grey finish.

For	Item #	LxW
701	BSP-1	3.75"x3.75" / 95x95 mm

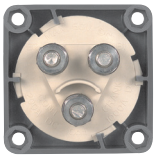
Specifications

Item #	OEM #	in LxWxH	mm LxWxH	Rating (A DC)			Voltage (V DC)	Operation	Stud size Studs x (in/mm)
				Cont	Inter	Crank			
701-PM	701-PM-B	2.75"x2.75"x3"	69x69x67 mm	275	455	1250	48	On/Off	2 x (3/8" / 10 mm)
701S-PM	701S-PM-B	2.75"x2.75"x3"	69x69x67 mm	200	300	1000	48	1-2-Both-Off	3 x (5/16" / 8 mm)

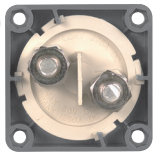
As shown in Contour Connect panels



701S-PM



701-PM



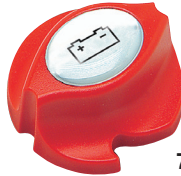
Battery Knob Options for 701 Switch

For applications where emergency parallel switch needs to be highlighted.

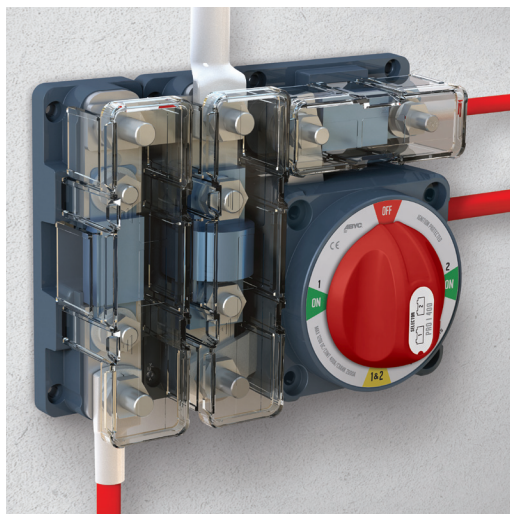
Order separately - replaces existing knob.



701-KEY-EP



701-KEY



Pro Installer Series Battery Switches

A new range of premium quality battery switches that feature an industry standard mounting footprint. This enables easy mounting into existing or new installations. Improved design and ergonomics provide clear intuitive operation, while attention to all aspects of switch function and use has created superior installation options, high power capacity and improved reliability. The many innovations include a number for which patent applications have been made for switch mounting and functionality.

See page 152 for more Pro Installer products to complete your cluster.



770

NEW Pro Installer On/Off Battery Switch

A powerful new generation battery switch with outstanding performance and features for both the installer, and end user. Three mounting options: surface, rear panel, and front panel mounting, plus optimized cable access makes installation a breeze. Pro Installer switches set the new benchmark with outstanding ergonomics, intuitive look/feel, and are engineered from the finest materials to withstand the harsh marine environment.



770-DP

NEW Pro Installer Double Pole Battery Switch

Same industry standard mounting with On/Off operation. Used where positive and negative supplies must be isolated at the same time.

SAFETY NOTE: BEP does not recommend this for switching house and start battery systems at the same time, for safety reasons. You may need to isolate your engine battery in an emergency, but not your house battery which typically powers the communications. For this application please use the new Dual Bank Control Switch (772-DBC) or one of BEP's battery switch clusters.

Note: 770-DP is replacing 720-DP



772-DBC

NEW Pro Installer Dual Bank Control Switch

This innovative (Patent Pending) switch combines the functions of 3 battery switches into one (House, Start, and Emergency Parallel) to intuitively manage 2 battery banks and 2 loads. A unique safety position isolates one load e.g. House "On", Start "Off" in case of engine malfunction, so an emergency radio call can still be made. Significant savings in both space and installation cost can be made, without compromising functionality or safety.

Specifications

Item #	OEM #	in LxWxH	mm LxWxH	Rating (A DC)			Voltage (V DC)	Operation	Stud Detail
				Cont	Inter	Crank			
770	770-B	3.85"x3.85"x3.62"	98x98x92 mm	400	600	1500	48	On/Off	2x (3/8" / 10 mm)
770-DP	770-DP-B	3.85"x3.85"x3.62"	98x98x92 mm	2x 400	2x 600	2x 1500	48	On/Off (x2)	4x (3/8" / 10 mm)
771-S	771-S-B	3.85"x3.85"x3.62"	98x98x92 mm	400	600	1500	48	1-2-Both-Off	3x (3/8" / 10 mm)
771-SFD	771-SFD-B	3.85"x3.85"x3.62"	98x98x92 mm	400	600	1500	48	1-2-Both-Off	3x (3/8" / 10 mm)
772-DBC	772-DBC-B	3.85"x3.85"x3.62"	98x98x92 mm	2x 400	2x 600	2x 1500	48	1, 1/2, Parallel, Off	4x (3/8" / 10 mm)

NEW Pro Installer Selector (771-S) & Selector with Field Disconnect (771-SFD) Battery Switches

Power requirements on boats have increased, and these 2 Selector switches offer high power capacity (400 amps continuous), the ability to easily fit doubled cables, and conform to the industry standard mounting footprint (Guest, Perko, Blue Sea).

Please note selector switches will not separate electronics from harmful engine starting spikes.

Specifications on previous page.

Note: 771-S is replacing 721

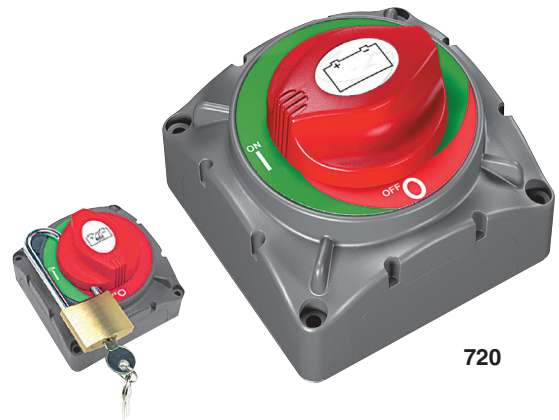


771-S

Heavy-duty Battery Switch

The 720 Heavy-duty Battery Switch fits into the same contour lock system as used on the battery distribution system. Rated at 600A continuous and 2500A cranking. It is well suited to larger vessels.

As with the 701, the 720 can be recessed or surface mounted. The 720 uses the same style of self cleaning sliding contact as used in the 701 and uses the same label sheet (Item # 713 or 715 see page 142).



720

Specifications

Item #	OEM #	in LxWxH	mm LxWxH	Rating (A DC)			Voltage (V DC)	Operation	Stud Detail
				Cont	Inter	Crank			
720	720B	4"x4"x3.5"	102x102x90 mm	600	800	2500	48	On/Off	2x (1/2" / 12 mm)



Remote Operated Battery Switches

The MD range of battery switches allow you to install the battery switch very close to the battery, to remotely manage the increased electrical loads found on today's boats. This reduces cable lengths and sizes, providing significant savings in expense and weight of copper battery cable. They are ideal for remote isolation of bow and stern thrusters. The 720-MDO has been enhanced to offer easy standard installation, or advanced options capable of switching different voltage circuits from the main supply (example: a 48 volt bow thruster with a 24 volt house supply).

- Remote operation
- Battery switch can be mounted alongside battery, reducing cable lengths and cable sizes. (Large cost and weight saving in copper cables)
- Reduced installation labor, due to shorter battery cable runs
- Manual override option to meet CE/ABYC requirements
- Power Draw 701-MD: Switch off: 12mA
- LED status identification for remote control switch
- Same capacities/specifications and mounting options as standard BEP™ battery switches
- Uses interchangeable labelling system (Item # 713 or 715 on page 142)

Optical sensor benefits (720-MDO only)

- Same easy connection for standard installation
- Ability to control different voltage circuits e.g. 36 or 48 volts
- Can be used to switch positive or negative lines
- Main contacts can be isolated from control circuit allowing operation via another battery source
- Low stand by current draw (<5mA)

Replacement knobs on page 99



720-MDO



701-MD

Specifications - All recessed or surface mount, tin-plated copper studs & nuts, ignition-protected

Item #	in LxWxH	mm LxWxH	Rating (A DC)			Voltage (V DC)	Function	Stud size Studs x (in/mm)
			Continuous	Intermittent	Cranking			
701-MD	2.7"x2.7"x4"	69x69x101 mm	275	455	1250	9.5-32	On/Off	2 x (3/8" / 10 mm)
720-MDO	4"x4"x4.33"	102x102x110 mm	500	700	2500	9.5-32	On/Off	2 x (1/2" / 12 mm)

NEW Terminal Link Kits (TLK's)

Now available for the 701 and 720 size switches, the TLK's allow for cable connections to be made outside of the body of the switches. Image not available yet.

Item # 80-708-0017-00 701-MD

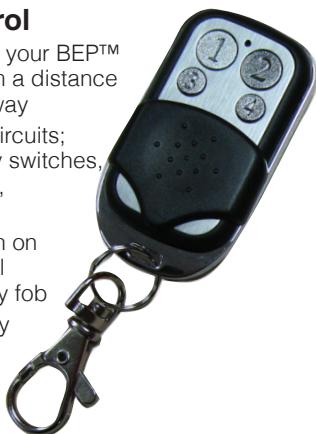
Item # 80-708-0013-00 720-MDO

Wireless Remote Control

You can now wirelessly operate your BEP™ motorized battery switches from a distance of up to 250 feet (80 meters) away

- Control up to 4 separate 5A circuits; eg, 701-MD/720-MDO battery switches, anchor light, navigation lights, and courtesy lights
- No more lifting hatches to turn on battery switches — it's now all controlled from the remote key fob
- Control battery switches easily (On/Off) from the dock
- Remote has a rolling code, for security

Item # 80-911-0045-00



Remote On/Off Key Switch

For the remote operation of the 701-MD and 720-MDO battery switches (above). It can be mounted standalone or within the Contour Connect panel range.

Item # 80-724-0006-00



Dual Operation VSS (Voltage Sensitive Switch) and Emergency Parallel

These Voltage Sensitive Switches (VSS) automatically sense connected battery bank voltages and provide optimal, efficient charging of the second bank. The VSS allows for independent battery banks to be combined or isolated based on the presence of a charging source (such as an engine alternator or battery charger), while also offering remotely activated, high current, emergency parallel connection. Designed and constructed for longevity in the marine environment with tinned copper conductors, stainless steel nuts, and high temperature, fibre reinforced plastics. The units are ignition protected, provide On/Off switching operation, and may be recessed or surface mounted.

- Dual battery sensing
- Remote emergency parallel function: can be operated through a momentary button on the dash which will parallel the batteries for 10 minutes. Once this 10 minutes has passed, if the voltage is up high enough, the voltage sensitive switch will stay engaged. If not, it will disengage.
- Manual override option

720-MDVSO benefits

- Dual 12/24 volt operation (both banks must be same voltage)
- Low power consumption (<6mA)
- Lowered cut in voltage (13.3/26.6V) suits low output alternators and high temperature environments

80-701-0018-00, and 720-MDO-EP: Emergency Parallel Only

- 10 minute remotely activated emergency parallel function (no voltage sensitive function)
- 12/24 volt operation (both banks must be same voltage)

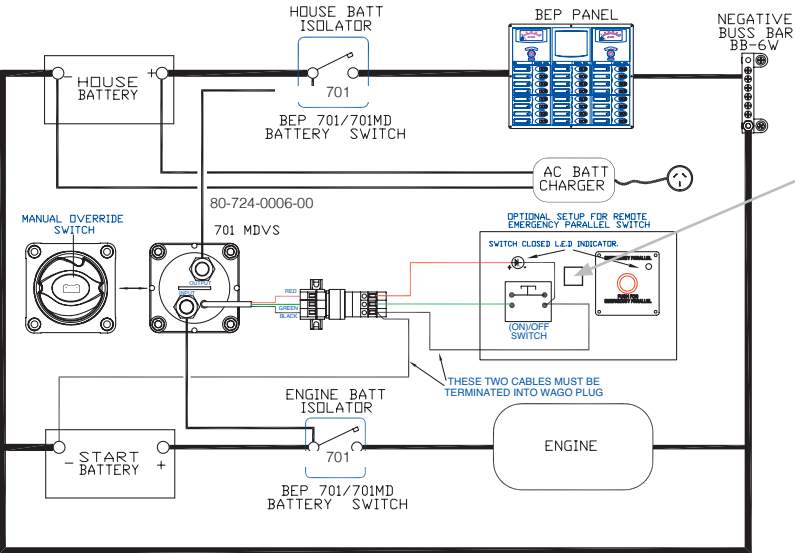


701-MDVS



720-MDVSO

Item #	in LxWxH	mm LxWxH	Volts (V)	Rating (A)	Engages (V DC)	Disengages (V DC)
701-MDVS	2.7"x2.7"x4"	69x69x101 mm	12	275	13.7	12.2-13.00
720-MDVSO	4"x4"x4.3"	102x102x110 mm	12/24	500	13.3	12.7
701-MDVS-24V	2.7"x2.7"x4"	69x69x101 mm	24	275	27.4	24.4-26.00
80-701-0018-00	2.7"x2.7"x4"	69x69x101 mm	12/24	275	Emergency Parallel Only	
720-MDO-EP	4"x4"x4.3"	102x102x110 mm	12/24	500	Emergency Parallel Only	



Remote Emergency Parallel Switch

Used for convenient remote activation of the 10 minute emergency parallel function on these motorised Voltage Sensitive and Emergency Parallel switches. It can be mounted standalone or within the Contour Connect panel range.

Item # 80-724-0007-00

DVSR: Dual Battery Charging Made Easy

The Digital Voltage Sensing Relay (DVSR) allows the charging of a second battery bank from any single charging source. When the voltage on the charged bank rises sufficiently, the DVSR engages allowing the 2nd battery bank to charge. When charging stops and voltage falls, the DVSR automatically isolates the battery banks, ensuring that engine start batteries are kept fully charged. Digital circuitry provides superior reliability and extremely low power consumption.

- Safely charge two or more independent battery banks from one charge source (alternator, battery charger...)
- Charges engine starting batteries before combining auxiliary bank for charging
- Protects start batteries from becoming flattened by domestic loads
- Isolates electronics from harmful electrical surges from starter motors
- Simple to install 3 wire connection, leaves alternator wiring intact
- No volt drop vs. diode isolators
- Ignition protected
- Surface or panel mountable
- **Replaces previous models 710-125A and 710-125A-DS**

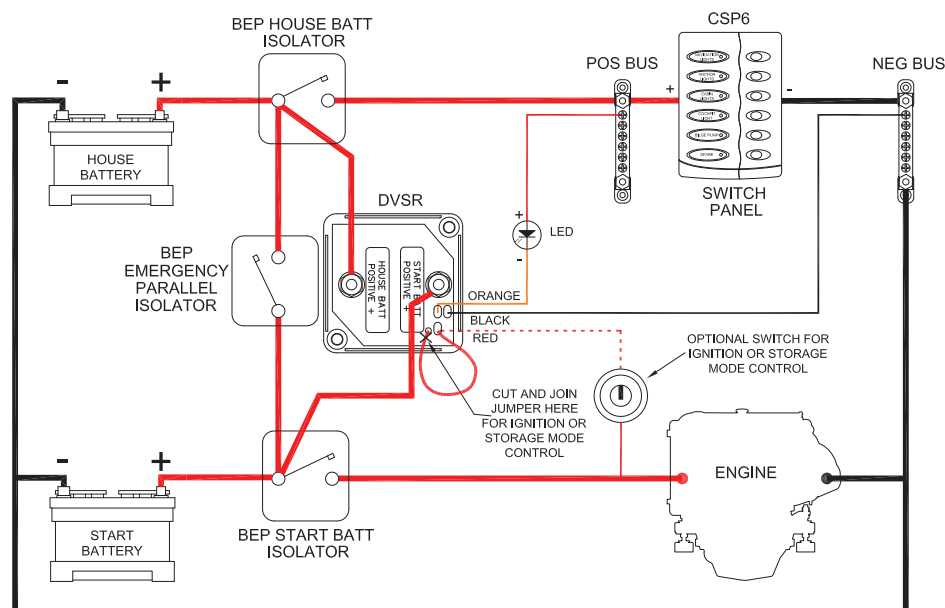
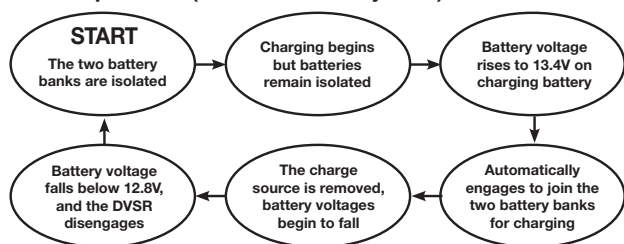
2011 Digital enhancements:

- Multi voltage, auto selects between 12 and 24V DC operation
- Digital circuits provide very low power consumption and enhanced performance
- Remote sensing circuitry allows optional connection from ignition switch, provides same functionality as single sense VSR and zero power consumption when engine is off
- Zero stand by current draw when remote sensing circuit utilized with storage mode switch fitted (switch in open position)
- Remote status LED output option



Item #	OEM #	in LxWxH	mm LxWxH	Volts (V)	Rating (A) Continuous	Rating (A) Intermittent	Engages (V DC)	Disengages (V DC)
710-140A	710-140A-B	2.75"x2.75"x2"	69x69x50 mm	12/24	125	140	13.4/26.8	12.8/25.6

DVSR Operation (shown for 12V system)



Wiring diagrams indicative of installation only, for full instructions see the BEP website: bepmarine.com

Charge Mate

An auxiliary onboard power supply is increasingly common. As a second battery can prevent the main battery from depleting and being unable to start, this seems like a safe and reliable solution. The second battery, however, also has to be charged regularly. Mastervolt has the solution: The Charge Mate connects both batteries with a voltage relay while charging, and keeps them isolated at other times. The Charge Mate is especially practical for small systems.



	Charge Mate 1202	Charge Mate 2505
Item #	83301202	83302502
Battery voltage	12/24V	12/24V
Continuous power	120A	500A
Inrush current (250ms)	2000A	2000A
Switch on voltage	13...15V (12V) 26...30V (24V)	13...15V (12V) 26...30V (24V)
Switch on delay	5 sec	30 sec
Switch off voltage	< 12.75V (12V) < 25.5V (24V)	< 12.25... > 15V (12V) < 25.5...> 30V (24V)
Switch off delay	no	3 minutes
Ambient temperature	-40–65°C	-40–60°C
Dimensions, hwxwd	3"x1.8"x1.8" 76x46x46 mm	3.5x3.1x3.3" 90x80x85 mm
Weight	0.28 lbs / 0.125 kg	1.4 lbs / 0.65 kg
Protection degree	IP21	IP21
Number of modes	n.a.	on, off, auto, start assist
Power consumption	switch open: < 1mA at 12/24V DC	switch open: < 1mA at 12/24V DC



Battery Distribution Clusters

With the successful release of the BEP™ battery distribution system, BEP saw the need for ready assembled clusters for different applications to make the installation within the battery area even easier. Following is the range as outlined in each diagram, which are overviews only.

All clusters are completely bused and pre-wired internally and are supplied with mounting fastenings along with easy to follow instructions. These include all connecting points clearly marked with ABC labels as shown in all illustrations.

All existing VSR enabled Battery Distribution Clusters now come standard with the new Digital Voltage Sensing relays. Replace suffix "-100A" with "-140A-DVSR(-B)".

**Now Incorporating
NEW Digital VSR**



See pages 110 & 111
for panel versions

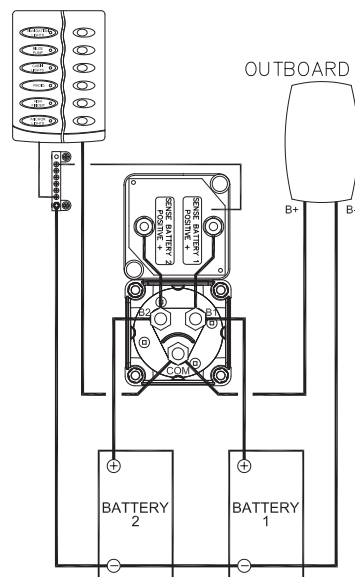
Single Engine, Two Battery Banks

The 714-140A-DVSR uses a dual sensing DVSR (710-140A). This system ensures you will always have a fully charged reserve battery. When the switch is in position one, it becomes the sensing battery for the VSR. Battery two, which is in isolation, will be charged via the VSR when the engine is running ensuring it is always fully charged. When the switch is in battery two position, this becomes the sensing battery and battery one is charged via the VSR. The fact that there is always a fully charged battery in reserve is a huge safety factor.

Please note: With the 714-140A-DVSR the electronic loads are run off the same battery as the engine starting battery.

Item # 714-140A-DVSR
OEM # 714-140A-DVSR-B

See table on following page for specifications



See pages 110 & 111
for panel versions

Single Engine Two Dedicated Battery Banks

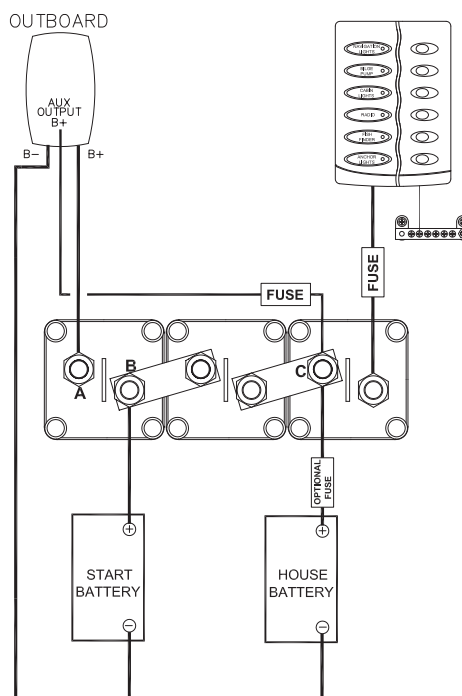
Available as Horizontal or Vertical units.

To be used in the following systems:

- 1) Single outboard dual battery bank
- 2) Single alternator dual battery bank
- 3) Twin alternator dual battery bank

Item # 715-V

See table on following page for specifications



Single Engine, Two Battery Banks

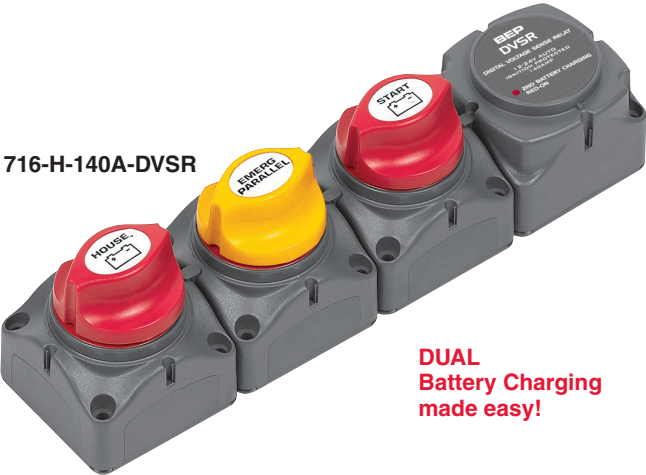
An ideal replacement for a Battery Selector Switch. Just remove selector switch and connect existing wires to a 716 cluster, no extra wires are required for a fully automatic battery management system. No more flat start batteries. Electronics protection from harmful engine start spikes. The 716 cluster is for use on charging systems up to 150A. To be used in the following systems:

1. Single outboard dual battery bank.
2. Single alternator inboard engine dual battery bank.

The 716 cluster replaces battery isolator systems. For VSR operation, see page 103.



716-SQ-140A-DVSR



716-H-140A-DVSR

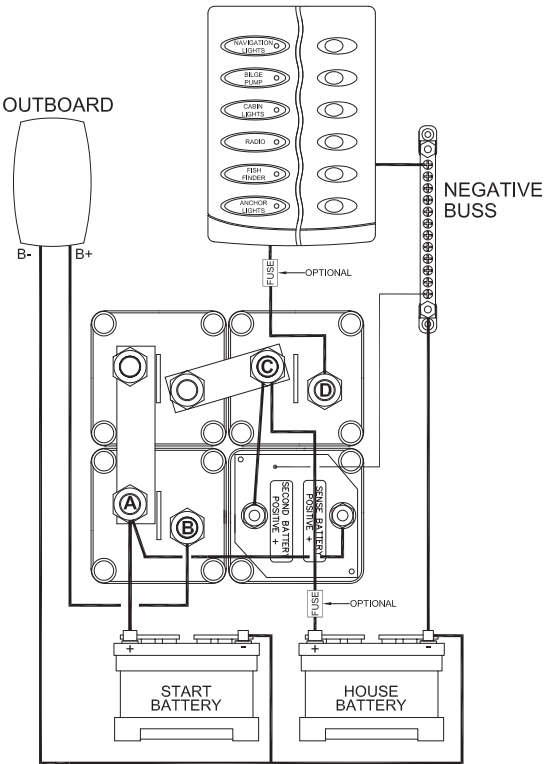
DUAL
Battery Charging
made easy!



See pages 110 & 111
for panel versions

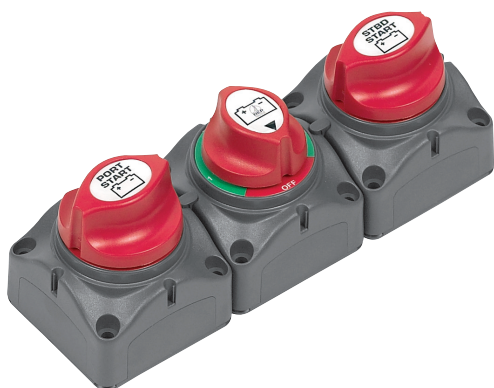
Dimension guide

Clusters are made from uniformly square switches, each side 2.7" (69 mm)



Engine type	Battery (banks)	Item #	in LxWx3	mm LxWx75
Single inboard or outboard	2	714-140A-DVSR	5.4"x2.75"	138x69
		715-H	8.1"x2.75"	207x69
		715-V	2.75"x8.1"	69x207
		716-SQ-140A-DVSR	5.4"x5.4"	138x138
		716-H-140A-DVSR	10.85"x2.75"	276x69
		716-V-140A-DVSR	10.9"x2.7"	276x69
Twin inboard or outboard	2	715-S	8.1"x2.75"	210x69
Twin outboard	3	717-140A-DVSR	5.4"x8.1"	138x207
Twin inboard	3	718-140A-DVSR	8.1"x5.4"	207x138
Triple outboard	4	719-140A-DVSR	8.1"x 8.1"	207x207

VSR Charging Current: 125A continuous Battery Switch Rating: 275A continuous



Twin Engine, Two Banks

The 715-S allows the house loads to be switched between port and starboard batteries. The selector switch can also be used to parallel the batteries when in both positions.

See table on previous page for specifications.

Item # 715-S



Twin Engine, Three Banks

The 718-140A-DVSR is designed for twin inboard systems when it is not practical to have both engine alternators in parallel because of the types of regulators used on these alternators. The house battery is charged from the port engine when the VSR is engaged. (for VSR operation read see page 104)

See table on previous page for specifications.

Item # 718-140A-DVSR



See pages 110 & 111
for panel versions



Twin Engine, Three Banks

This system is designed for twin engine installations. It will allow the port engine to charge the port start battery and the house battery when the VSR is engaged. It will also allow the starboard engine to charge the starboard start battery and the house battery when the starboard VSR is engaged, giving a combined charge from two engines into the house battery until the voltage regulators on both engines control the charge. It will also allow the house battery to be charged if steaming on one engine.

See table on previous page for specifications.

Item # 717-140A-DVSR



Triple Engine, Four Banks

This system is designed for triple engine installations. Once again using multiple VSR's off each start battery giving combined charge from all 3 engines into the house battery via VSRs.

See table on previous page for specifications.

Item # 719-140A-DVSR



Single Engine, Two Battery Banks with Motorized VSR

Offers the same features as the 716-SQ-140A-DVSR (see page 107), with two important differences.

The VSR and Emergency parallel switch are combined into one voltage-sensitive switch, and that switch is able to be remote-operated. For features of the motorized VSR, see page 104. The layout allows all cables to be attached from the bottom of the cluster.

Item # 80-716-0017-00

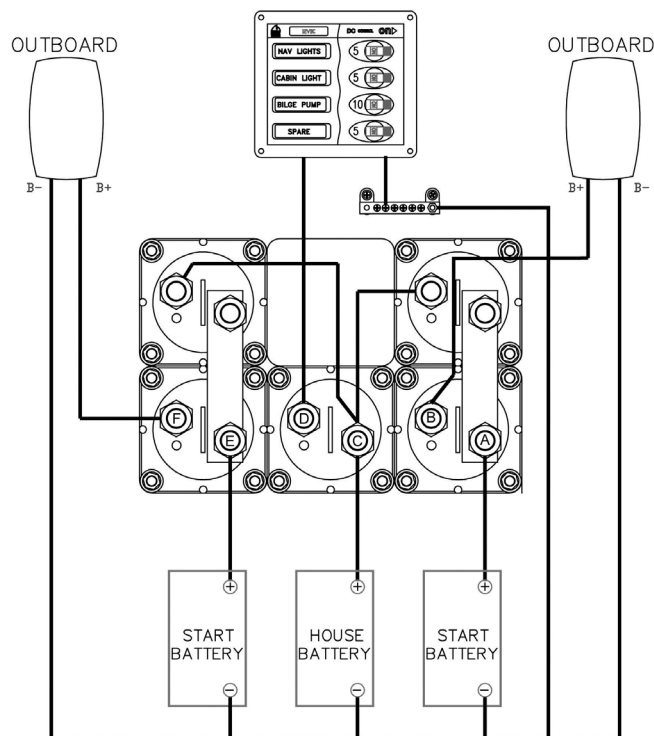
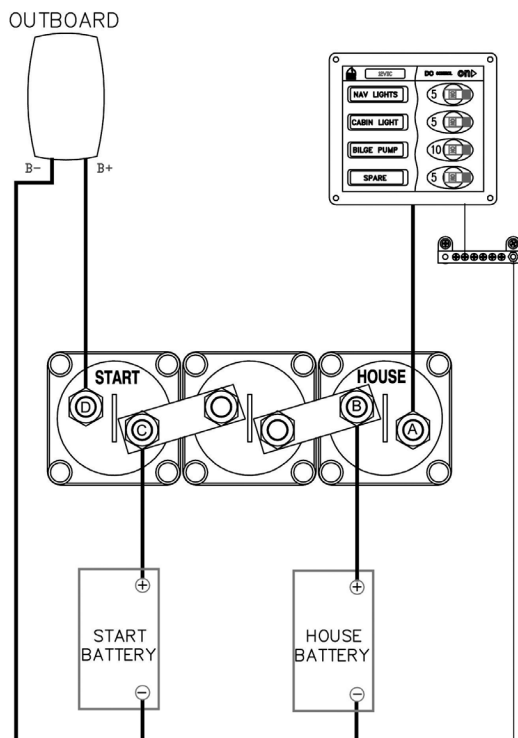


Twin Engine, Three Banks with Motorized VSR

Offers the same features as the 717-140A-DVSR (see page 107).

The VSR and Emergency parallel switch are combined into one voltage-sensitive switch, and that switch is able to be remote-operated. For features of the motorized VSR, see page 104. The layout allows all cables to be attached from the bottom of the cluster.

Item # 80-716-0018-00



See pages 110 & 111
for panel versions

Remote Battery Management Clusters

- Complete system including all cable links (Battery Control Center ordered separately. See page 112.)
- Offers all features of motorized battery switches and Motorized VSRs in one kit. Makes ordering easy!
- Clusters are surface mount, and can be rearranged to meet specific needs, such as port and starboard configurations and can be combined with other battery distribution products.
- Available in single, dual and triple engine configurations

Single Engine



80-716-0014-00

Dual Engine



80-716-0015-00

Triple Engine

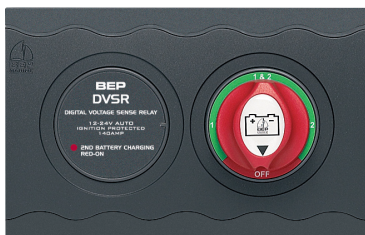


80-716-0016-00

Battery Distribution Panels

Fast fit, flush mounting battery distribution panels

1. Use template to mark rectangular hole in fascia
2. Cut hole
3. Fit panel and screw into place
4. Add trim pieces
5. Connect cables



Single Engine, Two Battery Banks

This panel incorporates a version of our very successful 714-140A-DVSR cluster (see page 106).

Supplied pre-wired with back cover and with a CC-J joiner to allow it to be combined with other modules.

Supplied standard in charcoal with light grey wave strip. Other trim colors are available for volume OEM orders.

Item # CC-801



Single Engine, Two Battery Banks

The CC-810 is supplied standard with 3 x 701-PM battery switches pre-assembled. Ideal for installing alongside any other Contour Connect Modules.

Item # CC-810



Single Engine, Two Battery Banks

The 80-700-0054-00 offers the same features as the CC-802.

The VSR and Emergency parallel switch are combined into one voltage-sensitive switch, and that switch is able to be remote-operated.

Fewer components, more compact.

The layout allows all cables to be attached from the bottom of the cluster.

For features of the voltage sensitive relay, see page 104.

Item # 80-700-0054-00

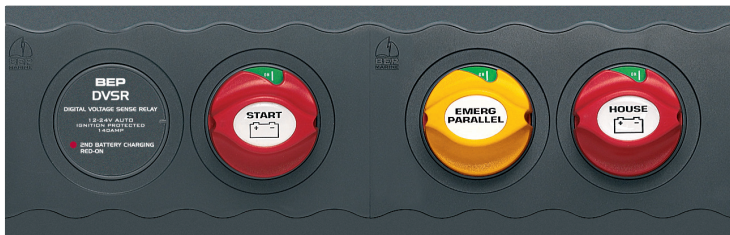
Single Engine, Two Battery Banks

The CC-802 incorporates a version of our very successful single engine battery switch cluster (page 107).

The CC-802 is supplied loosely assembled with links and joiners to allow it to be assembled in either the vertical or horizontal orientation as shown in illustrations.

Full wiring instructions are supplied to allow pre assembly for both orientations.

Item # CC-802



Twin Engine, Three Battery Banks

The CC-803N incorporates a version of our very successful dual engine battery switch cluster (page 108).

The CC-803N is supplied with cables to allow for horizontal or vertical configurations.

The components can also be easily removed and reconfigured if the factory layout does not suit your application.

Item # CC-803N



Dimensions for Contour Connect Panels

Item #	LxWxH in		LxWxH mm	
	Module	Cut-out	Module	Cut-out
CC-801	6.5"x4.2"x2.2"	5.75"x3.4"	166x106x55 mm	146x86 mm
CC-810	9.2"x4.2"x2.2"	8.5"x3.4"	233x106x55 mm	213x86 mm
CC-802	6.5"x8.3"x2.2"	5.75"x7.5"*	166x212x55 mm	88x148 mm*
CC-803N	9.2"x8.3"x2.2"	8.5"x3.4"*	223x212x55 mm	213x86 mm*
80-700-0054-00	9.2"x4.2"x2.2"	8.5"x3.4"*	223x106x55 mm	213x86 mm*

*Single hole only.

Battery Control Center

Sophisticated Electrical Systems Need Reliable Automation. That's Key. Centralize power handling with the BEP™ Battery Control Center.

Cluster or Contour Connect mounted, delivers hard-handling, good-looking power management where it's needed. The Battery Control Center (BCC) is equipped with locks on each battery switch position. This ensures group operation at the turn of the key. Any switch can be isolated by disengaging its lock and toggling the switch off.

Description	Item #
Single engine remote	80-700-0050-00
Twin engine remote	80-700-0051-00
Triple engine remote	80-700-0052-00



80-700-0051-00

5 Way CB Panel

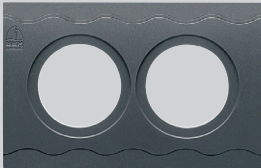
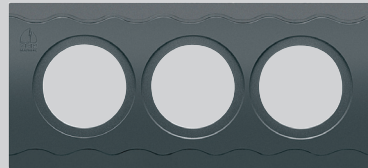
- 1x Heavy-Duty CB, 1x Toggle, 3x Push Reset
- Equipped to cover essential circuits requirements (bilge, pumps etc)
- 50A CB for DC mains or treatment systems
- 135A 185 Series CB for anchor windlass
- Compliments the other modules for either single or dual engine installations

Item # CC-804





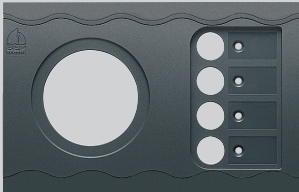
The below panels are designed for applications where the OEM or panel builder wishes to construct a custom system. They're supplied as empty panels with all necessary mounting hardware, including one CC-joiner.

CC-1**CC-5**

CC-1 & CC-5 Modules

Will house the following components:

- 701-PM Panel mount battery on/off (page 99).
- 701S-PM Panel mount battery selector switch (page 99).
- 185 Series Heavy-duty circuit breakers (page 125). (CC-HDBM must be ordered with 185 series circuit breakers, one per breaker).
- 710-140A Voltage Sensitive Relay (see page 104).



CC-2 Module

Will house the following components:

- CLB series (push reset) Carling circuit breakers (page 127).
- Toggle Magnetic Hydraulic Carling circuit breakers (page 124).

**CC-HDBM**

BEP™ CB Panel Mount

The CC-HDBM module must be ordered separately if ordering BEP™ 184 & 185 series circuit breakers. Mounting hardware for CB and panel attachment is supplied with module.

Wave Strips

- Supplied with Contour Connect panels (standard)
- Can be ordered separately (top and bottom pair)
- Available in single, double and triple lengths

Item # **CC-3WS/CH**



Blanking Plate

The CC-BLANK will cover an unused hole in CC-1 and CC-2. Attached from the rear of the panel, it allows for expanding with other options at a later date.

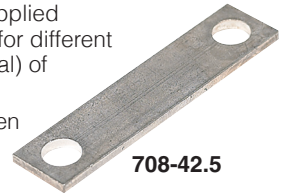
Item # **CC-BLANK**



Solid Links

708-42.5 Solid terminal links supplied pre-connected with spare links for different orientations (horizontal or vertical) of Contour Connect panels.

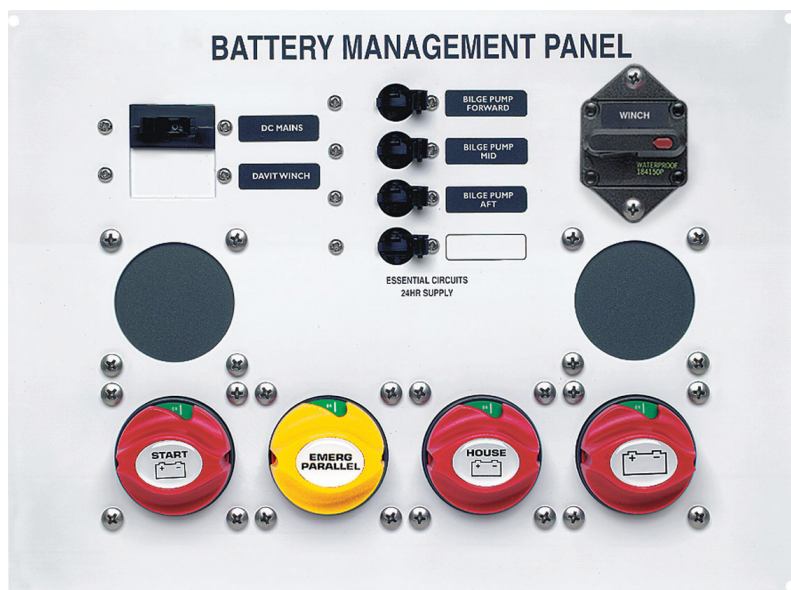
Must be ordered separately when ordering CC Kitset panels.



Item #	Application
708-42.5	For horizontal linking of battery switches in the same panel
708-70.0	For horizontal linking of battery switches studs between 2 separate panels
708-107	For vertical linking of battery switches between panels

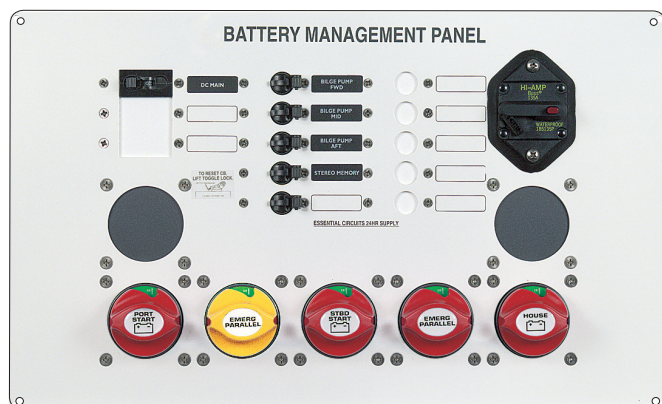
Battery Management Panels

- Essential circuits, 24 hour supply
- Mains breakers for control panels, davit winches, or treatment systems
- Panels are supplied with a BEPT™ 703-300A/B heavy-duty negative bus, to accommodate all the negative connections at the battery.
(Please note: 800-MS4 is supplied with 702B negative stud)
- Heavy-duty breakers for anchor winches
- Powder coated aluminum panel
- Supplied with a full label set for panel circuit breakers - Item # SET-MSP; additional label sets available (see page 141)
- Spare positions for additional battery switches and circuit breakers for extras such as radio batteries and genset batteries



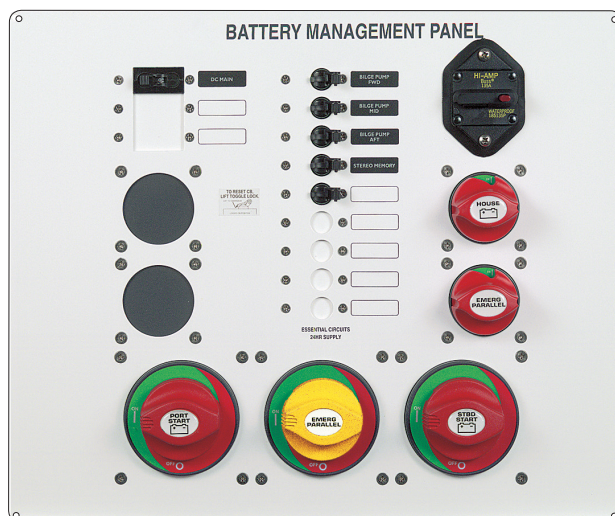
800-MS1

The 800-MS1 panel is designed for power or sail boats between 10–12m (32.9-39.5 ft) with single engines. 260x351x75 mm (10.25"x13.8"x2.9")



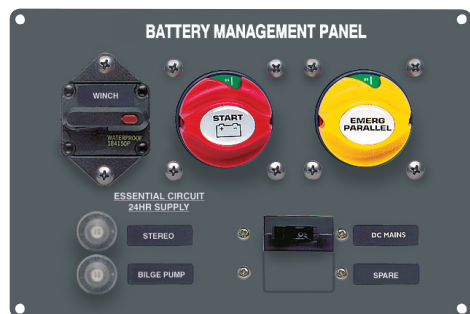
800-MS2

The 800-MS2 panel is designed for power boats between 10–12 m (32.9–39.5 ft) with twin engines. 281x463x75 mm (11.1"x18.25"x2.9")



800-MS3

The 800-MS3 panel is designed for power boats between 12 –16 m (39.5 – 52.5 ft) with larger diesels. 380x463x95 mm (15"x18.25"x3.75")



800-MS4

The 800-MS4 panel is designed for sail boats up to 14 m (46 ft) and power boats up to 10 m (32.9 ft) with single engine. 160x239x75 mm (6.3"x9.4"x2.9")

Auxiliary Parts (ordered separately)

- Item # 701 Battery switches to fit panel cutouts
Item # 713 Battery switch label sheet

Circuit Breakers

For treatment systems, davit winches and sub-mains.

- Item # CBL-50A-SP 50A
Item # CBL-75A-SP 75A
Item # CBL-100A-SP 100A

Universal Mount Switches

- Longer stud lengths for improved assembly and easier cable routing
- Built with heavy-duty copper sweep contacts to ensure positive circuit control
- Rugged internal components protected by a tough, impact resistant polycarbonate housing that is impervious to the elements
- Cable Lug Size: 3/8"
- Dimensions: 5.0"x2.75"

Selector Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Item # 2111A



OEM # 2111A-B

Selector Switch with AFD

Continuous amps: 230
Momentary amps: 345



Item # 2110A



OEM # 2110A-B

On/Off Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Item # 2112A



OEM # 2112A-B

Battery Selector Switches

- Polycarbonate case
- For 6, 12, 24 or 36V systems
- Surface mount
- Cable Lug Size: 3/8"
- Dimensions: 5.50"x2.63"

Selector Switch with AFD

Continuous amps: 230
Momentary amps: 345



Item # 2100

OEM # 2100-B

Selector Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Item # 2101

OEM # 2101-B

On/Off Switch w/out AFD

Continuous amps: 230
Momentary amps: 345



Item # 2102

OEM # 2102-B

OEM # 2102-3-B black

Heavy-duty Diesel Power Battery Switches

- For 6, 12, 24 or 36V systems
- Built with heavy-duty copper sweep contacts to ensure positive circuit control
- Rugged internal components protected by a tough, impact resistant polycarbonate housing that is impervious to the elements
- All feature Alternator Field Disconnect (AFD) allowing selection of any position, including "off", without damage to alternator or electrical system
- Cable lug size: 1/2"
- 2304A and 2304A-B have 3 studs

Heavy-duty On/Off Switch

Continuous amps: 450
Momentary amps: 800



Item # 2303A



OEM # 2303A-B

Extra-duty On/Off Switch

Continuous amps: 600
Momentary amps: 1000



Item # 2304A



OEM # 2304A-B

Battery Selector Switch

Continuous amps: 360
Momentary amps: 600

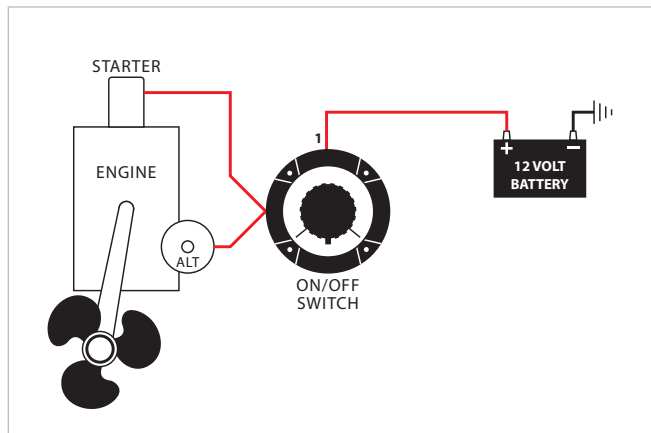


Item # 2300A



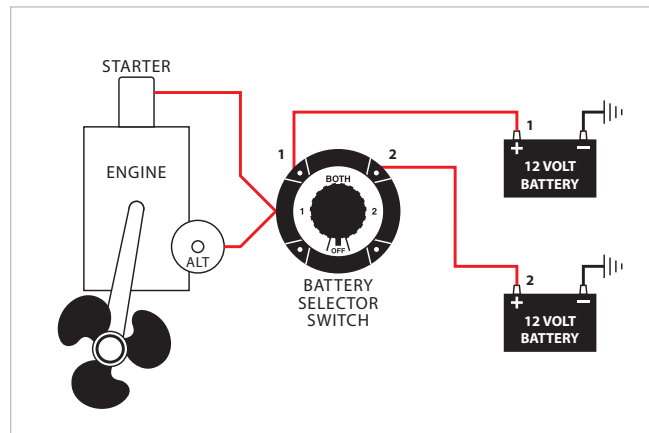
OEM # 2300A-B

As more and more electronics and electrical accessories are added to your boat (autopilot, refrigeration, etc.) the use of multi-batteries becomes a necessity. Guest components allow you to set up the system (from simple to complex) for your boat's application. The following diagrams are for use in identifying and designing the right system for your boating needs. Detailed installation schematics are available. Request Guest form I-21681.



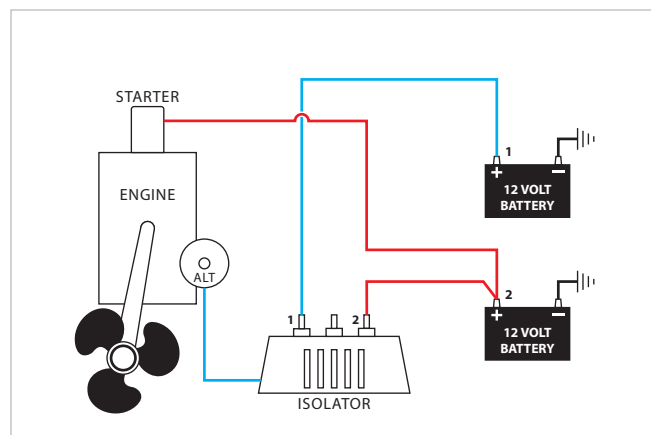
Single battery

Installation: To shut off all power at source. Recommended installation by approved authorities.



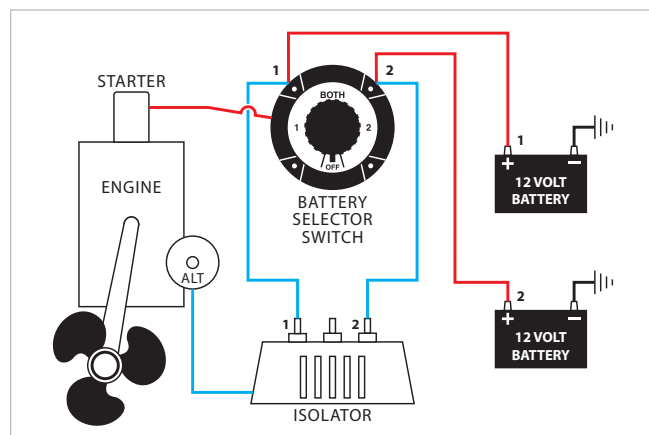
Two battery with out isolator

Installation: To select a starter battery and ship service battery. Manually isolates each battery, parallels both batteries for emergency start, master disconnect, manually selects batteries for charging.



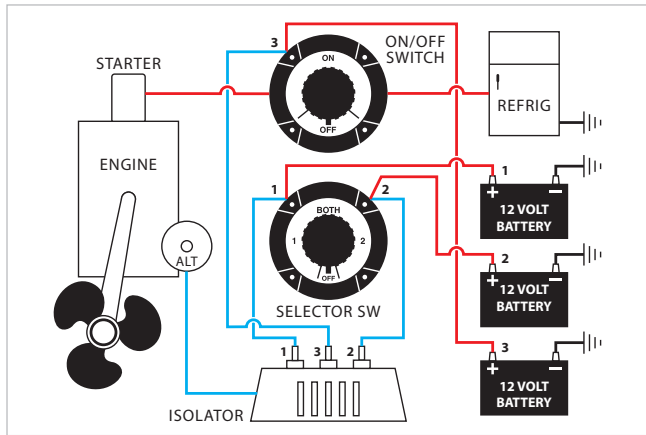
Two battery with isolator

Installation: Isolator automatically selects lower charged battery to be charged first. Full battery can't discharge to drained battery. Dedicated system, no flexibility, no emergency parallel or disconnect function.



Two battery with emergency parallel

Installation: An isolator automatically isolates each battery, lower charged battery will automatically be charged first. Two different size batteries can be used, larger for ship services, smaller for engine cranking. Switch selects usage, master disconnect, emergency parallel function.

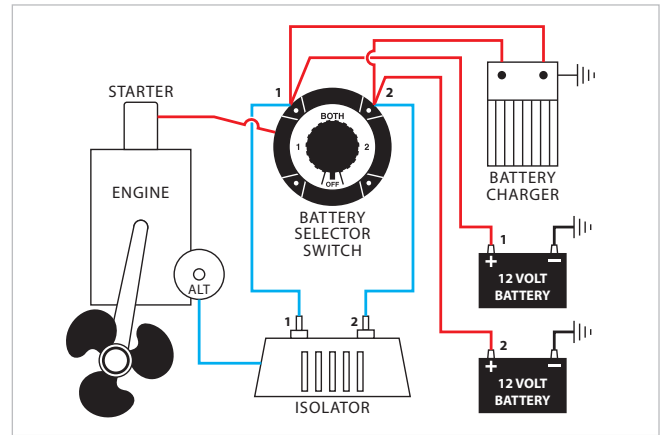


One battery selector switch, one On/Off selector switch automatic battery isolation and automatically charges three batteries

Installation: Use for sailboats and trawlers. Third battery isolated from other ship circuits. All batteries being automatically charged while running through isolator. To be used for refrigeration or other heavy load devices. Isolator protects other batteries.

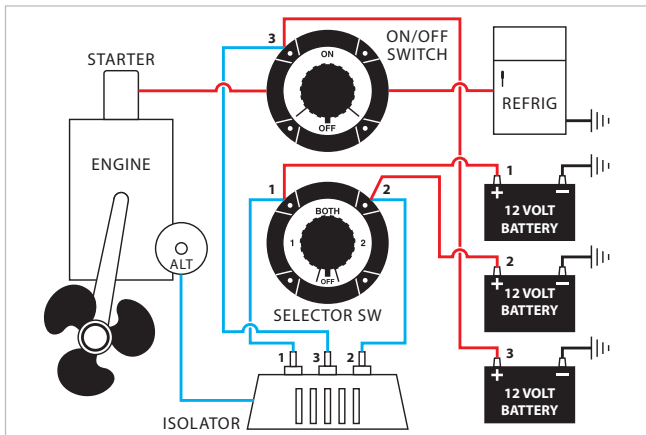
Switch selector usage:

1. Master disconnect 2. Emergency parallel function



Adding automatic battery charger/converters to system

Installation: At dockside multi-bank charger built in isolator which will automatically charge lower battery.



Three batteries, one battery selector switch, one On/Off or selector switch, two alternators, one isolator

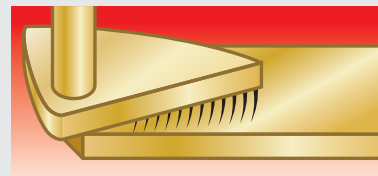
Installation: Isolator separates both alternators so both alternators will charge simultaneously. Automatically charges lowest battery first. All batteries can be used for start, third battery, ship's source.

Alternator Field Disconnect (AFD)

Allows selection of any position, including "Off," without damage to alternator or electrical system. AFD is required on some electrical systems.

- Heavy-duty copper sweep contacts
- Positive click-stop on all positions
- "Make before break" contacts allow selection of all positions except "Off" while engine is running
- New design is easy to retrofit into existing hole patterns
- Use with 6, 12, 24 or 36V systems
- Built-in skirt protects connections
- Surface or rear panel mounting
- Marine grade construction

Important Note: The boater's electrical needs and problems should be discussed with your boatyard's electrical technician.



Exclusive flat 360 "sweep" contact design provides up to 60% more contact area than other switch designs.

BI Battery Isolators

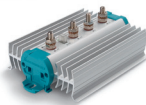
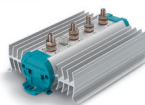
Mastervolt's BI battery isolators are based on conventional diode technology. The diode voltage drop (ca. 0.6V) can be compensated for by adapting the output voltage of the connected charger. Mastervolt battery chargers and Alpha Pro alternator regulators come as standard with automatic compensation for voltage drops.



	BI 702-S	BI 703	BI 1202-S	BI 1203-S
Item #	83007021	83007030	83012021	83012031
Max. output charger	25/50A	25/50A	80A	80A
Max. output alternator	70A	70A	120A	120A
Compensation diode	yes	no	yes	yes
Dimensions, hxxwxd	6.2"x5.5"x3.2" 157x140x80 mm	8.2"x5.5"x3.2" 207x140x80 mm	8.2"x5.5"x3.2" 207x140x80 mm	8.2"x5.5"x3.2" 207x140x80 mm
Weight	1.3 lbs / 0.58 kg	2.4 lbs / 1.1 kg	2.65 lbs / 1.2 kg	2.9 lbs / 1.3 kg
# of battery banks	2	3	2	3

Battery Mate

The Battery Mate is compatible with any type of alternator/battery charger, in both existing and new systems. As the voltage loss between the alternator and battery is negligible, the Battery Mate performs far better than conventional battery isolators. This ensures fast and complete charging of your batteries without having to make additional adjustments to the alternator.



	Battery Mate IG 1602	Battery Mate IG 1603	Battery Mate IG 2503
Item #	83116025	83116035	83125035
Max. output charger	120A	120A	200A
Max. output alternator	160A	160A	250A
Dimensions, hxxwxd	8.2"x5.5"x3.2" 207x140x80 mm	8.2"x5.5"x3.2" 207x140x80 mm	8.2"x5.5"x3.2" 207x140x80 mm
Weight	2.2 lbs / 1 kg	2.2 lbs / 1 kg	2.2 lbs / 1 kg
# of battery banks	2	3	3

Battery Isolators

- Optimized heat sink design for maximum performance
- Minimized voltage drop across isolation barrier using Schottky type diodes
- Each output individually capable of carrying the full alternator load
- Fixed cable posts for secure connections
- Fully potted, marine grade construction
- Waterproof components for harsh environment performance - year after year

NOTE: If used on a 24V system, boat must be equipped with 24V DC alternator

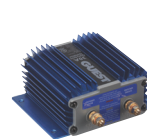


Item #	2501	2502	2504	2532
Max. output alternator	70A	70A	70A	120A
Operation	12-48V	12-48V	12-48V	12-48V
Dimensions	5.4"x4.5"x2.6"	10"x5.5"x3.7"	5.4"x4.5"x2.6"	15"x5.5"x3.7"
# of alternators	1	2	1	2
# of battery banks	2	2	3	3

**2 YEAR
WARRANTY**

Fail-Safe Galvanic Isolators

- Gold plated terminals provide superior corrosion resistance for harsh environment exposure
- Prevent galvanic corrosion due to dissimilar metals between boats
- Block DC current from flowing through shore power cable
- Ignition Protected
- ABYC - A28 compliant to "fail-safe" requirements



Item #	4531001	4531011
Voltage Rating	115/230V AC	115/230V AC
Frequency Rating	50/60Hz	50/60Hz
Current Rating	30A at 50°C	50/60A at 50°C
Operating Temp	-20 to 50°C	-20 to 50°C

Battery Watch

The Battery Watch is an essential element of any well-equipped battery system, offering you a 1.3 lbs electronic watchdog that ensures a much longer lifespan for your batteries. The unit switches off loads when batteries are nearly empty, to keep your batteries in optimum condition. LED lights provide a clear read out and the undervoltage can be set using DIP switches.

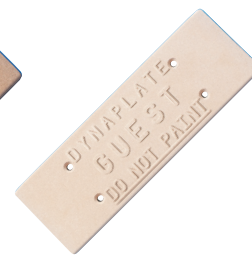


Battery Watch

Item #	83200150
Max. load	150A
Input voltage	8-32V DC
Switch off under voltage 12V	9-12V DC
Switch off under voltage 24V	18-24V DC
Dimensions, lwxwxh	6.2"x5.5"x3.2" 157x140x80 mm
Weight	1.3 lbs / 0.6 kg

Dynaplates for Hull Bonding & Grounding

- Improves performance of electronics and reduces RF interference
- Offers the best path for hull bonding without long runs of copper foil
- Deters electrolysis and galvanic corrosion
- Sintered porous bronze sphere construction for maximum conductivity in a compact size
- Low drag, non-fouling shape
- Easy to clean with wire brush
- Conforms to ABYC standards
- Mounting hardware included
- Gold plated mounting bolt
- Bronze mounting nuts
- Copper washers



	Standard	Large	Giant	Super
Item #	4006	4008	4012	4018
Use for	bonding and grounding	bonding, grounding and Loran use	bonding, grounding and Loran use	SSB radio
Dimensions	6"x2"x.5" 152x51x13 mm	8"x2.5"x.5" 203x64x13 mm	12"x3"x.5" 305x76x13 mm	18"x6"x.5" 457x152x13 mm
Mounting holes	2-1/2" center to center	4" center to center	6" center to center	9.875" center to center; 3" top to bottom
Weight	3 lbs / 1.4 kg	5 lbs / 2.3 kg	7 lbs / 3.2 kg	13 lbs / 5.9 kg

Accessories for dynaplates

Part	Material	Use with:	Dimensions	Item #
washer	Bronze	4006/4008	1/4" x 20	P-11D03
		4012/4018	3/8" x 16	P-11D04
bolt	Bronze	4006/4008	1/4" x 20	P-12D34
		4012/4018	3/8" x 16	P-12D36
	Bronze	4006/4008	1/4" x 20	P-12D35
	Gold Plate	4012/4018	3/8" x 16	P-12D37

Part	Material	Use with:	Dimensions	Item #
nut	Bronze	4006/4008	1/4" x 20	P-13A27
		4012/4018	3/8" x 16	P-13A29
	Bronze	4006/4008	1/4" x 20	P-13A28
	Gold Plate	4012/4018	3/8" x 16	P-13A2A

Marine Fuses

- Fast-acting, corrosion resistant fuses open quickly to protect circuits from overloads and short-circuits.
- Time-delayed to allow temporary, harmless in-rush currents to pass but open on sustained overloads and short-circuits.
- Each fuse tested twice to ensure highest quality.



ATM Fuses

Diameter: 5/16" (7.9 mm)
Length: 7/16" (11 mm)
Maximum voltage: 32V DC

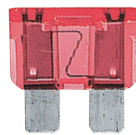
Rating (A)	Qty/ Pkg	Item #
5	2	603905
10	2	603910
15	2	603915
20	2	603920
30	2	603930
Kit		
1 of ea	5	601110



ATM Fuses (BEP)

Diameter: 7/16" (11 mm)
Length: 5/8" (16 mm)
Maximum voltage: 32V DC

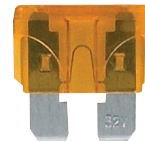
Rating (A)	Qty/ Pkg	Item #
5	2	JJ05A
10	2	JJ10A
15	2	JJ15A
20	2	JJ20A
30	2	JJ30A



ATO/ATC Fuses

Diameter: 13/16" (21 mm)
Length: 3/4" (19 mm)
Maximum voltage: 32V DC

Rating (A)	Qty/ Pkg	Item #
3	2	604003
5	2	604005
7.5	2	604007
10	2	604010
15	2	604015
20	2	604020
25	2	604025
30	2	604030
Kit		
5-30	6	601114



ATC Fuses (BEP)

Diameter: 3/4" (19 mm)
Length: 3/4" (19 mm)
Maximum voltage: 32V DC

Rating (A)	Qty/ Pkg	Item #
3	1	J03A
5	1	J05A
7.5	1	J7.5A
10	1	J10A
15	1	J15A
20	1	J20A
25	1	J25A
30	1	J30A



AGC Fuses

Diameter: 1/4" (6.4 mm)
Length: 1-1/4" (32 mm)
UL 248-14

Rating (A)	Qty/ Pkg	Item #
250V AC max		
1/2	5	601005
1	5	601010
1.5	5	601015
2	5	601020
2.5	5	601025
3	5	601030
4	5	601040
5	5	601050
7	5	601070
7.5	5	601075
8	5	601080
10	5	601100
32V AC max		
15	5	601150
20	5	601200
25	5	601250
30	5	601300
Kits		
5-30	5	601112
1-30	41	601113



MDL Fuses

Slow Blow
Diameter: 1/4" (6.4 mm)
Length: 1-1/4" (32 mm)
UL 248-18

Rating (A)	Qty/ Pkg	Item #
250V AC max		
3	2	602030
5	2	602050
6.25	2	602062
7.5	2	602075
10	2	602100
125V AC max		
15	2	602150
20	2	602200
25	2	602250
30	2	602300



GMA Fuses

Diameter: 3/16" (5 mm)
Length: 13/16" (20 mm)
Maximum voltage: 125V AC
UL 248-14

Rating (A)	Qty/ Pkg	Item #
1	3	605010
2	3	605020
3	3	605030
5	3	605050
7	3	605070
10	3	605100
15	3	605150



AGA Fuses

Diameter: 1/4" (6.4 mm)
Length: 5/8" (16 mm)
Maximum voltage: 32V AC
UL 248-14

Rating (A)	Qty/ Pkg	Item #
20	5	604200
30	5	604300



601113

41-Piece AGC Fuse Kit

Contains 4 each of: 1, 2, 3, 5, 7-1/2, 10, 15, 20, 25 and 30A AGC fuses with one 30A water-resistant in-line fuse holder.



ANL Fuses

Use with:

- New Pro Installer ANL Fuse Holders (page 155)
- DC Distribution 500 (Item # 77020200) on page 171
- ANL Fuse Block below (Item # 607006)

Length: 3.23" (82 mm)

Width: 0.88" (22 mm)

Stud Clearance: 0.43" (11 mm)

Rating (A)	Qty/ Pkg	Item #
40	1	77049040
50	1	77049050
60	1	77049060
63	1	77049063
80	1	77049080
100	1	77049100
125	1	77049125
160	1	77049160
175	1	77049175
200	1	77049200
250	1	77049250
300	1	77049300
355	1	77049355
400	1	77049400
425	1	77049425
500	1	77049500

NEW Heavy-duty ANL Fuses

Use with:

- 5/16" (8 mm) mounting studs
- New Pro Installer ANL Fuse Holders (page 155)

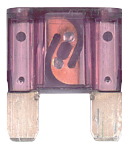
Rating (A)	Qty/ Pkg	Item #
600	5	FANL-600-B
675	5	FANL-675-B
750	5	FANL-750-B



ANL Fuse Blocks

- Glass filled nylon base for durability.
- Fits all ANL and ANN fuses up to 800 amps.
- UL approved
- Rating: 800 max amps

Item # 607006



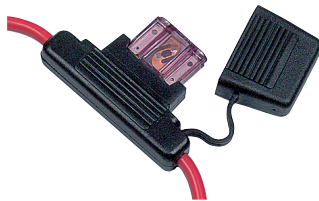
Maxi-Blade Fuses

Fuses available: 30-80A

Interrupt capacity: 1000A DC

Maximum voltage: 32V DC

Rating (A)	Qty/ Pkg	Item #	OEM #
30	1	BFHD-30A/DSP	BFHD-30A
40	1	BFHD-40A/DSP	BFHD-40A
50	1	BFHD-50A/DSP	BFHD-50A
60	1	BFHD-60A/DSP	BFHD-60A
70	1	BFHD-70A/DSP	BFHD-70A
80	1	BFHD-80A/DSP	BFHD-80A



HDBFH Inline Heavy-duty Fuse Holder

For installations where space is tight and fuse needs to be installed inline with the cable.

Supplied with 8 mm (8G) tails for inline connections.

An economical solution to heavy-duty fusing. 3.15"x2.15"x.6" (80x55x15 mm)

Item # HDBFH



Maxi Fuse Holder

An economical way of fusing heavy loads 30-80A. Ideal for battery charger outputs or mains feeds. 1/4" (6 mm) studs accept ring terminals and cables up to 25 mm² (4 gauge). Fuse is clamped between tinned brass clamps for positive connection. Covers enclose exposed terminals to meet ABYC standards. 2.8"x2"x1.42" (71x53x36 mm)

Item # 702-MFH

OEM # 702-MFH-B



NEW Medium-duty Class T Fuses

Interrupt Capacity: 20,000A DC

Maximum voltage: 160V DC

Diameter: 1.34" (34 mm)

Length: 2.77" (70mm)

Use with:

- New Pro Installer Class T Fuse Holders (page 155)

Rating (A)	Qty/ Pkg	Item #
225	1	FT-225-B
250	1	FT-250-B
300	1	FT-300-B
350	1	FT-350-B
400	1	FT-400-B



NEW Heavy-duty Class T Fuses:

Interrupt Capacity: 20,000A DC

Maximum voltage: 160V DC

Diameter: 1.62" (41 mm)

Length: 3.03" (77mm)

Use with:

- New Pro Installer Class T Fuse Holders (page 155)

Rating (A)	Qty/ Pkg	Item #
450	1	FT-450-B
500	1	FT-500-B
600	1	FT-600-B

ATC Fuse Holders

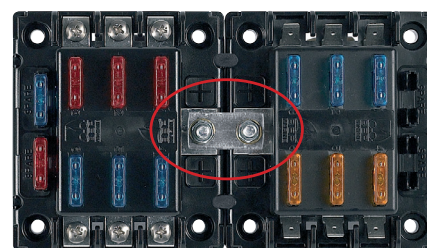
The BEP™ ATC Fuse Holder provides compact, easy access to fuses with the design integrity only BEP can offer.

- Allows for multiple fuse holders and bus bars to be joined together, increasing the number of circuits protected
- Fuse holder inputs can be linked together to form a single continuous fuse holder
- Includes patented Contour Lock system, see-thru clip-on cover and label set
- Available with screw terminals or quick connect terminals
- Max. current/circuit: 30A;
Max. current/block: 100A;
Max. voltage: 32V DC;
Base & cover material: polycarbonate
- Positions for spare fuses
- ATC Fuse holder: 80x90x47 mm (3.1"x3.6"x1.9")
- ATC Bus bar: 35x90x47 mm



ATC-6W

Description	Pack Qty	Item #	OEM #
6 Way fuse holder screw terminals w/ cover & link	1/blister	ATC-6W	—
6 Way fuse holder Quick Connect w/ cover & link	1/blister	ATC-6WQC	—
6 Way bus w/ 5 mm input stud, cover, joiners	1/blister	80-712-0039-00	—
6 Way fuse holder screw terminals w/ cover	24/pack	—	ATC-6W/B
6 Way bus w/ 5 mm input stud, cover, joiners	24/pack	—	80-712-0039-01

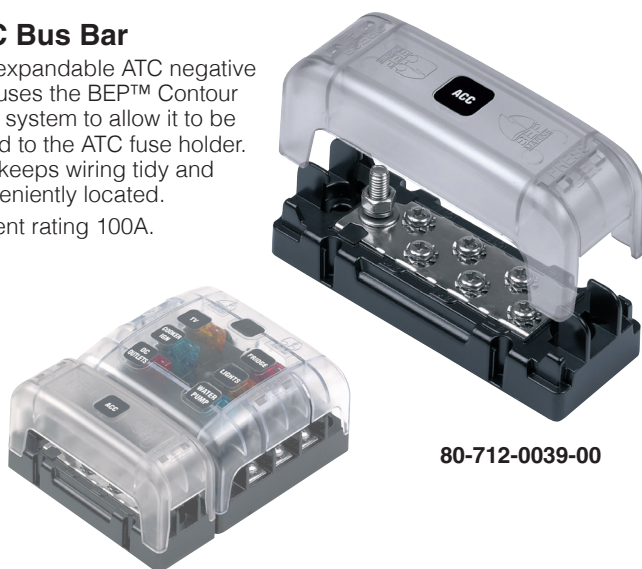


BB-LINK17MM

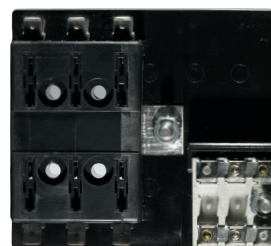
allows two 6 way ATC fuse holders to be joined together providing twelve fused positions running off one feed

ATC Bus Bar

The expandable ATC negative Bus uses the BEP™ Contour Lock system to allow it to be joined to the ATC fuse holder. This keeps wiring tidy and conveniently located.
Current rating 100A.



80-712-0039-00



ATO/ATC Fuse Panels

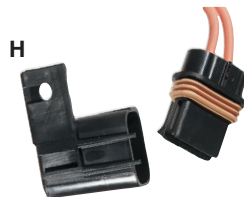
- Common negative bus with "push-on" tabs
- Common positive feed
- Each branch handles up to 30 amps (160A max total)
- 3.75"w x 3.375"h x .8125"d

Item # **607122** 6 Gang

Fuse Holders

Figure Letter	Description	AWG Wire	Fuse Style	Rating (Max Amps)	Item #
A	Panel Mount		AGC & MDL	15	607010
	Panel Mount Fuse Holder Cap for 607010				607011
B	Crimp-On	12–18 (3–8 mm ²)	AGC & MDL	30	607012
C	Waterproof In-Line	12–18 (3–8 mm ²)	AGC & MDL	30	607013
D	Waterproof In-Line	10 (5 mm ²)	AGU	30	607014
E	Waterproof In-Line	12 (3 mm ²)	AGC & MDL	20	607015
F	Heavy-duty In-Line	12 (3 mm ²)	AGC & MDL	15	607016
G	In-Line	12 (3 mm ²)	ATC	30	607017
H	Waterproof In-Line	12 (3 mm ²)	ATO/ATC	30	607019
I	Waterproof In-Line	12 (3 mm ²)	ATM	30	607020
J	Waterproof In-Line	16 (1 mm ²)	ATM	15	607021
K	In-Line		ATO/ATC	15	607022
L	In-Line	10 (5 mm ²)	ATO/ATC	30	607023

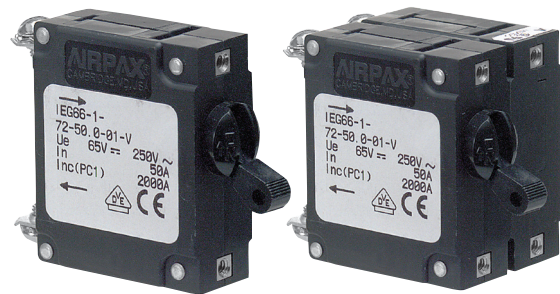
With weather resistant cap and tinned copper wire for corrosion resistance



IEG Magnetic CBs

IEG magnetic circuit breakers provide reliable circuit protection and accurate circuit control for equipment in the international market place. Designed using the latest in sensitive hydraulic magnetic technology, the IEG line adapts itself to many applications and environments. They are ideal for marine applications, data processing and business machines, as well as medical instrumentation, broadcast equipment, vending and amusement machines, military applications and wherever precision operation is required. Temperature differences which affect fuses and other thermal devices are not a concern. One important feature of this breaker line is a 'trip free' action, which means the circuit will trip in the presence of an overload even though the handle is held in the ON position. The delay mechanism senses the fault and the contacts open.

- Spacing compliance: IEC specification 601, 950; VDE 0804, 0805
- UL recognized; CSA certified; VDE 0660 approved; Part 101 & CE compliant
- Available in single or double pole; triple pole available on special orders

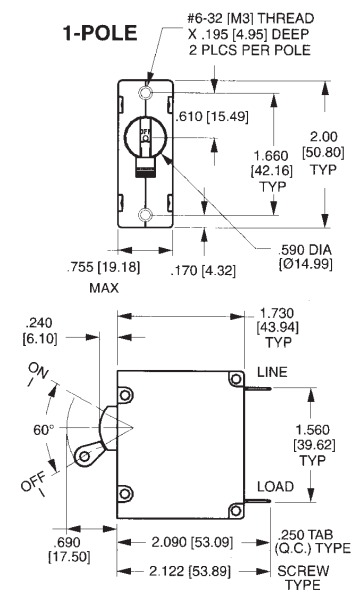


CBS-50A-SP-IG

CBS-50A-DP

Single pole	Rating (A)	Double pole	Rating (A)	Triple pole	Rating (A)
CBS-5A-SP	5	CBS-10A-DP	10	CBS-50A-TP / 50	50
CBS-10A-SP	10	CBS-15A-DP	15		
CBS-15A-SP	15	CBS-20A-DP	20	D / Pole trip coil	Volts (V)
CBS-20A-SP	20	CBS-25A-DP	25	CBS-15A-DP-TC230	230
CBS-25A-SP	25	CBS-30A-DP	30	CBS-20A-DP-TC230	230
CBS-30A-SP	30	CBS-40A-DP	40	CBS-30A-DP-TC230	230
CBS-40A-SP	40	CBS-50A-DP	50	CBS-50A-DP-TC230	230
CBS-50A-SP-IG	50				

Compatible with BEP panels

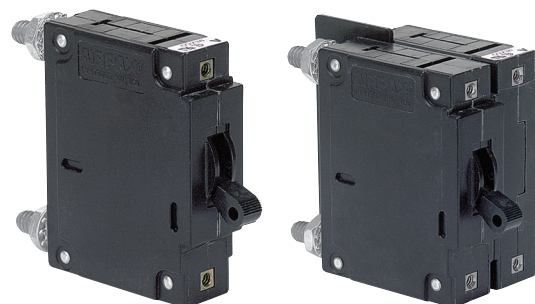


IUL Magnetic CBs

Provide reliable circuit protection and accurate circuit control for equipment in the international market place. BEP uses the IUL range of circuit breakers where current requirements exceed 50A and are within 100A. Available in single and double pole with triple pole available on special orders.

Single pole	Rating (A)	Double pole	Rating (A)	Triple pole	Rating (A)
CBL-50A-SP	50	CBL-50A-DP	50	CBL-80A-TP	80
CBL-60A-SP	60	CBL-60A-DP	60	CBL-100A-TP	100
CBL-75A-SP	75	CBL-75A-DP	75		
CBL-100A-SP	100	CBL-100A-DP	100		

Compatible with BEP panels



CBL-50A-SP

CBL-100A-DP

Heavy-duty Single Pole Thermal Type Breakers

- **Ratings:** 30–150A; 30V DC, 3000A interrupt capacity
- **Operating Temperature:** -25°F (-32°C) to 180°F (82°C)
- **Storage Temperature:** -30°F (-34°C) to 300°F (149°C)
- **Applications:** Auxiliary and accessory circuits – trucks, buses, RVs and marine applications, battery chargers and DC audio systems. Series 184 & 185 are sealed for engine compartment and bilge area applications.
- **Housing:** Thermoset plastic; UL rated 94V0; 311°F (155°C). Stud insulators are provided on covered units with F (Surface Mount) bases; tin plated copper studs, brass rivets and stainless steel locking nuts.
- **Mounting:** Panel or surface
- **Terminal Stud Torque:** 50 in-lb (5.6Nm) max.
- **Indicator:** Series 184 & 185 have a unique reset mechanism providing visible indication of tripped condition
- **Ingress Protection Rating:** IP67
- **Approvals:** Complies with SAEJ1625, J1171 and UL1500 (Ignition protected) specifications.



185080P-01-1



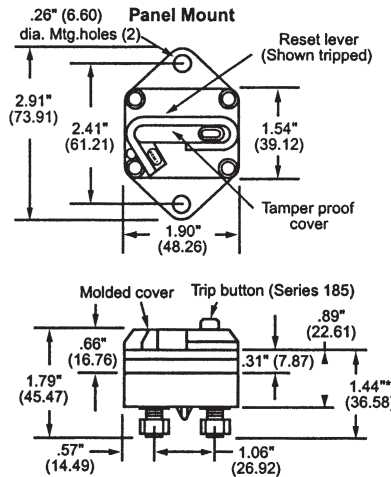
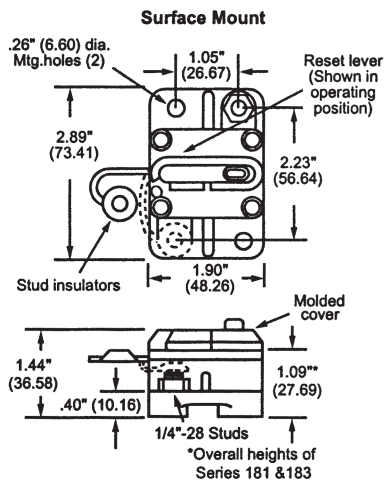
184100F-01-1

Manual Reset

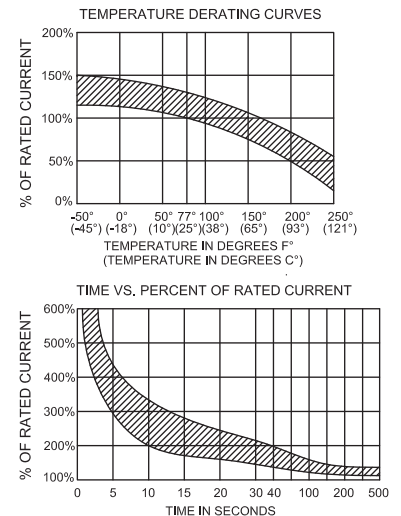
Rating (A)	Panel Mount OEM #	Surface Mount OEM #
30	184030P-01-1	184030F-01-1
40	184040P-01-1	184040F-01-1
50	184050P-01-1	184050F-01-1
60	184060P-01-1	184060F-01-1
70	184070P-01-1	184070F-01-1
80	184080P-01-1	184080F-01-1
90	184090P-01-1	184090F-01-1
100	184100P-01-1	184100F-01-1
120	184120P-01-1	184120F-01-1
135	184135P-01-1	184135F-01-1
150	184150P-01-1	184150F-01-1

Switchable Reset

Rating (A)	Panel Mount Item #	Surface Mount Item #	Panel Mount OEM #	Surface Mount OEM #
30	185030P/DSP	185030F/DSP	185030P-01-1	185030F-01-1
40	185040P/DSP	185040F/DSP	185040P-01-1	185040F-01-1
50	185050P/DSP	185050F/DSP	185050P-01-1	185050F-01-1
60	185060P/DSP	185060F/DSP	185060P-01-1	185060F-01-1
70	185070P/DSP	185070F/DSP	185070P-01-1	185070F-01-1
80	185080P/DSP	185080F/DSP	185080P-01-1	185080F-01-1
90	185090P/DSP	185090F/DSP	185090P-01-1	185090F-01-1
100	185100P/DSP	185100F/DSP	185100P-01-1	185100F-01-1
120	185120P/DSP	185120F/DSP	185120P-01-1	185120F-01-1
135	185135P/DSP	185135F/DSP	185135P-01-1	185135F-01-1
150	185150P/DSP	185150F/DSP	185150P-01-1	185150F-01-1



Temperature and Current Rating



NEW Single Pole Switchable Manual Reset Thermal Circuit Breaker

Features:

- Weatherproof IP66 design
- Trip free safety feature
- Switchable circuit protection
- Easy installation/ operation
- Ignition Protected
- CE Approved

Specifications:

- **Rating:** 25-200A, 48V DC
- **Interrupt Rating:** Main Breaker Protection Interrupt Rating (5,000A@ 14V DC, 3,000A@ 28V DC and 1,500A@ 48V DC)
- **Operating Temperature Rating:** -40°F (-40°C) to 185°F (85°C)
- **Storage Temperature Rating:** -40°F (-40°C) to 260°F (125°C)
- **Materials:** Black UL-rated 94V0 thermoset plastic body
- Cover and lever are UL-rated 94V0 thermoplastic
- **Marking:** Standard marking includes amp/volt ratings
- **Termination:** 5/16-18 threaded studs
- **Torque Rating:** 75 in-lbs (8.5Nm) max
- **Mounting Torque Rating:** Panel or surface-mount options; 50 in-lbs (5.6 Nm) max
- **Ingress Protection Rating:** IP66
- **Compliances:** ABYC E-11; CE; SAE J1171 (ignition protected)
- Available in other sizes upon request, from 25–150 Amps



MRCBF-200A



MRCBP-200A

Description	Item #
Surface Mount	MRCBF-200A
Panel Mount	MRCBP-200A

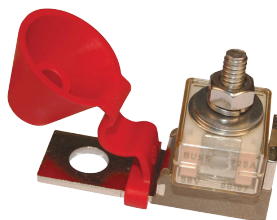
NEW Marine Rated Battery Fuse

Features:

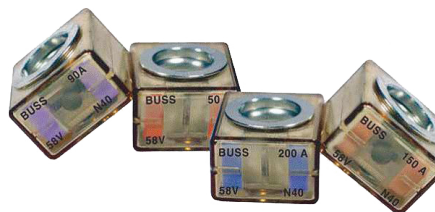
- Weatherproof IP66 design
- Compact heavy duty protection
- Insulated cap to prevent short circuit
- Ignition Protected
- Easy installation
- Suitable for high capacity battery banks

Specifications:

- **Voltage Rating:** 58Vdc Maximum
- **Amperage Rating:** 30A - 300A
- **Ingress Protection:** IP66
- **Ignition Protected:** Per SAEJ1117
- **Interrupt Rating:** 10000A @ 14Vdc, 5000A @ 32Vdc, 2000A @ 58Vdc.
- **Torque Rating:** Maximum 12Nm (106 in-lbs)
- **Material:** Body – Ceramic, Housing & Cover: UL-rated 94V0
- Thermoplastic, Ring Terminals - Tin Plated
- **Compliances:** ISO 8820-6
- Available in other sizes upon request, from 30–300 Amps



MRBF-SET
Terminal mount heavy-duty
fuse holder and cover



Rating (A)	Qty/ Pkg	Item #
80	1	MRBF-80A
100	1	MRBF-100A
125	1	MRBF-125A
150	1	MRBF-150A
200	1	MRBF-200A

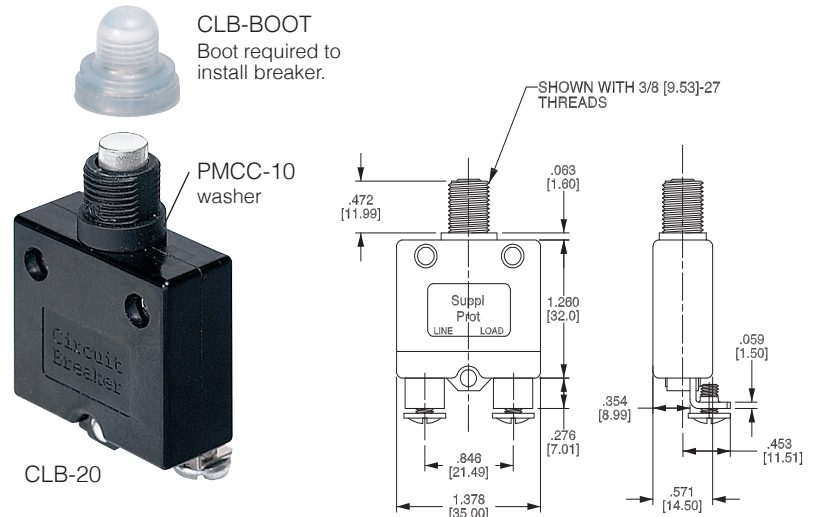
CLB Series Push Reset Thermal Circuit Breakers

- **Ratings:** 5–40A; 200A @ 250V AC Interrupt Capacity
- **Operating Temperature:** 14–140°F (-10–60°C)
- **Interrupting capacity:** 2500A
- **Resettable overload capacity:** 10 x rated current
- **Approvals:** UL, CUL, TUV, CE, UL1500ISO8846 for ignition protection/marine

Rating (A)	Item #*	OEM #
5	—	CLB-05
10	CLB-10/DSP	CLB-10
15	CLB-15/DSP	CLB-15
20	—	CLB-20
25	CLB-25/DSP	—
30	—	CLB-30
40	CLB-40/DSP	CLB-40

*DSP versions include circuit breaker, washer and boot

Description	OEM #
Boot	CLB-BOOT
Washer	PMCC-10



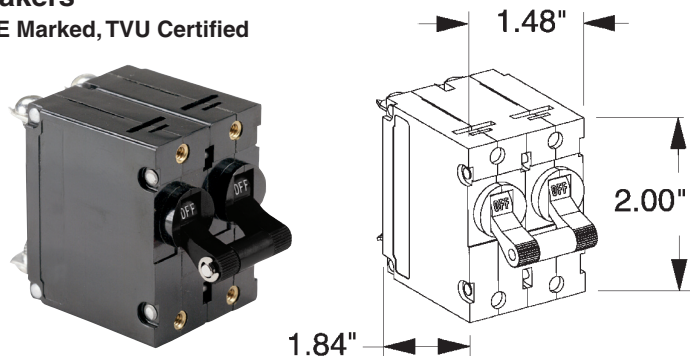
World Circuit Breakers

- Now certified in North America and Europe, meets the needs of all worldwide markets!
- Tested and certified by most widely recognized international regulatory agencies including UL (Underwriters Laboratory), CSA (Canadian Standards Association), CE (European Union), VDE (German government approval) and TVU Certified
- Designed for applications requiring higher amperage and voltage handling capability in a compact design
- Protects wiring, motors, generators, telecommunication systems, batteries, and many other applications in the harsh marine environment, fits common panel cutouts
- Mechanical Endurance: 10,000 On-Off operations @ 6 per minute; with rated current & voltage
- Breakers will trip on overload even when actuator is forcibly held in the ON position
- Enhanced, upgraded design of Ancor™ standard single and double pole breakers
- Maximum voltage 250V AC, 65V DC

Magnetic Double Pole AC Circuit Breakers

UL 489A, UL 1077 Recognized, VDE Certified, CE Marked, TVU Certified

Design Amps	Toggle Color	Qty/ Pkg	Item #
20	white	1	552820
30	white	1	552830
50	white	1	552850



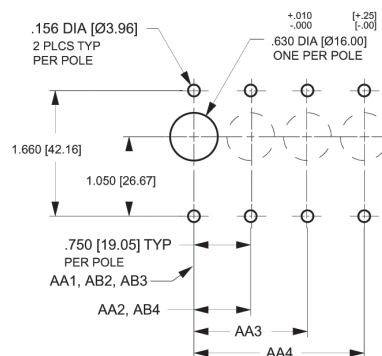
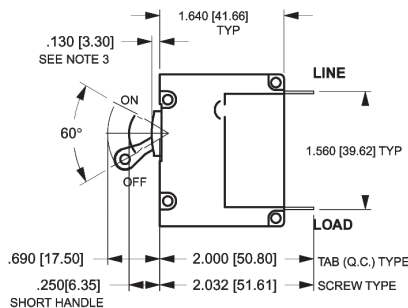
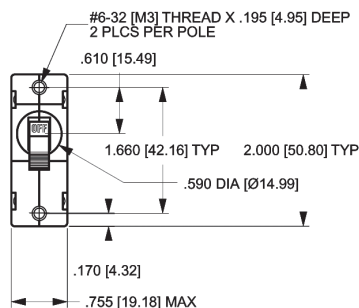
Magnetic Single Pole AC/DC Circuit Breakers

UL 489A, UL 1077 Recognized, VDE Certified, CE Marked, TVU Certified

Design Amps	Toggle Color	Qty/ Pkg	Item #	Design Amps	Toggle Color	Qty/ Pkg	Item #
5	Black	1	551505	25	Black	1	551525
	Red	1	551605		White	1	551725
	White	1	551705	30	Black	1	551530
10	Black	1	551510		Red	1	551630
	Red	1	551610		White	1	551730
	White	1	551710	40	Black	1	551540
15	Black	1	551515		Red	1	551640
	Red	1	551615		White	1	551740
	White	1	551715	50	Black	1	551550
20	Black	1	551520		Red	1	551650
	Red	1	551620		White	1	551750
	White	1	551720				



Not compatible with BEP panels



PANEL CUTOUT DETAIL
TOLERANCES ±.005 [-.12]
UNLESS OTHERWISE SPECIFIED

Circuit Breakers with Neutral

Description	Item #	Description	Item #
DPN 6 A-B, 1 P+N	6387000600	DPN 16 A-B, 1 P+N	6387001600
DPN 10 A-B, 1 P+N	6387001000	DPN 20 A-B, 1 P+N	6387002000
		DPN 25 A-B, 1 P+N	6387002500
		DPN 32 A-B, 1 P+N	6387003200



RCD Panels

We supply two Residual Current Device (RCD) ratings (16 & 32 A). Due to the difference in style of the RCD's, these panels are made to be mounted separately from the main AC panel.

Item #	Rating (A)	HxWx2.5"	HxWx65 mm
900-RCD-16A	16	4.5"x5"	115x127 mm
900-RCD-1X16-32A	32	4.5"x5"	115x127 mm
900-RCD-2X16A	16x2	4.5"x5"	115x127 mm
900-RCD-2X32A	32x2	4.5"x5"	115x127 mm
900-RCD-32A	16x1, + 32x1	4.5x5"	115x127 mm

Cutout size - 3/8" (10 mm) inside all external edges



900-RCD-16A



900-RCD-2X16A

CB Options

- 230 volt

Item #	Rating (A)	Type
RCD16A30MA	16	Residual CB Overload
RCD32A30MA	32	Residual CB Overload
RCD63A	63	Residual CB Overload
MCB16A	16	Miniature CB
MCB32A	32	Miniature CB
MCB63A	63	Miniature CB
124001000	16	Shore Fix 30 mA



RCD
(see chart)



MCB
(see chart)



MCB-3WENC
6.3"x3.6"x3.5"
160x92x90 mm



124001000
7.87"x4.33"x4.53"
200x110x115 mm

For installations in Australia and New Zealand to comply with AS/NZ3004 an approved double pole mains circuit breaker must be mounted upstream of the BEP™ Control Panel in the form of a RCD or MCB. The MCB-3WENC is an enclosure with IP65 rating. The enclosure and CB is ordered separately. The Shore Fix is already assembled, no additional item parts need to be ordered.



Mounting Screws

- Black
- Nylon
- 5-32"x 5/16" (4x7.9 mm)
- Used in mounting circuit breakers to electrical control panel

Item # 553041



Line-to-Line Jumper

- Used in terminal blocks with 5/8" (15.9 mm) between holes
- 100 amps total capacity
- Pkg qty 5

Item # 553021



Handle Lock

Image shows "handle lock" as used in all our battery management panels for essential CBs to prevent accidental or unintended actuation of essential circuits CB's from either the "on" or "off" position. (ordered separately)

Item # 121-710-1101/1



Modular Brackets

- Black

Item # 554000 end
Item # 554001 middle

Manage: DC Circuit Breaker Panels

DC No Meters

- Red systems on LED
- 12V
- Marine grade powder coated aluminium
- ABYC standard voltage indication
- Green LED backlit labels
- Stylish clip on contour fascia
- Label sets and buss bar supplied with panels;
for additional labels see page 139–140



901V



902NMV



900-DC



901H



902NMH

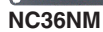


904NMH

# of Circuits	Direction	in HxWx2.5	mm HxWx65	Label Sheet	CB's - Single Pole						Neg Bus	Item #
					5	10	15	20	25	30		
4	square	4.5"x5"	115x127	1	1	2	1				6 way	900-DC
8	horizontal	4.5"x9.75"	115x239	1	2	2	3	1			6 way	901H
	vertical	7.9"x5"	200x127	1	2	2	3	1			6 way	901V
12	horizontal	4.5"x13.9"	115x351	1	3	4	4		1		6 way	902NMH
	vertical	11.25"x5"	285x127	1	3	4	4		1		6 way	902NMV
16	square	7.9"x9.75"	200x239	1	4	5	5	1	1		12 way	904NM
	horizontal	4.5"x18.25"	115x463	1	4	5	5	1	1		12 way	904NMH
	vertical	11.25"x5"	285x127	1	3	4	4		1		6 way	904NMV
24	square	7.9"x13.9"	200x351	1-3	5	8	8	1	1	1	12 way	905NM
	vertical	11.25"x9.75"	285x239	1-3	5	8	8	1	1	1	12 way	905NMV
32	horizontal	7.9"x18.25"	200x463	1-4	7	11	11	1	1	1	24 way	906NMH
	vertical	14.6"x9.75"	370x239	1-4	7	11	11	1	1	1	24 way	906NMV
36	square	11.25"x13.9"	285x351	1-4, 6	8	12	12	2	1	1	24 way	NC36NM

Cutout size - 3/8" (10 mm) inside all external edges

For more information on circuit breaker panels go to bepmarine.com



For changing 12V panels to 24V backlighting

131

DC Analog/Digital Meters

- Ammeters available in other scales (page 197).
- All panels are available with either Analog or Digital meters
- Label set and bus bar supplied with panel; for additional label sets see page 139–140



900-AM



901V-DCSM



902V-DCSM



906V-AM



905V-DCSM



904-AM



902-AM

# of Circuits	Direction	mm HxWx65	in HxWx2.5	Label Sheet	CB's - Single Pole						Neg Bus	Digital Item #	Analog Item #
					5	10	15	20	25	30			
4	vertical	200x127	7.9x5	1	1	2	1				6 way	900V-DCSM	900-AM
8	vertical	295x127	11.6x5	1	2	2	3	1			6 way	901V-DCSM	901V-AM
12	square	200x239	7.9x9.75	1	3	4	4		1		6 way	902-DCSM	902-AM
	vertical	380x127	15x5	1	3	4	4		1		6 way	902V-DCSM	902V-AM
16	vertical	295x239	11.6x9.75	1-2	4	5	5	1	1		12 way	904-DCSM	904-AM
20	horizontal	200x351	7.9x9.75	1-3	5	6	7	1		1	12 way	903-DCSM	903-AM
24	square	295x351	11.6x13.9	1-3	5	8	8	1	1	1	12 way	905-DCSM	905-AM
	vertical	380x239	15x9.75	1-3	5	8	8	1	1	1	12 way	905V-DCSM	905V-AM
32	horizontal	295x463	11.6x18.25	1-4	7	11	11	1	1	1	24 way	906-DCSM	906-AM
	vertical	455x239	18x9.75	1-4	7	11	11	1	1	1	12 way	906V-DCSM	906V-AM
48	square	380x463	15x18.25	1-5	12	15	15	3	1	2	2 x 24 way	—	907-AM

All analog panels supplied with one shunt, extra shunts ordered separately. Digital panels supplied with 450A-50mV shunt.

Cutout size - 10 mm (3/8") inside all external edges

All panels available in 12 or 24V configuration. All part numbers shown are 12V backlighting.

Order upgrade kits to suit number of breakers in panel.

For more information on circuit breaker panels go to bepmarine.com



903-DCSM



907-AM



905-AM



906-AM

Cruiser Series

- 12V / 24V
- Mimic panel for quick reference of systems in operation
- Blank space for addition of extra meter
- Digital or analog readouts



NC32Y-DCSM



NC36L-DCSM

# of Circuits	in HxWx2.5	mm HxWx65	Label Sheet	CB's - Single Pole						Digital Item #	Analog Item #
				5	10	15	20	25	30		
32	15x13.9	380x351	1-4, 6	7	11	11	1	1	1	NC32Y-DCSM	NC32Y-AM
36	15x13.9	380x351	1-4, 6	8	12	12	2	1	1	NC36L-DCSM	NC36L-AM

All analog panels supplied with one shunt, extra shunts ordered separately. Digital panels supplied with 450A – 50mV shunt.

Cutout size – 3/8" (10 mm) inside all external edges

All panels available in 12 or 24V configuration. If 24V is required, please specify when ordering by adding –24V to part number.

Double Pole Panel

- Double pole panels available in all panel sizes.
- Double pole CBs use twice the space of single pole breakers; an 8-way panel can become a 4-way
- AC or DC versions available
- Single toggle



DP-PANEL

Millennium Series

- 12V / 24V
- Compact sizing
- Battery monitoring using BEP™ multifunction meter (voltage on 3 battery banks, charge, discharge amps and amp-hours remaining on main battery bank)



M28-DCSM



M44-DCSM



M56-DCSM



M44H-DCSM



M32-DCSM

# of Circuits	Direction	in HxWx2.5	mm HxWx65	Label Sheet	CB's - Single Pole						Digital Item #
					5	10	15	20	25	30	
28	vertical	14.6"x9.75"	370x239 mm	1-4	8	8	8	2		2	M28-DCSM
32	horizontal	11.25"x13.9"	285x351 mm	1-4, 6	7	11	11	1	1	1	M32-DCSM
44	vertical	14.6"x13.9"	370x351 mm	1-4, 6	10	14	14	3	1	2	M44-DCSM
	horizontal	11.25"x18.25"	285x463 mm	1-4, 6	10	14	14	3	1	2	M44H-DCSM
56	vertical	18"x13.9"	455x351 mm	1-4, 6	12	18	18	4	2	2	M56-DCSM

Breaker Panels without Meters

- Ideal for AC shore power installations and on board inverter installations.



900-ACM2W



900-AC1

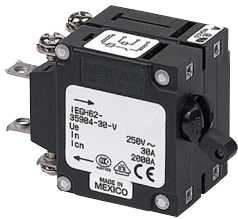


900-ACM6W



900-ACCH

For standard twin input systems, eg: one shore power and one genset input.



Reverse Polarity Auto Trip Breaker

Now standard on all 230V, 50Hz panels (Euro and Asia-Pacific). This will automatically trip when it detects reverse polarity.

Item # CBS-20A-DP-TC230

Volts	in HxWx2.5	mm HxWx65	Label Sheet	CB's - Single Pole						CB's - Double Pole					Neg Bus	Item #
				5	10	15	20	25	30	20	25	30	50	80		
230	7.9"x5"	200x127 mm	5	2	2					2					IS-6MM-2	900-AC1
110	4.5"x9.75"	115x239 mm	5			2	2				2				IS-6MM-2	900-AC1-110V
230	4.5"x5"	115x 27 mm	5		2					1					IS-6MM-2	900-ACM2W
110	4.5"x5"	115x127 mm	5			2					1				IS-6MM-2	900-ACM2W-110V
230	7.9"x5"	200x127 mm	5		2	3	1			1					IS-6MM-2	900-ACM6W
110	7.9"x5"	200x127 mm	5			3	2	1			1				IS-6MM-2	900-ACM6W-110V
230	7.9"x5"	115x127 mm	5			2									IS-6MM-2	900-ACCH
110	7.9"x5"	115x127 mm	5								2				IS-6MM-2	900-ACCH-110V

Analog/Digital Meters

- All available in 110V/60 Hz or 230V/50 Hz.
- All supplied with transducers
- Reverse polarity indicator
- Double pole mains input CBs with side lockout
- Digital meter shows volts, amps and frequency
- LED wired to indicate live panel with mains breaker either on or off
- AC source selector ensures no cross over between AC inputs (ship or shore power)
- AC voltage/frequency label to comply with ABYC Standards



900-AC4-ACSM



900-ACM2-AM



900-ACM6V-AM



900-AC2V-ACSM



900-AC3-ACSM



900-AC2H-AM

			Label Sheet	CB's – Single Pole						CB's – Double Pole					Neg Bus Item #		
in Volts	HxWx2.5	mm HxWxL		5	10	15	20	25	30	20	25	30	50	80			
Analog																	
230	7.9"x5"x2.5"	200x127x65 mm	5	2						1					IS-6MM-2	900-ACM2-AM	
110	7.9"x5"x2.5"	200x127x65 mm	5	2						1					IS-6MM-2	900-ACM2-AM-110	
230	11.6"x5"x2.5"	295x127x65 mm	5	2 3 1						1					IS-6MM-2	900-ACM6V-AM	
110	11.6"x5"x2.5"	295x127x65 mm	5	3 2 1						1					IS-6MM-2	900-ACM6V-AM-110	
230	7.9"x9.75"x2.5"	200x239x65 mm	5	1	3	3	1			1	1				2x6 way	900-AC2H-AM	
110	7.9"x9.75"x2.5"	200x239x65 mm	5	2 3 2 1						1 1					2x6 way	900-AC2H-AM-110	
230	15"x5"x2.5"	380x127x65 mm	5	1	3	3	1			1	1				2x6 way	900-AC2V-AM	
110	15"x5"x2.5"	380x127x65 mm	5	1	2	3	2	1			1 1				2x6 way	900-AC2V-AM-110	
230	7.9"x13.9"x2.5"	200x351x65 mm	5	1	4	5	1	1			1	1				2x12 way	900-AC3-AM
110	7.9x13.9x2.5"	200x351x65 mm	5	1	3	4	3	1	1			1		1	2x12 way	900-AC3-AM-110	
Digital																	
230	7.9"x9.75"x2.5"	200x239x65 mm	5	1	3	3	1			1	1				2x6 way	900-AC2H-ACSM	
110	7.9"x9.75"x2.5"	200x239x65 mm	5	2 3 2 1						1 1					2x6 way	900-AC2H-ACSM-110	
230	15"x5"x2.5"	380x127x65 mm	5	1	3	3	1			1	1				2x6 way	900-AC2V-ACSM	
110	15"x5"x2.5"	380x127x65 mm	5	1	2	3	2	1			1 1				2x6 way	900-AC2V-ACSM-110	
230	7.9"x13.9"x2.5"	200x351x65 mm	5	1	4	5	1	1			1	1				2x12 way	900-AC3-ACSM
110	7.9x13.9x2.5"	200x351x65 mm	5	1	3	4	3	1	1			1		1	2x12 way	900-AC3-ASCM-110	
230	7.9x13.9x2.5"	200x351x65 mm	5	1	5	7	2	1			1	1				2x6 way	900-AC4-ACSM
110	7.9x13.9x2.5"	200x351x65 mm	5	5 8 2 1						1					1	2x6 way	900-AC4-ACSM-110

Cutout size – 3/8" (10 mm) inside all external edges. All panels available in 12 or 24V backlighting configuration.

Back Panel Covers

- Designed to insulate exposed rear terminals.
- Flame retardant PVC in two styles.
- Flange Mount: for access to control panel back when mounted in place. Attaches to the rear of the same mounting surface as the panel.
- Panel Mount: for access only when panel is removed. Supplied with mounting pedestals.



BC-PM1



BC-FM1



BC-FM2



BC-PM2

Item #	Mount type	Cover Description	in HxWx3.5	mm HxWx90
BC-FM1	Flange	1 column 8-12 CBs + meter	15"x5"	380x127
BC-FM2	Flange	2 column 8-12 CBs + meter	15"x9.4"	380x239
BC-FM3	Flange	1 column 8-12 CBs	11.2"x5"	285x127
BC-FM4	Flange	2 column 8-12 CBs	11.2"x9.4"	285x239
BC-PM1	Panel	1 column 8-12 CBs + meter	14.2"x4.2"	360x107
BC-PM2	Panel	2 column 8-12 CBs + meter	14.2"x8.6"	360x219



ACCESSORIES**SET-1N**

Accessories
Anchor Light
Auto Pilot
Bilge Pump
Cabin Lights
Cabin Lights
Cockpit Lights
Compass Lights
DC Outlets
Depthsounder
Freezer
Freshwater Pump
GPS
Instruments
LPG Control
Mast Light
Navigation Lights
Saltwater Pump
Shower Drain Pump
Spare
Spotlight
Spreader Light
Steaming Light
Stereo
Trim Tabs
VHF
Winch
Wiper

BAIT TANK PUMP**SET-2N**

Bait Tank Pump
Bilge Pump Aft
Bilge Pump Forward
Bilge Pump Mid
Bilge Pump Port
Bilge Pump Starboard
Blower
Boarding Light
Cabin Lights Aft
Cabin Lights Fwd
Cabin Lights Mid
Cabin Lights Port
Cabin Lights Starboard
Deck Wash Pump
Electric Toilet
Engine Room Lights
Fridge
Horn
Nav Lt's Port
Nav Lights Starboard
Panel Lights
Radar
Saloon Lights
SSB
Start
Stern Light
Stop
Tri Light

12V OUTLETS**SET-3N**

12V Outlets
24V Outlets
Aft Deck Light
Bilge Auto Man.
Bow Lights
Docking Lights
Emergency Parallel
Engine Alarm
Engine Blowers
Extraction Fan
Flood Lights
Fore Deck Light
Galley Lt
Generator Lights
Holding Tank Pump
House Batteries
Lazarette Light
Port
Radio Battery
Search Light
Starboard
Start Batteries
Step Light
Strobe Light
Toilet Lt
Weather Fax
Windex Light
Window Washers

AFT LIGHTS**SET-4N**

Aft Lights
Bedroom/Converter
Davit Winch
Engine Alternator
Fire System
Fish Finder
Fishing Light
Galley/Bath
House Alternator
Intercom
Load
Locker Light
Mid Wiper
Mid Lights
Mizzen Spreader Light
Plotter
Port Wiper
Preheat
Sole Light
Heater Fans
Starboard Wiper
Sub Main
Sump Pump
Tank Room Lights
Toilet Pump
Towing Light
TV/Stereo
Walvac

AC MAINS**SET-5N**

AC Mains
AC Outlets
AC Outlets
Air Conditioning
Battery Charger
Cook Top
Dishwasher
Dive Compressor
Dryer
Frequency
Genset
Heater
Hotwater Cylinder
Ice Maker
Inverter
Inverter Outlets
Microwave
Oven
Refrigeration
Reverse Polarity
Ships Power
Shore Power
Trash Compactor
TV
Video
Washing Machine
Waste Master
Water Maker

AC MAINS**SET-6N**

AC Mains
Accessories
Anchor Wash
Automatic
Autopilot
Auxiliary
Bilge Auto Manual
Bilge Lights
Boom Furl
Bridge Lights
Burglar Alarm
Cabin Fan
CB Radio
Cell Phone
Computer
DC Mains
Fuel Transfer
Galley Fan
Hatch Controls
Hydraulics
Loud Hailer
Macerator
Manual
Night Lights
Pelmet Lights
Solar Panel
Stove
TV Antenna

AFT PEAK LIGHT**SET-7N**

Aft Peak Light
Deck Flood Lights Fwd
Deck Flood Lights Aft
Deck Lights
Deck Lights Port
Deck Lights Starboard
Deck Lights Forward
Deck Lights Aft
Fishing Lights
Fishing Lights White
Fishing Lights Red
Fishing Lights Green
Fish Room Lights
Fish Room Pump
Fore Deck Light
Focle Light
Mast Flood Lights Fwd
Mast Flood Lights Aft
Net Recorder
Not Under Command
NUC Lights
Plotter
Port Flood Lights
Shower Lights
Stbd Flood Lights
Toilet Fan
Toilet Light
Winch Flood Lights

ANCHOR LIGHT**SET-8N**

Anchor Light
Baragraph Power
Cabin Fans
Cabin Fans Fwd
Cabin Fans Aft
Courtesy Lts
Courtesy Lts Fwd
Courtesy Lts Mid
Courtesy Lts Aft
Diesel Heater
Fire System
Fuel Pump
Hailer
Lectrasan
Lectrasan Fwd
Lectrasan Stbd
Port Engine Controls
Port Ignition
Sat Com
Shower Light
Saloon Lights
Spare
Spare
Stabilizer
Stbd Engine Controls
Stbd Ignition
Toilet Light
Waste Treatment

BOILER/HEATER**SET-9N**

Boiler / Heater
Bow Thruster
DC/DC Converter
Deck Lights Forward
Deck Lights Aft
Deck Lights Mid
Deck Lights Upper
Defroster
Galley Lights
Grey Water Pump
Guest State Lights
Head Pump 1
Head Pump 2
Master State Lights
Nav Lights
Oil Pump
Pilot House Lights
Saloon Lights
Search Light
Spare
Spare
Stereo
Trim Tab Control
V-Berth Lights
VHF Lower
VHF Upper
Wash Down Pump
Windlass

AIR COMPRESSOR**SET-10N**

Air Compressor
Air Con Galley
Air Con Guest Room
Air Con Master State
Air Con Pilot House
Air Con Salon
Air Con Saloon
Air Con State Room
Air Con V-Berth
Air Conditioning
Air Conditioning 1
Air Conditioning 2
Air Conditioning 3
Central Vacuum
Charger Generator
Charger House
Charger Inverter
Compactor
Engine Room Fans
Hot Circ Pump
Ice Maker Lower
Ice Maker Upper
Outlets Engine Room
Outlets External
Outlets Galley
Outlets Lower Deck
Outlets Upper Deck
Water Heater

12-12V REDUCER**SET-12N**

24-12V Reducer
Aerator
Ballast Aft
Ballast Control
Ballast Fwd
Black Tank Aft
Black Tank Fwd
Black Water Pump
Boom Light
Bridge Lights
Bridge Supply
Dining Lights
Fire Alarm
Flow Alarm
Interior Lights
Luff Light
Modem
Nav Area Fan
Outlets Aft
Outlets Fwd
Outlets Mid
Outlets Port
Outlets Stbd
Port Engine
Stbd Engine
Step Lights
Strobe
Riding Light

AFT BILGE ALARM
SET-13N

Aft Bilge Alarm
Bilge Alarm
Bilge Alarm Test
Bilge Auto
Bilge Lights
Bilge Manual
Bilge Pump Auto/
Manual
Fwd Bilge Alarm
High Water Alarm
Mid Bilge Alarm
Port Aft Bilge Alarm
Port Aft Bilge Auto
Port Aft Bilge Manual
Port Fwd Bilge Alarm
Port Fwd Bilge Auto
Port Fwd Bilge Manual
Port Mid Bilge Alarm
Port Mid Bilge Auto
Port Mid Bilge Manual
Stbd Aft Bilge Alarm
Stbd Aft Bilge Auto
Stbd Aft Bilge Manual
Stbd Fwd Bilge Alarm
Stbd Fwd Bilge Auto
Stbd Fwd Bilge Manual
Stbd Mid Bilge Alarm
Stbd Mid Bilge Auto
Stbd Mid Bilge Manual

210KHz TX
SET-14N

210KHz TX
33KHz TX
Aft Hold Light
Cockpit Freezer
Engine Controls
Fridge/Freezer
Fire Pump
Fluxgate Compass
Flybridge Freezer
Fuel Gauge
Fuel Transfer Port
Fuel Transfer Stbd
Fwd Hold Light
Gantry Lights
Holding Tank Port
Holding Tank Stbd
Masthead Light
Pilot Light Red
Pilot Light White
Port Fuel Filter
Rudder Indicator
Stbd Fuel Filter
Steering
Toilet Aft
Toilet Fwd
Towing Light Amber
Towing Light White
Tuna Tubes

**12V OUTLETS
FLYBRIDGE**
SET-15N

12v Outlet Flybridge
Arch Lights
Bilge Pump Clutch
Cabin Heater
Compass
Dry Head Pump
Demister
Engine Clutch Pump
Flybridge Hatch
Flybridge Wipers
Freezer Clutch
Fwd Stateroom Lights
Greywater Pump 1
Greywater Pump 2
Guest Cabin Stereo
Inmarsat
Instrument Lights
Instruments Flybridge
Instruments Pilothouse
Master Head Lights
Nav Area Lights
Overhead Lights
Overhead Saloon Lights
Saloon Wipers
Security System
Underfloor Lights
24v DC Mains
Bow Bilge High Water

AC OUTLETS AFT
SET-16N

AC Outlets Aft
AC Outlets Aft Cabin
AC Outlets Cockpit
AC Outlets Deck
AC Outlets Fwd
AC Outlets Fwd Cabin
AC Outlets Galley
AC Outlets Guest Cabin
AC Outlets Mid
AC Outlets Port
AC Outlets Salon
AC Outlets Saloon
AC Outlets Staterooms
AC Outlets Stbd
AC Outlets Wheelhouse
Aircon Aft
Aircon Aft Deck
Aircon Cabin
Aircon Fwd
Aircon Fwd Deck
Aircon Helm
Aircon Pump
Aircon Port
Aircon Stbd
Airhandler Fwd
Stateroom
Airhandler Mstr
Stateroom
Airhandler Pilothouse
Airhandler Saloon

24 HOUR CIRCUITS
SET-17N

24 Hour Circuits
Aft Bilge Pump Auto /
Man
Aft Head
Alarm Mute
Depth / Speed
Electronics
Engine Alarm
Fans
Fwd Bilge Pump Auto /
Man
Fwd Head
Galley / Head Vent
Galley Fridge
Gas Stove
Gauges
Head Pump
Level Indicator
Lights
Mid Bilge Pump Auto /
Man
Nav & Inst Lights
Oil Pressure
Pt Engine
Pt Engine Start / Stop
Stbd Engine
Stbd Engine Start / Stop
Sum Log
Synchronizer
Water Temp
Windshield

27 MEG
SET-18N

27 Meg
Aft Holding Tank
Aft Water Heater
Cabin Outlets
Cockpit Fridge
DC Mains 1
DC Mains 2
Dehumidifier
DVD
Engine Blower
Engine Room Outlets
Entertainment
Flybridge Main
FWD Holding Tank
FWD Water Heater
Galley
Gas Solenoid
Generator
GFCI Outlet
Hatch Lifter
Helm Main
Hour Meter
Laundry
LPG/Cooktop
Navigation
Range
TV /DVD
UHF

**12V BATTERY
CHARGER**
SET-19N

12V Battery Charger
24hr Bilge Pump
24V Battery Charger
12V Battery Charger
Bilge Pump Port Fwd
Bilge Pump Port Mid
Bilge Pump Stbd Aft
Bilge Pump Stbd Fwd
Bilge Pump Stbd Mid
Boarding Platform
Bulwark Lights
Bunk Lights
Cable Master
Desalinator
Dishwasher
Electric Windows
Engine Controls
Macerator
Oil Pump
Pitch Control
Port Air Con
Port Engine
Sonar
Storeroom Lights
Spa
Stbd Air Con
Stbd Engine
TV

12V AUX HORN
SET-20N

12V Aux Horn
Aft Fridge
Alternator
Anchor Winch
Bathroom Fan
Bathroom Outlets
Bridge Supply
Docking Lights
Engine Room Bilge
Alarm
Fax
Fish Finder
Holding Tank Gauge
Icemaker
Inverter/Charger
Lake Water
Master Head
RCD
Reset
Salon Lights
Shaver Outlets
Sunder
Speed
Sum Log
Toilet Port
Toilet Stbd
TV lift
Wind Instruments

BOILER/HEATER
SET-22N

Alarms
CCTV
Cockpit Fridge
Communications
Control Max 2.0
Deck Lights
Earth Leakage Lights
Emergency Parallel
Engine Room Main
Equipment Room
Flybridge Lights
Fresh Water Pump Port
Fresh Water Pump Stbd
Genset Start
Genset Stop
Grill
Head/Galley Vent
HF Radio
Ignition Start
Mid Hold Lights
Radio Light
Radios
Refrigerator
Reverse Polarity Test
UHF Radio
VHF Radio
Wheelhouse Lights
Wine Cooler

**AIR CON
FLYBRIDGE**
SET-23N

Air Con Flybridge
Air Con Fwd
Air Con Port
Air Con Stbd
Berth Lights
Blower
Cabin Lights Main
Cooling Pump 1
Cooling Pump 2
Discharge
Discharge
Discharge
Discharge
Emergency Lights
Gallery Fridge
Helm Lights
Macerator
Master Cabin Lights
Port Engine Controls
Port Engine Controls
Port Engine Controls
Quartz Lights
Stbd Engine Controls
Stbd Engine Controls
Stbd Engine Controls
Stereo Memory
Storage Bin Pump
Waterblaster

CABINE AVANT
SET-FRENCH

Cabine Avant
Cabine Babord
Cabine Tribord
Dessalinisateur
Divers
ECL Interieur
Essuie-Glace
Feu De Hune
Feu De Mouillage
Feu De Pont
Feux De Navigation
Flaps Trim Tabs
GPS
Groupe D'Eau
Guindeau
Instruments
Pilote Automatique
Pompe De Cale
Prise 12V
Refrigerateur
Salle De Bain
Salle Machine
Sondeur
Stereo
Table A Carte
Timonerie
Ventilateur De Cale
VHF

AUXILIARE 1
SET-FRENCH 2

Auxiliaire 1
Auxiliaire 2
Avertisseur
Cabin 2
Cabin 3
Cabin I
Centrale Nav
Chauffage
Chauffe-Eau
Confort
Congelateur
Divers
Eclairage Babord
Eclairage Carre
Eclairage Nacelle
Eclairage Tribord
Electronique
Feu Tricolore
Hi-Fi
Micro-Ondes
Pompe Babord
Pompe De Lavage
Pompe Douche
Pompe Tribord
Radar
Spots
Toilettes
Winch

CSP6**ANCHOR LIGHT****SET-2SP**

Anchor Light
Bilge Auto Man
Boom Light
Cabin Light
Cockpit Lights
Compass Light
Deck Lights
Depth Sounder
E/R Blower
Freezer
Instruments
Locker Lights
Nav Lights
Port Nav Lights
Port wiper
Shower Drain Pump
Spare 1
Spare 2
Spare 3
Stbd Nav Lights
Stbd Wiper
Steaming Light
Stern Light
Transom Lights
Tri Light

CSP6**ACCESSORIES****SET-1SP/F**

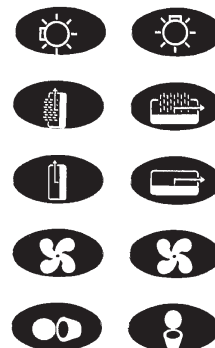
<Mouillage Navigation>
Accessories
Accessories
Aerateur
Appliques De Cockpit
Appliques Interieures
Avertisseur
Essuie-Glace 1
Essuie-Glace 2
Essuie-Glace 3
Feu De Mouillage
Feu De Navigation
Frigo
GPS
Groupe D'Eau
Instruments
Lecteurs De Cartes
Pilote Automatique
Pompe Cale <Auto Manuel>
Pompe De Cale
Pompe De Lavage
Pompe De Vidange
Prises De Courant
Radio
Sondeur
Spots
Ventilateur
Winch

900-6WP**NAVIGATION LIGHTS****LBL-WP**

Accessories
Aerator
Anchor Lights
Autopilot
Bait Tank Pump
Bilge Pump
Blower
Cabin Lights
Cockpit Lights
DC Outlets
Deck Wash
Depth Sounder
Freshwater Pump
Fridge
GPS
Horn
Inst. Lights
Instruments
Log
Navigation lights
Radar
Spare
Spot Lights
Stereo
Stern Light
Trim Tabs
VHF
Wiper

CMP-6WP**FRESHWATER PUMP****LBL-CMP**

Accessories
Aerator
Anchor Lights
Autopilot
Bait Tank Pump
Bilge Pump
Blower
Cabin Lights
Cockpit Lights
DC Outlets
Deck Wash
Depth Sounder
Freshwater Pump
Fridge
GPS
Horn
Inst. Lights
Instruments
Log
Navigation lights
Radar
Spare
Spot Lights
Stereo
Stern Light
Trim Tabs
VHF
Wiper

**Interior Series
Switch Plates****SET-IN****800-MS1-4****24 HOUR LIGHTS****SET-MSP3**

24 Hour Lights
Bow Bilge Pump
Bow Bilge Override
Bow Thruster
Cathodic Protection
Charts/Sounder
Cockpit Main
CO Detector
Cockpit Fridge
Electronics Main
Electric Controls
Electric Head
Genset Battery Charger
Hatch Lifter
Helm Main
Head Macerator
Port Battery Charger
Port Engine Blower
Port Controls
Saloon Mains
Stbd Controls
Stereo
Stereo Amplifier
Stbd Battery Charger
Stbd Engine Blower
Wiper Mid
Wiper Port
Wiper Stbd
Accessories
Controls

800-MS1-4**24V HOUSE
VOLTMETER FEED****SET-MSP4**

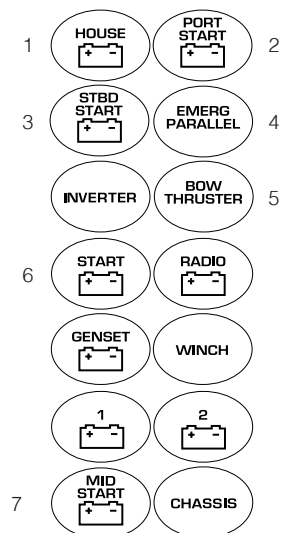
24V House Voltmeter Feed
Bilge Alarm
Bilge Pump 24 hr
Bilge Pump Aft High Water
Bilge Pump Fwd High Water
Bilge Pump Mid High Water
Bilge Pumps
Bilge Pumps Main
Flybridge 12V Mains
Flybridge 24V Mains
Genset Blower
High Water Alarm
House Battery Charger
House Battery Meter
House Main
Lower 12V Mains
Lower 24V Mains
Port Aft Bilge Pump
Port Batter Meter
Port Fwd Bilge Pump
Port Mid Bilge Pump
Shower Sump
Stbd Aft Bilge Pump
Stbd Battery Meter
Stbd Fwd Bilge Pump
Stbd Mid Bilge Pump
Toilet
Twin Disk
Twin Disk Port
Twin Disk Stbd

706 - 707**WINCH****SET-714**

Anchor Winch
Bilge Pump Aft
Bilge Pump Fwd
Bilge Pump Mid
Bilge Pump Port
Bilge Pump Starb
Bow Thruster
Davit Winch
DC Mains 1
DC Mains 2
Halyard Winch
Head 1
Head 2
Holding Tank
Inverter
Memory Circuits
Security System
Sheet Winch
Spare
Waste Treatment 1
Waste Treatment 2

NOTE:

The complete range of BEP labels are listed in a quick reference table on our website: bepmarine.com

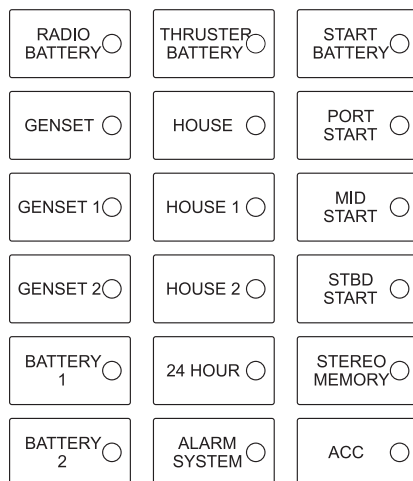
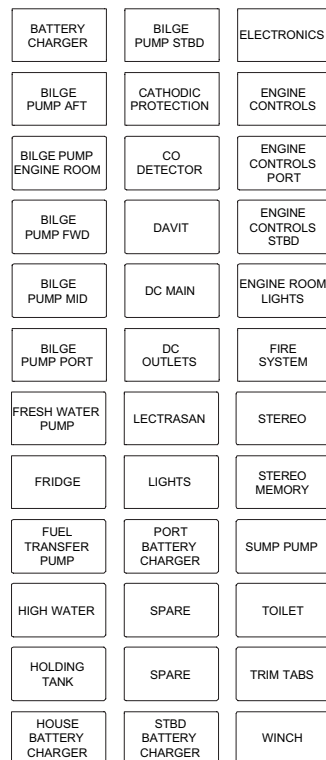
Battery Switches 701-720**713**

Some labels can be purchased separately under the following item numbers

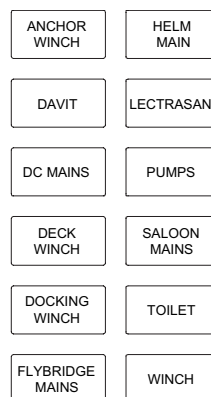
- 1 **713-HB**
- 2 **713-PS**
- 3 **713-SS**
- 4 **713-EP**
- 5 **713-BT**
- 6 **713-SB**
- 7 **713-MS**

SET-715

SET-715 contains the 3 most commonly requested labels out of set 713 without the need to purchase a full label set.

Battery Control Center**SET-CC-BCC-1****Circuit Breaker Modules****SET-CC-1**

SET-CC-1 labels are supplied standard with any 800 series module containing toggle or push reset circuit breakers.

Heavy-duty Circuit Breaker Modules**SET-CC-A**

SET-CC-A labels are supplied standard with any 800 series module containing the heavy-duty Busman circuit breaker.

Spray-Proof Panels Generation II (145)

Label Set
SET-G2-1

ACCESSORIES
AERATOR
ANCHOR LT
BAIT TANK
BILGE PUMP
AUTO B/P MAN
BLOWER
CABIN LIGHTS
COCKPIT LTS
DC OUTLETS
DECK WASH
DN WINCH UP
ELECTRONICS
ENGROOM LTS
FLOOD LIGHTS



FW PUMP
FRIDGE
GPS
HORN
INST. LIGHTS
INSTRUMENTS
NAV LIGHTS
RADIO
SW PUMP
SPOT LIGHTS
UP PORT DN
UP STBD DN
WIPER

Label Set
SET-G2-2

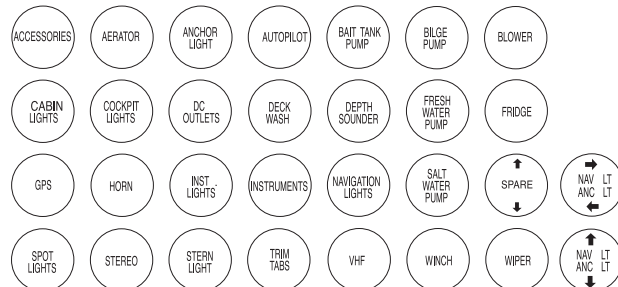
B/PUMP PORT
B/PUMP STBD
B/PUMP FWD
B/PUMP MID
B/PUMP AFT
B/PUMP ENG RM
COMPASS LT
DECK LTS
STEAMING LT
NAV LTS PT
NAV LTS STBD
STEP LTS
STERN LT
WIPER PT
WIPER MID



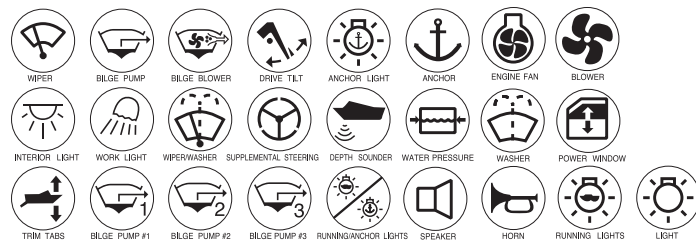
WIPER STBD
WASHERS
FREEZER
H/TANK PUMP
SUMP PUMP
LOCKER LTS
PANEL LTS
TRI LT
BOW LTS
SHOWER LT
SHOWER PUMP
SPARE
SPARE

Sprayproof Switch Panels - Micro

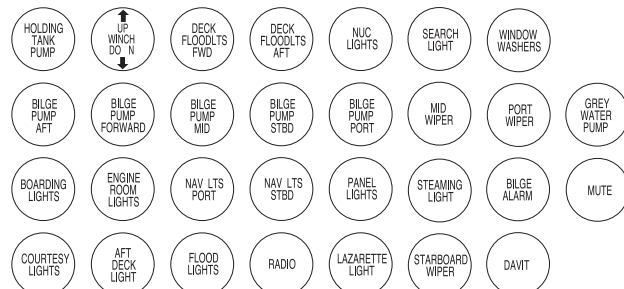
LBL-MIC1



LBL-MICSYM

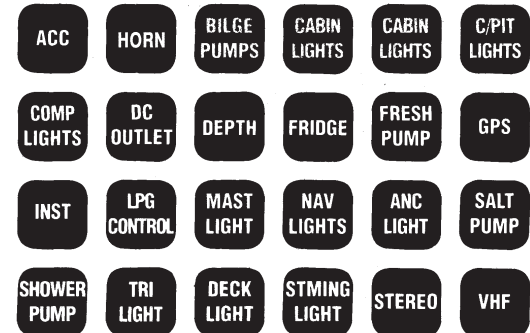


LBL-MIC2



Contour Interior Series Monitor Panels

SET-1001



SET-1002



Custom Panel Layouts

Although the panels shown in this catalog are our standard range, there are a number of changes that can be made to fit the needs of custom and production boatbuilders. For example,

a panel can be made up with eight circuit breakers, four systems in operation lights plus a meter, or a panel can consist of a mixture of analog and digital meters if required.



See label index starting on page 139

Circle your selections:								
Voltage:	AC	DC	12V	24V	110V	230V		
Backlighting:	12V	24V						
Meters:	Yes	Blank						
Digital:	ACSM (page 192)	DCSM (page 191)	600-VM3	600-TG	600-SOM			
Meter Position:	1	2	3	4				
Anlg Volts DC:	8-16	16-32		Meter Position:	1	2	3	4
Anlg Amps DC:	0- 50	0-100	0-150	Meter Position:	1	2	3	4
Anlg Volts AC:	0-150	0- 300		Meter Position:	1	2	3	4
Anlg Amps AC:	0-60	0-100AAC		Meter Position:	1	2	3	4

If the panel involves a total custom layout, as described above, a specific Item # will be applied to that panel and quoted accordingly.









































































If the design is unable to be achieved we will notify the customer.

Alternatively a customer may request a standard panel with circuit breakers laid out to their requirements with labels factory fitted. This involves a personalized layout charge with the following part numbers applying, eg:

901V is ordered as NPF-901V.

902A-12V-12V is ordered as NPF-902A-12V-12V

When ordering personalized panels see our label selection that starts on page 139. We can also do specific label sets, priced per-job.

METER POSITION 1		METER POSITION 2		METER POSITION 3		METER POSITION 4	
	CONTROL 		CONTROL 		CONTROL 		CONTROL 
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
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<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>	

Contour Generation II

The Contour Generation II Spray Proof Range offers unique styling using the latest techniques in injection molding. The switch tray is molded plastic with a rubber gasket and seal molded into the plastic. The cover is molded in a clear plastic with a rubber over-mold allowing the flexibility to operate the switches through the front of the panel while providing a clear window for label backlighting. The contour wave strip is interchangeable allowing for custom colors for OEM applications. Standard color supplied is black panel with charcoal strip.

G2 can be mounted vertically or horizontally and is available in 2, 4 and 6 way configurations.

A joiner (CG2-JB) is available for multiple panel installations. Supplied complete with on/off switches, these can be interchanged with a variety of different switch options.

- Replaceable clip-on contour wave (customized colors available for OEMs)
- Mounting screws covered by switch cover
- Backlit LEDs
- Flexible overshoot cover allows for easy switch operation
- Ribbed gasket provides watertight seal with switch cover
- Molded gasket on panel base creates watertight seal against mounting surface
- Unique design allows labels to be read whether mounted vertically or horizontally.
- Switches rated at 16A DC
- Panel supplied standard with label SET-G2-1 (labels SET-G2-2 ordered separately, page 143)



Switches	Color	Fuses	Label Sheet	Item #
2	Black	No	SET-G2-1	CG2-2W
2	Black	1	SET-G2-1	CG2-2W-F
4	Black	No	SET-G2-1	CG2-4W
4	Black	2	SET-G2-1	CG2-4W-F
6	Black	No	SET-G2-1	CG2-6W
6	Black	3	SET-G2-1	CG2-6W-F
2	White	No	SET-G2-1	CG2-2W-W
2	White	1	SET-G2-1	CG2-2W-F-W
4	White	No	SET-G2-1	CG2-4W-W
4	White	2	SET-G2-1	CG2-4W-F-W
6	White	No	SET-G2-1	CG2-6W-W
6	White	3	SET-G2-1	CG2-6W-F-W

Available upon request: Different custom color combinations for Contour strip and rubber over-mold.



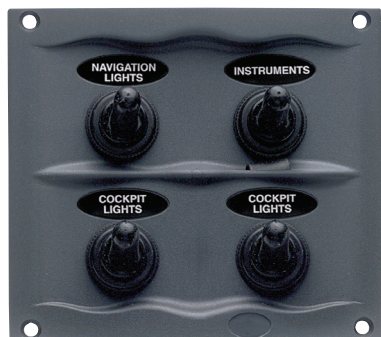
Spare Switches for Contour Generation II

Item #	Switch type
SW-CG1	On/Off
SW-CG2	On/Off Momentary
SW-CG3	On/Off/On
SW-CG4	Momentary On/Off/ Momentary On
SW-CG5	On/On

Waterproof Series

- Compact panel size
- Sprayproof inline fuse holders with fuses included
- Waterproof power receptacles (16A) in five and three way models
- Waterproof to IP56
- Switches rated at 20A DC
- LxWxH is 3.75"x4.25"x2.9" (95x107x75 mm)
- Panel supplied with label LBL-WP

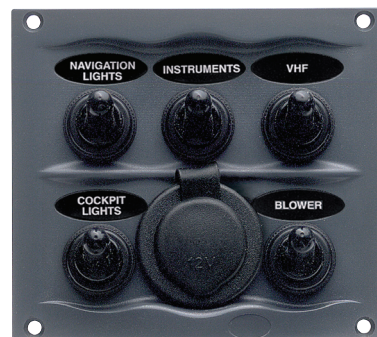
Switches	Color	Item #
3	black	900-3WPS
	white	900-3WPSW
4	black	900-4WP
	white	900-4WPW
5	black	900-5WPS
	white	900-5WPSW
6	black	900-6WP
	white	900-6WPW



900-4WP



900-6WPW



900-5WP

Micro Series

- Green LED backlit labels; red when on
- Full range of text or graphic labels available; mix n' match labels and panels to suit
- Switches rated 20A DC
- 3.4"x2.3"x1.2" (86x58x28 mm)
- Waterproof to IP56
- Label see LBL-MIC included; additional label sets available



900-2WPOFO



900-2WP
2 x 2 way switches



900-2WPMOM



900-SOP
2 x 10 mm LEDs showing systems in operation



900-BA
Bilge alarm and bilge pump control panel includes: 1 on/off/on switch for auto manual control; 1 warning light and alarm for high water level alarm. (Float switch ordered separately – Item # SB1-FS)

Contour Switch Panel

- CSP6-PTC uses the latest in overload protection technology - Positive Temperature Co-efficient
- Green LED backlit labels; red systems on indicator
- Switches rated 20A DC
- Removable cover plates conceal screws & water drain
- Label set SET-1SP included, additional label sets available, see page 141
- **CSP6** Includes 6 switches unfused for installation where separate fused supply is available.
- **CSP6-F** Includes 6 switches and 3 inline fuse holders with fuses behind panel.
- **CSP6-PTC** fuses are solid state resettable fuses which change to a high resistance device on over-current. The panel is supplied with 6 x 9A PTC fuses mounted internally. No more changing fuses!

Item #	in LxWxH	mm LxWxH	Label Sheet	Fuses	PTC
CSP6	6.25"x4.4"x2.5"	158x112x65	SET-1SP	No	No
CSP6-F	6.25"x4.4"x2.5"	158x112x75	SET-1SP	3	No
CSP6-PTC	6.25"x4.4"x2.5"	158x112x75	SET-1SP	No	6

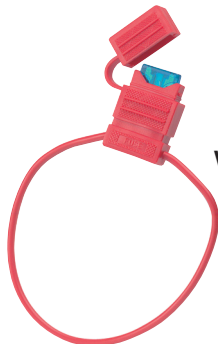
**CSP6****Spare Parts**

Compatible with Waterproof and Micro Series panels (opposite page) and Contour Switch Panel above.

Item #	Description	Operation
SW-32111	Switch	on/off
SW-32113	Switch	on/on
SW-32114	Switch	on/off/on
SW-32115	Switch	(on)off/momentary
SW-32120	Switch	(on)off(on) momentary
SW-32123	Switch	on/off/on double pole
SW-M331	Boot	Splash proof cover
12VPG	Deluxe 12 volt plug	
12VCR	Deluxe 12 volt receptacle	
WAFH-14	Inline ATC fuseholder	

**SW-M331****12VCR****12VPG**

See page 38 for product details and OEM versions

**WAFH-14**

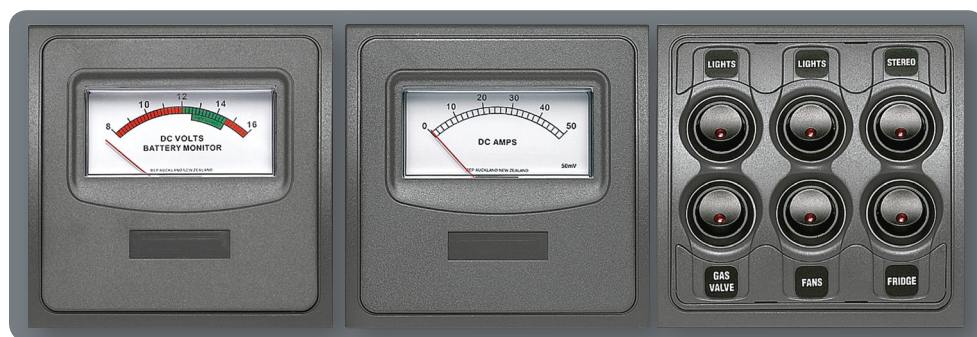
Contour Interior Switch Panel 1000 Series

The smart, economical interior option for smaller vessels. Fully modular and built with ease of access in mind.

- Removable frame conceals mounting screws
- Concealed ATC fuses accessible from front of panel; ATC fuses supplied
- 16A rocker switches
- Panels are modular and square for vertical or horizontal stacking.
- LED Systems On light
- Supplied with: Spacer for accurate mounting placement, label sheet Item # SET-1000
- Maximum panel load 50A



Item #	Switches	Fuses	Voltage
1000-6W	6	6	12



1000-VM-12V Voltmeter

1000-AM50 Ammeter

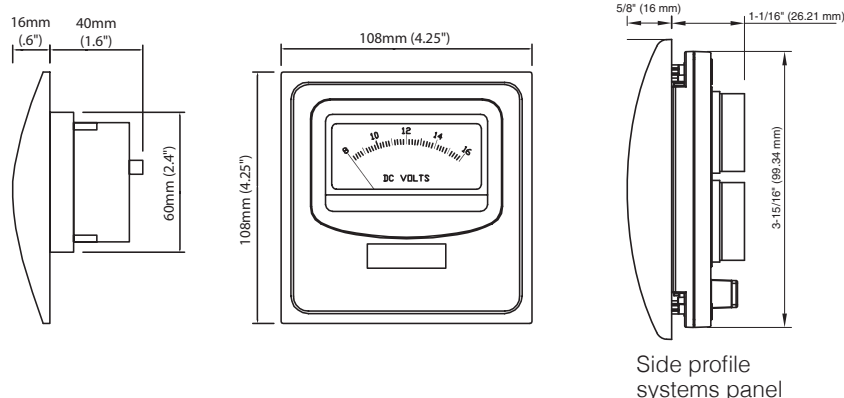
1000-6W Switch Panel



SW-RVS2
ON/OFF

Description	Item #
10A Ammeter (internal shunt)	1000-AM10
20A Ammeter (internal shunt)	1000-AM20
50A Ammeter (external shunt, supplied)	1000-AM50
12 Volt Systems	1000-VM-12V
24 Volt Systems	1000-VM-24V
DC Systems Monitor	1000-DCSM
AC Systems Monitor	1000-ACSM

NEW Now available with digital
AC and DC systems monitors



Contour 1100 Series

The Contour Interior switch can be either surface or recess mounted.

The interior series is supplied standard with a three terminal on/on switch which can be used for on/off circuits or two way light installations. For applications, eg: shower drain pumps or electric toilets, momentary switches can be interchanged into the switch plate.

Switches can be turned 90° for horizontal mounting, and all are current rated at 10A DC.

All switches include a label sheet

For reference, see page 141

Replacement and/or different Operational Switch

Description	Item #
On/On (On/Off)	SW-6064B3P
On/Off/On	SW-6064C3P
On/Off Spring-loaded in "on" position	SW-6064D3P



Item #	1100-BK	1101-BK	1101-BK-TS
Interior/Exterior	Interior	Interior	Exterior
Single/Double	Single	Double	Double
Rated	10A	10A	20A
LxWxH	2.4"x1.2"x0.75" 60x30x18 mm	3.6"x1.2"x0.75" 91x30x18 mm	3.6"x1.2"x0.75" 91x30x18 mm

NEW 12 & 24V Push-button Switches & Buzzers with LED Ring

New push-button Switches & Buzzers are built to last with their stainless steel components and silver alloy contacts. The through panel mount switches are ideal for lighting, switch, or dash panels, with colored rings that can be wired to either display power to the system or switch back lighting. The product line includes both switches and warning buzzers with LED light rings.

Features & Benefits:

- Maximum switch current rating 5 Amps
- IP67 environmental protection switches
- IP50 environmental protection buzzers
- 80 decibel buzzer sound intensity



Volts	Description	Color	Item #
12V	Latching On/Off	Red LED	80-511-0001-01
	Latching On/Off	Blue LED	80-511-0003-01
	Momentary (On)/Off	Red LED	80-511-0002-01
	Momentary (On)/Off	Blue LED	80-511-0004-01
	Buzzer	—	80-511-0009-01

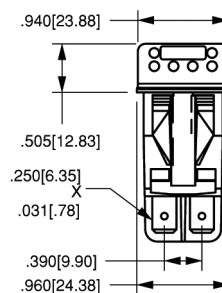
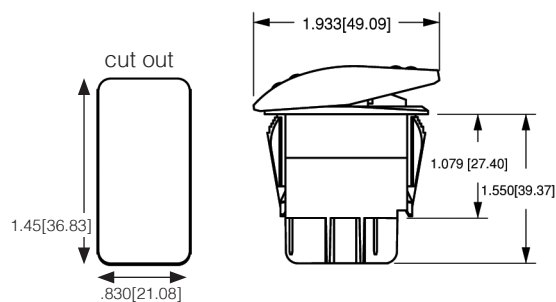
Volts	Description	Color	Item #
24V	Latching On/Off	Red LED	80-511-0005-01
	Latching On/Off	Blue LED	80-511-0007-01
	Momentary (On)/Off	Red LED	80-511-0006-01
	Momentary (On)/Off	Blue LED	80-511-0008-01
	Buzzer	—	80-511-0010-01

Sealed Rocker Switches UL 1077 Recognized

- Certified for prolonged submersion under pressure (front panel sealing) and UL Ignition Protected. Certified to IP66/IP68.
- Withstands extreme temperatures from -40°C to + 85°C.
- Endurance: 150,000 cycles minimum. Rating: 20A at 12V, 10A at 250V AC, 15A at 125V AC

without Light

Description	Function	Item #
Single Pole Single Throw	on-off	554010
	(on)-off	554022
Single Pole Double Throw	on-off-on	554026
	(on)-off-(on)	554028
Double Pole Single Throw	on-off	554030
	on-on	554038
Double Pole Double Throw	on-off-on	554033
	(on)-off-(on)	554035

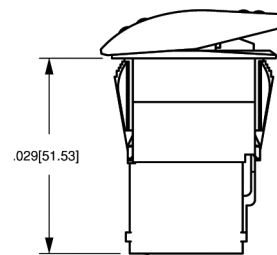


with Light

Description	Function	Item #
Single Pole Single Throw	on-off	554024
	(on)-off	554011
Single Pole Double Throw	(on)-off-on	554012
	on-off-on	554027
	(on)-off-(on)	554029
	on-off	554032
Double Pole Double Throw	on-off-on	554036
	(on)-off-(on)	554016



Red Lens, Clear Lamp



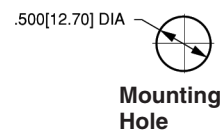
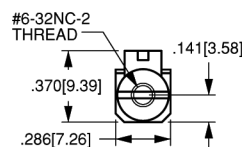
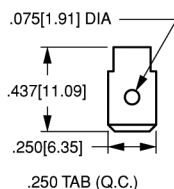
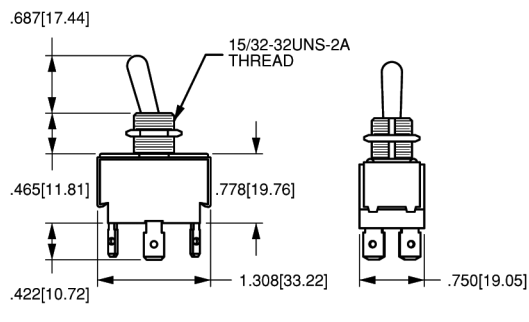
(on) = Momentary

Nylon Toggle Switches UL 1077 Recognized

- Rating: 10A at 250V AC, 15A at 125V AC

Toggle Style	Description	Function	Item #
Paddle w/ 1/4" Tab 6.4 mm	Single Pole Single Throw	on-off	556010
	Single Pole Double Throw	(on)-off-(on)	556028

(on) = Momentary

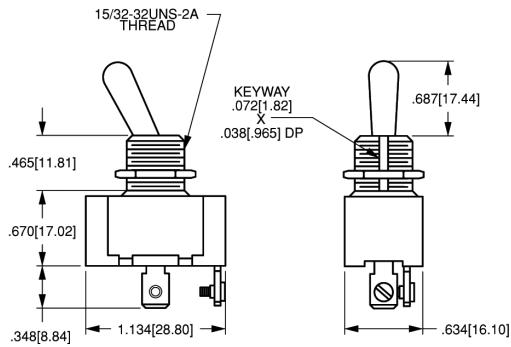
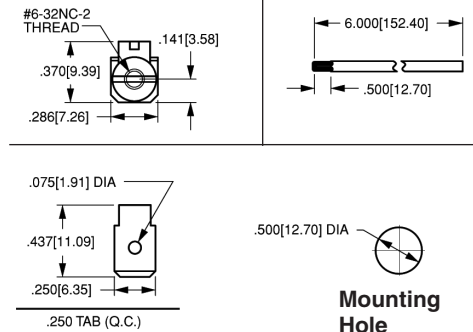


Nickel Plated Brass Toggle Switches UL 1077 Recognized

- Rating: 10A at 250V AC, 15A at 125V AC

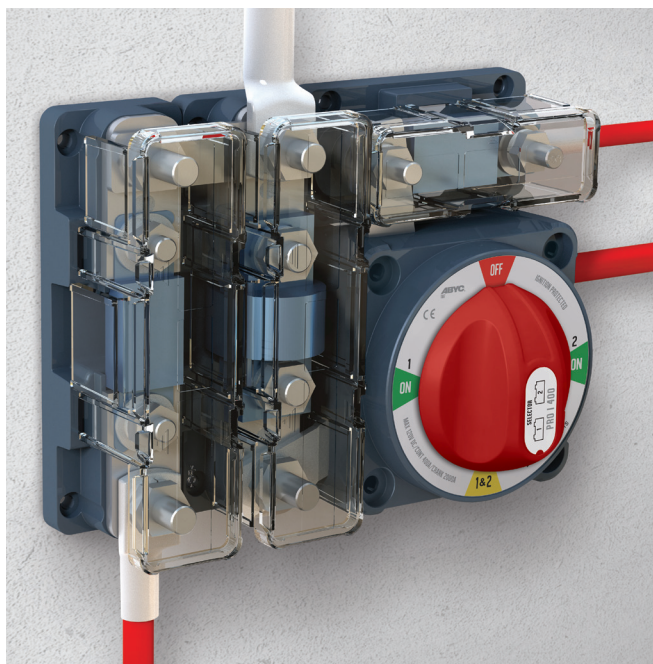
Toggle Style	Description	Function	Item #
Bat w/ 1/4" Tab 6.4 mm	Single Pole Single Throw	on-off	555010
		(on)-off	555022
	Single Pole Double Throw	(on)-off-on	555025
		(on)-off-(on)	555028

(on) = Momentary

**Terminal Type****Mounting Hole****Waterproof Toggle Switch Boot** UL 1077

- For use with Nickel Plated Toggle Switches
- Black
- Pkg qty 5

Item # 555105



Pro Installer Series

Onboard power demands continue to increase as boaters request the comforts of home on their boats. Marincó and BEP looked at the common products used by electrical installers every day and made significant improvements to their design and construction. The result is a robust product line with greater capacity and extended product life.

The valuable space saved onboard gives builders or installers greater flexibility when designing power systems. Since Pro Installer modular assemblies are designed for fast, flexible installation in tight spaces, it's easy to "cluster" products and reduce their mounting footprint. The common interconnection height enables solid link bars to connect multiple Pro Installer products — a smart design feature for watercraft. Like all Marincó products by BEP, you can be assured of durable construction engineered specifically to handle the challenging marine environment. High-temperature, fiber-reinforced base material provides strength and chemical resistance.

All Pro Installer products include a common interconnection height, label recess on the cover, ability to "cluster" and a compact footprint. All studs, washers and nuts are made of stainless steel.

See page 100 for Pro Installer Battery Switches to complete your cluster.

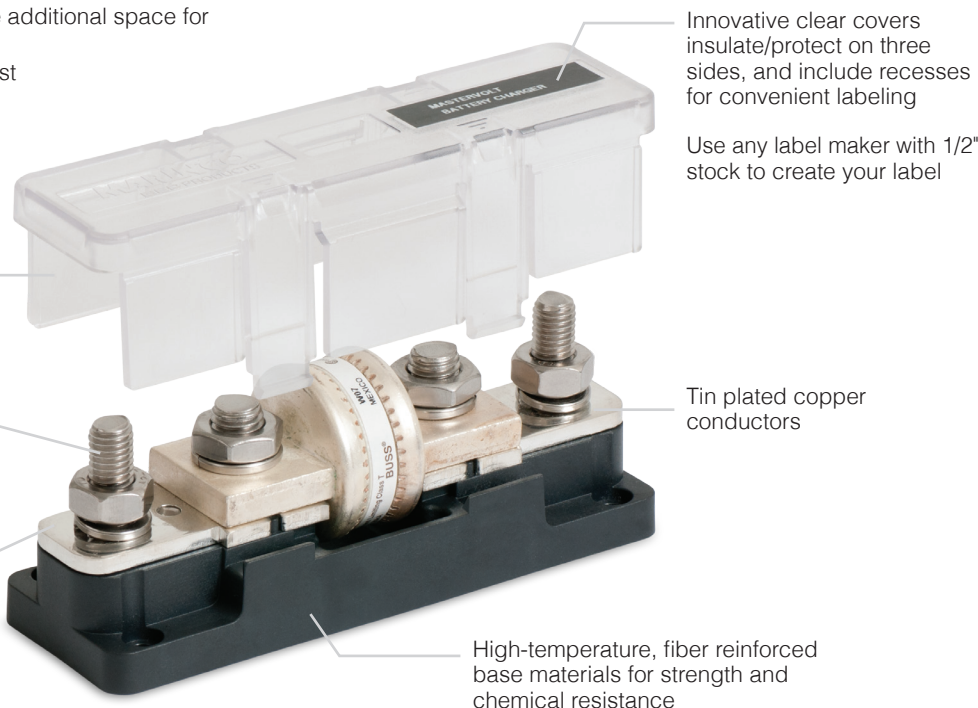
Features and Benefits:

- Common interconnection height makes it easy to 'cluster' products
- Modular assemblies offer unrivalled flexibility in design/layout
- Reduced individual footprints save additional space for the most compact installations
- Robust construction for the harshest of marine environments

Covers feature snap-out side skirts for additional cable entry as required

Stainless steel studs, washers and nuts

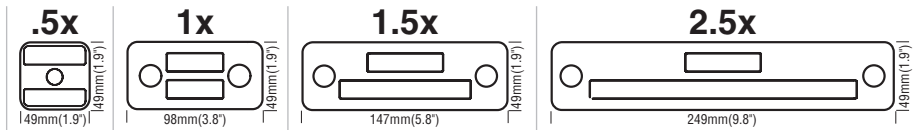
Radiused bar ends and generous stud lengths improve cable routing options for large cables



Typical Cluster example



Product Footprints



Heavy-duty Busbars

777-BB4S-500	4 Stud		✓		
777-BB3S-650	3 Stud		✓		
777-BB5S-650	5 Stud			✓	
777-BB8S-650	8 Stud				✓

Z Busbars

777-Z10W-200	10 Way		✓		
777-Z18W-200	18 Way			✓	

ANL Fuseholders

778-ANL	ANL		✓		
778-ANL2S	ANL with additional cable clamping studs			✓	
778-ANLTP	ANL Through Panel		✓		

Class-T Fuseholders

778-T2S-400	225-400A			✓	
778-T2S-600	450-600A			✓	

Insulated Studs

IST-8MM-1S	Single 8mm	✓			
IST-8MM-2S	Double 8mm	✓			
IST-10MM-8MM	Double 10mm/8mm	✓			
IST-10MM-1S	Single 10mm	✓			
IST-10MM-2S	Double 10mm	✓			
IST-8MM-1SPT	Single 8mm with power tapping plate	✓			
IST-10MM-1SPT	Single 10mm with power tapping plate	✓			

NEW Heavy-duty Busbars

Pro Installer Heavy Duty Busbars provide a robust means to connect (bus) together the multitude large cables found in modern electrical installations. These offer unrivaled flexibility to meet the requirements of any installation, saving significant cost and space.

Specifications:

- 4 Stud-500A busbar: 8 mm (5/16") stainless steel studs
- 3, 5, and 8 stud-650A busbars: 10 mm (3/8") stainless steel studs
- Studs treated with anti-seize lubricant
- 50 VDC
- Tinned CDA102 Copper conductors
- Stainless steel studs, washers, nuts for longevity in the marine environment
- Generous stud lengths, metric threads

Description	Item #	Footprint*
3 Stud Busbar	777-BB3S-650	1 x
4 Stud Busbar	777-BB4S-500	1 x
5 Stud Busbar	777-BB5S-650	1.5 x
8 Stud Busbar	777-BB8S-650	2.5 x

* See page 153 for Footprint details



NEW Z Busbars

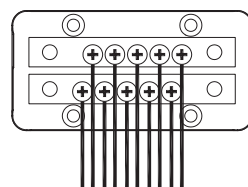
Marinco BEP Products have created a completely new concept for small cable termination with the Z-Bar range. These busbars maximize power density by utilizing high and low level bars to optimize cable runs, saving even more installation space.

Specifications:

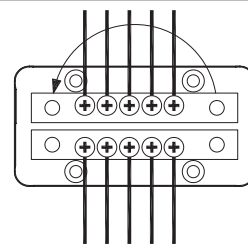
- 10 Way and 18 Way versions
- 4x 6 mm (1/4") studs with anti-seize lubricant
- 4mm (5/32") terminals with captive lock washers
- 200A maximum per bar (2x 200A)
- 50 VDC
- Tinned CDA102 Copper conductors
- Stainless steel studs, washers, nuts for longevity in the marine environment
- Metric threads

Description	Item #	Footprint*
10 way, Z Busbar	777-Z10W-200	1 x
18 way, Z Busbar	777-Z18W-200	1.5 x

* See page 153 for Footprint details



Cable Entry Same Side



Cable Entry Both Sides
(Rotate Top Bar 180°)

NEW ANL Fuse Holders

These ANL fuseholders offer unparalleled circuit protection choice for both the installer and end-user. The innovative Through-Panel fuseholder (778-ANLTP) provides superior access for fuse inspection and replacement. Small electrical loads are catered to with the compact 778-ANL unit while additional cable security and highest capacity is provided by the 778-ANL-2S, featuring additional studs for separate clamping of cables.

Specifications:

- Cable connection studs: Shared 8mm (5/16") on 778-ANL.
- 10mm (3/8") studs on 778-ANL-TP and 778-ANL-2S
- Fuse mounting studs: 8mm (5/16")
- Double washers allow any ANL fuse brand to be fitted
- Fuse type: ANL or ANN (fast blow)
- Swinging fuse style allows changing fuse without removal of fastening nuts
- Amperage: determined by fuse sizing, 778-ANL: 35-300A, 778-ANL2S: 35-750A, 778-ANLTP, 35-500A
- 50 VDC (or determined by fuse fitted)
- Tinned CDA102 copper conductors 778-ANL-2S
- Tinned CDA260 high conductivity brass conductors 778-ANLTP



See page 121 for ANL fuses.

Description	Item #	Footprint*
Fuseholder, ANL	778-ANL	1 x
Fuseholder, ANL with additional cable clamping studs	778-ANL2S	1.5 x
ANL Through Panel	778-ANLTP	1 x

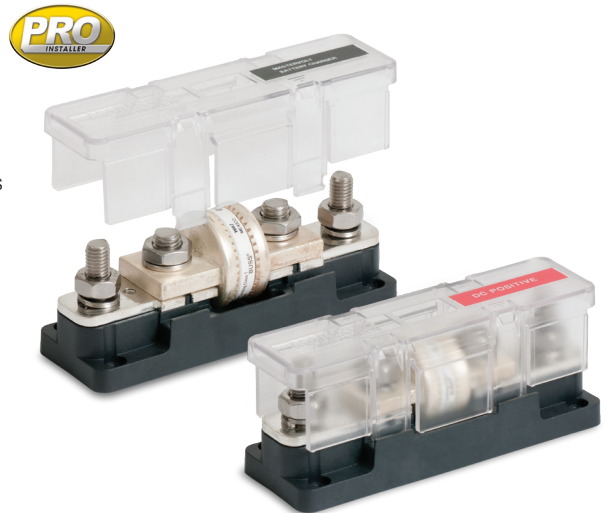
* See page 153 for Footprint details

NEW Class-T Fuse Holders

Class-T fusing provides the ultimate protection for high power circuits, and where extremely fast fuse blow characteristics are required. Modern battery technologies such as Mastervolt Lithium Ion or AGM are capable of very high short circuit currents which may be beyond the interrupt rating of standard circuit breakers and other types of fuse. Two sizes of Pro Installer Class-T Fuseholder are available which accommodate fuses from 225-400 Amps, and 450-600 Amps respectively.

Specifications:

- Cable connection studs: 10 mm (3/8") studs
- Fuse mounting studs: 10 mm (3/8") 225-400A holder, 12 mm (1/2") 450-600A holder
- Fuse type: Class-T (JLLN / TJN / A3T)
- Maximum amperage: Determined by fuse sizing, either 400A or 600A
- 50 VDC
- High temperature, fibre reinforced plastic base provides strength and chemical resistance
- Clear polycarbonate cover
- Tinned CDA102 Copper conductors
- Stainless steel studs, washers and nuts for longevity in the marine environment
- Metric threads



See page 121 for Class T fuses.

Description	Item #	Footprint*
Fuseholder, Class-T 225-400A	778-T2S-400	1.5 x
Fuseholder, Class-T 450-600A	778-T2S-600	1.5 x

* See page 153 for Footprint details

NEW Insulated Studs

Pro Installer Insulated studs are available in single and twin stud versions, featuring 8 mm (5/16") and 10 mm (3/8") variants. A double stud version with 10mm and 8mm studs is also included for extending outboard motor cables. The Power Tapping Plate single stud models provide convenient termination points for additional small cables. Pro Installer family features are replicated with these insulated studs, generous stud length, modular footprint, insulating covers with label recess, common interconnection height.

Specifications:

- Power tapping plate: 4x 4 mm (5/16") terminals
- Maximum current through power tapping plate: 50A per terminal (4x 50A maximum)
- Note: no power passes through the stud so no amp rating is given
- 50 VDC
- High temperature, fibre reinforced plastic base provides strength and chemical resistance
- Clear polycarbonate cover with snap-out extra cable access
- Stainless steel studs, screws and nuts for longevity in the marine environment
- Insert moulded studs with metric threads
- Double studs feature 'snap out' insulating partition, to allow linking of studs



IST-10MM-8MM



IST-8MM-1SPT



IST-10MM

Description	Item #	Footprint*
Single 8mm	IST-8MM-1S	0.5 x
Double 8mm	IST-8MM-2S	0.5 x
Double 10mm/8mm	IST-10MM-8MM	0.5 x
Single 10mm	IST-10MM-1S	0.5 x
Double 10mm	IST-10MM-2S	0.5 x
Single 8mm with power Tapping Plate	IST-8MM-1SPT	0.5 x
Single 10mm with power Tapping Plate	IST-10MM-1SPT	0.5 x

* See page 153 for Footprint details

Insulated Studs & Covers

- Made with high temperature plastic bases
- Stud covers push securely over the threaded stud covering to ABYC standards
- Dual studs ideal for +ve / -ve connections, branch circuits, windlass or inverter installations.
- Covers supplied with display versions.



IS-6MM-1



IS-10MM-1



IS-6MM-2

Studs

Item #	OEM #	Stud Size	Polarity
Single Studs			
IS-6MM-1R/DSP*	IS-6MM-1R	1/4" / 6 mm	Positive
IS-6MM-1/DSP*	IS-6MM-1	1/4" / 6 mm	Negative
IS-10MM-1/DSP*	IS-10MM-1	3/8" / 10 mm	Negative
Dual Studs			
IS-6MM-2/DSP*	IS-6MM-2	2 x [1/4" / 6 mm]	

*Item #'s come with cover, OEM #'s do not.

Covers

Item #	Description
ISC-10R	Red positive 10 mm
ISC-10BK	Black negative 10 mm
ISC-6-2	Double 6 mm



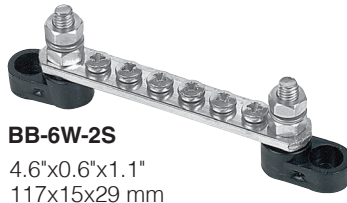
ISC-10BK



ISC-6-2

Bus Bars

- Now with easy-fit covers to ABYC standards, with polarity ID
- 5/32" (4 mm) stainless steel screws with shakeproof washers
- 2 x 1/4" (6 mm) input studs
- Tin-plated, brass-insulated mounting bases with recessed mounting holes to avoid accidental shorts on aluminum surfaces
- Supplied standard with all BEP™ AC & DC control panels
- Display pack versions supplied with cover



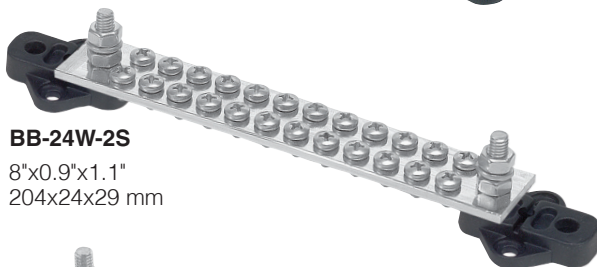
BB-6W-2S

4.6"x0.6"x1.1"
117x15x29 mm



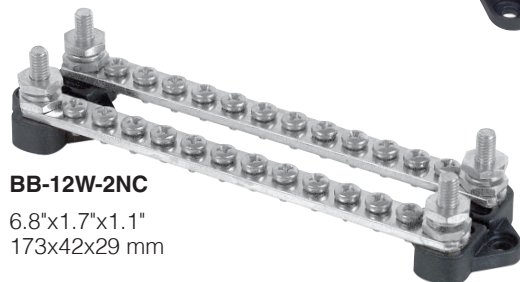
BB-12W-2S

7"x0.6"x1.1"
177x15x29 mm



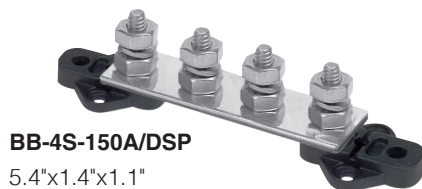
BB-24W-2S

8"x0.9"x1.1"
204x24x29 mm



BB-12W-2NC

6.8"x1.7"x1.1"
173x42x29 mm



BB-4S-150A/DSP

5.4"x1.4"x1.1"
138x35x29 mm

Item #	OEM #	Bus Type	Output screws	Input studs	Rating (A)
BB-6W-2S/DSP	BB-6W-2S	Single	6	2	100
BB-12W-2S/DSP	BB-12W-2S	Single	12	2	100
BB-24W-2S/DSP	BB-24W-2S	Single	24	2	150
BB-6W-2NC/DSP	BB-6W-2NC	Double	2 x 2	2 x 6 way	100
BB-12W-2NC/DSP	BB-12W-2NC	Double	2 x 12	2 x 12 way	100
BB-4S-150A/DSP	—	4-way	1 x 4	4 x 6 mm (1/4 stud)	150

Bus Bar Covers

- Flame-resistant flexible plastic
- Color-coded for polarity
- Unique push-on fit
- Supplied standard with bus bars when ordered in display packs (for bulk packaging ordered separately)

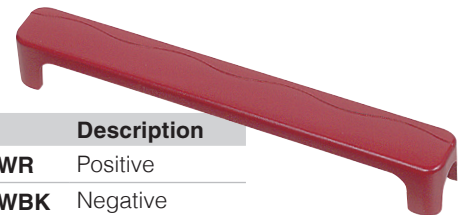
6 W

Item #	Description
BBC-6WR	Positive
BBC-6WBK	Negative



12 W

Item #	Description
BBC-12WR	Positive
BBC-12WBK	Negative



24 W

Item #	Description
BBC-24WR	Positive
BBC-24WBK	Negative



Terminal Blocks

Ideal for isolated connections up to 30A. Suitable for connecting tails from AC and DC panels.

Base material: Phenolic; Current rating 30A; Max. voltage rating: 300V AC/DC; Screw size: 0.25" (6.3 mm)

Item #	Description
TB-118-6P	6 connections
TB-118-10P	10 connections

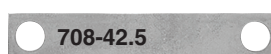


Distribution Stud

The Contour Distribution Stud allows terminating of heavy-duty cables for one or more connections. Contour Lock housing has removable side plates which allows for connections from all sides.



702



708-42.5

19 mm
Suits 701



708-62.0

25 mm
Suits 720



Terminal Links

The 708 links are designed for space saving interconnections of terminals when battery distribution modules are linked together. Four standard solid links are available for interconnection of the 701 battery switch with other Battery Distribution products and two larger links which are intended for the heavy-duty battery switch.

Item #	Distance between centers		Hole diameter	
708-42.5	1.7"	43 mm	3/8"	10 mm
708-54.5	2.2"	55 mm	3/8"	10 mm
708-64.5	2.6"	65 mm	3/8"	10 mm
708-68.5	2.7"	69 mm	3/8"	10 mm
708-62.0	2.45"	62 mm	1/2"	12 mm

Dual Distribution Stud

Designed specifically for transom areas for connecting battery cables from outboards. It also has many other applications where heavy-duty positive and negative connections need to be terminated.



702-2S



Secondary Bus

Fitted to Distribution Stud 702 allows for small wire connections without cluttering main stud. Terminal screws 1/8" (4 mm).

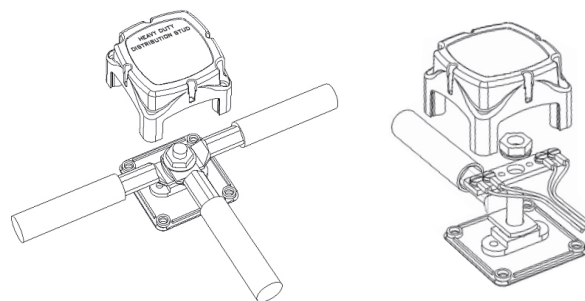
Item # 702SB

Four Way Distribution Stud

The 704-4S was designed for multiple heavy-duty connections which need to be isolated from each other. This model completes the range of heavy-duty connectors and meets ABYC standards for exposed terminals.



704-4S



Description	Stud Size	Item #	OEM #	LxWxH	
Distribution Stud	10 mm, 3/8"	702	702B	2.75"x2.75"x2"	69x69x50 mm
	1 x (8 mm, 5/16")	702-8	702-8-B	2.75"x2.75"x2"	69x69x50 mm
Dual Distribution Stud	2 x (10 mm, 3/8")	702-2S	702-2S/B	2.75"x2.75"x2"	69x69x50 mm
	1 x (8 mm, 5/16")	702-8-10	702-8-10-B	2.75"x2.75"x2"	69x69x50 mm
	1 mm x (10 mm, 3/8")				
Four Way Distribution Stud	4 x (10 mm, 3/8")	704-4S	704-4S/B	5.3"x2.75"x2"	138x69x50 mm
	10 mm, 3/8"	704-ANL	704-ANLB	5.3"x2.75"x2"	138x69x50 mm

The patented Contour Locking System is an innovative feature that allows for multiple battery management components to be connected to each other providing for a clean finished installation. These locking tabs can be found on battery switches, heavy-duty buss bars, fuse holders, distribution studs and breaker modules.



Circuit Breaker Module

Provides 3 CBs ideal for medium duty loads, like waste treatment systems and electric toilets. Designed to separate these loadings from the main DC panel, avoiding voltage spikes. Supplied standard with 1 x 50A and 2 x 25A B Series CBs in a Contour Lock housing for easy modulation. Extra CBs available (124).

Labels ordered separately: SET-714.

Item # 707



24hr Essential Circuit Module

Designed for smaller systems where only 2 circuit breakers are required. Supplied with 2 x 10A Carling CLB Series circuit breakers – push to reset.

Item # 706-2W



24hr Service Circuit Breaker Module (4W)

Consists of one 5A and three 15A push to reset Carling CLB Series thermal CBs. Suitable for essential circuits such as bilge pump, auto float switch supplies and stereo memory circuits. The push to reset function ensures essential 24hr circuits cannot be switched off inadvertently. This is contained in the contour lock double module. For spare circuit breakers see 125.

Labels: SET-714

Item # 706-4W

OEM # 706-4WB

Item #	OEM #	Rating (A)	in LxWxH	mm LxWxH	Stud Size
707	—	1 x 50A, 2 x 25A	5.4"x2.71"x3"	138x69x75 mm	3/16" 5 mm
706-4W	706-4WB	1 x 5A, 3 x 15A	5.4"x2.71"x3"	138x69x75 mm	5/32" 4 mm
706-2W	—	2x10A	2.71"x2.71"x2.75	69x69x70 mm	5/32" 4 mm



Mastervolt transfer systems: Regulates 120V & 230V power sources

The Mastervolt transfer system helps you regulate your shore, generator or inverter power and automatically selects the right power sources at the right time. With Mastervolt you can cook and do laundry at the same time or watch TV with the airco on full blast. In addition, Mastervolt transfer systems are suitable for every installation. Mastervolt makes onboard 230V a breeze.

Masterswitch: The simple solution

- Two AC inputs: Inverter, shore power or generator.
- One outlet to AC power group.
- Automatic switching.
- Power transfer up to 25 kW, input/output from 20–125A.
- Can be combined with circuit breakers (Masterswitch Fuses).
- Functional casing.

Mass Systemswitch: The complete system solution

- Three 230V inputs: Inverter, shore power and generator.
- Three or four outlets to 230V power groups.
- Automatic switching.
- Power transfer from 4.5–16 kW, input/output from 25–63A.
- Information source for central energy management via the MasterBus data network.
- Optional automatic fuses; for larger systems this usually requires an extra casing.
- Luxury C-casing or installation casing (System Manager model).
- MasterBus compatible.

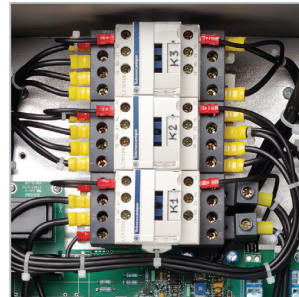
The Mastervolt transfer system controls the following:

- Switching on and selecting 230V sources: Shore power, inverter and generator (adjustable to amperage of shore power, for instance 6A).
- Stable transfer to connected groups.
- Prevents damaging contact between the inverter and other 230V sources.
- Fully compatible with Mastervolt systems, and suitable for installations from other brands, other generators and/or inverters.



LED indications on Systemswitch

Read out of the basic functions on the display, including indication of available power source, generator, shore power or inverter and 'load on inverter' function.



Smart electronics

The intelligent electronics control the switching to ensure equipment does not use too much power. Its double-pole relay is sustainable and incredibly safe.



Central energy management

The MasterView Easy indicates AC current, amperage and frequency including the 'load on inverter' mode. The 12/24V read out shows current, power (charge/discharge) and battery monitoring, and has a start/stop generator.



Suitable for MasterBus

As the Mass Systems Switch is suitable for MasterBus, all the information can also be read out on, for instance, a MasterView display, including the status of the charge current and the inverter.


Masterswitch
5 kW

Masterswitch
10 kW

Masterswitch
25 kW

Masterswitch
Fuses 5 kW

Item #	55006010	55006015	55003500	55006060
Input				
Nominal input voltage	230V (50/60Hz)	230V (50/60Hz)	230V (50/60Hz)	230V (50/60Hz)
Input voltage range	200-250V AC	200-250V AC	200-250V AC	200-250V AC
Number of inputs	2	2	2	2
Number of outputs	1	1	1	2
Dimensions, hwxwd	7.9"x4.3"x4.5" 200x110x115 mm	7.9"x4.3"x4.5" 200x110x115 mm	11.5"x9.5"x6.6" 291x241x168 mm	7.9"x10"x4.5" 200x255x115 mm
Weight	2.6 lbs / 1.2 kg	2.9 lbs / 1.3 kg	8.4 lbs / 3.8 kg	4.6 lbs / 2.1 kg
Version				
With automatic circuit breakers	no	no	no	no
Connection for remote control	no	no	no	no
MasterBus compatible	no	no	no	no
LED indication on cabinet	no	no	no	no
Nominal input current generator	20A	40A	125A	16A
Nominal input current shore	20A	40A	125A	16A
Nominal input current inverter	n.a.	n.a.	n.a.	20A
Earth leakage switch	n.a.	n.a.	n.a.	yes (1x)
Generator input switch	no	no	no	no
Time delay generator input	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)
Output				
Nominal current shortbreak output	n.a.	n.a.	n.a.	6A + 6A + 6A
Nominal current power output	20A	40A	125A	6A + 10A
Nominal current generator output	n.a.	n.a.	n.a.	n.a.
Automatic circuit breakers	no, system dependent	no, system dependent	no, system dependent	yes
Technical Specifications				
Power consumption (AC all inputs)	7VA	7VA	26VA	7VA
Power consumption (only inverter power)	no load consumption	no load consumption	no load consumption	no load consumption
Temperature range (specified)	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C
Temperature range (allowed)	-25°C to 70°C (may not meet the specified tolerances)			
Temperature range (storage/non operating)	-60°C to 80°C	-60°C to 80°C	-60°C to 80°C	-60°C to 80°C
Relative humidity	maximum 95%, non condensing		maximum 95%, non condensing	
Transfer time	switch on 12-22 ms / switch off 4-19 ms		switch on 12-22 ms / switch off 4-19 ms	
Frequency watch	no	no	no	no
Mechanical				
Cable size	0.5-10 mm²/AWG 20-7	0.5-10 mm²/AWG 20-7	4-50 mm²/AWG 10-1/0	0.5-10 mm²/AWG 20-7
Protection degree	IP55	IP55	IP55	IP55

* Also available in 9 kW, Item # 55106200. Specifications identical to 7 kW, except current is 80A.

For detailed specifications, scale drawings, 3D files, certificates, manuals and 120V models see mastervolt.us/transfer-systems

Mass Systemswitch
6 kW**55008005**Mass Systemswitch
10 kW**55008105**Mass Systemswitch
16 kW**55008205**Masterswitch
3 kW**55106000**Masterswitch
7 kW**55106100***

230V (50/60Hz)	230V (50/60Hz)	230V (50/60Hz)	120V (50/60Hz)	120V (50/60Hz)
200-250V AC	200-250V AC	200-250V AC	100-125V AC	100-125V AC
3	3	3	2	2
3	4	4	1	1
13.4"x10.3"x5.7" 340x261x144 mm	13.4"x10.3"x5.7" 340x261x144 mm	13.4"x10.3"x5.7" 340x261x144 mm	7.9"x4.3"x4.5" 200x110x115 mm	7.9"x6.1"x5.8" 200x154x148 mm
9.7 lbs / 4.4 kg	10.8 lbs / 4.9 kg	11 lbs / 5 kg	2.6 lbs / 1.2 kg	5.5 lbs / 2.5 kg
no	no	no	no	no
yes	yes	yes	no	no
yes	yes	yes	no	no
indication voltage sources present and 'load on inverter' mode			no	no
25A	40A	63A	25A	60A
25A	25A	40A	25A	60A
25A	25A	25A	n.a.	n.a.
no	no	no	n.a.	n.a.
continuous monitoring of voltage and frequency			no	no
0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)	0-10 sec (adjustable)
25A	25A	25A	n.a.	n.a.
25A	25A	40A	n.a.	n.a.
n.a.	40A	63A	25A	60A
no, system dependent	no, system dependent	no, system dependent	no, system dependent	no, system dependent
27VA	33VA	33VA	7VA	7VA
<1VA	<1VA	<1VA	no load	no load
-5°C to 60°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C
-25°C to 70°C (may not meet the specified tolerances)				
-60°C to 80°C	-60°C to 80°C	-60°C to 80°C	-60°C to 80°C	-60°C to 80°C
maximum 95%, non condensing			maximum 95%, non condensing	
switch on 12-22 ms / switch off 4-19 ms			switch on 12-22 ms / switch off 4-19 ms	
yes	yes	yes	no	no
0.5-10 mm ² /AWG 20-7, remote control: 0.14-2.5 mm ² /AWG 26-13			0.5-10 mm ² /AWG 20-7	0.5-10 mm ² /AWG 20-7
IP23	IP23	IP23	IP55	IP55

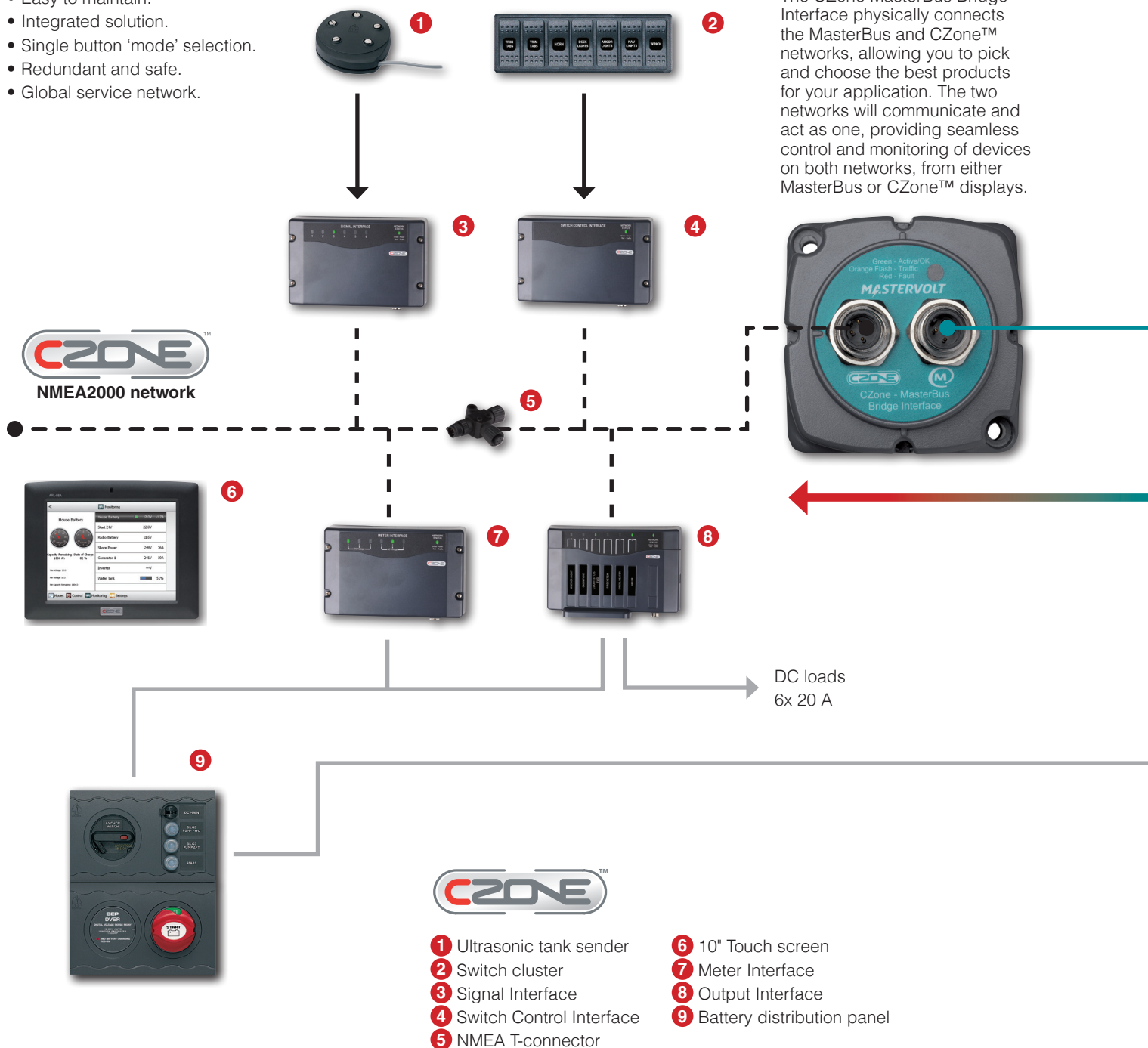
Fully Integrated CZone™ & MasterBus System

Advantages of one system:

- Fewer cables.
- Less weight.
- Installation time savings.
- Increased flexibility in terms of design changes.
- 'Super Yacht' power and load management capabilities.
- Remotely accessible.
- Easy to maintain.
- Integrated solution.
- Single button 'mode' selection.
- Redundant and safe.
- Global service network.

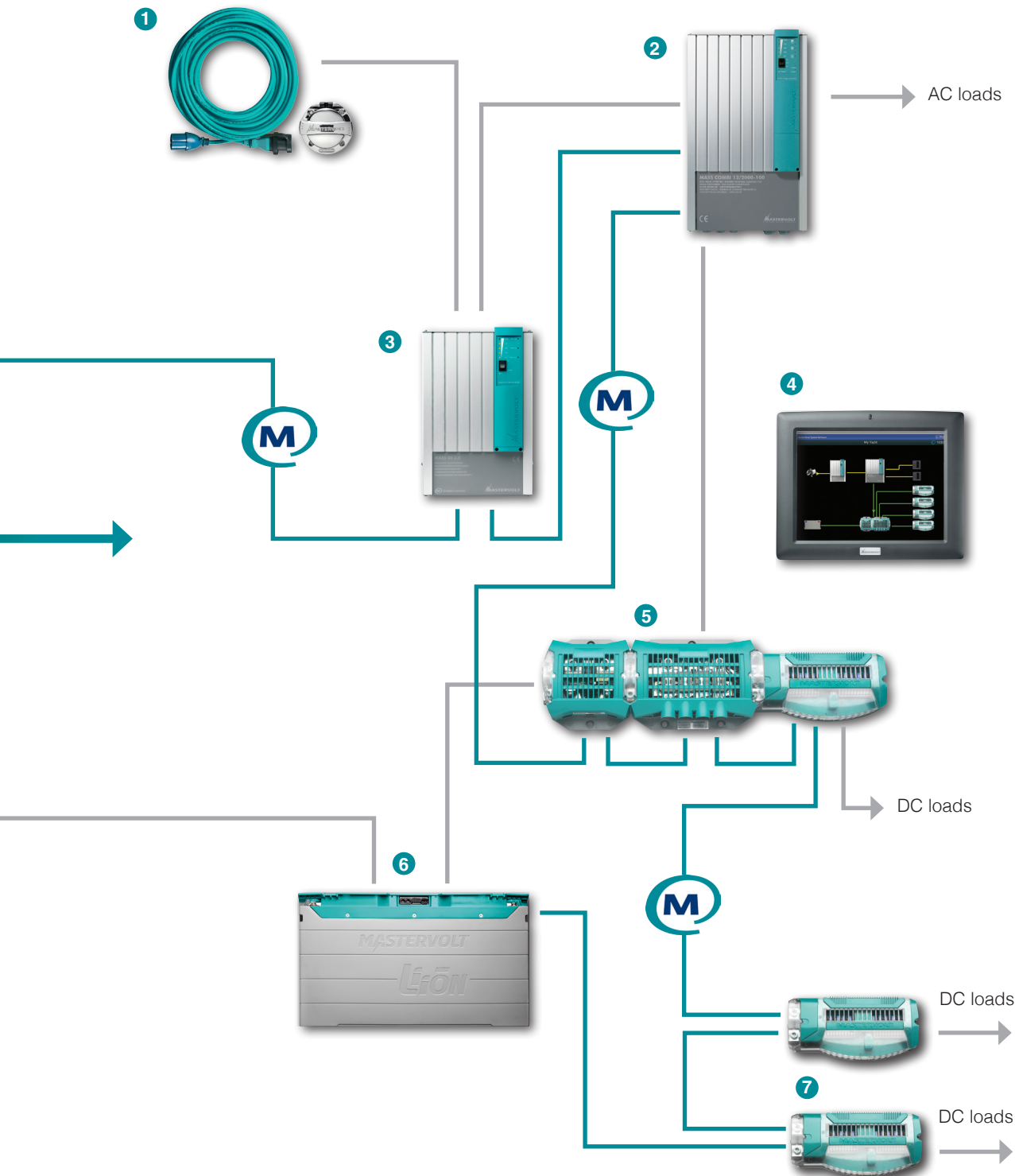
CZone MasterBus Bridge Interface

The CZone MasterBus Bridge Interface physically connects the MasterBus and CZone™ networks, allowing you to pick and choose the best products for your application. The two networks will communicate and act as one, providing seamless control and monitoring of devices on both networks, from either MasterBus or CZone™ displays.





- 1 Shore power
- 2 Mass Combi
- 3 Mass GI isolation transformer
- 4 MasterView System
- 5 MasterShunt, DC Distribution, Digital DC 10x10
- 6 Lithium Ion 12V (service battery)
- 7 Digital DC 10x10





Digital switching, the future is now

By de-centralizing your installation, it is possible to create smarter systems with less cables and installation work. Central switchboards are replaced by de-centralized power outputs, which are controlled via a bus system. These outputs power equipment like lights, pumps and navigation equipment. Different input modules can be connected to this bus as well. These input modules – from switches to touch screen panels – control the output modules. This way you can control your yacht from anywhere, even from your mobile phone via text messages. With digital switching systems you have greater flexibility and more intelligence to be integrated. Without additional components like relays, timer modules and extensive cable trees, it is possible to design a smart system. Digital switching systems result in systems that are easy to operate.

Two platforms one system: MasterBus and CZone™

The CZone™ digital control and monitoring system utilizes the NMEA 2000 architecture for its network, fit as a standalone system or add NMEA 2000 compliant components to build a fully integrated system including the latest Simrad and B&G multifunction marine displays (Chartplotters, fishfinder, radar, Autopilot). Carrying a high Ingress protection level (IPX5 and higher) CZone™ components are ideal for harsh environment installations.

MasterBus is based on the proprietary MasterBus network, used for all Mastervolt products. This system is perfectly suited for integration of Digital switching with the power electronics from Mastervolt.

Both systems can be interconnected via an interface.

The ease of digital distribution

The MasterBus and CZone™ systems bring features and automated functionality normally reserved for superyachts to the everyday boat user. CZone™ and MasterBus systems provide intelligent automation of complex onboard systems leaving the boat user free to enjoy their boating experience.

Customizeable modes of operation allow the boat to be configured to suit the use of the boat, at the push of a single button the boats systems can be transformed from 'Dock Mode' to 'Cruise Mode' preparing the boat for a day at sea.

Thanks to galvanic isolation, nearly all devices can supply power to the MasterBus, ensuring a safe and stable network. The wide range of interfaces and modules allows you to connect any equipment you wish to your MasterBus system and manage, monitor or operate it locally, centrally or even from your home address.

Professional perspective

The MasterBus and CZone™ systems make life easier for designers, builders and installers of power systems with less material, less work, less fuss and an easy testing method. Moreover, the MasterBus system is available in ten languages. Both systems provide a range of displays for controlling and monitoring on board systems such as inverters, chargers, circuits, power and tank levels. The range of displays offer a consistent, intuitive user interface.

Digital switching makes your life easier.

See page 190 for the NEW CZone™-MasterBus Bridge Interface



MasterView Control Panels: Well informed and in full control!



Fast and clear information is essential if you are to enjoy the sun, water, wind and fresh air to the max, either actively or passively. After all, the boat is supposed to be there for you, not the other way round.

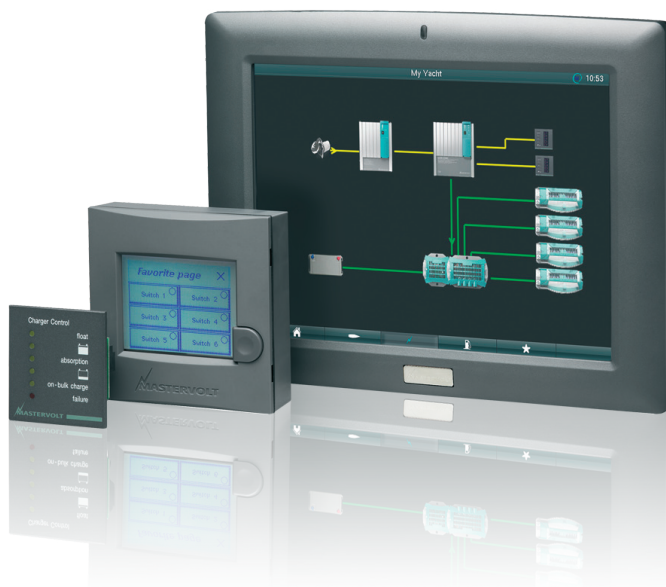
With MasterView panels you only require one panel, even for larger electrical systems, and can save time on making connections, interpreting data and finding the latest system information.

The smartest solution: MasterView System

Mastervolt's intelligent MasterView System brings an end to cluttered, unclear and excessive information. The system is based on our in-house developed software combined with a user-friendly 10.4-inch color touchscreen. The simple yet brilliant set-up of the MasterView System intelligently connects all the power sources and loads (generator, charger, bilge pump, engine, lighting, air conditioning, etc.) via the MasterBus. It provides all the information you need on your electric system in one clear overview on an organized, intuitively operated panel. The MasterView System is the next step up from simpler options such as MasterView Read-out (for load status) and MasterView Easy (status of a limited number of products) in terms of practicality and ease of operation.

Multifunctional touch screen remote panel: MasterView Easy

This multifunctional display can monitor every MasterBus product. Connected to the Mastershunt it functions as a battery monitor, connected to the generator as a generator panel. These and other functions can also take place simultaneously and you can create a favorites page showing all your main information.

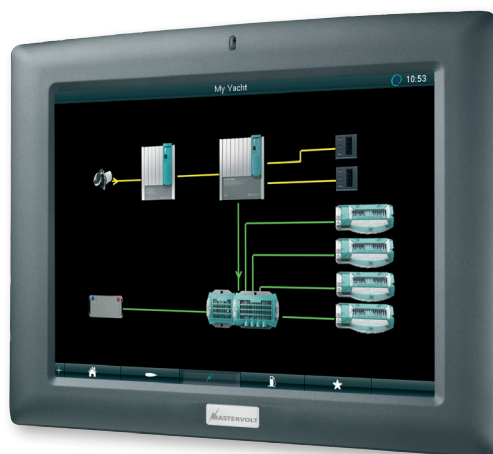




MasterView System

This full color graphical display helps installers to configure the electrical onboard system, and is extremely easy to reproduce. Configuration, monitoring and operation becomes easier, cheaper, lighter, faster & good looking. The software makes complicated electrical systems understandable for ship owners. Electricity has become fun to operate!

Item #	77010400
Display	10.4" colour touch screen
Dimensions, h x w	8.7"x10.8" / 222x276 mm
MasterBus connection	by means of System Panel Controller (delivered as standard)
Power	by means of System Panel Controller (delivered as standard)
Power consumption	28W
Protection degree	IP64 (front)
Weight	3.1 lbs / 1.4 kg
Languages	ENG, NL, DE, SP, IT, FRA, FIN, SWE, DEN, NOR



System overview

This screen gives a dynamic graphical overview of your electric system, answering any questions you have in an instant. Incorrect line voltages are shown in red, inactive circuits in grey: It couldn't be easier.



Home screen

The home screen provides a status overview of power sources like shore connections, inverters, generators and batteries. A basic form of control is possible, for example turning on and off your inverter.



Digital switching screen

This screen shows the layout of your yacht, lights and selected pumps. You manage the loads by clicking the icons. The background image can be uploaded for full customization. Alarm notifications are shown via eye-catching pop-ups.



Tank level screen

Stop guessing and know immediately the contents of up to 20 tanks. You can also install your own warning signals for full or (nearly) empty tanks. All you need to do is connect the MasterBus Tank level Interface to the MasterBus system.



Favourites screen

The favorites screen can be custom designed to meet your specific needs for information and control. Any information that is available on the MasterBus network can be shown in the most logical way. Multiple pages can display information, for example, one overview page, one or two breaker pages, an engine information page and a NMEA2000 information page.



System Panel Controller

- Connect the MasterView System or your PC with the MasterBus network.
- Provides the power and software license key for the MasterView System panel.
- Delivered as a standard with MasterView System (also separately available).

Item # 77031900



MasterView Easy

Control panel for all MasterBus products

This touch screen panel offers excellent readability and easy operation. The grey button allows you to turn the display on and off or (un)lock the touch screen. Further operation is via the touch screen. The first (of three) operation level shows a quick system overview - the information you need on a day-to-day basis. Product overview & configuration offers more detailed information and the option to change settings. As the MasterBus plug & play connection offers both data and power, only one cable is needed to connect the panel.

Benefits:

- Clearly lit display.
- Push button for on/off and blockade for unwanted operation.
- Touchscreen operation for all functions.
- White background lighting - red colour for alarm function or night lights.
- Buzzer and alarm function.
- Installation requires only one MasterBus cable for both data and power supply.
- Low power consumption.
- Easy to install, the panel can be flush and surface mounted.

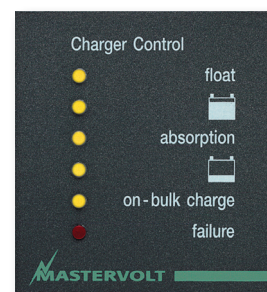
Item #	77010305
Display	3.5" touch screen
Dimensions, h x w	4.3"x4.3" / 110x110 mm
MasterBus connection	yes
Powered by	MasterBus
Power consumption	160 mW
Protection degree	IP21
Weight	0.51 lbs / 230 gr
Languages	ENG, NL, DE, SP, IT, FRA, FIN, SWE, DEN, NOR



MasterView Read-out

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

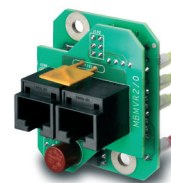
Item #	77010050
Display	7 LEDs
Dimensions, h x w	2.4"x2"x6" / 60x65 mm
MasterBus connection	yes
Powered by	MasterBus
Power consumption	144 mW
Protection degree	IP21
Weight	0.15 lbs / 70 gr



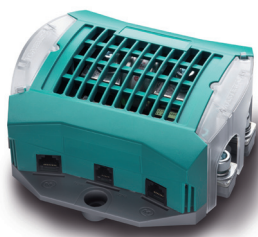
MasterView Read-out OEM

If your dashboard is full and does not offer space for a MasterView panel, this module allows you to integrate the MasterBus Read-out into your own control panel.

Item # 77010030



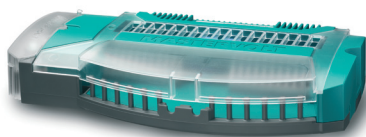
The MasterView series will be expanded in the course of 2011. For more information, see mastervolt.com/masterview.



MasterShunt

This ultra-modern battery monitor provides detailed information on the status of your batteries, including voltage, current, remaining time and used capacity in percentages so no more unpleasant surprises. With an intelligent connection system, the MasterShunt is easily connected to the DC Distribution. The integrated system clock combined with command-based events automates your system according to your needs. A good example of such system automation: The generator should start automatically when the batteries are almost depleted. The MasterShunt also has a built-in robust main fuse that can safely break short-circuit currents of 50,000 amps.

	MasterShunt 500
Item #	77020100
Dimensions, hwxwd	5.9"x5.9"x2.5" / 150x150x65 mm
Weight	2.2 lbs / 1 kg
Battery types	gel, AGM, wet, Lithium Ion, spiral
Battery voltage	12, 24 or 48V DC
Current	300A continuous / 500A for 5 minutes
MasterBus powering	yes
Main fuse	500A T-fuse (300A continuous at 40 °C)
System functionality	alarm, timers, auto start/stop for the generator
Programmable alarms	warning low voltage, warning low state of charge, high voltage
Protection degree	IP21
Delivered with	MasterShunt, temperature sensor, MasterBus Terminator, MasterBus cable, cable protections for DC connections



Digital DC 10x10A

As the pinnacle of system intelligence, the Mastervolt Digital DC 10x10A has ten 10A outputs for all functions including lighting, pumps or electronics. It comes standard with intelligent alarm functions and luxury options include:

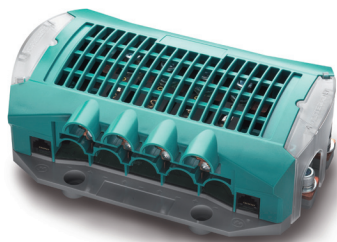
- Follow me home (light stays on for a specific time after you leave the vessel).
- (Delayed) dimming of lights (including ten built-in dimmers).
- Alarm signal for overload.
- Every output has a hardware and software fuse.
- Reset the fuses via the MasterBus network.
- Possibility of higher currents (up to 100A) with parallel switching of multiple outputs.

	Digital DC 10x10A
Item #	77020400
MasterBus powering	yes
Power consumption	<2 mA at 12V / <2 mA at 24V (off board situation)
Protection degree	IP21
Weight	1.7 lbs / 750 gr
DC Output	
Connection	cable max. 4 mm ²
Maximum software fuse current	10A per channel
Hardware fuse current	15A per channel
DC Input	
Connections	max. 95 mm ² or directly connected to MasterShunt or DC Distribution
Maximum current	100A
Supply voltage	8-30V DC

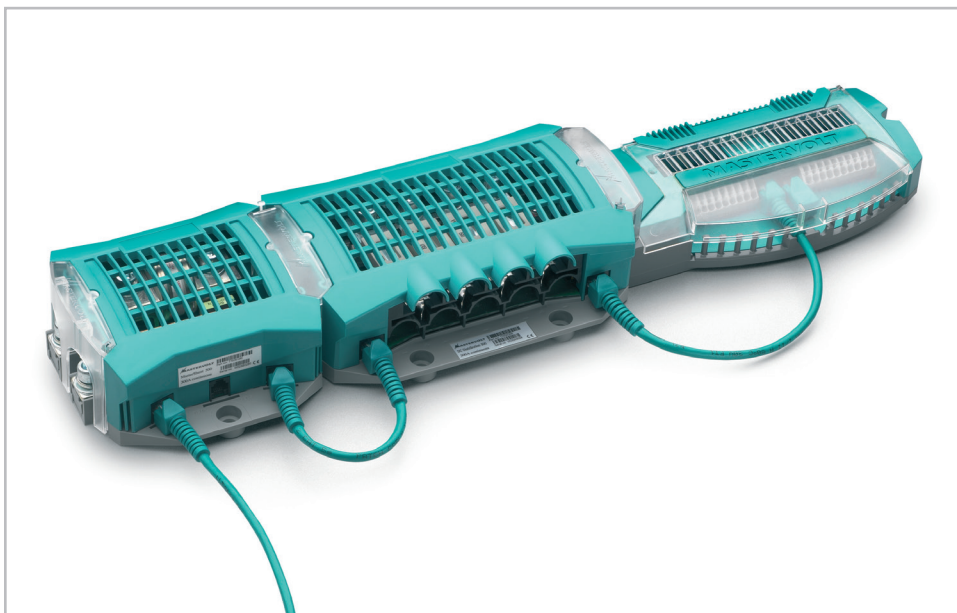


DC Distribution 500

The DC Distribution 500 is the smallest distribution model available. It connects up to four DC devices to the DC groups, such as a battery charger, inverter, alternators and solar panels. With the included plug & play cable it can be easily connected to the MasterBus network. The MasterView panel gives all fuses logical names, for instance, referring to the connected equipment, to ensure you receive understandable error notifications (for example: battery charger fuse defect).



	DC Distribution 500
Item #	77020200
Dimensions, hwxwd	5.9"x7.9"x2.5" / 150x216x65 mm
Weight	2.6 lbs / 1.2 kg
Battery voltage	12, 24 or 48V DC
Current	300A continuous / 500A for 5 minutes
MasterBus powering	no
Standard fuses	80, 80, 125, 160A - ANL type (deviating values can be ordered separately)
Spare fuse	125A ANL type
Alarm	fuse monitoring
Protection degree	IP21
Delivered with	5 fuses, hex tool, MasterBus Terminator, MasterBus cable, cable protections for DC connections





MasterBus Interfaces



The special MasterBus Interfaces increase the versatility of your MasterBus network. Connect multiple components to distribute information to your MasterBus products or connect products that require information from the MasterBus network, such as a NMEA2000 or Modbus network, and vice versa.

All interfaces (and modules) can be installed in various ways, from DIN rails to surface mounting. Available in ten languages: English, Dutch, German, French, Spanish, Italian, Norwegian, Swedish, Finnish and Danish.



USB Interface

Allows you to read and configure your MasterBus system from your PC.

Item # 77030100



Modbus Interface

The MasterBus Modbus Interface can provide all information from the 'closed' MasterBus network for other monitoring and operating systems by means of the Modbus protocol.

Item # 77030800



Inverter Interface

The MasterBus Inverter Interface integrates the Mastervolt Mass Sine inverter in a MasterBus network and allows it to be operated and monitored via MasterView or PC.

Item # 77030700



Combi Interface

This interface integrates a Mastervolt Mass Combi in a MasterBus network and allows it to be operated or monitored via a MasterView panel or PC.

Item # 77030475



Serial Interface

The MasterBus Serial Interface connects conventional Mastervolt products to the MasterBus. Data becomes permanently available to allow configuration, operation and monitoring via MasterView panels.

Item # 77030450



NMEA2000 Interface

The MasterBus NMEA2000 Interface provides the MasterBus network with NMEA2000 information, and vice versa.

Item # 77031800

Specifications for MasterBus Interfaces on page 174.



GPRS Module

The GPRS module communicates with your vessel via mobile phone, allowing you to monitor current information or operate the system by remote control via a text message or easy shortcuts. Alarm notifications per text message are optional.

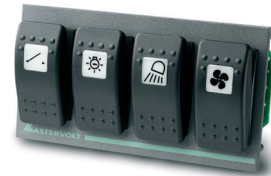
Item # 77031000



Switch Input 3 PCB

The Switch Input 3 makes watertight Carling switches compatible with MasterBus. Multiple functions can be easily linked with this module. Distance between switches is 1.03" (26.1 mm).

Item # 77031300



Switch Input 4 PCB

Provides LED indications for additional information, such as when a light stops working. Distance between switches is 1.07" (27.3 mm).

Item # 77031400



Digital Input

Connect up to four switches to the MasterBus network. Delivery includes cables from interface to switches.

Item # 77030900



Digital AC 1x6A

The Digital AC 1x6A switches all AC loads up to 6A directly and higher loads via a relay, anywhere on board. Max. relay current is 6A (230V AC single pole).

Item # 77031500



Multipurpose Contact Output

This programmable free switch contact provides your MasterBus network with unprecedented options, such as controlling a ventilator in the engine room or operating a generator from a different brand. Potential free contact is NO-C-NC - 1A / 30V DC.

Item # 77030500



Tank Level Interface

This interface converts analogue sensor input signals to MasterBus data. Selectable input signals: 4-20 mA, 0-300 Ω , 8-70V DC.

Item # 77030300



CZone MasterBus Bridge Interface

The CZone MasterBus Bridge Interface physically connects the MasterBus and CZone™ networks together enabling the two networks to communicate and act as one, providing seamless control and monitoring of devices on both networks from either MasterBus or CZone™ displays.

Item # 80-911-0072-00



Repeater

Extends the maximum length of your MasterBus network. With integrated isolated power supply to power the MasterBus.

Item # 77031100

Specifications for MasterBus Interfaces on page 174.

**AC power analyser**

The AC power analyser is a multifunctional measuring device which can visualize the AC current and AC voltage, frequency, Cos Phi and the power of the system. On top of that it features the "inverter control" and a free programmable "potential free contact".

Item # 77031200

**System Panel Controller**

Connect the MasterView System or your PC with the MasterBus network. Provides the power and software license key for the MasterView System panel.

Item # 77031900

MasterBus Interfaces Specifications

Item #	MasterBus powering	Dimensions HxWxD	Weight	Protection Degree	Delivered with
77030100	yes (when the PC is switched on)	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	USB connection cable, MasterBus cable, MasterBus Terminator, user's manual
77030800	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	MasterBus cable, MasterBus Terminator, user's manual
77030700	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	Interface connection cable, MasterBus cable, MasterBus Terminator, user's manual
77030475	yes	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	Interface connection cable, MasterBus Terminator, user's manual
77030450	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	Interface connection cable, MasterBus cable, MasterBus Terminator, user's manual
77031800	no	2.6"x3.1"x1.3" 66x78x32 mm	0.22 lbs ± 100 gr	IP21	NMEA connection cable, MasterBus cable, MasterBus Terminator, user's manual
77031000	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	GPRS antenna, MasterBus cable, MasterBus Terminator, user's manual; SIM card not included
77031300	no	2"x3.4"x2.3" 54x86x58 mm (incl. mounting frame)	0.08 lbs 35 gr (incl. MasterBus Terminator)	IP21	MasterBus Terminator, user's manual; switches and mounting frame not included
77031400	no	2.2"x4.7"x2.6" 56x120x65 mm (incl. mounting frame)	0.1 lbs 45 gr (incl. MasterBus Terminator)	IP21	MasterBus Terminator, user's manual; switches and mounting frame not included
77030900	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	cable with plug, MasterBus cable, MasterBus Terminator, user's manual
77031500	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	MasterBus cable, MasterBus Terminator, user's manual
77030500	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	MasterBus cable, MasterBus Terminator, user's manual
77030300	no	2.6"x3.1"x1.3" 66x78x32 mm	0.18 lbs ± 80 gr	IP21	MasterBus cable, MasterBus Terminator, user's manual
80-911-0072-00	no	2.7"x2.7"x2" 69x69x50 mm	0.32 lbs ± 145 gr	IP65	MasterBus cable adapter, MasterBus Terminator, user's manual
77031100	yes	2.6"x3.1"x1.3" 66x78x32 mm	0.20 lbs ± 90 gr	IP21	MasterBus cable, MasterBus Terminator, user's manual
77031200	no	3.1"x7.1"x1.1" 80x181x28 mm	1.17 lbs ± 530 gr	IP65	MasterBus cable, MasterBus Terminator, current transformer 100:5, user's manual
77031900	yes (when the PC is switched on)	3.6"x7.3"x1.3" 91x185x33 mm	1.65 lbs ± 750 gr	IP65	USB cable, SPC cable, MasterBus cable, MasterBus Terminator, user's manual



MasterBus DIY Kit

Cut your own cables to length and finish, comprising:

- Professional RJ45 crimping tool
- 50 x MasterBus RJ45 connectors
- 50 x green MasterBus RJ45
- protection boots
- 100 m green MasterBus
- CAT5E UTP cable

Item # 77050000

Separately available:

MasterBus RJ45 Connectors

- 8-pole
- 25 pcs

Item # 77040010

Green Isolation Caps for RJ45 Connector

- 25 pcs

Item # 77040015



MasterBus Communication Cable

Suitable for data traffic and powering peripheral equipment, this is the only cable you need for your MasterBus network. MasterBus compatible products come standard with two ports, while other equipment requires an interface. A DIY kit is optional.

Length	Item #
0.2 m	77040020
0.5 m	77040050
1 m	77040100
3 m	77040300
6 m	77040600
10 m	77041000
15 m	77041500
20 m	77042000
25 m	77042500
100 m	77045000



MasterBus Terminator

The Terminators at both ends of the cable ensure interference-free operation, prevent reflection of data signals and ensure high communication speeds.

Item # 77040000



MasterShunt Fuse

The robust fuse (500A/160V DC, 50 kA short circuit current) is suitable for high short circuit currents from the batteries. Spare fuse available separately.

Item # 77049000



DC Distribution Fuses

The DC Distribution standard comes with four ANL fuses: 80, 80, 125 and 160A, and a spare fuse of 125A. Replacement fuses are available with a variety of amp ratings:

Rating (A)	Qty/Pkg	Item #
40	1	77049040
50	1	77049050
60	1	77049060
63	1	77049063
80	1	77049080
100	1	77049100
125	1	77049125
160	1	77049160
175	1	77049175
200	1	77049200
250	1	77049250
300	1	77049300
355	1	77049355
400	1	77049400
425	1	77049425
500	1	77049500



The CZone™ digital control & monitoring system is designed for manufacturers and installers of Marine, RV and Specialty Vehicles. It simplifies installation of electrical systems through the replacement of complicated, cumbersome wiring to switch and fuse panels, with state of the art, robust interfaces and light NMEA 2000 network cable. It also provides the end user a sophisticated solution through the automation of complicated control and monitoring issues associated with today's on board systems.

Installation

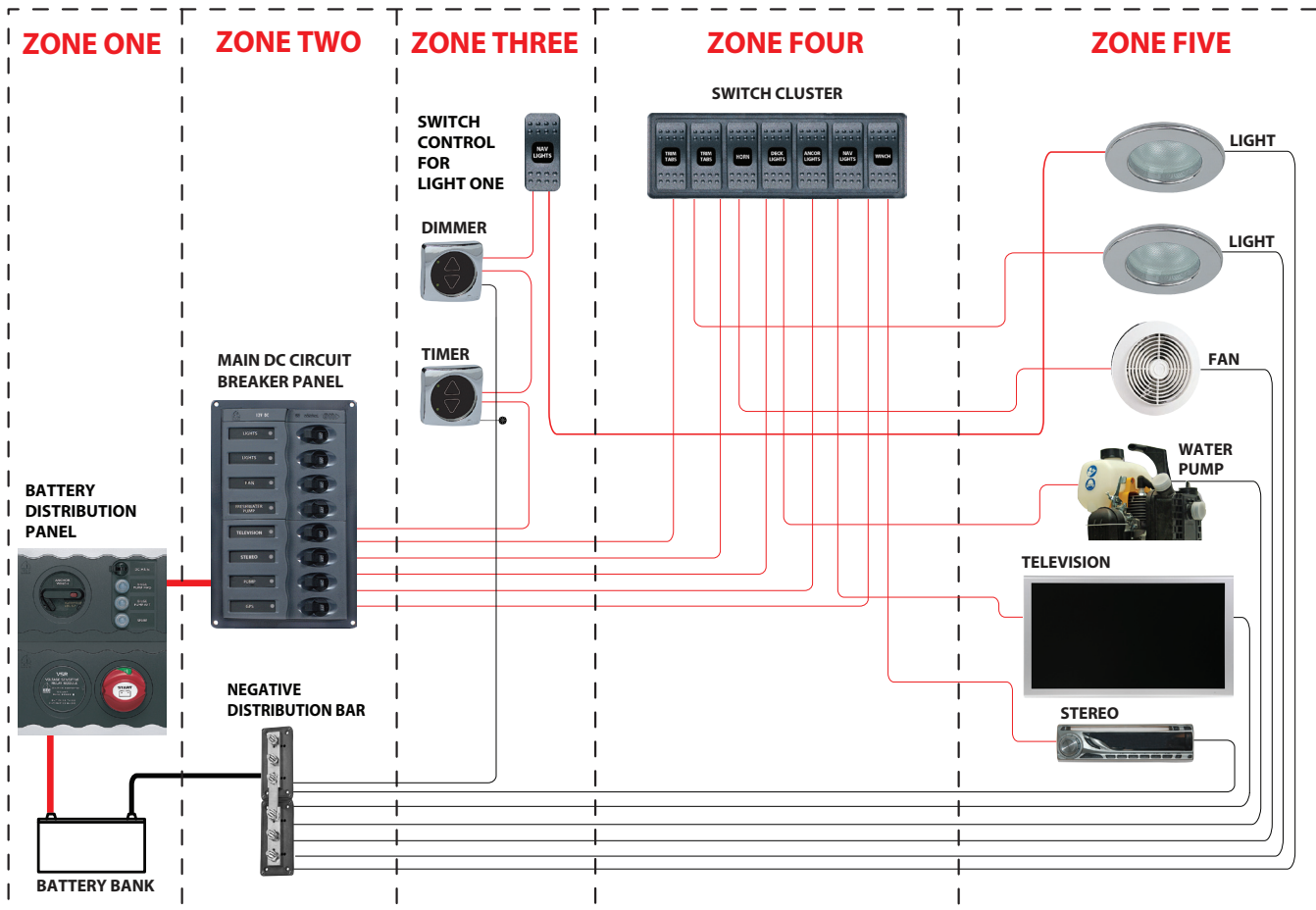
Builders recognize an immediate benefit with reductions in cable usage, harness weights and installation times. The CZone™ system also integrates many stand alone components into one intuitive system. Wiring is dramatically simplified, because the CZone™ system is designed to remove complex switching clusters and wiring runs. Integrated diagnostics ensures fault finding is simple. The CZone™ system is the digital networking system that is both cost-effective and scalable. Modules can easily be added into the system to best suit the OEM and end-users' needs.



Traditional Electrical DC Wiring

Wiring DC systems can be complex and installation time can be extensive. The larger the system, the more wire is required, which creates weight and space concerns, not to mention increased cost and complexity of design and manufacturing. Basic maintenance and trouble shooting of traditional wiring systems can be difficult to manage.

- Switch panel wiring is complicated and extremely labor intensive to install
- Cable runs are long and have multiple conductors. Switching of common circuits is complex
- Long wire runs require larger cable, adding weight, increasing cost and reducing space





Configuration

We provide the tools to help you determine the modules needed based on your specific requirements. Then, simply program with the CZone™ intuitive configuration tool.

Integration

The CZone™ system is NMEA 2000 compliant and uses the standard Micro cables and connectors. Being NMEA 2000 compliant you can have trust in the network. This also allows a single network backbone to be installed for multiple systems (CZone™ and other NMEA 2000 devices). Additionally, the CZone™ system can share certain monitoring functions with other NMEA 2000 compliant screens.

Versatility & Security

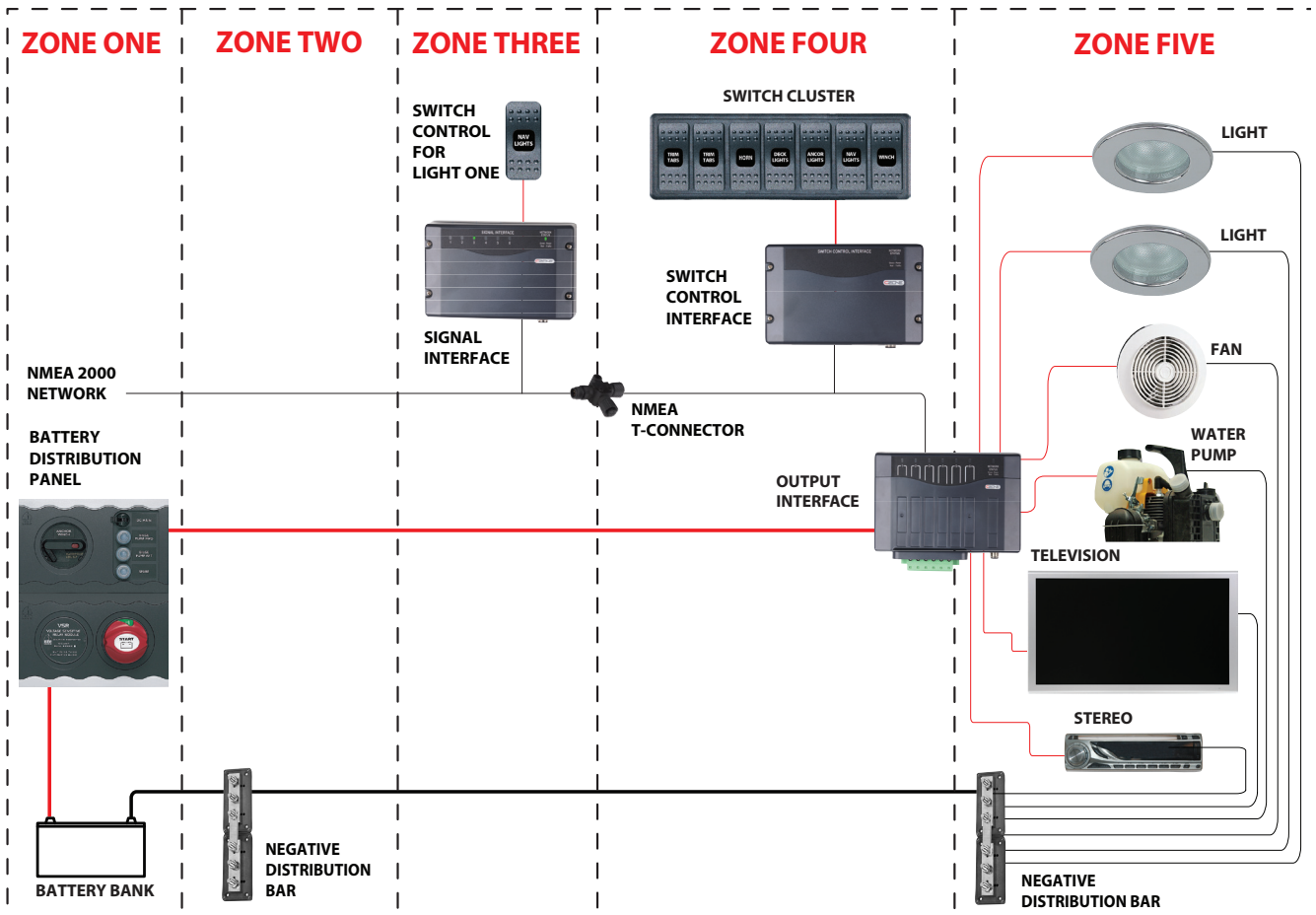
The CZone™ system, designed for 9-32V systems, features built-in timers, dimmers (including support for halogen lighting), alarms, voltage reducers and load shedding. With safety in mind, the CZone™ system features a manual bypass. Our No-Single-Failure-Point technology ensures a plug-n-play system that is designed to handle mishaps. If a module is damaged, the system will automatically program the replacement module, when it is plugged in. This means any module can be replaced without using high tech service people. Our security features allow custom configurations that can be locked.



DC Wiring

The CZone™ system decentralizes the DC power distribution system, locates circuit control and protection modules closer to loads to shorten cable runs and reduce the size of conductors, significantly decreasing the cost and weight of the electrical wiring harness. The system replaces complex wiring with a single data wire.

- Complex switch panel wiring removed, replaced with single data cable connection
- The grouping of multiple loads into common areas (Zones) with Output Interfaces is the key to the system
- Heavy-duty battery mains cable, replaced by multiple smaller conductors





CZone™ LCD Displays

The CZone™ Displays are the interface between the CZone™ network and the user. They offer full control of circuits as well as the ability to view important on board systems information such as tank levels and power levels (for both AC and DC supplies), they also provide audible and visual alarms with systems diagnostics. The displays are extremely intuitive to use with simple controls and a menu structure that is easy to follow.

The “modes of operation” feature allows the control of multiple circuits with a single push of a button. For instance, “night running” mode turns pre-selected lights on to dim levels. These modes are all user configurable. The CZone™ displays can be used to set the CZone™ system parameters for initial installation and future system maintenance (DI only).

3.5" Display Interface

Screen size	3.5" transfective QVGA
Protection	IPX7 water ingress
Dimensions, WxHxD	4.13"x6.5"x2.44" 105x165x62 mm
Power consumption	at 12 V: 180mA (standby 130mA)
Rotary knob for easy menu navigation	



- 80-911-0001-00** black (power cable incl.)
- 80-911-0002-00** gray (power cable incl.)
- 80-911-0003-00** black (interface only)
- 80-911-0004-00** gray (interface only)

8" Touch Screen

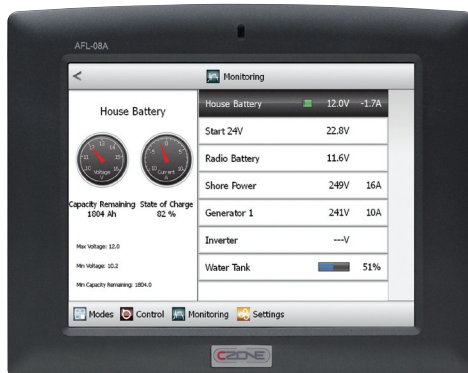
Screen size	8.4" (SVGA)
IP Level	IP64
Dimensions, WxHxD	9.21"x7.24"x1.65" 234x184x42 mm
Brightness (cd/m2)	450
Input voltage	12 V DC
Power Consumption	20 W



80-911-0064-00

10" Touch screen

Screen size	10.4" (SVGA)
IP Level	IP64
Dimensions, WxHxD	10.87"x8.93"x1.99" 276x227x50.7 mm
Brightness (cd/m2)	400
Input voltage	12 V DC
Power consumption	25 W



80-911-0065-00

Power Control

- Turn circuits on and off including timer and light dimming control.
- Set modes of operation.

Monitoring

DC power meter

- Displays voltages of multiple battery banks, includes low and high voltage alarms.
- Displays charge and discharge (amps) of multiple battery banks.
- Displays battery capacity in ampere hours and % charge/discharge, includes low ampere hour alarm.
- Logging of battery minimum and maximum voltage levels.
- Logging of minimum battery capacity level.

AC power meter

- Displays multiple line voltages (230 and 120 V), includes high and low voltage alarm.
- Displays AC line frequencies, includes high and low frequency alarm and AC power consumption in kW.
- Logging of minimum and maximum voltage and frequency levels.
- Logging of maximum AC current.

Tank levels

- View tank level information for multiple tanks and fluid types.

Data

- Displays standard NMEA2000 information.
- Displays temperature and pressure values.

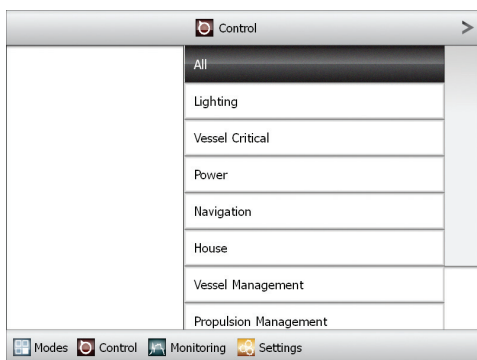
Alarms/diagnostics

- Logging of circuit run time and on cycles.
- CZone™ network status reporting.
- Presents alarms for on board faults in audible and visual form (bilge pump running, smoke alarm).

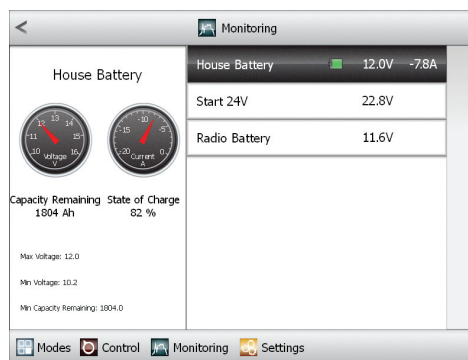


CZone™ LCD Displays

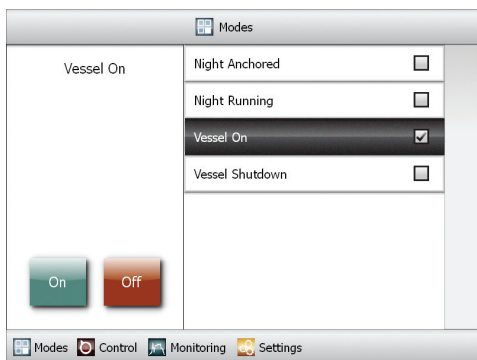
The CZone™ Displays are designed with both the manufacturer and end-user in mind. The easy to use display screens put the control of all components directly at your fingertips. Multiple Display Interfaces can be used in the same system. The scroll and click interface is simple to use in the roughest of seas or bumpiest of roads.



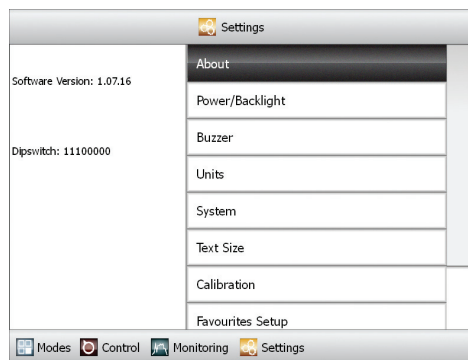
Control: Breaks down the circuits into easy to identify groups for quick control, i.e. to turn on fresh water pump open “pumps” group. User can open pumps group and select fresh water pump. This screen also allows the user to monitor the status of the circuit i.e. on, off, fault and current draw.



Monitoring: Allows user to easily monitor AC and DC power, tanks, data, alarms, and circuit status. Presents data in analog and digital form.



Modes: Key to the ease of operation. With one key press the user can turn on a group of circuits, without having to scroll, search for, and turn on the individual circuits that they need for operation of their vessel/vehicle. When leaving vessel or vehicle, simply press “systems off” to turn off all non-essential circuits. Entertainment mode allows preset activation of salon lights, music etc... All functions can be controlled remotely with The CZone™ system remote.



Settings: Allows OEM or technician access to the configuration (via password) of a system. No need for computer to set or change configuration settings such as circuit labels, circuit breaker sizes, etc. (DI only)

CZone™ Integration Partners

Simrad and B&G have added CZone™ control and monitoring to their award winning fully networked chartplotter/multifunction displays.

View CZone™ monitoring data, tank levels, battery voltage, alongside radar, fish finder, video and chartplotter information or navigate to the CZone™ page to operate any circuit from the intuitive control page.





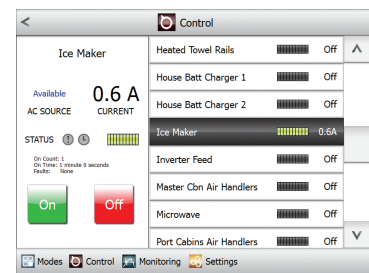
AC Output Interface (ACOI)

Simplify the way you network, monitor and control onboard AC circuits. The AC Output Interface does it all and provides circuit protection for all onboard AC devices. It is easy-to-install, configure and operate the digital control system with pre-wired components for quick connections. This gives you a customizable solution to suit unique installation and application needs, including 'night running' or 'at anchor' as well as control at multiple locations. It has eight outputs (up to 50 A each), supports multiple pole designs and two separate buss feeds. To make it easy, status LEDs and manual bypass are located right at the enclosure.

- 8 Outputs at up to 50 amps each
- Circuit status and run current displayed for each circuit
- Customizable to suit installation requirements
- Pre-wired for quick connection
- Staggered start up of loads
- 110 V, 240 V, 110/220 V
- IPX5 enclosure
- Supports multiple pole designs, i.e. double, triple, four pole
- Utilizes standard DIN rail mounted components for circuit protection and control
- Can support two separate buss feeds i.e. 2 load groups in one box
- Delay before circuits come on to allow generators to come up to speed
- Dimensions, HxWxD: 11.61"x18"x5.1" 295x458x130 mm (enclosure dimensions may change depending on installation requirements)
- Provides circuit protection and control
- Status LED's at enclosure
- Manual bypass at enclosure
- Provision for MCB/RCD's
- Timers
- 50 or 60 Hertz



80-911-0069-00



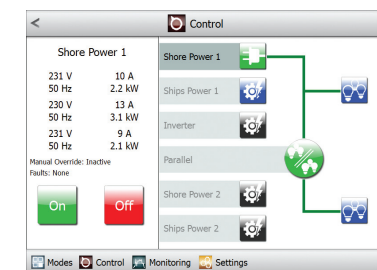
AC Mains Interface (ACMI)

A sophisticated source selector or transfer switch, the AC Mains Interface enables the user to specify which AC power source is actively supplying power to the ship (generator, inverter, shore power). Developed for use with the CZone™ digital control system, but may also be used as a stand-alone device. The ACMI can be programmed to automatically change the supply source when the current rating is exceeded, and includes a manual bypass and user-friendly display screen that ensures easy current, voltage, frequency, and power monitoring. Other features include six monitored, over-current protected main power inputs of up to 100 A each, as well as two outputs, which enables two separate load groups and a parallel option for use with a single source. To simplify installation, the ACMI comes pre-wired for easy installation.

- 6 Source inputs up to 100 A (eg. 2x shore power, 2x generator)
- Monitoring of channel status (on/off/fault)
- Provides circuit protection and control
- Manual override at enclosure and via remote panel
- Customizable to suit installation requirements
- Supports multiple pole designs, i.e. double, triple, four pole
- 110 V, 240 V, 110/220 V
- IPX5 enclosure
- Utilizes standard DIN rail mounted components for circuit protection and control
- Physical and software lockouts between source controls (prevents two sources from becoming connected)
- Reverse polarity and bad power supply alarms including auto disconnect and lockouts
- Current, voltage, frequency and power monitoring incorporated (six channels)
- 2 Outputs (load groups), allows for two separate load groups with parallel option for use with single source
- Dimensions, HxWxD: 15.8"x24.8"x5.1" 403x630x130 mm (enclosure dimensions may change depending on installation requirements)
- Auto changeover
- Provision for RCD's
- Load shedding
- Status LED's at enclosure
- Pre-wired for quick connection
- Timer controls
- 50 or 60 Hertz



80-911-0068-00



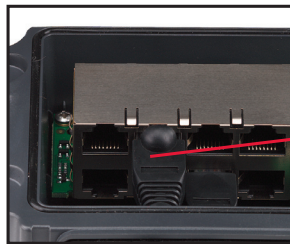


Switch Control Interface

The Switch Control Interface (SCI) provides an interface between the CZone™ network and traditional mechanical switches that manufacturers and users are familiar with. The SCI simplifies your wiring, supports your existing choice of switches, protects against failures and allows for expanding installation options.

- Single switch position can control multiple OI channels
- Attaches to switch panels via custom SCI cable
- Multiple SCI switches can control single OI channel
- Output for backlighting of switch labels (dimnable)
- Outputs systems on and function/ fault codes to systems on LED of switches (dimnable)
- Dimensions, WxHxD: 6-3/32"x3-29/32"x1-5/8"
156x100x42 mm
- IPX5 water ingress protection
- 8 Inputs per module (16 individual controls)
- Programmable switch types
- Sequential button press functionality

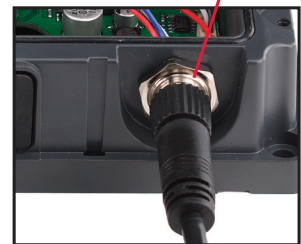
Item #	Description
80-911-0011-00	Switch Control Interface w/seal
80-911-0012-00	Switch Control Interface only



8-Way Connector Bank for SCI Cable Assembly to Switches



Waterproof Cable Seal



NMEA 2000 Connector



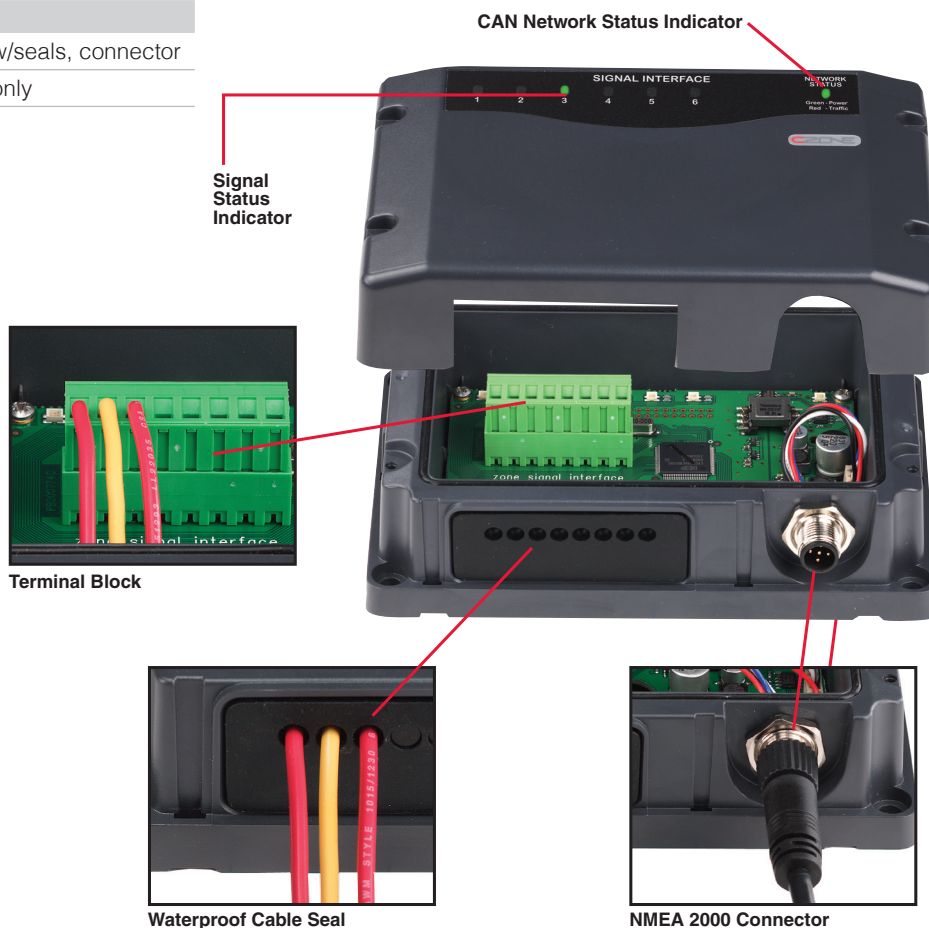
Signal Interface

The Signal Interface (SI) connects the CZone™ system to your external sensors, alarms and switching devices. The SI allows intelligent, automated operation of circuits depending on the state of the input.

- Accepts inputs from traditional switch types being used to control outputs
- Accepts inputs from switches to trigger alarm i.e. high water float switch
- Accepts inputs from industry standard tank senders (0-5V, 10-180 Ohm, 240-33 Ohm)
- Accepts inputs from general voltaic or resistive signals can be used for controlling outputs or to display a physical position i.e. show a hatch is partially open
- LED status indicators for each input
- Dimensions, WxHxD: 6-3/32"x3-29/32"x1-5/8" 156x100x42 mm
- IPX5 water ingress protection
- Resistive input range 0–1000 Ohms
- Outputs standard NMEA2000 sentences
- Voltage sensing input range 0–34 V DC



Item #	Description
80-911-0013-00	Signal Interface w/seals, connector
80-911-0014-00	Signal Interface only





Meter Interface

The Meter Interface (MI) accepts inputs from external AC and DC power metering sensors such as: AC and DC voltage and amps, AC kWatts, and DC battery capacity in amp hours and % remaining. All with user definable high and low alarms.

AC

- 3 x AC voltage inputs (multi voltage)
- 2 x AC current inputs
- Calculates true RMS power

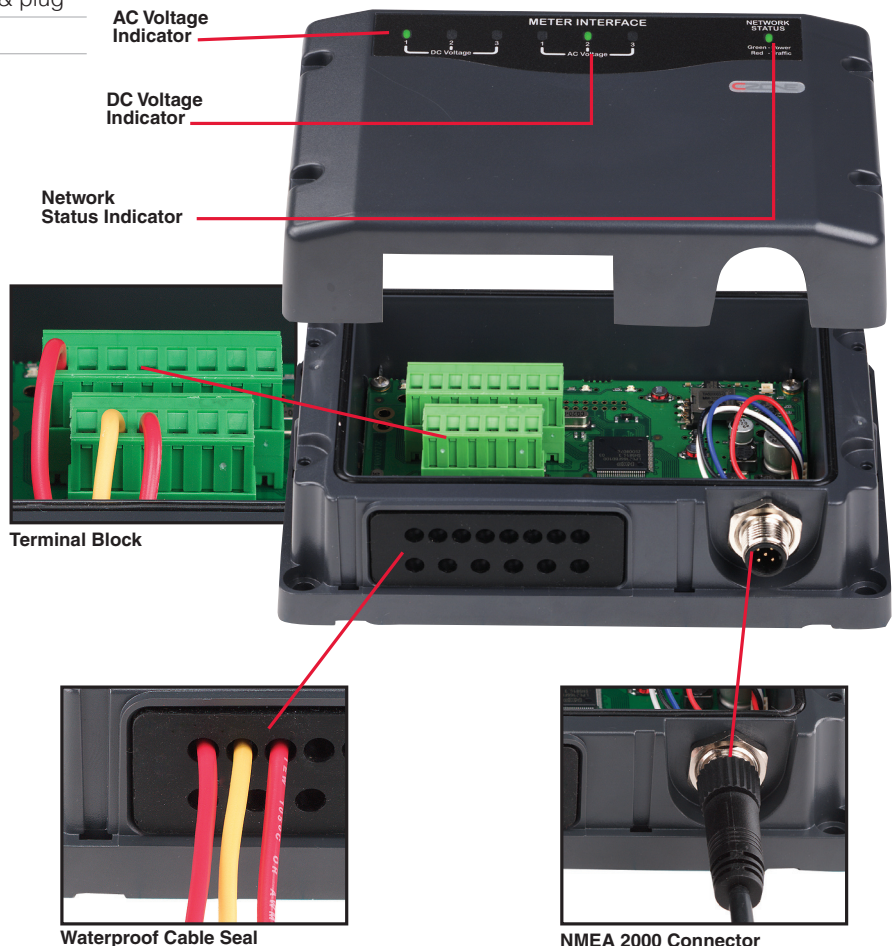
DC

- 3 x DC voltage inputs (multi voltage)
- 2 x DC current inputs
- Calculates battery capacity as ampere hours and percentage charge remaining
- Resolution for current metering down to 0.1 A

General

- Dimensions, WxHxD: 6-3/32"x3-29/32"x1-5/8"
156x100x42 mm
- IPX5 water ingress protection
- Outputs standard NMEA2000 power monitoring sentences

Item #	Description
80-911-0005-00	Meter Interface, w/seal & plug
80-911-0006-00	Meter Interface only





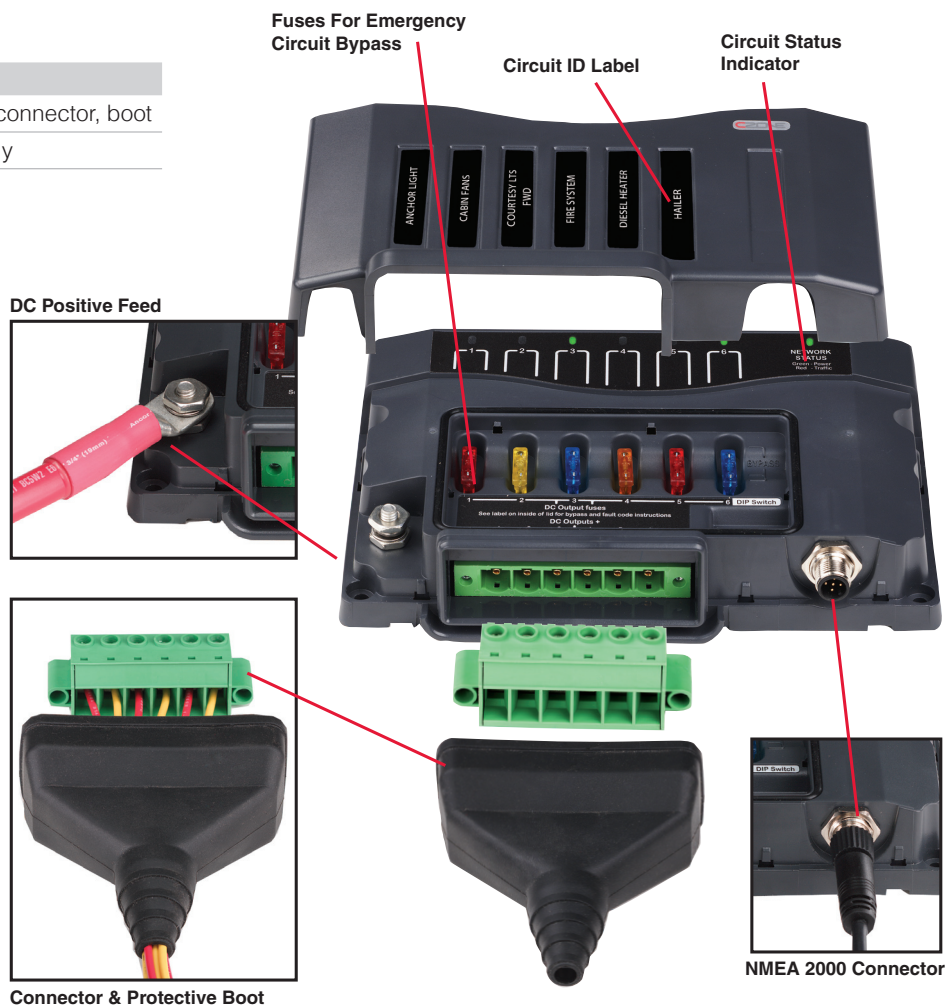
Output Interface

The Output Interface (OI) provides an intelligent replacement for traditional circuit breaker and fuse panels. It has 6x high power, robust output channels which provide the power supply, control and fusing for a circuit as well as integrating many other built in features such as timers and dimmers. Connection to the unit is simple: a large 6 way plug allows connections to cables of up to 16 mm² (6AWG) in size, or multiple smaller conductors. No need for specialized crimp terminals and expensive crimp tools to be carried for terminations to CZone™, just a blade screwdriver. A protective flexible boot offers protection to the connections from harsh environment conditions.

- 4 levels of backup fusing including manual override (as required by ABYC)
- Multiple channels can be bridged together to offer higher current switching
- Power consumption 12 V: 85 mA (standby 60 mA)
- Dimensions, WxHxD: 7-29/32"x5"x1-3/4" 200x128x45 mm
- Small, non metallic, easy to install case
- 6 x 20 amps circuits
- IPX5 water ingress protection
- Programmable software 'fuse' sizes



Item #	Description
80-911-0009-00	Output interface w/connector, boot
80-911-0010-00	Output interface only



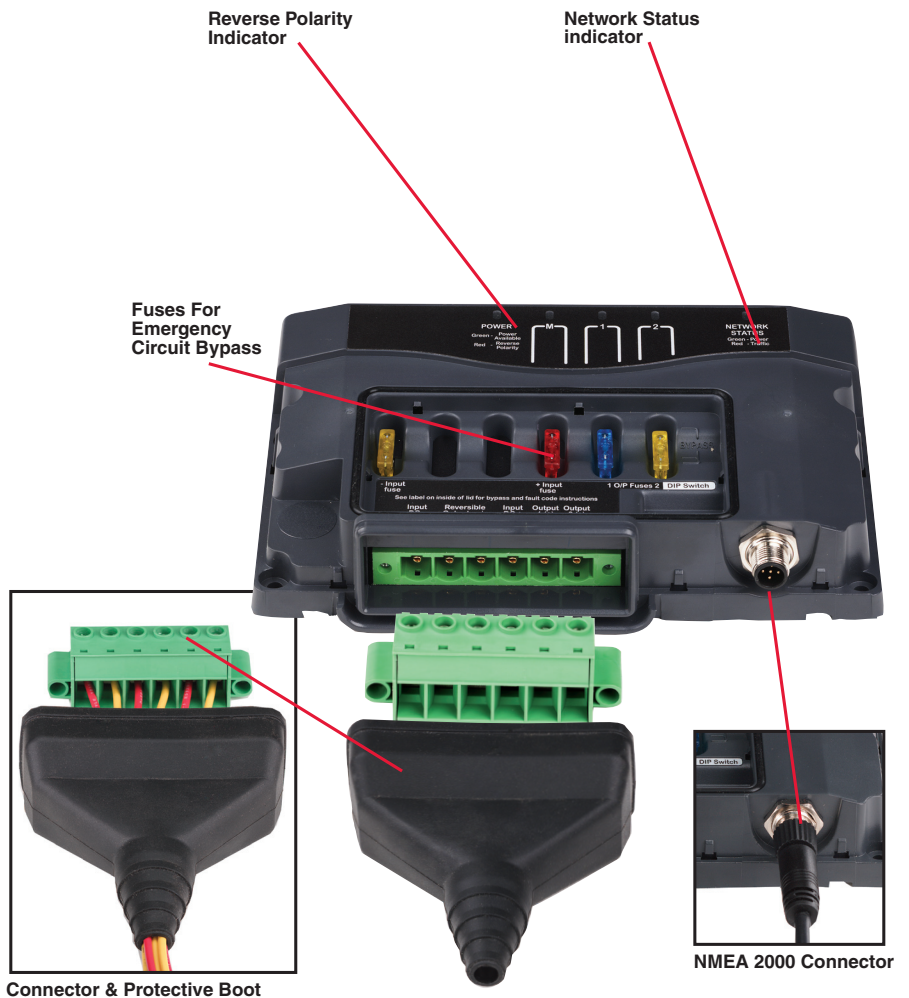


Motor Output Interface

The Motor Output Interface (MOI) has an output pair for controlling DC motors which require a reversal of polarity to change the direction of their mechanical operation. For example, a DC motor for an electric window mechanism will move the window up or down depending on the polarity of the feed to the motor. The MOI also incorporates two standard output channels such as is found on the OI.

- Single motor control and two normal channels per unit, 20 A per output
- Built-in circuit protection
- IPX5 water ingress protection
- Dimensions, WxHxD: 7-29/32"x5"x1-3/4" 200x128x45 mm

Item #	Description
80-911-0007-00	Motor Output Interface w/ connector, boot
80-911-0008-00	Motor Output Interface only

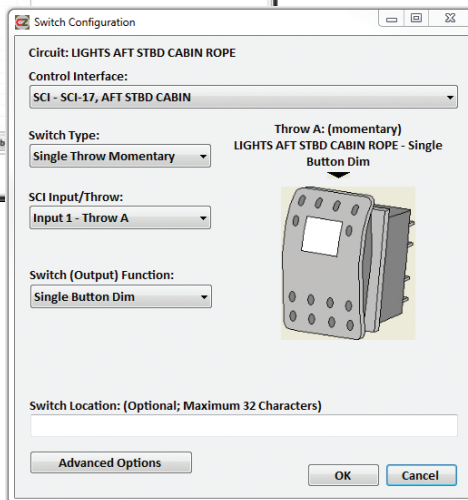
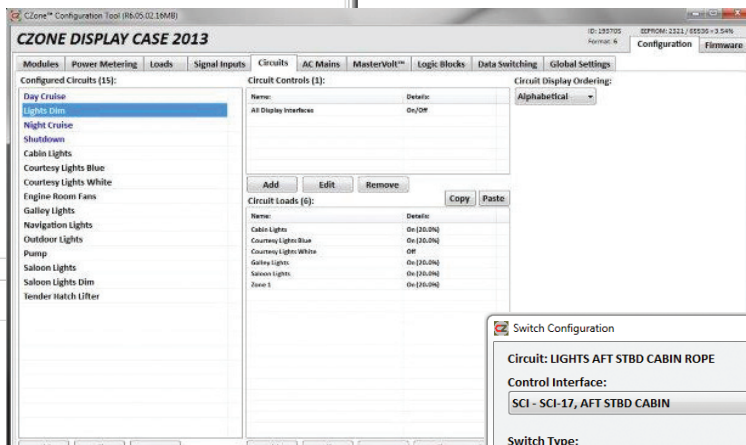
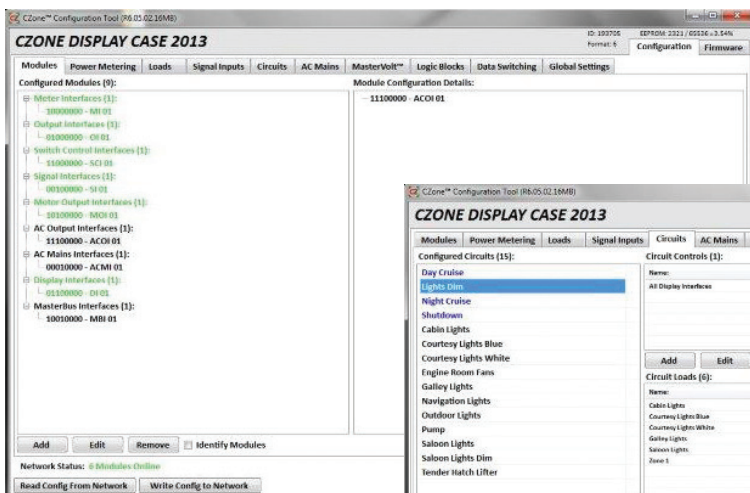




Configuration Made Easy

Historically, generating a configuration for and programming a system is a chore that requires a significant amount of training. The configuration tool of the CZone™ system offers simple, straightforward programming that is easy to learn and to use.

The CZone™ system Configuration Tool allows the manufacturer to set up programming parameters on a standard PC, (use USB CAN Adapter #80-911-0044-00) upload a saved configuration into the CZone™ network and simultaneously program every interface on-board. Changes and customizations can also be made from the Display Interface and downloaded back to the PC overriding the master configuration. The master template file is now ready to go and can be used on multiple vessels or vehicles during manufacturing.





NMEA 2000 Micro C Accessories

**Ext. Cable**

Carries power and data along backbone to NMEA 2000 devices

Item #	80-911-0024-00	16 ft	5 m
Item #	80-911-0025-00	32 ft	10 m
Item #	80-911-0026-00	1.6 ft	.5 m
Item #	80-911-0027-00	6.5 ft	2 m

**Power Cable for Display Interface**

Supplies power for the 3.5" display interface

- 2 pin, 6.5 ft (2 m)
- NMEA 2000 Network

Item # 80-911-0032-00

**Power Cable**

Provides power to the NMEA 2000 network and devices

- 3.2 ft, 1 meter

Item # 80-911-0028-00

**Single Tee Connector**

Connects a single device into the NMEA backbone

Item # 80-911-0029-00

**90° Elbow Connector**

Connects cable together in tight spaces

- NMEA 2000 Network

Item # 80-911-0046-00

**Terminating Resistors**

Use at either end of the NMEA backbone to complete the network. Each network must have a make and female terminator.

- NMEA 2000 Network

Item # 80-911-0030-00 Female

Item # 80-911-0031-00 Male

**2 Way Tee Connector**

Connects multiple devices into the NMEA backbone

- NMEA 2000 Network

Item # 80-911-0047-00

**4 Way Tee Connector**

Connects multiple devices into the NMEA backbone

- NMEA 2000 Network

Item # 80-911-0048-00

Banking Caps

Protects unused Tee Connector from dust and water

- NMEA 2000 Network

**Male Cap**

Item # 80-911-0050-00

**Female Cap**

Item # 80-911-0051-00



NMEA 2000 Micro C Accessories



**Cable Gland
for SCI Silicon**

Item # 80-911-0035-00



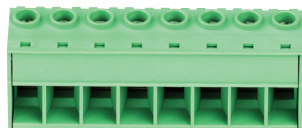
**Cable Gland
SI, Blk Silicon**

Item # 80-911-0036-00



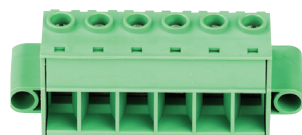
**Cable Gland,
MI, Blk Silicon**

Item # 80-911-0033-00



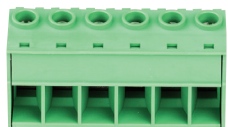
**Terminal Block
SI/MI, 8 Way**

Item # 80-911-0043-00



**Terminal Block
OI/MOI, 6 Way**

Item # 80-911-0041-00



**Terminal Block
for MI, 6 Way**

Item # 80-911-0042-00



**Seal Boot for OI/MOI
6-Wire, Blk Silicon**

Item # 80-911-0034-00



Through Bulkhead Adaptor

For use on the backbone to transition through a waterproof bulkhead or can be used to connect removable equipment such as a computer interface

- NMEA 2000 Network

Item # 80-911-0052-00



Female Field Serviceable Connector

For terminating bare NMEA cable

- NMEA 2000 Network

Item # 80-911-0053-00



Male Field Serviceable Connector

For terminating bare NMEA cable

- NMEA 2000 Network

Item # 80-911-0054-00



Hole Plugs, Blk

3.2 mm for MI and SI cable glands
5 mm for SCI cable glands

Item # 80-911-0016-00 3.2 mm

Item # 80-911-0017-00 5 mm

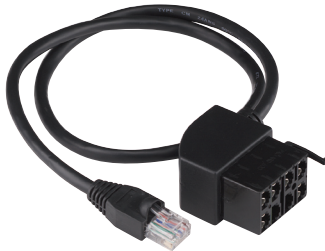


Custom Switches

- Red or blue systems in operation and backlighting LED's

Item #	80-911-0037-00	ON/OFF	red LED
Item #	80-911-0038-00	mom ON/OFF	red LED
Item #	80-911-0039-00	ON/OFF/ON	red LED
Item #	80-911-0040-00	mom ON/OFF/mom ON	red LED
Item #	80-911-0066-00	mom ON/OFF	blue LED
Item #	80-911-0071-00	mom ON/OFF/mom ON	blue LED

Multiple rocker labels available upon request



Cable Assembly, SCI to suit Custom Switches above

Item #	80-911-0018-00	.5 meter
Item #	80-911-0019-00	1 meter
Item #	80-911-0020-00	2 meter
Item #	80-911-0021-00	3 meter
Item #	80-911-0022-00	4 meter
Item #	80-911-0023-00	5 meter



USB CAN Adapter

- Connects PC to the CZone™ network for configuration and system set up

Item # 80-911-0044-00



80-911-0062-00



80-911-0063-00

Push Buttons

- Momentary and latched actuation options available
- Blue and red circuit status indication LED options
- 19mm mounting hole
- IP 67 environmental protection
- Stainless Steel components

For use with CZone™ systems only

Item #	80-911-0060-00	Momentary (ON)OFF	red LED
Item #	80-911-0063-00	Latching ON/OFF	red LED
Item #	80-911-0062-00	Momentary (ON)OFF	blue LED
Item #	80-911-0061-00	Latching ON/OFF	blue LED



Cable Assembly, SCI to suit Push Buttons above

Item #	80-911-0085-00	.5 meter
Item #	80-911-0086-00	1 meter
Item #	80-911-0087-00	2 meter
Item #	80-911-0088-00	5 meter
Item #	80-911-0089-00	8 meter

CZone™ Wireless Remote Kit

- Simple to set up, wireless remote control
- Buttons are configurable for momentary on or latching control of circuits
- 80m (250 ft) operating range
- Rolling code

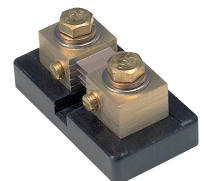
Item # 80-911-0045-00



DC Current Shunt

- 450A / 50 mV shunt supplied with 80-600-0021-00
- 3.25"Lx2.8"Wx2.75"H (83Lx45Wx44H mm)

Item # LB-450-50





CZone™ Digital Control Accessories



NEW CZone™-MasterBus Bridge Interface

The CZone™-MasterBus bridge has been developed to connect two great systems together to bring you the best of both worlds. The bridge physically connects the MasterBus and CZone™ networks together, enabling the two networks to communicate and act as one, providing seamless control and monitoring of devices on both networks from either Masterbus or CZone™ displays.

Features/Functions

- Control Mastervolt inverters and chargers from CZone™ displays and switches
- Control of MasterBus output devices (turn lights, pumps, etc. on/off)
- Control of CZone™ output devices (turn lights, pumps, etc. on/off) via MasterBus displays and switches
- Display CZone™ acquired systems information such as tank and power levels on Masterbus displays
- Display MasterBus acquired systems information such as tank and power levels on CZone™ displays
- Transfers alarms between both systems
- 2.75"x2.75"x2" (69x69x50)

Item # 80-911-0072-00

AC Transducer

- The AC-VSEN-4 includes 3 voltage transformers for up to 3 voltage inputs.
- Dimensions: 2.75"x5.5"x2" (69x140x50 mm)

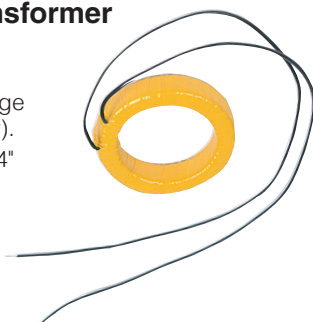
Item # AC-VSEN-4



Heavy-duty Current Transformer

- Maximum current 150A AC
- CT-HD is available for systems with large mains cables, too large for CT-10-3 (ordered separately).
- CT-HD dimensions: Ø 1.85 x 0.4" (Ø 47 x 10.5 mm)
- Hole size: 1.25" (32 mm)

Item # CT-HD



CZone™ Network Bridge Interface

- For isolating sections of an NMEA 2000 network to decrease standby current draw
- Isolation when bridging between two CAN networks, (eg connecting CZone™ to Simrad Simnet)
- For expansion of the NMEA 2000 network when the maximum node limit (node = any device connected to the NMEA 2000 network) for the network has been reached
- Once fitted, a further 40 nodes can be added

Item # 80-911-0057-00



Surge Protection Module

Protect your electronics from becoming damaged by harmful high voltage spikes. When fitted to the battery supply these modules look for sudden increases in voltage then switch into protection mode to absorb and suppress the high energy spike.

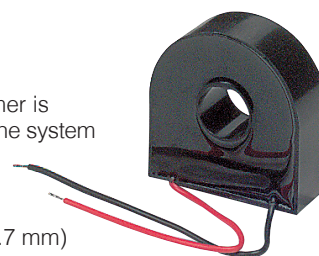
Item # 80-707-00004-00 12V DC

Item # 80-707-00005-00 24V DC

Current Transformer

- Maximum current 150A AC
- One CT-10-3 current transformer is supplied with ACSM. If a twin line system is in use, a second CT must be ordered.
- Dimensions: 1.5"x1.55"x.55" (37.5x39.2x13.7 mm)
- Hole size: 0.5" (12 mm)
- Supplied with 80-600-0023-00

Item # CT-10-3



DC Systems Monitor (DCSM)

Designed and manufactured by BEP, these state of the art full color monitors are made to meet the systems monitoring requirements of today's modern vessel and recreational vehicle. Complex AC and DC electrical installations onboard are becoming more common place. Additionally the increase in tank monitoring requirements for fuel, fresh, grey and black water, accurate monitoring of these systems is essential. The DCSM and ACSM displays feature clear, extra large type face. This allows for more detailed on-screen information and increased clarity. The screen has backlighting for easy night time viewing.

See sample screens below.

Specifications:

- 2.8" Color QVGA LCD
- Input voltage 8-32VDC
- Dimensions WxH: 90x100 mm
- Backlit keypad

Monitors:

- Charge/discharge amps for two banks
- Capacity remaining in A/h and %
- Battery condition
- Tank fluid level
- Circuit status

Features:

- 8 Generic, user configurable inputs
- Programmable high/low audio/visual alarms for volts, amps and tank levels
- Backlit keypad and dimmable screen
- Can be panel or surface mounted

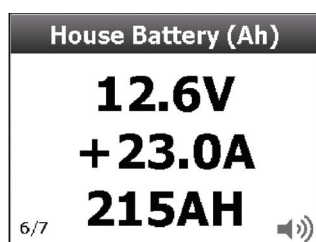


80-600-0021-00

(DCSM including 1x shunt and cable)

80-600-0022-00

(DCSM excluding shunt)



DC Power Meter

- Displays voltages of multiple battery banks (0-32V DC)
- Displays charge and discharge (amps) of 2 battery banks
- Displays battery capacity in amp hours
- High/Low level alarms

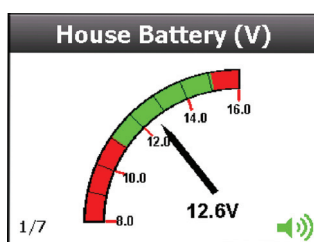


Installation Cable Kit

- 2 core screened cable in 2 lengths pre-terminated

Item # 600-DCM-5M 16.45" (5 m)

Item # 600-DCM-10M 32.9" (10 m)



Display Type

- Configure the DCSM to show the data in analog, digital and graphic form

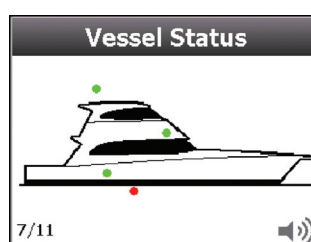


Ammeter Shunt Enclosure

Provides a protective housing for shunt termination meeting ABYC standards. DC current shunt **Item # LB-450-50M** ordered separately. See page 189 for more details.

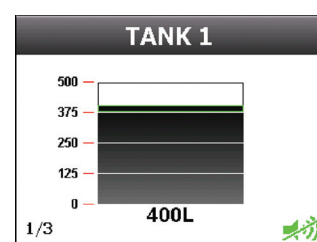
- Digital large: 450A - 50mV
- Analog small: 50A - 50mV, 100A - 50mV, 150A - 50mV
- Takes 2 small or one large shunt

Item # 711L



Circuit Status

- View the status of important circuits (on/off)
- In graphic and numeric form



Tank Level

- View tank level information for multiple tanks in numeric and graphic forms. Resettable when leaving boat



Sprayproof Gasket

When fitted the gasket provides a water ingress protection level of IPX5 (Protection against low pressure jets of water) for the AC and DC systems monitors

Item # GAS-SM

AC Systems Monitor (ACSM)

Specifications:

- 2.8" Color QVGA LCD
- Input voltage 8-32V DC
- Dimensions (WxH): 90x100 mm
- Backlit keypad

Monitors:

- AC volts, amps and frequency

Features:

- 3 user configurable inputs
- Displays data in analog, digital and graphic forms
- Output for load shedding
- Programmable high/low audio/visual alarms for each input



80-600-0023-00

(ACSM) includes 1x AC-VSEN-4
and 2x CT-10-3



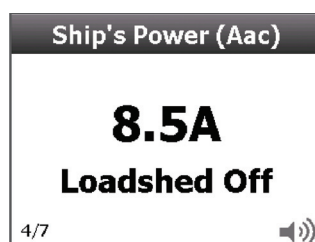
AC Power Meter

- Displays AC volts, amps frequency and power for two supplies with a third position for monitoring AC volts and frequency of a third supply
- Displays AC power in kW (true RMS)



AC Volts/Frequency

- Displays AC voltage and frequency, 80-264V AC 50 & 60Hz



AC Amps

- Displays Current for 3x AC supplies (0-75A)



Alarms

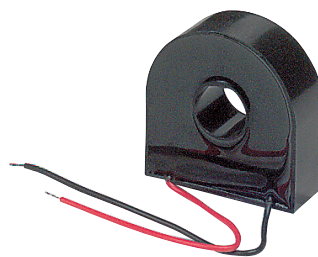
- High and low alarms for each input
- User selectable alarm levels
- Mutable



AC Transducer

- The AC-VSEN-4 includes 3 voltage transformers for up to 3 voltage inputs.
- Dimensions: 2.75"x5.5"x2" (69x140x50 mm)

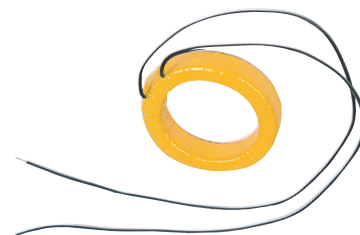
Item # **AC-VSEN-4**



Current Transformer

- Maximum current 150A AC
- One CT-10-3 current transformer is supplied with ACSM. If a twin line system is in use, a second CT must be ordered.
- Dimensions: 1.5"x1.55"x.55" (37.5x39.2x13.7 mm)
- Hole size: 0.5" (12 mm)
- Supplied with 80-600-0023-00

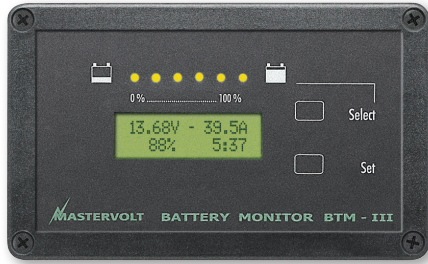
Item # **CT-10-3**



Heavy-duty Current Transformer

- Maximum current 150A AC
- CT-HD is available for systems with large mains cables, too large for CT-10-3 (ordered separately).
- CT-HD dimensions: Ø 1.85 x 0.4" (Ø 47 x 10.5 mm)
- Hole size: 1.25" (32 mm)

Item # **CT-HD**



Masterlink BTM-III Battery Monitor

Provides an accurate indication of the current, amperage, remaining time and remaining capacity of battery bank 1, and the current and estimated capacity of battery banks 2 and 3. The built-in microprocessor calculates the remaining capacity and stores historic data.

Item #	70403163
Number of battery sets	service (fully), starter & bowthruster
Max. amp-hour capacity	9999Ah
Voltage read-out	yes
Current read-out	yes
Amp-hours read-out	yes
Time remaining indication	yes
Battery capacity in %	yes
Current consumption (backlight off)	14 mA/12V - 11 mA/24V
Current consumption (backlight on)	100 mA/12V - 50 mA/24V
Supply voltage	9-35V DC
Voltage range measurement	7-35V DC
Voltage resolution	0.01V
Voltage deviation	± 0.6% ± 1 figure
Amps measurement range	0-500A (optional 1000A/50mV)
Shunt specification	500A / 50mV (included)
Dimensions instrument, wxh	4.7"x2.6" / 120x65 mm
Built-in depth incl./excl. cover box	2.2"/1.6" / 55/40 mm
Weight instrument incl. shunt	2 lbs / 0.9 kg
Dimensions shunt, hwxwd	3.3"x1.7"x1.7" / 84x44x44 mm - M8

Tank Level Senders



Tank Sender Interface Module

- Only required when using VDO (10-180) or Centroid (10-180) or Teleflex (240-33) senders to produce a 0–5V signal to operate the 600-TLM-N.
- Switchable link for VDO or Teleflex signal. 10-32V supply.
- One unit per sender required.
- Dimensions: 2.4"x1.3"x.9" (60x34x22 mm)

Item # 600-TLM-SIF

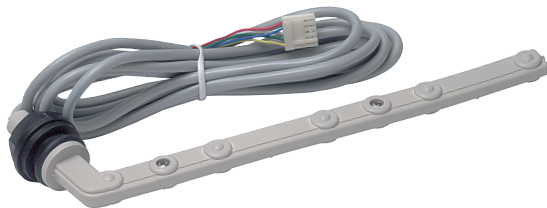


LED Tank Gauge

The 600-TG offers economical monitoring for fresh or grey water tanks (plastic or fiberglass only). Using 600-TGSK strategically mounted well nuts will give 4 tank levels. Supplied with one sender kit. Second sender ordered separately.

Also available is the RV-TS-5M Tank sender. Only one hole is required for installation, the sender is sealed via external lock nuts. Suitable for tanks with maximum depth of 280 mm.

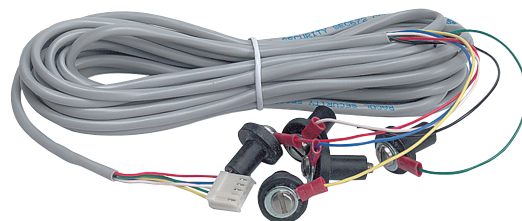
Item # 600-TG



Tank Sender

Suits tanks with maximum depth of 280 mm and a maximum wall thickness of 10 mm, and a maximum hole size of 22 mm. Comes with 5 m cable.

Item # RV-TS-5M



Tank Sender

- Well nut hole size 3/8" (9 mm).
- Cable length 5 m.
- One kit supplied with 600-TG.

Item # 600-TGSK

BEP™ Ultrasonic Tank Sender—No Moving Parts

- Handles common outputs – 240-33, 10-180, Vetus 10-300 and 0-5V tanks from BEP, Teleflex, Faria, VDO and many other popular instrument brands. (When connecting to non-adjustable gauges the TS1 must be pre-calibrated)
- Low Profile Design and standard SAE 5 hole mounting pattern, allowing it to be retrofitted to practically all other sender brands.
- Can be set for tank dimensions via computer using BEP™ Marine's proprietary TS1 software, avoiding experimental tank filling on site
- Connects directly to the DC systems monitors (80-600-0021-00 & 80-600-0022-00 page 191) when configured to a 0-5V output
- Is set for 0-2000 mm depth off the shelf (not suitable for tank depths less than 200 mm) 8".
- Operating voltage: 10-32V
- Current draw: 25 mA with 5V gauge output
- Measurement method: Acoustic sonic measurement
- Tank depth: 0-6.5 ft (2000 mm)
- Accuracy Distance: 0-6.5 ft (2000 mm) at 2 mm accuracy
- Mounting: SAE 5 stud mounting pattern with gasket, seal and screws (top mount only).
- Environmental temperature: 39.2-149°F (4-65°C)
- Chemical resistance: Petrol, diesel, water, toilet chemicals
- Tank type style: Metal and plastic with non linear capacity
- Works with petrol, diesel, fresh water, grey water and black water

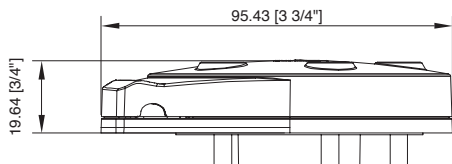


TS1



...the most unique and sophisticated system of any tank monitor tested... the ultrasonic technology is extremely accurate.

Practical Sailor Magazine, July 2009



Nonlinear tank parameter Calculation

Nonlinear Tank Parameter Calculation

Enter Tank dimension in Meters

X Value	X1 Value
Y Value	X2 Value
W Value	
H Value	
Z Value	

Non Linearisation Calculated Values

20% : 20
40% : 40
60% : 60
80% : 80

Volume in litres

Calculate Close

BEP's proprietary Window's based software application allows for TS1 senders to be programmed specific to tank shape, size and fluid type via a computer's USB port.

Programming is a simple process and can be carried out by downloading free software from bepmarine.com and purchasing a programming kit **TS1-PK**.

Once programmed, the specific tank parameters are stored in the non-volatile memory of the TS1. Find more detailed information at bepmarine.com



TS1 Programming Device

Item # TS1-PK

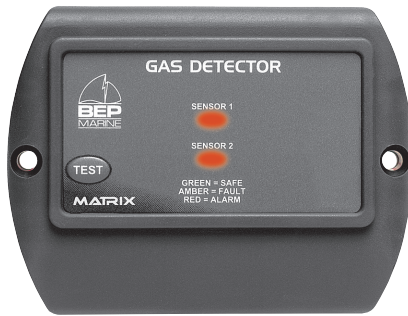
Gas Detectors

The BEPTM Detectors use microprocessor control to ensure correct sensor sensitivity. The Detectors have the capability to control two sensors which detect both LPG and Petrol, with visual and audible alarms.

- Dual sensors for LPG and Petrol
- Visual and audible alarms; provision for external alarm
- Automatic shut-off solenoid control with pulse and hold circuit for low power draw (600-GDL only)
- Self-testing
- Provision of bilge blower
- 2.4"x3.5"x0.7" (67x88x17 mm)

600-GD, 600-GDL, & FD-2 Specifications

Voltage (V DC)	10–32
Current (mA)	350 max.
Alarm Sensitivity	20% lower explosive limit
Current@Out (mA)	800 max.
Solenoid (mA)	700 pulse, 250 hold



600-GD

600-GD will detect LPG, Petrol and CNG fumes. Supplied with one sensor, with an option for a second sensor, Item # BL-SL-L output for remote alarm and blower unit. 600-GD can be used on 12 or 24V systems.



600-GDL

Same features as the 600-GD, with the ability to switch a valve on. It contains a unique "Pulse & Hold" circuit within the detector. This allows the valve to be pulled in at 12V and then once energized it will step down to hold the valve in place. This reduces power consumption and heat while the gas is turned on.



BL-SL-L

One Sensor lead supplied (5 m) with GD & GDL.
Second Sensor lead ordered separately



600-LPG

600-LPG is a stand alone gas shut-off system with no gas detection ability. For 12V systems order VR2.2 separately. For 24V systems order VR2.2-24V.



600-GDRV

600-GDRV has the sensor mounted in the front facia creating a stand alone unit. The unit is designed to be surface mounted at the vessel's lowest point.



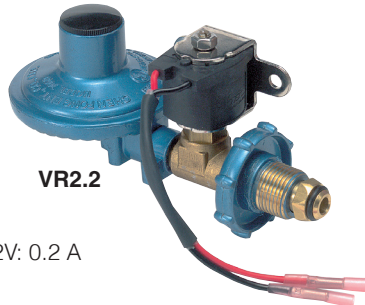
FD-2

FD-2 is designed for an economic in-dash installation. Supplied with sensor (5 m cable) which is capable of detecting combustible gases.

Solenoid Valve & Regulator Kit

Compatible with 600-GDL Gas Detector or 600-LPG.

Solenoid voltage: 12 V or 24 V
Gas outlet: 3/8 BSP
Gas inlet: POL Thread
Current draw: 800 mA
Current draw with GDL or PH-12V: 0.2 A
Regulator Flow Rate: 3 kPa.



VR2.2

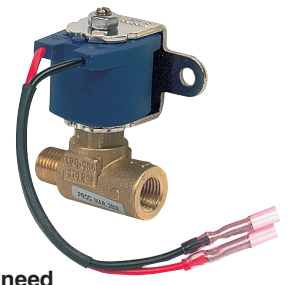
Note: The VR2.2 may not comply in some countries, and does not comply with USCG requirements. Please check with your local gas installer. Not for sale in the USA.

Solenoid Valve

The SA296COMP-12V is suitable for countries where VR2.2 is not approved. The CE approved SA296COMP-12V can be installed by an approved gas installer using approved components from within specific markets. 12V or 24V options available. Uses 1/4" BSP thread.

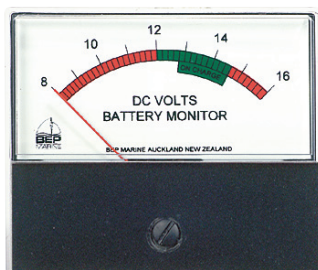
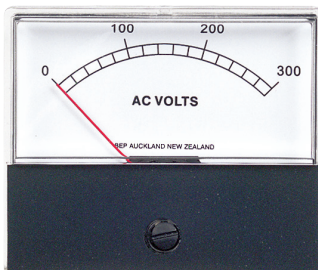
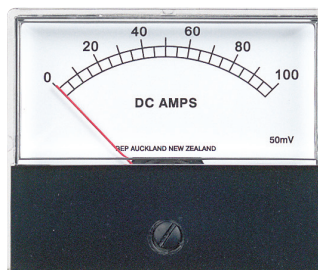
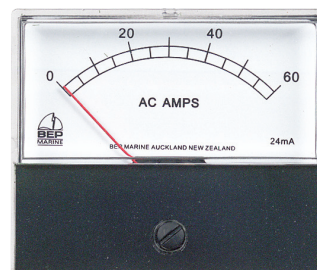
Note: A separate regulator will need to be installed with the SA296 valves.

Item # SA296COMP-12V 12V
Item # SA296COMP-24V 24V



Analog

- Analog meters as used in BEP™ Contour circuit breaker panels.
- All analog meters accurate to within 2.5%

**N816DCV****NO300ACV****NO100A****NO60ACT**

Meters	Item #	Range	Division Marks	Shunt Type
Amp (DC)	N010A	0-10A DC	0.5A	Internal
	N020A	0-20A DC	1A	Internal
	N050A	0-50A DC	2A	50A-50mV
	N0100A	0-100A DC	5A	100A-50mV
	N0150A	0-150A DC	1A	150A-50mV

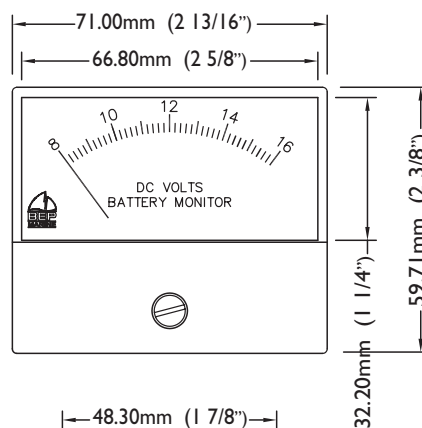


When ordering optional external shunt ammeters, shunts must be ordered separately.

Meters	Item #	Range	Division Marks
Volt (DC)	N816DCV	8-16V DC	0.2V
	N1632DCV	16-32V DC	0.4V
Volt (AC)	N0150ACV	0-150V AC	10V
	N0300ACV	0-300V AC	20V
Amp (AC)	N060ACT	0-60A AC	5A
	N0100ACT	0-100A AC	5A



CT-10-AN must be ordered when using N060ACT or N0100ACT.

**Systems in Operation Panels**

- 10 mm red LED's giving important systems on information
- Ideal for flybridge or remote dash position. Also available with alarm and mute switch.
- Backlit labels

Item #	in LxWx1.6	mm LxWx40	Label Sheet	LEDs	Alarm	Mute switch
SOP1	4.5"x5"	115x127	1	4	No	No
SOP1-AL	4.5"x5"	115x127	1	3+1 switch	Yes	Yes
SOP2	4.5"x9"	115x239	1-2	8	No	No
SOP2-AL	4.5"x9"	115x239	1-2	7+1 switch	Yes	Yes

**SOP1****SOP2**

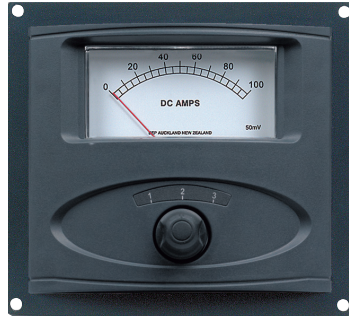
Analog & Digital

- Contour panel/front facia complements contour range
- All Contour Matrix monitors can fit into this style of panel

**80-601-0020-00****Panel Mounted Analog Battery Condition Meter (expanded scale)**

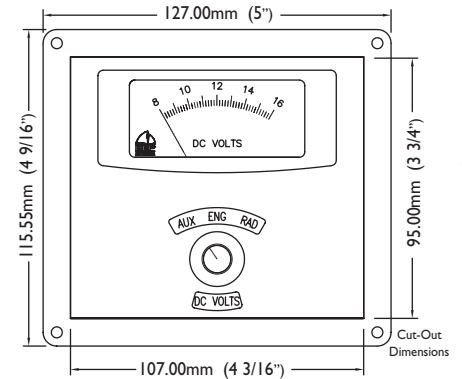
- Panel switchable to show 3 different battery banks
- Available 12V (8-16V) or 24V (16-32V)

Item #	Range	Inputs
80-601-0020-00	8–16V DC	3
80-601-0021-00	16–32V DC	3
80-601-0022-00	0–150V AC	1
80-601-0023-00	0–300V AC	1

**80-601-0025-00****Panel Mounted Analog Ammeter Panel**

- Panel switchable for use on up to 3 different ammeter shunts
- Supplied with 1 shunt, meter scales available, 0-50A 0-100A 0-150A

Item #	Range	Inputs
80-601-0024-00	0–50A DC	3
80-601-0025-00	0–100A DC	3
80-601-0026-00	0–150A DC	3



Dimensions for analog and digital panels

**Panel Mounted DC Systems Monitor**

- See page 191 for DCSM functionality
- Supplied with 450A-50mV shunt

Item # **80-600-0027-00**

**Panel Mounted AC Systems Monitor**

- See page 192 for ACSM functionality
- Supplied with voltage and current transducers

Item # **80-600-0028-00**

“Can I use ‘regular wire’ for my boat?” The answer to this common question is a qualified “yes,” if the wire is SAE (Society of Automotive Engineering) J378, J1127 or J1128. These wires are designed for “surface vehicles,” not for the special requirements of the marine industry, but meet the minimum standards for boats in limited circumstances. Even if tinned copper, they should not be run in bilge spaces or other areas subject to moisture from spray or dripping. They should not be run in engines spaces, unless marked “oil resistant” and “75°C”. They should not be used in applications where subjected to vibration or frequent flexing and must never be used for 110 volt applications. For safety, use only wire which is marked with size and type.

Most importantly, SAE wire is up to 12% smaller than AWG Boat Cable which means that, in many applications, larger

gauge wire must be used to stay within the voltage drop limits recommended by experts (see Tables C & D). The wire charts found in “Chapman’s Piloting” and other publications are all for “AWG” wire like Ancor™, not “SAE” type wire.

Using the wrong type of wire can cost you more in the long run. Insist on Marine Grade Boat Cable by Ancor. It is UL approved for the corrosive marine environment and charter boat service. Marine Grade Boat Cable is specially designed to exceed all test standards for cold bend, moisture and oil resistance, heat shock and flammability. This ensures the safest, easiest to install, longest lasting and ultimately the least expensive electrical system you can buy. Only Ancor offers a complete line of Marine Grade Boat Cable for every need.

Table A: Marine Color Code

Color	Item	Use
Red	DC Positive Conductor	Positive Mains
Black or Yellow	DC Negative Conductor	Return, Negative Mains
Green or Green w/ Yellow Stripe	DC Grounding Conductor	Bonding System Bonding Wires (if insulated)
Light Blue	Oil Pressure	Oil Pressure Sender to Gauge
Dark Blue	Cabin & Instrument Lights	Fuse or Switch to Lights
Brown	Generator Armature	Generator Armature to Regulator
	Alternator Charge Light	Generator Terminal/Alternator
		Auxiliary Terminal to Light to Regulator
	Pumps	Fuse or Switch to Pumps
Grey	Navigation Lights	Fuse or Switch to Lights
	Tachometer	Tachometer Sender to Gauge
Orange	Accessory Feed	Ammeter to Alternator or Generator Output and Accessory
		Fuses or Switches
	Common Feed	Distribution Panel to Accessory Switch
Pink	Fuel Gauge	Fuel Gauge Sender to Gauge
Purple	Ignition	Ignition Switch to Coil & Electrical Instruments
	Instrument Feed	Distribution Panel to Electric Instruments
Brown w/ Yellow Stripe	Bilge Blowers	Fuse or Switch to Blower
Yellow w/ Red Stripe	Starting Circuit	Starting Switch to Solenoid
Tan	Water Temperature	Water Temperature Sender to Gauge
Green/Stripe (G/x) (except G/Y)	Tilt Down and/or Trim In	Tilt and/or Trim Circuits
Blue/Stripe (B/x)	Tilt Up and/or Trim Out	Tilt and/or Trim Circuits

Table B: Conductors Sized (AWG) for 3% Voltage Drop

Use 3% voltage drop for any "critical application" affecting the safety of the vessel or its passengers: bilge pumps, navigation lights, electronics, etc....

IMPORTANT!

Length (feet): Determined by measuring the length of the conductor from the positive (+) power source connection to the electrical device and back to the negative (-) power source connection. Note that the power source connection may be either the battery, panelboard or switchboard.

Current (amps): Determined by adding the total amps on a circuit.

Conductor sizes not covered in Table B or Table C may be calculated by using the following formula:

$$CM = \frac{K \times I \times L}{E}$$

After calculating the Circular Mil Area (CM), use Table E to determine the proper conductor size (National Fire Protection Agency and Coast Guard require that the next larger conductor be used when the calculated CM area falls between the two conductor sizes).

CM = Circular Mil Area of Conductors

K = 10.75 (Constant representing the mil-foot resistance of copper)

I = Current - amps / **L** = Length - feet

E = Voltage drop at load (in voltage drop in a decimal expression)

For Example...

Q: A bilge pump draws 10 amps. The positive run is 11 feet from the power panel, including the float switch. The negative run is only 10 feet. What size is the wire?

A: Use the formula to reach the correct answer:

Table D shows that 12 AWG wire has a CM area of 6,500 and is the correct choice. However, SAE wire has a CM area of only 5,833. Under NFPA and USCG regulations, 10 SAE wire must be used.

3% Voltage Drop at 12 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	14	12	10	10	8	6	6	6	6	4	4	
15'	5 m	16	12	10	10	8	8	6	6	4	4	4	2	2
20'	6 m	14	10	10	8	6	6	6	4	4	2	2	2	2
25'	8 m	12	10	8	6	6	6	4	4	2	2	2	1	1
30'	9 m	12	10	8	6	4	4	4	2	2	2	2	1	1
40'	12 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
50'	15 m	10	6	6	4	4	2	2	1	1/0	2/0	3/0	4/0	4/0
60'	18 m	10	6	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
70'	21 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
80'	24 m	8	6	4	2	2	1	1/0	2/0	3/0	4/0	4/0		
90'	27 m	8	4	2	2	1	1/0	2/0	3/0	4/0	4/0			
100'	30 m	6	4	2	2	1	1/0	2/0	3/0	4/0				
110'	33 m	6	4	2	2	1	1/0	2/0	3/0	4/0				
120'	36 m	6	4	2	1	1/0	2/0	3/0	4/0					
130'	40 m	6	2	2	1	1/0	2/0	3/0	4/0					
140'	43 m	6	2	2	1/0	2/0	3/0	4/0						
150'	46 m	6	2	1	1/0	2/0	3/0	4/0						
160'	49 m	6	2	1	1/0	2/0	3/0	4/0						
170'	52 m	6	2	1	2/0	3/0	3/0	4/0						

3% Voltage Drop at 24 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	16	14	12	12	10	10	10	8	8	8	6
15'	5 m	18	16	14	12	12	10	10	8	8	6	6	6	6
20'	6 m	18	14	12	10	10	10	8	6	6	6	6	4	4
25'	8 m	16	12	12	10	10	8	6	6	6	4	4	4	4
30'	9 m	16	12	10	10	8	8	6	6	4	4	4	2	2
40'	12 m	14	10	10	8	6	6	6	4	4	2	2	2	2
50'	15 m	12	10	8	6	6	6	4	4	2	2	2	1	1
60'	18 m	12	10	8	6	6	4	4	2	2	1	1	1/0	1/0
70'	21 m	12	8	6	6	4	4	2	2	1	1	1/0	1/0	2/0
80'	24 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
90'	27 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
100'	30 m	10	6	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
110'	33 m	10	6	6	4	2	2	1	1/0	1/0	2/0	3/0	3/0	4/0
120'	36 m	10	6	4	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
130'	40 m	8	6	4	2	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0
140'	43 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
150'	46 m	8	6	4	2	2	1	1/0	2/0	3/0	3/0	4/0	4/0	
160'	49 m	8	6	4	2	2	1	1/0	2/0	3/0	4/0	4/0	4/0	
170'	52 m	8	6	2	2	1	1	2/0	3/0	3/0	4/0	4/0		

3% Voltage Drop at 32 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	16	16	14	14	12	12	10	10	10	8	8
15'	5 m	18	16	14	14	12	12	10	10	8	8	8	6	6
20'	6 m	18	16	12	12	12	10	10	8	8	6	6	6	6
25'	8 m	18	14	12	12	10	10	8	8	6	6	6	6	4
30'	9 m	16	14	10	10	10	8	8	6	6	6	4	4	4
40'	12 m	16	12	10	10	8	8	6	6	4	4	4	2	2
50'	15 m	14	12	8	8	8	6	6	4	4	2	2	2	2
60'	18 m	14	10	8	8	6	6	4	4	2	2	2	2	1
70'	21 m	12	10	6	6	6	6	4	2	2	2	1	1	0
80'	24 m	12	10	6	6	6	4	4	2	2	1	1	0	0
90'	27 m	12	8	6	6	6	4	2	2	2	1	1/0	1/0	2/0
100'	30 m	12	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
110'	33 m	10	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
120'	36 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
130'	40 m	10	8	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
140'	43 m	10	6	6	4	2	2	1	1/0	1/0	2/0	3/0	3/0	3/0
150'	46 m	10	6	6	4	2	1	1	1/0	2/0	2/0	3/0	3/0	4/0
160'	49 m	10	6	4	4	2	1	1	1/0	2/0	3/0	3/0	4/0	4/0
170'	52 m	8	6	4	2	2	1	1	1/0	2/0	3/0	3/0	4/0	4/0

**Table C: Conductors
Sized (AWG) for 10%
Voltage Drop**

Use 10% voltage drop for any
“non-critical” applications: windlass,
cabin lights, etc....

10% Voltage Drop at 12 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	16	16	14	14	12	12	10	10	10	10
15'	5 m	18	18	16	14	14	12	12	10	10	8	8	8	8
20'	6 m	18	16	14	14	12	12	10	10	8	8	8	6	6
25'	8 m	18	16	14	12	12	10	10	8	8	6	6	6	6
30'	9 m	18	14	12	12	10	10	8	8	6	6	6	6	4
40'	12 m	16	14	12	10	10	8	8	6	6	6	4	4	4
50'	15 m	16	12	10	10	8	8	6	6	4	4	4	2	2
60'	18 m	14	12	10	8	8	6	6	4	4	2	2	2	2
70'	21 m	14	10	8	8	6	6	6	4	2	2	2	2	1
80'	24 m	14	10	8	8	6	6	4	4	2	2	2	1	1
90'	27 m	12	10	8	6	6	6	4	2	2	2	1	1	1/0
100'	30 m	12	10	8	6	6	4	4	2	2	1	1	1/0	1/0
110'	33 m	12	8	8	6	6	4	2	2	2	1	1/0	1/0	1/0
120'	36 m	12	8	6	6	4	4	2	2	1	1	1/0	1/0	2/0
130'	40 m	12	8	6	6	4	4	2	2	1	1/0	1/0	2/0	2/0
140'	43 m	10	8	6	6	4	2	2	1	1	1/0	2/0	2/0	2/0
150'	46 m	10	8	6	4	4	2	2	1	1/0	1/0	2/0	2/0	3/0
160'	49 m	10	8	6	4	4	2	2	1	1/0	2/0	2/0	3/0	3/0
170'	52 m	10	6	6	4	2	2	2	1	1/0	2/0	2/0	3/0	3/0

10% Voltage Drop at 24 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	18	18	18	16	16	14	14	14	12	12
15'	5 m	18	18	18	18	16	16	14	14	12	12	12	10	10
20'	6 m	18	18	18	16	16	14	14	12	12	10	10	10	10
25'	8 m	18	18	16	16	14	14	12	12	10	10	10	8	8
30'	9 m	18	18	16	14	14	12	12	10	10	8	8	8	8
40'	12 m	18	16	14	14	12	12	10	10	8	8	8	6	6
50'	15 m	18	16	14	12	12	10	10	8	8	6	6	6	6
60'	18 m	18	14	12	12	10	10	8	8	6	6	6	6	4
70'	21 m	16	14	12	10	10	8	8	6	6	6	6	4	4
80'	24 m	16	14	12	10	10	8	8	6	6	6	4	4	4
90'	27 m	16	12	10	10	8	8	6	6	6	4	4	4	2
100'	30 m	16	12	10	10	8	8	6	6	4	4	4	2	2
110'	33 m	14	12	10	8	8	8	6	6	4	4	2	2	2
120'	36 m	14	12	10	8	8	6	6	4	4	2	2	2	2
130'	40 m	14	12	10	8	8	6	6	4	4	2	2	2	2
140'	43 m	14	10	8	8	6	6	6	4	2	2	2	2	1
150'	46 m	14	10	8	8	6	6	4	4	2	2	2	2	1
160'	49 m	14	10	8	8	6	6	4	4	2	2	2	1	1
170'	52 m	12	10	8	6	6	6	4	2	2	2	2	1	1

10% Voltage Drop at 32 Volts

		Current (Amps)												
Length		5	10	15	20	25	30	40	50	60	70	80	90	100
10'	3 m	18	18	18	18	18	18	18	16	16	14	14	14	14
15'	5 m	18	18	18	18	18	18	16	14	14	14	12	12	12
20'	6 m	18	18	18	18	16	16	14	14	12	12	12	10	10
25'	8 m	18	18	18	16	16	14	14	12	12	10	10	10	10
30'	9 m	18	18	18	16	14	14	12	14	10	10	10	10	8
40'	12 m	18	18	16	14	14	12	12	10	10	8	8	8	8
50'	15 m	18	16	14	14	12	12	10	10	8	8	8	6	6
60'	18 m	18	16	14	12	12	10	10	8	8	8	6	6	6
70'	21 m	18	14	14	12	10	10	8	8	8	6	6	6	6
80'	24 m	18	14	12	12	10	10	8	8	6	6	6	6	4
90'	27 m	18	14	12	10	10	10	8	6	6	6	6	4	4
100'	30 m	16	14	12	10	10	8	8	6	6	6	4	4	4
110'	33 m	16	14	12	10	10	8	8	6	6	6	4	4	4
120'	36 m	16	12	10	10	8	8	6	6	6	4	4	4	2
130'	40 m	16	12	10	10	8	8	6	6	6	4	4	2	2
140'	43 m	14	12	10	8	8	8	6	6	4	4	2	2	2
150'	46 m	14	12	10	8	8	6	6	6	4	4	2	2	2
160'	49 m	14	12	10	8	8	6	6	4	4	2	2	2	2
170'	52 m	14	12	10	8	8	6	6	4	4	2	2	2	2

ABYC Recommends...

“Conductors used for panelboard or switchboard main feeders, bilge blowers, electronic equipment, navigation lights, and other circuits where voltage drop must be kept to a minimum, shall be sized for a voltage drop not to exceed three percent. Conductors used for lighting, other than navigation lights, and other circuits where voltage drop is not critical, shall be sized for a voltage drop not to exceed 10 percent.”
11.14.2.6.

Table D: Conductor Sizes

AWG	mm ²	AWG CM area	SAE CM area	Ampacity Engine Space	
				Outside	Inside
18	0.8	1,600	1,537	20	17
16	1	2,600	2,336	25	21
14	2	4,100	3,702	35	30
12	3	6,500	5,833	45	38
10	5	10,500	9,343	60	51
8	8	16,800	14,810	80	68
6	13	26,600	24,538	120	102
4	21	42,000	37,360	160	136
2	34	66,500	62,450	210	178
1	42	83,690	77,790	245	208
1/0	53	105,600	98,980	285	242
2/0	68	133,100	125,100	330	280
3/0	85	167,800	158,600	385	327
4/0	107	211,600	205,500	445	378

Table E: Temperature Rating of Conductor Insulation**The Law****The Code of Federal Regulations (CFR) 183.425 Conductors**

- (b) Except for intermittent surges each conductor must not carry a current greater than that specified in Table E for the conductor's gauge and temperature rating.
- (c) For conductors in engine spaces, amperages must be corrected by the appropriate correction factor in note 1 of Table E.

Due to engine heat, the ambient temperature in engine spaces is usually higher than in other spaces of the boat. Wiring in and passing through engine spaces must be able to operate at these higher ambient temperatures. The ampacity values in Table E are based on an ambient temperature of 86°F (30°C) which is considered reasonable for use on boats except in engine spaces. The correction factors in Note 1 in Table E convert the ampacities to Table E to acceptable values in an ambient temperature of 122°F (50°C). This higher temperature has been selected as satisfactory for engine spaces. Note 1 is supplied to eliminate the need for calculating the corrections to Table E. The values are already corrected.

Conductor Size AWG	Ampacity Outside of Engine Space	Ampacity Inside of Engine Space (Note 1)
18	20	17
16	25	21
14	35	30
12	45	38
10	60	51
8	80	68
6	120	102
4	160	136
3	180	153
2	210	178
1	245	208
1/0	285	242
2/0	330	280
3/0	385	327
4/0	445	378

*De-rating for engine space is 0.85 for 221°F (105°C) rated wire.

Table F: Allowable Amperage of Conductors of 50 Volts or More

The current values shown in Table F and also on Table D do not consider voltage drop for conductors under 50 volts. The values shown on the ampacity table are the maximum safe amperages which the conductor can carry on a continuous basis. They do not apply to intermittent starting loads such as motor start currents. Since all Ancor™ Boat Cable is 105°C insulated, only that temperature rating is shown.

Due to the higher ambient temperatures in engine spaces and the heat retention of large wire bundles, a "correction factor" must be used to derate the wire by increasing conductor size. Table F takes into consideration these factors and should be used to select conductor sizes for circuits over 50 volts. Note that for electrical systems under 50 volts, voltage drop is the controlling factor and the tables on 199 and 200 should be used.

Conductor Size AWG	2 Conductors 221°F (105°C) Engine Space		3 Conductors 221°F (105°C) Engine Space		4–6 Conductors 221°F (105°C) Engine Space		7–24 Conductors 221°F (105°C) Engine Space	
	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside
18	20	17.0	14.0	11.9	12.0	10.2	10.0	8.5
16	25	21.3	17.5	14.9	15.0	12.8	12.5	10.6
14	35	29.8	24.5	20.8	21.0	17.9	17.5	14.9
12	45	38.3	31.5	26.8	27.0	23.0	22.5	19.1
10	60	51.0	42.0	35.7	36.0	30.6	30.0	25.5
8	80	68.0	56.0	47.6	48.0	40.8	40.0	34.0
6	120	102.0	84.0	71.4	72.0	61.2	60.0	51.0
4	160	136.0	112.0	95.2	96.0	81.6	80.0	68.0
3	180	153.0	126.0	107.1	108.0	91.8	90.0	76.5
2	210	178.5	147.0	125.0	126.0	107.1	105.0	89.3
1	245	208.3	171.5	145.8	147.0	125.0	122.5	104.1
1/0	285	242.3	199.5	169.6	171.0	145.4	142.5	121.1
2/0	330	280.5	231.0	196.4	198.0	168.3	165.0	140.3
3/0	385	327.3	269.5	229.1	231.0	196.4	192.5	163.6
4/0	445	378.3	311.5	264.8	267.0	227.0	222.5	189.1

Number of current carrying conductors:	Correction Factor
3	0.70
4 to 6	0.60
7 to 24	0.50
25 and above	0.40

Table F is supplied to eliminate the need for calculating the corrections for multi-conductor cable bundles to Table E. The values are already corrected.

Note: These tables only apply for 221°F (105°C) wire and other premium wire and should not be used for lesser grades of wire and cable.

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* There is NO LIMIT on conductors in a bundle under 50 volts.



Wire & Cable

- Ancor Marine Grade™ wire is manufactured from tinned copper stranding for maximum protection against corrosion and electrolysis. Ultra flexible (Type 3) stranding resists fatigue due to vibration and flexing.
- Ancor's proprietary premium vinyl insulation stays flexible even in extreme cold (-40°C) and resists salt water, battery acid, oil, gasoline and ultra-violet radiation. Exclusive insulation is rated at 600 volts, 105°C dry and 75°C wet, and is resistant to heat and abrasion.
- Exceeds all UL 1426, US Coast Guard Charter boat (CFR Title 46) and ABYC standards.

Primary Cable 18–14 AWG

18 AWG (0.8 mm²)

Color	Ft	Item #
Black	35	180003
	100	100010
	250	100025
	500	100050
	1000	100099
Dk Blue	35	180103
	100	100110
	250	100125
	500	100150
	1000	100199
Brown	35	180203
	100	100210
	250	100225
	500	100250A
	1000	100299
Green	35	180303
	100	100310
	250	100325
	500	100350
	1000	100399
Grey	35	180403
	100	100410
	250	100425
	500	100450
	1000	100499
Orange	35	180503
	100	100510
	250	100525
	500	100550
	1000	100599
Pink	35	180603
	100	100610
	250	100625
	500	100650
	1000	100699
Purple	35	180703
	100	100710
	250	100725
	500	100750
	1000	100799
Red	35	180803
	100	100810
	250	100825
	500	100850
	1000	100899

18 AWG (0.8 mm²)

Color	Ft	Item #
White	35	180903
	100	100910
	250	100925
	500	100950
	1000	100999
Yellow	35	181003
	100	101010
	250	101025
	500	101050
	1000	101099

16 AWG (1 mm²)

Color	Ft	Item #
Lt Blue	100	101910
	250	101925
	500	101950
Black	25	182003
	100	102010
	250	102025
	500	102050
	1000	102099
Dk Blue	25	182103
	100	102110
	250	102125
	500	102150
	1000	102199
Brown	25	182203
	100	102210
	250	102225
	500	102250
	1000	102299
Green	25	182303
	100	102310
	250	102325AA
	500	102350
	1000	102399
Grey	25	182403
	100	102410
	250	102425
	500	102450
	1000	102499

16 AWG (1 mm²)

Color	Ft	Item #
Orange	25	182503
	100	102510
	250	102525
	500	102550
	1000	102599
Pink	25	182603
	100	102610
	250	102625
	500	102650
	1000	102699
Purple	25	182703
	100	102710
	250	102725
	500	102750
	1000	102799
Red	25	182803
	100	102810
	250	102825
	500	102850
	1000	102899
White	25	182903
	100	102910
	250	102925
	500	102950
	1000	102999
Yellow	25	183003
	100	103010
	250	103025
	500	103050
	1000	103099

14 AWG (2 mm²)

Color	Ft	Item #
Lt Blue	100	103910
	250	103925
	500	103950
Black	18	184003
	100	104010
	250	104025
	500	104050
	1000	104099
Dk Blue	18	184103
	100	104110
	250	104125
	500	104150
	1000	104199

14 AWG (2 mm²)

Color	Ft	Item #
Brown	18	184203
	100	104210
	250	104225
	500	104250
	1000	104299
Green	18	184303
	100	104310
	250	104325
	500	104350
	1000	104399
Grey	18	184403
	100	104410
	250	104425
	500	104450
	1000	104499
Orange	18	184503
	100	104510
	250	104525
	500	104550
	1000	104599
Pink	18	184603
	100	104610
	250	104625
	500	104650
	1000	104699
Purple	18	184703
	100	104710
	250	104725
	500	104750
	1000	104799
Red	18	184803
	100	104810
	250	104825
	500	104850
	1000	104899
White	18	184903
	100	104910
	250	104925
	500	104950
	1000	104999
Yellow	18	185003
	100	105010
	250	105025
	500	105050
	1000	105099

Primary Cable 12–6 AWG

12 AWG (3 mm²)

Color	Ft	Item #
Black	12	186003
	25	106002
	100	106010
	250	106025
	400	106040
	1000	106099
Dk Blue	25	106102
	100	106110
	250	106125
	400	106140
	1000	106199
Brown	25	106202
	100	106210
	250	106225
	400	106240
	1000	106299
Green	25	106302
	100	106310
	250	106325
	400	106340
	1000	106399
Orange	25	106502
	100	106510
	250	106525
	400	106540
	1000	106599
Pink	25	106602
	100	106610
	250	106625
	400	106640
Purple	25	106702
	100	106710
	250	106725
	400	106740
Red	12	186803
	25	106802
	100	106810
	250	106825
	400	106840
	1000	106899
White	25	106902
	100	106910
	250	106925
	400	106940
	1000	106999
Yellow	25	107002
	100	107010
	250	107025
	400	107040
	1000	107099

10 AWG (5 mm²)

Color	Ft	Item #
Black	8	188003
	25	108002
	100	108010
	250	108025
	500	108050
	1000	108099
Dk Blue	25	108102
	100	108110
	250	108125
	500	108150
	1000	108199
Brown	25	108202
	100	108210
	250	108225
	500	108250
	1000	108299
Green	25	108302
	100	108310
	250	108325
	500	108350
	1000	108399
Orange	25	108502
	100	108510
	250	108525
	500	108550
	1000	108599
Red	8	188803
	25	108802
	100	108810
	250	108825
	500	108850
White	1000	108899
	25	108902
	100	108910
	250	108925
	500	108950
Yellow	1000	108999
	25	109002
	100	109010
	250	109025
	500	109050
Green w/ Yellow Strip	1000	109099
	25	109302
	100	109310
	250	109325
	500	109350
	1000	109399

8 AWG (8 mm²)

Color	Ft	Item #
Black	25	111002
	50	111005
	100	111010
	250	111025
	500	111050
	1000	111099
Green	25	111302
	50	111305
	100	111310
	250	111325
	500	111350
	1000	111399
Red	25	111502
	50	111505
	100	111510
	250	111525
	500	111550
	1000	111599
White	25	111702
	50	111705
	100	111710
	250	111725
	500	111750
Yellow	1000	111799
	25	111902
	50	111905
	100	111910
	250	111925
	500	111950
	1000	111999

6 AWG (13 mm²)

Color	Ft	Item #
Black	25	112002
	50	112005
	100	112010
	250	112025
	500	111050
	750	111075
Green	25	112302
	50	112305
	100	112310
	250	112325
	500	112350
	750	112375
Red	25	112502
	50	112505
	100	112510
	250	112525
	500	112550
	750	112575
White	25	112702
	50	112705
	100	112710
	250	112725
	500	112750
Yellow	750	112775
	25	112902
	50	112905
	100	112910
	250	112925
	500	112950
	750	112975



Battery Cable 4–4/0 AWG**4 AWG (19 mm²)**

Color	Ft	Item #
Black	25	113002
	50	113005
	100	113010
	250	113025
	500	113050
Red	25	113502
	50	113505
	100	113510
	250	113525
	500	113550
Yellow	25	113902
	50	113905
	100	113910
	250	113925
	500	113950

2 AWG (32 mm²)

Color	Ft	Item #
Black	25	114002
	50	114005
	100	114010
	250	114025
	400	114040
Red	25	114502
	50	114505
	100	114510
	250	114525
	400	114540
Yellow	25	114902
	50	114905
	100	114910
	250	114925
	400	114940

1 AWG (40 mm²)

Color	Ft	Item #
Black	25	115002
	50	115005
	100	115010
	300	115030
Red	25	115502
	50	115505
	100	115510
	300	115530
Yellow	25	115902
	50	115905
	100	115910
	300	115930

1/0 AWG (50 mm²)

Color	Ft	Item #
Black	25	116002
	50	116005
	100	116010
	250	116025
Red	25	116502
	50	116505
	100	116510
	250	116525
Yellow	25	116902
	50	116905
	100	116910
	250	116925

2/0 AWG (62 mm²)

Color	Ft	Item #
Black	25	117002
	50	117005
	100	117010
	200	117020
Red	25	117502
	50	117505
	100	117510
	200	117520
Yellow	25	117902
	50	117905
	100	117910
	200	117920

3/0 AWG (81 mm²)

Color	Ft	Item #
Black	25	118002
	50	118005
	100	118010
	150	118015
Red	25	118502
	50	118505
	100	118510
	150	118515
Yellow	25	118902
	50	118905
	100	118910
	150	118915

4/0 AWG (103 mm²)

Color	Ft	Item #
Black	25	119002
	50	119005
	100	119010
Red	25	119502
	50	119505
	100	119510
Yellow	25	119902
	50	119905
	100	119910

**Battery Cable Stripper**

- Adjustable blade cutting height, comes with extra blades.
- Easily adjusts to various cable thickness. Swivel blade for stripping up wire as well as around.
- Good for stripping duplex and triplex.
- Comes with extra swivel blade.

Item # 702065

Marine Grade™ 18 – 4/0 AWG Wire and Cable Specifications

Wire Size	Nominal O.D.	Wt. per 1000'	Stranding No. of 30 AWG	Cir. Mil Area	mm ²	Ohms per 1000'
18 AWG	7/64"	12 lbs	16	1600	.0823	6.48
.08 mm ²	3 mm	5.4 kg				
16 AWG	1/8"	16 lbs	26	2600	1.31	4
1 mm ²	3 mm	7.3 kg				
14 AWG	9/64"	23 lbs	41	4100	2.08	2.53
2 mm ²	4 mm	10.4 kg				
12 AWG	5/32"	31 lbs	65	6500	3.31	1.75
3 mm ²	4 mm	14 kg				
10 AWG	7/32"	44 lbs	105	10,500	5.26	2.98
5 mm ²	6 mm	20 kg				
8 AWG	5/16"	86 lbs	168	16,800	8.37	0.62
8 mm ²	8 mm	39 kg				
6 AWG	11/32"	118 lbs	266	26,600	13.3	0.04
13 mm ²	9 mm	53.5 kg				
4 AWG	13/32"	178 lbs	420	42,000	21.15	0.24
21 mm ²	10 mm	81 kg				
2 AWG	15/32"	277 lbs	665	66,500	33.62	0.157
34 mm ²	12 mm	126 kg				
1 AWG	17/32"	350 lbs	836	83,690	44.21	0.127
42 mm ²	14 mm	159 kg				
1/0 AWG	9/16"	437 lbs	1064	105,600	53.49	0.099
53 mm ²	14 mm	198 kg				
2/0 AWG	5/8"	549 lbs	1330	133,000	67.43	0.077
68 mm ²	16 mm	249 kg				
3/0 AWG	11/16"	675 lbs	1665	167,800	85.01	0.062
85 mm ²	18 mm	306 kg				
4/0 AWG	13/16"	837 lbs	2109	211,600	107.2	0.049
107 mm ²	21 mm	380 kg				

Safety Duplex Cable UL 1426 Tinned Boat Cable

Features red and yellow Marine Grade™ primary conductors in a white common jacket.

Spool Length	Item #	Spool Length	Item #
18/2 AWG (2x0.8 mm ²)		12/2 AWG (2x3 mm ²)	
100'	124910	100'	124310
250'	124925	250'	124325
500'	124950	500'	124350
1000'	124999	10/2 AWG (2x5 mm ²)	
16/2 AWG (2x1 mm ²)		25'	124102
100'	124710	100'	124110
250'	124725	250'	124125
500'	124750	400'	124140
1000'	124799	800'	124180
14/2 AWG (2x2 mm ²)		8/2 AWG (2x8 mm ²)	
25'	124502	50'	123905
100'	124510	100'	123910
250'	124525	6/2 AWG (2x13 mm ²)	
500'	124550	50'	123705
1000'	124599	100'	123710



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
18/2	3/16"x9/32"	49 lbs
	5x7 mm	22.2 kg
16/2	3/16"x5/16"	51 lbs
	5x8 mm	23.1 kg
14/2	7/32"x11/32"	65 lbs
	6x9 mm	29.5 kg
12/2	7/32"x3/8"	82 lbs
	6x10 mm	37.3 kg
10/2	1/4"x15/32"	128 lbs
	6x12 mm	58.2 kg
8/2	11/32"x5/8"	230 lbs
	9x16 mm	104.5 kg
6/2	13/32"x3/4"	364 lbs
	10x19 mm	165.5 kg

Safety Duplex Cable

Spool Length	Item #
16/2 AWG (2x1 mm²)	
100'	126710
250'	126725
500'	126750
14/2 AWG (2x2 mm²)	
100'	126510
250'	126525

Spool Length	Item #
500'	126550
12/2 AWG (2x3 mm²)	
100'	126310
250'	126325
500'	126350

Round Safety



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/2	5/16"	49 lbs
	8 mm	22.2 kg
14/2	11/32"	63 lbs
	9 mm	28.6 kg
12/2	13/32"	80 lbs
	10 mm	36.3 kg

Flat Duplex Cable

Spool Length	Item #
18/2 AWG (2x0.8 mm²)	
100'	121910
250'	121925
500'	121950
16/2 AWG (2x1 mm²)	
100'	121710
250'	121725
500'	121750
1000'	121799
14/2 AWG (2x2 mm²)	
100'	121510
250'	121525
500'	121550
1000'	121599

Spool Length	Item #
12/2 AWG (2x3 mm²)	
100'	121310
250'	121325
500'	121350
10/2 AWG (2x5 mm²)	
100'	121110
250'	121125
400'	121140
800'	121180
8/2 AWG (2x8 mm²)	
50'	120905
100'	120910
250'	120925
6/2 AWG (2x13 mm²)	
50'	120705
100'	120710

Flat Cable



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
18/2	3/16"x9/32"	49 lbs
	5x7 mm	22.2 kg
16/2	3/16"x5/16"	51 lbs
	5x8 mm	23.1 kg
14/2	7/32"x11/32"	65 lbs
	6x9 mm	29.5 kg
12/2	7/32"x3/8"	82 lbs
	6x10 mm	37.3 kg
10/2	1/4"x15/32"	128 lbs
	6x12 mm	58.2 kg
8/2	11/32"x5/8"	230 lbs
	9x16 mm	104.5 kg
6/2	13/32"x3/4"	364 lbs
	10x19 mm	165.5 kg

Triplex Cable

Spool Length	Item #
16/3 AWG (3x1 mm²)	
100'	131710
250'	131725
500'	131750
1000'	131799
14/3 AWG (3x2 mm²)	
100'	131510
250'	131525
500'	131550
900'	131590
12/3 AWG (3x3 mm²)	
25'	131302
100'	131310

Spool Length	Item #
250'	131325
700'	131370
10/3 AWG (3x5 mm²)	
100'	131110
300'	131130
500'	131150
8/3 AWG (3x8 mm²)	
25'	130902
50'	130905
100'	130910
6/3 AWG (3x13 mm²)	
50'	130705
100'	130710

Flat Cable



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/3	3/16"x15/32"	75 lbs
	5x12 mm	34 kg
14/3	7/32"x1/2"	96 lbs
	6x13 mm	43.6 kg
12/3	7/32"x17/32"	125 lbs
	6x14 mm	56.8 kg
10/3	1/4"x21/32"	186 lbs
	6x17 mm	84.5 kg
8/3	3/8"x1"	287 lbs
	10x25 mm	130.4 kg
6/3	7/16"x1-3/16"	470 lbs
	11x30 mm	213.6 kg

Spool Length	Item #
16/3 AWG (3x1 mm²)	
100'	133710
250'	133725
14/3 AWG (3x2 mm²)	
100'	133510
250'	133525
900'	133590

Spool Length	Item #
12/3 AWG (3x3 mm²)	
100'	133310
250'	133325

Round Cable



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/3	11/32"	75 lbs
	9 mm	34 kg
14/3	13/32"	96 lbs
	10 mm	43.6 kg
12/3	7/16"	125 lbs
	11 mm	56.8 kg

European Color Code AC Cable

Premium Tinned Copper, Class K Stranding



Spool Length	Item #
10/3 AWG (3x5 mm ²)	
500'	131151

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
10/3	1/4"x21/32"	186 lbs
	6x17 mm	84.5 kg

Flat Trailer Cable

Tinned Boat Cable



Conductor Colors	Spool Length	Item #
16/4 AWG (3x3 mm ²)		
Yellow, White, Green, Brown	100'	154010
	300'	154030

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/4	3/16"x9/16"	105 lbs
	4x14 mm	47.7 kg

Signal Cable

Tinned Boat Cable



Conductor Colors	Spool Length	Item #
20/2 AWG (2x0.5 mm ²)		
Black, Red	25'	189303
	100'	122010
	500'	122050

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
20/2	5/32"x1/4"	18 lbs
	4x6.4 mm	8.1 kg

Round Signal

100% Mylar Foil Shield and Drain Wire

Tinned Boat Cable



Conductor Colors	Spool Length	Item #
20/8 AWG (8x0.5 mm ²)		
Black, Red, Green, Blue, Brown, Orange, Purple, Yellow	100'	158010
	250'	158025

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
20/8	5/16"	63 lbs
	7.9 mm	28.6 kg

Twisted Pairs w/ Shield

Premium Tinned Copper

- For all metal boats and around sensitive electronics
- Ultra flexible stranding is tinned for corrosion resistance
- 93% Tinned copper shield for maximum EMI and RFI rejection
- 2-3" lay for interference cancellation



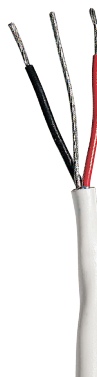
Spool Length	Item #
14/2 AWG (2x2 mm ²)	
100'	141410
250'	141425

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
14/2	.330"	73.2 lbs
	8.4 mm	33.3 kg

Round Instrument Cable

100% Mylar Foil Shield & Drain Wire

UL 1426 Tinned Boat Cable



Conductor Colors	Spool Length	Item #
20/3 AWG (3x0.5 mm ²)		
Black, Red	100'	153010
	500'	153050

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
20/3	7/32"	30 lbs
	5.6 mm	13.6 kg

Flat Ribbon Bonded Cable**Premium Tinned Bonded Copper**

Conductor Colors	Spool Length	Item #
16/2 AWG (3x3 mm²)		
Black, Red	100'	153110
	500'	153150

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/2	1/8"x1/4"	32 lbs
	3.2x6.4 mm	14.5 kg



Conductor Colors	Spool Length	Item #
16/4 AWG (4x1 mm²)		
Brown, Green, White, Yellow	100'	154510
	250'	154525

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/4	1/8"x1/2"	62 lbs
	3.2x12.7 mm	28 kg

Round Mast**UL 1426 Tinned Boat Cable**

Conductor Colors	Spool Length	Item #
14/5 AWG (5x2 mm²)		
Black, Blue, Green, Brown, Red	100'	155010
	500'	155050

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
14/5	1/2"	160 lbs
	12.7 mm	79.5 kg

Bilge Pump Cable**Premium Tinned Copper**

- Bilge Pump Cable features grey insulation with black, brown and red conductors specifically for bilge pumps. Oil resistant.
- STOW - A - Water resistant jacket.



Spool Length	Item #
16/3 AWG (3x1 mm²)	
100'	156610
250'	156625
14/3 AWG (3x2 mm²)	
100'	156410
250'	156425
500'	156450

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/3	.348"	78 lbs
	8.85 mm	35.5 kg
14/3	.377"	99 lbs
	9.6 mm	45.0 kg

GTO 15 High Voltage Cable (15000V)

- Coupler output to antenna



Conductor Colors	Spool Length	Item #
14 AWG (2 mm²)		
White	25'	150102
	100'	150110

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
14	1/4"	38 lbs
	6.4 mm	17.2 kg

Shore Power Cord

- High visibility yellow jacket is oil and sunlight resistant.
- Ultra flexible insulation is abrasion resistant for "hard service" applications.
- 600 volt rated for extra heavy-duty service.
- 16/3 is 300 volt cable.

Cable Size	Conductor Colors	Spool Length	Item #
16/3 Phone	Black, White, Green	300'	153530
10/3 STOW	Black, White, Green	250'	153725
10/3 STW	Black, White, Green	250'	SPC103
6/3 STOW	Black, White, Green	250'	153925
		per/ft	100320
6/4 STW	Black, White, Green, Red	per/ft	100319



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
16/3 Phone	5/16" 6 mm	75 lbs 34 kg
10/3 STOW	21/32" 17 mm	284 lbs 129 kg
10/3 STW	21/32" 17 mm	284 lbs 129 kg
6/3 STOW	7/8" 22 mm	540 lbs 254.4 kg
6/4 STW	29/32" 23 mm	695 lbs 316 kg

Premium Battery Cable Assemblies

UL-1426 Tinned Boat Cable

Ancor™ Marine Grade Standard Battery Cable Assemblies are manufactured with Ancor's premium UL1426 tinned copper battery cable. The battery cable is fine stranded to produce maximum conductivity and flexibility. In addition, all Ancor™ battery cable is flame retarded, UV inhibited, rated to 600V and 105°C. The lugs are tinned copper to avoid corrosion and last longer. Each end has a piece of Ancor's adhesive lined 3:1 heatshrink tubing placed over the electrical connection. The heatshrink tubing seals out moisture and other corrosive elements found in the marine environment, and provides strain relief to ensure a longer lasting battery connection.

Color	Length		Stud Size		Item #
4 AWG (21 mm ²)					
Black	18"	45.7 cm	5/16"	7.93 mm	189130
	32"	81.2 cm	5/16"	7.93 mm	189134
	48"	121.9 cm	5/16"	7.93 mm	189136
Red	18"	45.7 cm	3/8"	9.5 mm	189131
	32"	81.2 cm	3/8"	9.5 mm	189135
	48"	121.9 cm	3/8"	9.5 mm	189137
2 AWG (34 mm ²)					
Black	18"	45.7 cm	5/16"	7.93 mm	189140
	32"	81.2 cm	5/16"	7.93 mm	189144
	48"	121.9 cm	5/16"	7.93 mm	189146
Red	18"	45.7 cm	3/8"	9.5 mm	189141
	32"	81.2 cm	3/8"	9.5 mm	189145
	48"	121.9 cm	3/8"	9.5 mm	189147



For Continuous Current Draws up to:	Use Battery Cable Assemblies
136 amps	4 AWG
178 amps	2 AWG

Super Flex Audio Cable

Premium Tinned Copper

- Super Flexible, easy to run. Clear jacket to blend into the environment.
- Drawn copper, unidirectional lay for ultimate in sound quality.
- Tinned copper for corrosion resistance in the marine environment.

Spool Length	Item #
18/2 AWG (2x0.8 mm ²)	
100'	142810
16/2 AWG (2x1 mm ²)	
100'	142610
250'	142625
500'	142650

Spool Length	Item #
14/2 AWG (2x2 mm ²)	
100'	142410
250'	142425
1000'	142499



Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
18/2	.265"	29 lbs
	6.7 mm	13 kg
16/2	.319"	51 lbs
	8.1 mm	23.1 kg
14/2	.345"	65 lbs
	8.8 mm	29.5 kg

Coaxial Cable

Premium Tinned Copper

- Features signal loss ratios of up to 50% less than other coaxial cables.
- Tinned copper center conductor as well as tinned copper outer braid for corrosion resistance and easy soldering.
- 96% braid for best signal strength and least interference with UV inhibited white jacket for longest life.

Spool Length	Item #
RG 58CU	
100'	150510
250'	150525
RG 59U	
250'	151025
500'	151050

Spool Length	Item #
RG 213	
100'	151710
250'	151725
500'	151750

Spool Length	Item #
RG 8X	
100'	151510
250'	151525
500'	151550
1000'	151560



Ancor Recommends

- RG 58CU for interconnecting electronic equipment.
- RG 59U for TVs and some SAT NAVs.
- RG 8X for VHF runs less than 50 feet.
- Coaxial fittings page 216.

Cable Size (AWG)	Nominal O.D.	Wt. per 1000'
RG 58CU	3/16"	26 lbs
	4.8 mm	11.8 kg
RG 59U	1/4"	36 lbs
	6.4 mm	16.3 kg
RG 8X	1/4"	40 lbs
	6.4 mm	18.1 kg
RG 213	13/32"	110 lbs
	10.3 mm	50 kg

Coaxial Cable Assemblies

Premium Tinned Copper

- All assemblies come with Ancor™ Adhesive Lined Heat Shrink to seal out moisture, provide strain relief and fight corrosion.
- 96% Tinned copper braid for optimum protection against signal loss.
- 100% Tinned Copper Center Conductor and Braid
- One end pre-assembled coaxial cable packages for RG58 and RG8X come with Ancor's twist-on UHF plugs for easy installation.
- No solder or special tools required.
- Special low loss SAT NAV extensions.

Wire Type	RG58C/U	RG59U	RG8X	RG213
Insulation Material	PVC*	PVC	PVC	PVC*
Nominal O.D.	3/16" / 4.8 mm	1/4" / 6.4 mm	1/4" / 6.4 mm	13/32" / 10.3 mm
AWG	20	23	16	13
Conductor Stranding	19/33	Solid**	19/29	7/21
Braid Coverage	96%	96%	96%	96%
Wt. per 1000'	26 lbs / 11.8 kg	36 lbs / 16.3 kg	40 lbs / 18.1 kg	110 lbs / 50 kg
Impedance (Ohms)	50	75	50	50
Capacitance/Ft.	30.8 pF	20.5 pF	26.0 pF	30.8pF
Attenuation/100'				
@50MHz	3.3db	2.4db	2.5db	1.3db
@100MHz	4.9db	3.4db	3.7db	1.9db
@1000MHz	21.5db	12.0db	13.5db	8.0db
Velocity of Propagation	66%	66%	78%	66%

* non-contaminating insulation ** copperweld

Ends Description	Wire Length	Item #
RG58CU		
Two ends assembled	3'	189800
RG8X		
One end assembled	50'	189849



Adhesive Lined Heat Shrink Connectors

- Offers heat activated adhesive built into the sleeve of the heat shrink tubing.
- Shrinks to form a water tight seal and the ultimate vibration and strain relief.
- Tinned for corrosion resistance.
- Pure copper for maximum current flow. Brazed seam for maximum strength.
- UL Listed and CSA Recognized



Heat Shrink Spade Terminals

UL 486A

AWG	Screw Size	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	#8 4 mm	3	313203
		25	313225
		100	313299
16-14 1-2 mm ²	#8 4 mm	3	314203
		25	314225
		100	314299
	#10 4.8 mm	3	314303
		25	314325
		100	314399
12-10 3-5 mm ²	#8 4 mm	3	315203
		25	315225
		100	315299
	#10 4.8 mm	3	315303
		25	315325
		100	315399



Heat Shrink Butt Connectors

UL 486C

AWG	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	3	309003
	25	309025
	100	309099
	500	309002
16-14 1-2 mm ²	3	309103
	25	309125
	100	309199
	500	309102
12-10 3-5 mm ²	3	309203
	25	309225
	100	309299
	500	309202

Heat Shrink Snap Plugs

UL 310



AWG	Gender	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	Female	3	318803
		25	318825
		100	318899
	Male	3	318903
		25	318925
		100	318999
16-14 1-2 mm ²	Female	3	319803
		25	319825
		100	319899
	Male	3	319903
		25	319925
		100	319999

Heat Shrink Disconnects

.250 (6.4 mm) tab size
UL 310


AWG	Gender	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	Female	3	316803
		25	316825
		100	316899
	Male	3	316903
		25	316925
		100	316999
16-14 1-2 mm ²	Female	3	317803
		25	317825
		100	317899
	Male	3	317903
		25	317925
		100	317999

Splash Proof Snap Plugs with Inserts



AWG	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	4	231480
	25	211480
16-14 1-2 mm ²	4	231490
	25	211490

Heat Shrink Ring Terminals

UL 486C



AWG	Screw Size	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	#8 4 mm	3	310203
		25	310225
		100	310299
	#10 4.8 mm	3	310303
		25	310325
		100	310399
	1/4" 6.4 mm	3	310403
		25	310425
		100	310499
	5/16" 7.9 mm	3	310503
		25	310525
		100	310599
16-14 1-2 mm ²	3/8" 9.5 mm	3	310603
		25	310625
		100	310699
	#8 4 mm	3	311203
		25	311225
		100	311299
	#10 4.8 mm	3	311303
		25	311325
		100	311399
	1/4" 6.4 mm	3	311403
		25	311425
		100	311499
12-10 3-5 mm ²	5/16" 7.9 mm	3	311503
		25	311525
		100	311599
	3/8" 9.5 mm	3	311603
		25	311625
		100	311699
	#8 4 mm	3	312203
		25	312225
		100	312299
	#10 4.8 mm	3	312303
		25	312325
		100	312399
	1/4" 6.4 mm	3	312403
		25	312425
		100	312499
	5/16" 7.9 mm	3	312503
		25	312525
		100	312599
	3/8" 9.5 mm	3	312603
		25	312625
		100	312699

Marine Grade Terminals

- Ancor's Marine Grade™ terminals differ from automotive terminals by being designed for the harsh marine environment.
- Nylon insulators are easy to crimp and will not split.
- Barrels are designed to tightly grip the wire with the least effort.
- Tinned copper gives the least electrical resistance but the most corrosion protection.



Nylon Ring Terminals

Nylon insulated with insulation grip
Double crimp, funnel entry
UL 486C

AWG	Screw Size		Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	#6	3.6 mm	6	230201
			25	210201
			6	230202
			25	210202
	#8	4 mm	6	230203
			25	210203
			100	220203
			500	222203
	1/4"	6.4 mm	5	230204
			25	210204
			100	220204
			500	222204
16-14 1-2 mm ²	#6	3.6 mm	6	230211
			25	210211
			6	230212
			25	210212
	#8	4 mm	6	230213
			25	210213
			100	220213
			500	222213
	1/4"	6.4 mm	5	230214
			25	210214
			100	220214
			500	222214

AWG	Screw Size		Qty/ Pkg	Item #
12-10 3-5 mm ²	#6	3.6 mm	5	230221
			25	210221
			5	230222
			25	210222
	#8	4 mm	5	230223
			25	210223
			100	220223
			500	222223
	1/4"	6.4 mm	4	230224
			25	210224
			100	220224
			500	222224
8 8 mm ²	5/16"	7.9 mm	4	230225
			25	210225
			100	220225
			500	222225
	3/8"	9.5 mm	4	230226
			25	210226
			100	220226
			500	222226
	1/2"	12.7 mm	3	230227
			25	210227
			50	220227
			100	222227

AWG	Screw Size		Qty/ Pkg	Item #
6 13 mm ²	#10	4.8 mm	1	230243
			25	210243
			100	222243
			500	222243
	1/4"	6.4 mm	1	230244
			25	210244
			100	222244
			500	222244
	5/16"	7.9 mm	1	230245
			25	210245
			100	222245
			500	222245
4 21 mm ²	3/8"	9.5 mm	1	230246
			25	210246
			100	222246
			500	222246
	1/2"	12.7 mm	1	230247
			25	210247
			100	222247
			500	222247
	#10	4.8 mm	1	230253
			25	210253
			100	222253
			500	222253

Nylon Flanged Spades

Nylon insulated with insulation grip
Double crimp, funnel entry
UL 486C



AWG	Screw Size		Qty/ Pkg	Item #
22–18 0.3–0.8 mm ²	#6	3.6 mm	6	230301
			25	210301
			100	220301
	#8	4 mm	6	230302
			25	210302
			100	220302
	#10	4.8 mm	6	230303
			25	210303
			100	220303
16–14 1–2 mm ²	#6	3.6 mm	6	230311
			25	210311
			100	220311
	#8	4 mm	6	230312
			25	210312
			100	220312
	#10	4.8 mm	6	230313
			25	210313
			100	220313
12–10 3–5 mm ²	#6	3.6 mm	5	230321
			25	210321
			100	220321
	#8	4 mm	5	230322
			25	210322
			100	220322
	#10	4.8 mm	5	230323
			25	210323
			100	220323

Nylon Single Crimp Butt Connectors

Nylon insulated seamless
UL 486C



AWG	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	7	230100
	25	210100
	100	220100
	500	222100
16-14 1-2 mm ²	7	230110
	25	210110
	100	220110
	500	222110
12-10 3-5 mm ²	5	230120
	25	210120
	100	220120
	500	222120

Nylon Double Crimp Butt Connectors

Nylon insulated with insulation grip
Funnel entry
UL 486C



AWG	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	3	230161
	25	210161
	100	220161
	500	222161
16-14 1-2 mm ²	3	230162
	25	210162
	100	220162
	500	222162
12-10 3-5 mm ²	2	230163
	25	210163
	100	220163
	500	222163

Nylon Fully Insulated Disconnects

.250 (6.4 mm) tab size
Nylon insulated with insulation grip
Double crimp, funnel entry
UL 310



AWG	Gender	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	Female	4	231408
		25	211408
		100	221408
	Male	4	231409
		25	211409
		100	221409
16-14 1-2 mm ²	Female	4	231418
		25	211418
		100	221418
	Male	4	231419
		25	211419
		100	221419
12-10 3-5 mm ²	Female	3	231428
		25	211428
		100	221428
	Male	3	231429
		25	211429
		100	221429

Nylon Disconnects

.250 (6.4 mm) tab size
Nylon insulated with insulation grip
Double crimp, funnel entry
UL 310



AWG	Gender	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	Female	4	230808
		25	210808
		100	220808
	Male	4	230809
		25	210809
		100	220809
16-14 1-2 mm ²	Female	4	230818
		25	210818
		100	220818
	Male	4	230819
		25	210819
		100	220819
12-10 3-5 mm ²	Female	3	230828
		25	210828
		100	220828
	Male	3	230829
		25	210829
		100	220829

Nylon Snap Plugs

Nylon insulated with insulation grip
Double crimp, funnel entry
UL 310



AWG	Gender	Qty/ Pkg	Item #
22-18 0.3-0.8 mm ²	Female	4	230708
		25	210708
		100	220708
	Male	4	230709
		25	210709
		100	220709
16-14 1-2 mm ²	Female	4	230718
		25	210718
		100	220718
	Male	4	230719
		25	210719
		100	220719

Nylon Multi-Stack Connectors

.250 (6.4mm) tab size
Nylon insulated with insulation grip
Double crimp, funnel entry
UL 310



AWG	Qty/ Pkg	Item #
16-14 1-2 mm ²	3	230612
	25	210612
	100	220612

Nylon 3-Way Connectors

Nylon insulated with insulation grip
Double crimp, funnel entry
UL 310



AWG	Qty/ Pkg	Item #
16-14 1-2 mm ²	1	230510
	25	210510
12-10 3-5 mm ²	1	230520
	25	210520

Vinyl Step Down Butt Connectors

Vinyl insulated
UL 486C



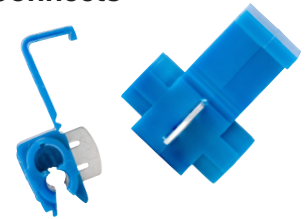
AWG	Qty/ Pkg	Item #
16-14 to 22-18 1-2 to 0.3-0.8 mm ²	3	230164
	25	210164
	100	220164
12-10 to 16-14 3-5 to 1-2 mm ²	3	230165
	25	210165
8 to 12-10 8 to 3-5 mm ²	3	230166
	25	210166

Vinyl Butt Connectors

Vinyl insulated
UL 486C



AWG	Qty/ Pkg	Item #
8 8 mm ²	2	230130
	25	210130
	100	222130
6 13 mm ²	1	230140
	25	210140
	100	222140
4 21 mm ²	1	230150
	25	210150
	100	222150

Splice Connects

AWG	Qty/ Pkg	Item #
18-14 0.8-2 mm ²	4	230615
	25	210615
	100	220615

Double Male-Female Adapter

.250 tab 6.4 mm



Qty/ Pkg	Item #
5	230613
25	210613



DrySeal™ Connectors






- Truly submersible, rated operable from -40°F to 221°F, under conditions of salt water spray and severe vibration.
- Sealing integrity is maintained even with exposure to gasoline, diesel fuel, anti-freeze, ozone and ultraviolet light to 3 feet.
- Seals intact under harsh conditions. Resistant to chemical exposure. One-piece, molded body.

ABYC Recommends:

"Current-carrying conductors shall be routed as high as practicable above the bilge water level and other areas where water may accumulate. If conductors must be routed in the bilge or other areas where water may accumulate, the connections shall be watertight." 11.14.6.5.

Cable Size	Description	Conductor Colors	Qty/Pkg	Item #
14/2 2x2 mm²	Two Conductor	Red, Yellow	1	249003

Coax Cable Fittings

	Description	Hex	Wire Size	Qty/Pkg	Item #
BNC Connectors					
	Crimp-On Male Plug	.320/.250	RG59	1	203100
UHF Connectors					
	Twist UHF Male Plug (PL259)		RG58	1	202175
			RG8X	1	202176
	Solder On UHF Male Plug (PL259)		RG8U	1	200259
	Double Female (PL258)			1	200258
	Deck Bulkhead Feed (PL258)			1	200250

Installation Instructions for Twist-On Connectors

To install Ancor™ twist-on connectors, strip the cable to expose 9/16" of the center conductor. Strip the outer jacket to expose 1/4" of the braid. Make sure that the braided shield does not touch the inner conductor.

Insert the cable into the connector until the center conductor protrudes through the center of the connector.

Twist the small knurled end while gently pushing the connector onto the cable until resistance is felt. Crimp or solder the center conductor.

Cut off any excess. It is strongly recommended that a piece of Ancor™ 3/4" heat shrink be installed on all exterior UHF connectors to waterproof and relieve strain.

Heavy-duty Lugs

- Ancor Marine Grade™ lugs are manufactured from heavy-duty annealed tinned copper, providing for maximum current flow.
- 100% tin plated copper resists corrosion from salt and moisture.
- Seamless barrel design allows for maximum strength when crimped.
- Closed end design seals out moisture so cables stay dry and corrosion free.
- 100% Tinned Copper
- UL 486A



Screw Size	Qty/Pkg	Item #
8 AWG 8 mm²		
10"	4.8 mm	2 252233
		25 242233
		100 244233
1/4"	6.4 mm	2 252234
		25 242234
		100 244234
5/16"	7.9 mm	2 252235
		25 242235
		100 244235
3/8"	9.5 mm	2 252236
		25 242236
		100 244236
1/2"	12.7 mm	2 252237
		10 242237
6 AWG 13 mm²		
10"	4.8 mm	2 252243
		25 242243
1/4"	6.4 mm	2 252244
		25 242244
5/16"	7.9 mm	2 252245
		25 242245
		100 244245
3/8"	9.5 mm	2 252246
		25 242246
		100 244246
5/16"	7.9 & 9.5 & 3/8" mm	1/1 252241
4 AWG 21 mm²		
10"	4.8 mm	2 252253
		25 242253
1/4"	6.4 mm	2 252254
		25 242254
		100 244254
5/16"	7.9 mm	2 252255
		25 242255
		100 244255
3/8"	9.5 mm	2 252256
		25 242256
		100 244256
1/2"	12.7 mm	2 252257
		10 242257
5/16"	7.9 & 9.5 & 3/8" mm	1/1 252251

Screw Size	Qty/Pkg	Item #
2 AWG 34 mm²		
1/4"	6.4 mm	2 252264
		25 242264
5/16"	7.9 mm	2 252265
		25 242265
		100 244265
3/8"	9.5 mm	2 252266
		25 242266
		100 244266
1/2"	12.7 mm	2 252267
5/16"	7.9 & 9.5 & 3/8" mm	1/1 252261
1 AWG 42 mm²		
1/4"	6.4 mm	2 252274
5/16"	7.9 mm	2 252275
		25 242275
3/8"	9.5 mm	2 252276
		25 242276
1/2"	12.7 mm	2 252277
1/0 AWG 53 mm²		
1/4"	6.4 mm	2 252284
		25 242284
5/16"	7.9 mm	2 252285
		25 242285
		100 244285
3/8"	9.5 mm	2 252286
		25 242286
		100 244286
1/2"	12.7 mm	2 252287
2/0 AWG 68 mm²		
1/4"	6.4 mm	25 242294
5/16"	7.9 mm	2 252295
		25 242295
		100 244295
3/8"	9.5 mm	2 252296
		25 242296
		100 244296
1/2"	12.7 mm	2 252297
		10 242297

Screw Size	Qty/Pkg	Item #
3/0 AWG 85 mm²		
5/16"	7.9 mm	10 242715
3/8"	9.5 mm	2 252716
		10 242716
1/2"	12.7 mm	2 252717
4/0 AWG 107 mm²		
5/16"	7.9 mm	2 252725
		10 242725
3/8"	9.5 mm	2 252726
		10 242726
		100 244726
1/2"	12.7 mm	2 252727
		10 242727



Heavy-duty Butt Connectors

100% Tinned Copper • UL 486A

Qty/Pkg	Item #
8 AWG 8 mm²	
2	252130
6 AWG 13 mm²	
2	252140
4 AWG 21 mm²	
2	252150
2 AWG 34 mm²	
2	252160
1 AWG 42 mm²	
2	252170
1/0 AWG 53 mm²	
2	252180
2/0 AWG 68 mm²	
2	252190

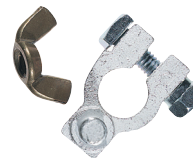
Lead Battery Terminals

Description	Positive / Negative	Stud Size		Qty/ Pkg	Item #
Wing Nut Style	Negative	5/16"	8 mm	1	260100
Yellow Brass Nut	Positive	3/8"	10 mm	1	260200
	Pos/Neg	5/16" & 3/8"	8 & 10 mm	1/1	260325



Tinned Brass Battery Terminals

Description	Positive / Negative	Stud Size		Qty/ Pkg	Item #
Wing Nut Style	Negative	5/16"	8 mm	1	260010
Yellow Brass Nut	Positive	3/8"	10 mm	1	260012
Tin Plated Terminal	Pos/Neg	5/16" & 3/8"	8 & 10 mm	1/1	260322













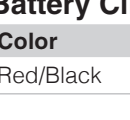







Battery Terminal Boots

Description	Size		Color	Qty/ Pkg	Item #
Wing Nut Style	4 & 2	19 & 32 mm ²	Black/Red	1/1	260350
Right Angle	8-2	8-32 mm ²	Red	1	260381



Battery Terminals and Covers

	Description	Terminal Item #		Cover Item #	Cover Color
	with nut M8 plus	68060100		68456902	red
	with nut M8 min	68060200		68456914	black
	plus flat	68060300		68454002	red
	min flat	68060400		68453014	black
	double plus flat	68060500		68451902	red
	double min flat	68060600		68451914	black
	with bolt M10 plus	68060700		68457302	red
	with bolt M10 min	68060800		68457314	black
	with bolt M12 plus	68060900		68457302	red
	with bolt M12 min	68061000		68457314	black

Battery Clips

Color	Size	Qty/Pkg	Item #
Red/Black	10A	1/1	260505



Adhesive Lined Heat Shrink Tubing (ALT)

- Cross Linked polyolefin tubing is much stronger than PVC tubing and will not burn like PVC.
- Heat activated adhesive lining provides impervious seal to salt water, oil, acids, and sunlight as well as providing strain relief.
- Highest shrink ratio - shrinks to 1/3 original size.
- Shrinks at 257°F / 125°C.
- Operating temperature range of -40°C to 110°C.
- UL 224



Color	Length		Qty/ Pkg	Item #
1/8" ALT Dia 3.2 mm				
Black	3"	7.6 cm	3	301103
	6"	15.2 cm	10	301106
	12"	30.5 cm	10	301124
	48"	122 cm	1	301148
3/16" ALT Dia 4.8 mm				
Black	3"	7.6 cm	3	302103
	6"	15.2 cm	10	302106
	12"	30.5 cm	10	302124
	48"	122 cm	1	302148
1/4" ALT Dia 6.4 mm				
Black	3"	7.6 cm	3	303103
	6"	15.2 cm	10	303106
	12"	30.5 cm	10	303124
	48"	122 cm	1	303148
Clear	3"	7.6 cm	1	303303
Black/Red	3"	7.6 cm	1/1	303602
Red	48"	122 cm	1	303648
Yellow	48"	122 cm	1	303948
3/8" ALT Dia 9.5 mm				
Black	3"	7.6 cm	3	304103
	6"	15.2 cm	5	304106
	12"	30.5 cm	5	304124
	48"	122 cm	1	304148
Clear	3"	7.6 cm	1	304303
Black/Red	3"	7.6 cm	1/1	304602
Red	3"	7.6 cm	3	304603
	6"	15.2 cm	5	304606
	12"	30.5 cm	5	304624
	48"	122 cm	1	304648
1/2" ALT Dia 12.7 mm				
Black	3"	7.6 cm	3	305103
	6"	15.2 cm	5	305106
	12"	30.5 cm	5	305124
	48"	122 cm	1	305148
Red	3"	7.6 cm	3	305603
	12"	30.5 cm	5	305624
	48"	122 cm	1	305648

Color	Length		Qty/ Pkg	Item #
3/4" ALT Dia 19 mm				
Black	3"	7.6 cm	3	306103
	6"	15.2 cm	4	306106
	12"	30.5 cm	4	306124
	48"	122 cm	1	306148
Black/Red	3"	7.6 cm	1/1	306602
Red	3"	7.6 cm	3	306603
	6"	15.2 cm	4	306606
	12"	30.5 cm	4	306624
	48"	122 cm	1	306648
1" ALT Dia 25.4 mm				
Black	3"	7.6 cm	3	307103
	12"	30.5 cm	3	307124
	48"	122 cm	1	307148
Red	48"	122 cm	1	307648

Kits

Color	Length		Qty/ Pkg	Item #
3/16"–3/4" ALT Dia 4.8–19 mm				
Black	3"	7.6 cm	8	301503
	6"	15.2 cm	8	301506
3/8" ALT Dia 9.5 mm				
Assorted (yw, wh, bl, gr, rd)	3"	30.5 cm	5	304503
	6"	122 cm	5	304506
3/4" ALT Dia 19 mm				
Assorted (yw, wh, bl, gr)	3"	7.6 cm	4	306503
	6"		4	306506

Adhesive Lined Tubing Specifications (3:1 ratio)

Size	Shrinks to		Wire Range (AWG)	
1/8"	3.2 mm	1/32" 0.8 mm	<18	< 0.8 mm ²
3/16"	4.8 mm	1/16" 1.6 mm	20-12	0.5-3 mm ²
1/4"	6.4 mm	5/64" 2 mm	16-10	1-5 mm ²
3/8"	9.5 mm	1/8" 3.2 mm	12-8	3-8 mm ²
1/2"	12.7 mm	5/32" 4 mm	8-4	8-19 mm ²
3/4"	19 mm	1/4" 6.4 mm	8-2/0	13-62 mm ²
1"	25.4 mm	5/16" 7.9 mm	2-4/0	32-103 mm ²

Adhesive Lined Heavy Wall Battery Cable Tubing (BCT)

3:1 ratio
UL 224



BCT Dia.	BCT Color	Length	Qty/ Pkg	Item #
3/4" 19 mm	Black	3" 7.6 cm	3	326103
		12" 30.5 cm	3	326124
		48" 122 cm	1	326148
	Black/Red	3" 7.6 cm	1/1	326202
	Red	3" 7.6 cm	3	326603
		12" 30.5 cm	3	326624
1" 25.4 mm	Black	12" 30.5 cm	2	327124
		48" 122 cm	1	326648
	Black/Red	3" 7.6 cm	1/1	327202
	Red	6" 15.2 cm	2	327606
		12" 30.5 cm	2	327624

Size	Shrinks to	Wire Range (AWG)
3/4" 19 mm	1/4" 6 mm	8-2/0 8-62 mm ²
1" 25 mm	3/8" 9 mm	2-4/0 32-103 mm ²
1-1/2" 38 mm	1/2" 12 mm	4/0-500 MCM 103-253 mm ²

Ultra Therm Heat Tool

- Cordless, simple, safe to operate under any conditions.
- Ready to use 15 seconds after ignition.
- Tank contains 120 minutes of operation and is refillable by normal butane.
- Comes with interchangeable soldering tip, hot blower/deflector and hot knife.

Item # **702061**



Micro Therm Heat Gun

- Features Piezo electronic ignition system, providing flame less heat, safe to use around chemicals or by wire bundles when using deflector.
- Powered by refillable cell.
- Flame temperature up to 1300°F (650°C).
- Ideal for work in the bilge where open flame should not be used.

Item # **702027**



Mini Pocket Butane Torch

- Electronic ignition system with safety locking switch.
- Flame temperature up to 2500°F (1300°C)
- Compact size allows unit to fit easily into any toolbox.
- Refillable butane cartridge included.
- Butane Not Included.

Item # **702024**





Cable Ties

Marinco® offers a wide variety of materials, styles, and sizing options. A patented, DoubleLock™ design offers increased tensile strength that is 33% stronger than the industry standard cable tie.

With a unique design and high-quality construction, Marinco® cable ties provide a great solution for bundling wire, cable, hoses, cords and countless other applications.





Standard Cable Ties

Length	Color	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
4"	natural	25	199200	no	yes	13/16"	18 lbs
	natural	100	199201	no	yes	13/16"	18 lbs
	UVB*	25	199202	no	yes	13/16"	18 lbs
	UVB*	100	199203	no	yes	13/16"	18 lbs
6"	natural	25	199246	yes	yes	1-3/8"	45 lbs
	natural	100	199247	yes	yes	1-3/8"	45 lbs
	UVB*	25	199248	yes	yes	1-3/8"	45 lbs
	UVB*	100	199249	yes	yes	1-3/8"	45 lbs
8"	natural	25	199204	yes	yes	2"	75 lbs
	natural	100	199205	yes	yes	2"	75 lbs
	UVB*	25	199206	yes	yes	2"	75 lbs
	UVB*	100	199207	yes	yes	2"	75 lbs
	UVB*	1000	199254	yes	yes	2"	75 lbs
11"	natural	25	199208	yes	yes	3"	75 lbs
	natural	100	199209	yes	yes	3"	75 lbs
	UVB*	25	199210	yes	yes	3"	75 lbs
	UVB*	100	199211	yes	yes	3"	75 lbs
14"	natural	25	199212	yes	yes	4"	75 lbs
	natural	100	199213	yes	yes	4"	75 lbs
	UVB*	25	199214	yes	yes	4"	75 lbs
	UVB*	100	199215	yes	yes	4"	75 lbs
	UVB*	1000	199256	yes	yes	4"	75 lbs

* UV Resistant





Heavy-duty Cable Ties

Length	Color	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
15"	UVB*	25	199259	yes	yes	4"	120 lbs
	UVB*	100	199260	yes	yes	4"	120 lbs
17"	natural	10	199216	no	yes	4-9/10"	175 lbs
	UVB*	10	199217	no	yes	4-9/10"	175 lbs
24"	natural	10	199218	no	yes	7"	175 lbs
	UVB*	10	199219	no	yes	7"	175 lbs
36"	natural	10	199220	no	yes	10-3/10"	175 lbs
	UVB*	10	199221	no	yes	10-3/10"	175 lbs
48"	natural	10	199222	no	yes	14-3/10"	175 lbs
	UVB*	10	199223	no	yes	14-3/10"	175 lbs

* UV Resistant





Releasable Cable Ties

Length	Color	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
8"	natural	25	199240	no	yes	1-3/4"	50 lbs
	UVB*	25	199241	no	yes	1-3/4"	50 lbs
16"	UVB*	4	199242	no	yes	4"	175 lbs
28"	UVB*	3	199243	no	yes	8"	175 lbs

* UV Resistant





Mounting Cable Ties

Length	Color	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
4"	natural	25	199244	no	yes	3/4"	18 lbs
	UVB*	25	199245	no	yes	3/4"	18 lbs
6"	natural	25	199250	no	yes	1-3/8"	30 lbs
	natural	100	199251	no	yes	1-3/8"	30 lbs
	UVB*	25	199252	no	yes	1-3/8"	30 lbs
	UVB*	100	199253	no	yes	1-3/8"	30 lbs
8"	natural	25	199226	no	yes	2"	50 lbs
	natural	100	199227	no	yes	2"	50 lbs
	UVB*	25	199228	no	yes	2"	50 lbs
	UVB*	100	199229	no	yes	2"	50 lbs
14"	natural	25	199230	no	yes	4"	50 lbs
	UVB*	25	199257	no	yes	4"	50 lbs
	UVB*	100	199258	no	yes	4"	50 lbs

* UV Resistant





Specialty Cable Ties

Length	Description	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
8"	natural I.D. tie	25	199237	no	yes	2"	50 lbs
11"	stainless steel*	10	199238	no	yes	3-3/4"	100 lbs
	black grip strip	5	199239	no	no	n/a	n/a

* UV Resistant

Cable Tie Kits

Length	Description	Unit Qty	Item #			Bundle Dia Max	Tensile Strength
8"	assorted colors	24	199224	yes	yes	2"	75 lbs
4", 6", 8"	assorted colors	500	199225	yes	yes	13/16", 1-1/2", 2"	18, 45, 75 lbs
4", 8"	natural/UVB*	25	199261	yes	yes	13/16", 2"	18, 75 lbs

* UV Resistant

Mounting Bases



199235

199233

Description	Unit Qty	Item #
#8 screw, natural	25	199231
	100	199232
#10 screw, natural	25	199262
	100	199263
natural	5	199233
	25	199234
UVB*	5	199235
	25	199236

* UV Resistant

Stainless Steel Cushion Clamps

- Prevents corrosion
- Resistant to oils, acids, salt water
- Temperatures range from -50° to 300°F
- Absorbs shock and vibration
- Reduces unwanted noise
- 1/4" clearance mounting hole



Nominal Diameter	Qty/ Pkg	Item #	Thickness	Width	Screw Size
3/16"	5 mm	10	403182	0.04	3/8" 10 mm #8 4 mm
1/4"	6 mm	10	403252	0.04	3/8" 10 mm #8 4 mm
5/16"	8 mm	10	403312	0.04	3/8" 10 mm #8 4 mm
3/8"	10 mm	10	403372	0.04	3/8" 10 mm #8 4 mm
1/2"	13 mm	10	403502	0.06	1/2" 13 mm #10 5 mm
9/16"	14 mm	10	403562	0.06	1/2" 13 mm #10 5 mm
5/8"	16 mm	10	403622	0.06	1/2" 13 mm #10 5 mm
3/4"	19 mm	10	403752	0.06	1/2" 13 mm #10 5 mm
7/8"	22 mm	10	403872	0.06	1/2" 13 mm #10 5 mm
1"	25 mm	10	403892	0.06	1/2" 13 mm #10 5 mm
1-1/4"	32 mm	10	403902	0.06	1/2" 13 mm #10 5 mm
1-1/2"	38 mm	10	404152	0.06	1/2" 13 mm #10 5 mm
1-3/4"	44 mm	10	404172	0.06	1/2" 13 mm #10 5 mm
2"	51 mm	10	404202	0.06	1/2" 13 mm #10 5 mm
2-1/2"	64 mm	10	404252	0.06	1/2" 13 mm #10 5 mm
3"	76 mm	10	404302	0.06	1/2" 13 mm #10 5 mm

#8 = 0.167 / #10 = 0.203

Nylon Cable Clamps

- Made from nylon for maximum strength
- Resistant to solvents, oils, acids and moisture.
- Unique screw hole alignment feature to speed installation.
- Absorbs shock and vibration; reduces unwanted noise



Nominal Diameter	Color	Qty/ Pkg	Item #
1/8" 3 mm	Natural	25	401122
3/16" 5 mm	Natural	25	401182
1/4" 6 mm	Natural	6	401251
		25	401252
		100	401255
	UV Black	25	402252
5/16" 7 mm	Natural	25	401312
	UV Black	25	402312
3/8" 9 mm	Natural	25	401372
		100	401375
	UV Black	25	402372
7/16" 11 mm	Natural	25	401432
1/2" 12 mm	Natural	25	401502
	UV Black	25	402502

Nominal Diameter	Color	Qty/ Pkg	Item #
5/8" 15 mm	Natural	25	401622
	UV Black	25	402622
3/4" 19 mm	Natural	25	401752
	UV Black	25	402752
1" 25 mm	Natural	25	401892
	UV Black	25	402892
1-1/4" 32 mm	Natural	25	401912
1-1/2" 38 mm	Natural	25	401932

Kit

Description	Color	Qty/ Pkg	Item #
1/8"-1/2" (3-12 mm)	Natural	54	400000

Cable Wraptor®

Simple Design. Endless Solutions.

- "T" handle feature allows for easy carrying ropes, cordsets and extension cords.
- Large hang hole is perfect to store and hang.
- Stainless steel hinge and spring to prevent rusting.
- Large teeth design for secure locking system.
- Easy release trigger.
- Cable tie looping hole for permanent attachment.
- Spring-loaded hinge helps close tail.



Description	Qty/ Pkg	Item #
Register Pack		
Cable Wraptor® Small	50	CW-T1RR50
Cable Wraptor® Medium	25	CW-T2RR25
Cable Wraptor® Large	25	CW-T3RR25
Cable Wraptor® X-Large	20	CW-T4RR20
2 Pack Carded		
Cable Wraptor® 2 Medium	2	CW-T2R2

Description	Qty/ Pkg	Item #
Displays		
Cable Wraptor® Desktop Display, Small	50	CW-T1M50
Cable Wraptor® Desktop Display, Medium	25	CW-T2M25
Cable Wraptor® Desktop Display, Large	25	CW-T3M25
Cable Wraptor® Gravity Feed, Medium	75	CW-T2M75
Cable Wraptor® Gravity Feed, Large	50	CW-T3M50
Cable Wraptor® Stackout Display, 100 M / 150 L / 40 XL	290	CW-290

Wire Seals

- Made of Nylon 6/6 flame resistant, self extinguishing Buna-N form seal.
- All seals exceed NEMA 4 x or 6 specs
- Overlapping clamping spines allow for superior pull-out protection and resistance
- Strain relief fittings are resistant to salt water, acids, alkalis, alcohol, oils and are non-corrosive for use in the marine environment.
- Good underwater to 300 feet /91.4 m (150 PSIG) provided there is a liquid tight seal between body and housing.
- Provide low cost cable entries into panels and junction boxes.
- UL 94 v-0



Description	For Use with	Thread Size	Cable Range	Clearance Hole	Body Length	Thread Length	Qty/ Pkg	Item #
Round Cable	18–10 AWG	3/8" NPT	.08"–.24"	2–6 mm	.68"	.87"	.59"	1 764998
Round Cable	20–1 AWG	1/2" NPT	.00"–.47"	0–12 mm	.83"	1.06"	.51"	1 765000
Round or Flat Cable	4–1, 14/2–10/2, 16/3–12/3 AWG	1/2" NPT	.24"–.55"	6–14 mm	.83"	1.10"	.51"	1 765002
Round Cable	1–3/0 AWG	3/4" NPT	.51"–.71"	13–18 mm	1.05"	1.22"	.51"	1 765004
Round Cable	4/0 AWG	1" NPT	.71"–.98"	18–25 mm	1.35"	1.53"	.75"	1 765006



Split Loom & Spiral Wrap

- Permits flexible routing of cable harnesses.
- Provides abrasion protection for wire and cable.
- Allows lead outs at any point for greatest ease of installation.

Self-extinguishing Split Loom

Diameter		Ft/Pkg	Item #
3/8"	10 mm	10'	453382
		100'	453386
1/2"	13 mm	10'	453502
3/4"	19 mm	10'	453752
		100'	453756
1"	25 mm	5'	453901

Marine Grade™ Spiral Wrap

Diameter		Ft/Pkg	Item #
1/4"	6 mm	10'	452251
3/8"	10 mm	10'	452381
		100'	452385
1/2"	13 mm	10'	452501
		100'	452505
3/4"	19 mm	10'	452751
		100'	452755
1"	25 mm	5'	452900
		100'	452905



ABYC Recommends:

"Conductors that may be exposed to physical damage shall be protected by self-draining; loom, conduit, tape, raceways, or other equivalent protection." 11.14.6.7.

"When AC and DC conductors are run together, the AC conductors shall be sheathed, bundled, or otherwise kept separate from the DC conductors." 11.14.6.4.

"Loom used to cover conductors shall be self-extinguishing. The base product (or resin) shall be classified as V-2 or better, in accordance with UL 94, Tests For Flammability Of Plastic Materials." 11.14.6.8.

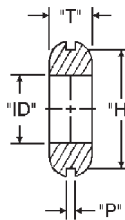
Spiral Wrap Specifications

Nominal Diameter	Bundle Range	
	Min.	Max.
1/4"	0.188	2.0
6 mm	4.8 mm	5 cm
3/8"	0.313	3.0
10 mm	8 mm	7.6 cm
1/2"	0.375	4.0
13 mm	10 mm	10.2 cm
3/4"	0.750	5.0
19 mm	19 mm	12.7 cm
1"	1.000	7.0
25 mm	25 mm	17.8 cm



Grommets

- Provide instant abrasion resistance to wires passing through panel holes.
- Flexible black vinyl makes installation simple.



Hole Size		Inside Diameter		Panel Width		Qty/ Pkg	Item #
3/8"	10 mm	1/4"	6 mm	3/32"	2 mm	5	760375
1/2"	13 mm	3/8"	10 mm	1/16"	2 mm	5	760500
1/4–3/4" Assortment Combo Pack						45	750000



600 Piece Nylon Insulated Connector Kit

- 150 pcs assorted 22-10 butt connectors
- 300 pcs assorted 22-10 ring terminals
- 25 pcs 16-14 fully insulated male and female disconnects
- 25 pcs 16-14 #8 and #10 flanged spade connectors
- 25 pcs 16-14 female disconnects
- 25 pcs 12-10 fully insulated female disconnects

Item # 250001



257 Piece Heat Shrink Connector Kit w/ Crimper & Mini Torch

- 110 pcs assorted 22-10 heat shrink butt connectors
- 145 pcs assorted 16-10 ring terminals
- 1 single crimp ratchet tool
- 1 mini butane pocket torch

Item # 320001



100 Piece Tinned Copper Lug Kit w/ Crimper

- 10 pcs #8 5/16" & 3/8" tinned lug
- 10 pcs #6 5/16" & 3/8" tinned lug
- 10 pcs #4 5/16" & 3/8" tinned lug
- 10 pcs #2 5/16" & 3/8" tinned lug
- 5 pcs 1/0 5/16" & 3/8" tinned lug
- 5 pcs 2/0 5/16" & 3/8" tinned lug
- 1 heavy-duty lug crimper

Item # 255001



314 Piece ATO ATC & AGC Fuse Kit

- 20 pcs 1, 7.5, 25 and 30A AGC fuses
- 25 pcs 2, 3, 5, 10, 15 and 20A AGC fuses
- 15 pcs 5, 10, 15 and 20A ATO/ATC fuses
- 5 pcs 25 and 30A ATO/ATC fuses
- 4 AGC panel mount fuse holders
- 4 AGC waterproof fuse holders
- 3 AGC in-line fuse holders
- 2 ATO/ATC in-line fuse holders
- 1 Fuse Puller/Installer

Item # 608001



Promotional Kit Cabinet

Buy 4 kits get a 4 drawer tray for FREE

Item # P33307



Coastal Electrical Kit

- 1 spool #16 & #12 Black, Red UL 1426 boat cable
- 100 pcs 22-18 to 12-10 various connectors
- 20 pcs 22-18 to 12-10 heat shrink butt connectors
- 2 pcs 1/4" & 3/8" black heat shrink tubing
- 30 pcs 8" & 11" 75 lbs natural and UV black cable tie
- 15 pcs 1/4" & 3/8" natural clamps
- 10 pcs Trade #90, 1004, 1142, 211-2 & 10806 bulbs
- 15 pcs 10, 15 & 20 amp AGC fuse
- 4 ea Marine Grade™ tools
- 5 ea #8 screw adjustable clamp
- 1 AGC in-line & waterproof fuse holder
- 2 adhesive backed cable tie mount
- 1 ATC fuse asst. pack
- 1 emergency clamp on terminal
- 1 coil 15' 16/2 duplex UL 1426 boat cable

Item # 220007



Premium Connector Kits

- Nylon Insulated with Insulation Grip
- Double Crimp, Funnel Entry

Description	Qty/Pkg	Item #
Connector, Assorted Butt, Ring, Spade and Male and Female Disconnects (18-10 AWG) plus Crimp Tool	31	220002
Connector, Assorted Butt, Ring, Spade and Male, Female Disconnects (18-10 AWG)	120	220003
Connector, Assorted Butt, Ring, Spade and Male and Female Disconnects (18-10 AWG) plus Crimp Tool	121	220004

225 Piece Twin Kit Electrical Repair Kit with Strip/Crimp Tool

- 55 pcs assorted butt connectors
- 95 pcs assorted ring terminals
- 35 pcs assorted disconnects
- 35 pcs assorted nylon cable ties
- Assorted, 10' spools of UL 1426 boat cable
- 5 pcs (3"x3/8") 3:1 shrink ratio, colored heat shrink tubing
- Opens both sides

Item # 220020



Heavy-Duty, Voltage-Continuity Tester

Heavy-duty voltage and continuity tester designed for any number of electrical applications.

- Tests voltage from 80–480V AC/DC (4-range indication)
- Dual function voltage and continuity tester
- Snap-in leads are spaced to fit standard outlet for “hands-free” operation
- Sta-Flex™ 36" cold weather leads
- 4 Hi-Vis™ indicators
- Integrated probe storage
- Operates from (2) LR44 batteries

Item # **ET6207**

Specifications	Range
AC Voltage	80–480V
DC Voltage	80–480V
Frequency	60Hz
Polarity	✓
Continuity	✓
CAT Rating	III 600V



Wire Tracker™ Wire Tracer

A must-have tester for avid boaters and marine technicians.

- Multi-purpose wire tracer for identifying wires such as coax, CAT 5, speaker, phone, or any non-energized (non-live) wires
- Adapter plugs include: RJ-45, RJ-11, coax, automotive fuse blade, and insulated clamps
- Adjustable sensitivity positively identifies a single wire when multiple wires are routed in close proximity
- Audible and visual indication
- Operates from (2) AAA batteries (transmitter) and (4) LR44 batteries (receiver)
- Auto off function included with transmitter to save battery life

Item # **ET64220**

Specifications	Range
Audible	✓
Visual	✓
Receiver Storage	✓
Belt Clip	✓
Tracer	✓

LIFETIME WARRANTY *Patented*



5 Function Analog Multimeter

- Manual range
- Compact, lightweight design
- AC/DC voltage
- DC Current
- Accurate needle deflection
- Operates from one AA battery

Item # HSP5

Specifications	Range	Accuracy
DC Voltage:	0–10/50/150/300V	4.0%
AC Voltage:	0–10/50/150/300V	5.0%
DC Current:	0–0.5/50/150 mA	4.0%
Resistance:	0–1M Ω	4.0%
Decibels:	✓	-20dB to +56dB
CAT Rating:	II 300V	–



6 Function Digital Snap-Around

- 400 amp non-contact AC/DC current reading
- Data hold capability to maintain reading on display
- Auto power off functionality to save battery life
- Compact lightweight design
- Includes convenient carrying case
- Operates from (2) AAA batteries

Item # DSA540A

Specifications	Range	Accuracy	Resolution	Overload Protection
DC Voltage	400/600V	1.5%	100mV	720VAC/DC
AC Voltage	400/600V	2%	100mV	720VAC/DC
DC Current	40/400	3%±8dgt (0–40A) 4%±6dgt (40–400A)	10mA	480A
AC Current	40–400	3%±8dgt (0–40A) 4%±6dgt (40–400A)	10mA	480A
Resistance	400/4000 Ω	2%	100m Ω	300VAC/DC
Cont Buzzer	0–600 Ohms	Buzzer Sounds @ 100 Ohms or less		
CAT Rating	II 600, III 300V AC	–	–	–



Includes Carrying Case

True RMS 10 Function Digital Snap-Around

- Precise True RMS circuitry
- 1000 Amp non-contact current reading
- Integrated non-contact voltage detection
- Min/Max function to hold either minimum reading or maximum reading on the display
- Data hold capability to maintain reading on display
- Backlit display for low light applications
- Peak hold function to display in-rush current
- Capacitance and temperature measurement functionality
- Auto power off functionality to save battery life
- Includes convenient carrying case
- Operates from (2) AAA batteries

Item # DSA1020TRMS

Specifications	Range	Accuracy	Resolution	Overload Protection
DC Voltage	600mV/6/60/600V	1% ± 3 dgt	100 μ V	720V AC/DC
AC Voltage	6/60/600V	1.5% ± 4 dgt	1mV	720V AC/DC
DC Current	600/1000A	$\pm 1.5\%$ rdg ± 5 dgt	100mA	1200A AC/DC
AC Current	600/1000A	2% ± 5 dgt	100mA	1200A AC/DC
Resistance	600/6K/60K/600K/6M/60M Ω	1% ± 5 dgt (600~6M Ω) 5% ± 8 dgt (6M~60M Ω)	100m Ω	600V AC/DC
Frequency	10/100/1000/10K	0.5% ± 5 dgt	—	—
Diode Test	✓	—	—	—
Cont Buzzer	0–600 Ohms	Buzzer Sounds @ 100 Ohms or less	—	—
Capacitance	40nF–4000 μ F	2.5% ± 20 dgt (400nF–40 μ F) NA (40nF, 40 μ F–4000 μ F)	—	—
Temperature	50° to 700°C/ 58° to 1292°F	°C $\pm 5^\circ$ / °F $\pm 9^\circ$	—	—
CAT Rating	IV 600	—	—	—



LIFETIME WARRANTY   

7 Function Digital Multimeter

- Auto ranging capability allows the meter to automatically determine the resolution based on the application
- Compact, lightweight design
- AC/DC voltage capable with temperature measurement functionality
- Impact resistant housing with protective rubber overmold
- Operates from (2) AAA batteries

Item # DM6250

Specifications	Range	Accuracy
DC Voltage	200mV, 2V, 20V, 200V, 600V	200mV & 600V (1.0%+5dgt) 2V 20V 200V (0.5%+5dgt)
AC Voltage	200mV, 2V, 20V, 200V, 500V	500V (1.5%+5dgt) 2V 30V 200V (0.8%+5dgt)
Resistance	200, 2K, 200k, 2M, 20M	200 Ω 20M (1.5%+2dgt) 2K 20K 200K 2M (1.0%+2dgt)
Battery Testing	1.5V (2V)	—
Temperature	-40°F–752°F	8%+5dgt
Diode Test	✓	—
Continuity	✓	—
CAT Rating	III 600V	—



9 Function Digital Multimeter

- Test Lead Input Icons for correct lead placement
- Industry leading LCD display size
- Relative Delta displays change in readings
- Low Impedance Function to trace ghost voltage
- Impact resistant housing with protective rubber boot
- Operates from one 9 volt battery

Item # DM6450

Specifications	Range	Accuracy
DC Voltage	400mV, 4V, 40V, 400V, 1000V	400mV (0.8%+3dgt) 4V 40V 400V (0.8%+1dgt) 1000V (1.0%+3dgt)
AC Voltage	4V, 40V, 400V, 750V	4V 40V 400V (1.0%+ 5dgt) 750V (1.2%+5dgt)
DC Amps	400µA, 4000µA, 40mA, 400mA, 4A, 10A	400µA 4000µA (1.0%+2dgt) 40mA 400mA (1.2%+3dgt) 4A 10A (1.5%+5dgt)
AC Amps	400uA, 4000uA, 40mA, 400mA, 4A, 10A	400µA 4000µA (1.2%+2dgt) 40mA 400mA (1.5%+3dgt) 4A 10A ±(2.0%+3dgt)
Frequency	10Hz–10MHz	0.1% +3dgt
Capacitance	40nF, 400nF, 4µF, 40µF, 100µF	40nF (3%+10dgt) 400nF, 4µF, 40µF (3%+5dgt) 100µF (4%+5dgt)
Resistance	400, 4K, 40K, 400k, 4M, 40M	400O 4M (1.2%+2dgt) 4K 40K 400K (1.0%+2dgt) 40M (1.5%+2dgt)
Diode Test	✓	–
Continuity	✓	–
CAT Rating	III 600V, II 1000V	–



Automatic Wire Stripper

- Made of reinforced polyimide
- Automatically adjusts to different wire sizes
- Strips without damage or marking of conductors, slim jaw for easy access, steel side cutter
- Strips and cuts wire from 24–12 AWG / 0.2–3 mm²
- Wire stop adjusts length of strip from 3/8"–1/2" (9.5–12.7 mm)

Item # 702030



Battery Cable Stripper

- Made of fiberglass reinforced polyimide, swivel blade for circular and longitudinal cuts
- Adjustable blade cutting height, comes with extra blades
- Strips 8–4/0 AWG / 8–103 mm² battery cable
- Slits outer jacket from 14/2–6/2 AWG / 2x2–2x13 mm² duplex and 16/3–6/3 AWG / 3x1–3x13 mm² triplex wire

Item # 702065



Dielectric Silicone Compound

- Fights oxidation to improve conductivity.
- Penetrates aluminum oxide to maintain current paths.
- Temperature rated 40°–500°F.
- 1/3 oz tube.

Item # 700115



Turbo Lite

- Child resistant piezo electronic ignition system
- Powered by butane, inexpensive and readily available
- Flame temperature up to 2500°F (1300°C)
- Windproof and weatherproof flame
- Flame may be locked in "on" position

Item # 702064



Micro Therm Heat Gun

- Features Piezo electronic ignition system, providing flame less heat, safe to use around chemicals or by wire bundles when using deflector
- Powered by refillable cell
- Flame temperature up to 650°C (1300°F)
- Ideal for work in the bilge where open flame should not be used

Item # 702027



Mini Pocket Butane Torch

- Electronic ignition system with safety locking switch
- Flame temperature up to 1300°C (2500°F)
- Compact size allows unit to fit easily into any toolbox
- Refillable butane cartridge included.
- Butane Not Included

Item # 702024



Heavy-duty Lug Crimper

- Spring loaded pivot bar, designed for use with a hammer or vise
- Makes UL approved crimps
- Made from steel with a hardened pivot pin
- Capacity: Crimps 6 - 4/0 AWG / 13–103 mm² lugs and 6 - 3/0 AWG / 13–81 mm² terminals

Item # 701010



Cut/Strip/Crimp Tool

- Precision ground cutters and stripping station, wide crimp range of insulated and non-insulated terminals
- "Box" crimp works with Ancor™ double crimp terminals, marking is embossed and paint filled
- Capacity: Crimps 22–10 AWG / 0.3–5 mm² insulated and non-insulated terminals, connectors and spark plug terminals in special cavities
- Strips insulation from 22–10 AWG / 0.3–5 mm² solid and stranded wires
- Cuts (4) 40/2 mm, (6) 32/4 mm, (8) 32/4.8 mm, (10) 32 / 6.4 mm and 10–24/6.4 mm bolts



Item # 701007

Stainless Steel Cut/Strip/Crimp Tool

- Crimp 10–22 AWG insulated and non-insulated terminals and coaxial connectors
- Cut and strip 8–22 AWG solid and 10–24 AWG stranded wire
- Cut and re thread 4–40, 5–40, 6–32, 8–32, 10–24, 10–32 screws
- Stainless steel blade resists corrosion and nicking
- Precision ground plier nose



Item # 701009

Single Crimp Ratchet Tool

- Recommended for heat shrink connectors as well as vinyl and nylon insulated connectors
- Crimps 22–10 AWG insulated terminals in three cavities
- Must be fully closed before tool allows itself to open, ensuring a proper crimp



Item # 702010

Double Crimp Ratchet Tool

- Ratchet mechanism crimps stranding and insulation grip portion of ANCOR connectors all in one motion for superior strain relief.
- Tool has adjustment feature to allow for wear, and a release lever in event of incorrectly placed terminal.
- Crimps 22–10 AWG insulated terminals in three cavities.



Item # 701030

Wire Strip Crimp Tool

- Strips 26–10 AWG stranded wire.
- Automatic jaw-load wire stripper self-adjusts to strip wire.
- Crimps 22–10 AWG insulated terminals.



Item # 702033

Heavy-duty Lug / Terminal Crimper

- Calibrated adjustment screw
- Compound lever action prevents operator fatigue
- Capacity: Crimps 8–4/0 AWG / 8–103 mm² lugs and terminals



Item # 702040



Propel: Electric & hybrid propulsion powered by Mastervolt

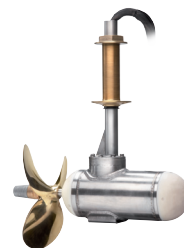
Electric sailing is becoming ever more popular. Perhaps it is the peace and comfort that comes from saying goodbye to engine vibrations and noise.

Our desire to be eco-friendly is certainly playing a key role. And then there is also the fact that many of the world's "green zones" can only be accessed with silent and emission-free e-propulsion.

Mastervolt offers you complete system solutions for all kinds of electric and hybrid propulsion applications. Whether you choose to go all-electric or to combine e-propulsion with a diesel or generator in a hybrid installation, we have the answer.

Making clever use of advances in technology and in-house developments, the efficiency of our e-propulsion systems is an impressive 90%, far higher than traditional systems. Propeller efficiency is also significantly enhanced, which means that the same amount of energy takes you a great deal further.

You now have an even more complete system solution for your vessel, with quieter smoother sailing, more relaxed maneuvering and all the other advantages that come with electric power.



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Adding a new dimension to Green by Heart

The Green by Heart philosophy marks a new era at Mastervolt, emphasizing our commitment to intelligent and environmentally friendly products and systems. We have developed ingenious solutions for supplying power in vehicles and onboard vessels with our advanced solar products and introduced a new way of sailing with our e-propulsion solutions.

Enjoy all the benefits of electric and hybrid sailing

- Propulsion with electric engines is pleasantly quiet.
- A generator makes far less noise than a diesel engine with propeller shaft.
- The power of an electric engine is directly and fully available and can be regulated with a great degree of precision, allowing for easy maneuvering.
- Power consumption is up to 20% lower with dedicated electric propulsion than with conventional systems (depending on water and weather conditions).
- You save money as well as the environment.

Choosing your electric or hybrid solution

Having developed our e-propulsion products in partnership with the experts in this field, Mastervolt offers complete electric systems up to 20 kW or customized solutions with higher capacities (up to 40 kW). In addition to propulsion, some systems can also supply power to the batteries, battery chargers and battery monitoring devices. And we have a range of intelligent, integrated solutions for hybrid sailing.

Two-year warranty and global service

All Mastervolt systems for electric sailing come with a two-year warranty as well as global service.

For a complete overview of our propulsion solutions and detailed specifications, see mastervolt.us/e-propulsion.



Choose your system

The overview below provides several system recommendations based on weight and application. Heavier vessels from around 55 ft for motor and sail yachts and from around 60 ft for catamarans always require a bespoke solution. These recommendations are intended as guidelines only. Always consult your Mastervolt specialist for the best configuration.

Required Capacity (guideline)

Weight	Motor yacht		Sail yacht		Catamaran	
	Length	Power	Length	Power	Length	Power
1 T / 1000 kg	≤ 16' / 5 m	2.5 kW	≤ 20' / 6 m	2.0 kW	≤ 20' / 6 m	2x 1.0 kW
2 T / 2000 kg	≤ 23' / 7 m	5.0 kW	≤ 30' / 9 m	4.0 kW	≤ 30' / 9 m	2x 2.0 kW
3 T / 3000 kg	≤ 30' / 9 m	7.5 kW	≤ 36' / 11 m	6.0 kW	≤ 36' / 11 m	2x 3.0 kW
4 T / 4000 kg	≤ 36' / 11 m	10.0 kW	≤ 39' / 12 m	8.0 kW	≤ 39' / 12 m	2x 4.0 kW
5 T / 5000 kg	≤ 39' / 12 m	12.5 kW	≤ 43' / 13 m	10.0 kW	≤ 43' / 13 m	2x 5.0 kW
6 T / 6000 kg	≤ 43' / 13 m	15.0 kW	≤ 46' / 14 m	12.0 kW	≤ 46' / 14 m	2x 6.0 kW
7 T / 8000 kg	≤ 46' / 14 m	20.0 kW	≤ 49' / 15 m	15.0 kW	≤ 49' / 15 m	2x 7.5 kW

Choose your propulsion kit and throttle control

Total package

Mastervolt delivers all its electric motors with a controller, cables, display, contact key, main switch and main fuse. Due to the wide variety in designs, materials and shapes, throttle handles are not included as standard.

Throttle controls

The Mastervolt ControlMaster throttle controls were specifically designed for electric sailing and ensure that the speed of your vessel can be subtly and carefully controlled. Another important issue is an easily identifiable neutral gear. Your choice of throttle controls will depend on your preference. All our throttle controls were developed using corrosion-proof materials and are easily installed. The kits can be equipped with all available throttle controls.



ControlMaster Casual

141500010

single version

for all propulsions

side assembly



ControlMaster Sport

141500030

single version

for all propulsions

side assembly



ControlMaster Sport TD

141400220

double version

for all propulsions

top assembly

Practical tips:

- Permanent Magnet (PM) motors are very compact and silent; Asynchronous motors are exceptionally quiet and have a very high torque.
- To find your most suitable batteries, go to mastervolt.us/batteries
- A proper battery charger is essential for the maintenance and lifespan of your batteries. See mastervolt.us/chargers for assistance with your selection.
- A reliable battery monitor is a must. See mastervolt.us/batterymonitor
- The number of sailing hours depends on your battery kit combined with the generated capacity. For six to eight hours sailing, you require 4.6 x kW motor capacity in kWh. Example: 4.6 x 3.5 kW = 16.1 kWh; this is the capacity required for six to eight hours sailing.

DriveMaster series

The tried and tested DriveMaster propeller systems are ideal when size and space are limited, and remain very much a solution for today. The special and compact permanent magnet motor offers a high constant torque with a low rpm, directly transferred to the propeller without transmission.



DriveMaster Ultra series

DriveMaster Ultra asynchronous systems are specially designed for applications where capacity and reliability are crucial in all conditions. The modern brushless asynchronous electro-motors are watertight (IP65), air-cooled, entirely maintenance-free and incredibly quiet. The asynchronous technology enables a considerably higher temporary capacity. Thanks to the fully automated Powerboost function (+20%), fast maneuvering and short bursts of speed are even easier to attain.



DriveMaster Ultimate & DriveMaster Performance series

Mastervolt's extensive experience and knowledge in the field of electric sailing are reflected in our new series of propulsion systems, the DriveMaster Ultimate & DriveMaster Performance. This system is thought-through to the finest detail, including a fluid-cooled motor that is designed and built to guarantee an excellent performance and pure sailing pleasure.



Type	Capacity*	Motor technology	Voltage regulator	Max. RPM	Required battery capacity for		Item #
					3–4 hrs sailing	6–8 hrs sailing	
DriveMaster 2.5	2.5 kW	PM	24 V	1100	7 kWh	11.5 kWh	140100250
DriveMaster 3.6	3.6 kW	PM	48 V	1600	10 kWh	16.5 kWh	140100360
DriveMaster Ultra 3.5**	3.5 kW	asynchronous	48 V	1450	9.8 kWh	16 kWh	140300350
DriveMaster Ultra 7.5**	7.5 kW	asynchronous	48 V	1450	21 kWh	34.5 kWh	140300750
DriveMaster Ultra 10**	10 kW	asynchronous	48 V	1450	28 kWh	46 kWh	140301000
DriveMaster Ultra 20**	20 kW	asynchronous	96 V	1450	56 kWh	92 kWh	140302000
DriveMaster Ultimate 6***	6 kW	asynchronous	48 V	1500	17 kWh	27.2 kWh	140900600
DriveMaster Ultimate 10***	10 kW	asynchronous	48 V	1500	28 kWh	46 kWh	140901000
DriveMaster Ultimate 15***	15 kW	asynchronous	48 V	1500	42 kWh	69 kWh	140901500
DriveMaster Ultimate 25***	25 kW	asynchronous	96 V	1500	70 kWh	115 kWh	140902500
DriveMaster Ultimate 35***	35 kW	asynchronous	96 V	1500	91 kWh	161 kWh	140903500
DriveMaster Performance 25***	25 kW	asynchronous	96 V	2500	70 kWh	115 kWh	141002500
DriveMaster Performance 40***	40 kW	asynchronous	96 V	2500	112 kWh	184 kWh	141004000

* Supplied capacity.

** With Boost function for easy manoeuvring.

*** Liquid cooled, IP66 motor, stainless steel motor support, shaft and flange. Includes controller, excludes display, cooling and throttle control.

Accessories DriveMaster Ultimate/Performance

To complete your DriveMaster Ultimate or Performance installation, choose one of the displays below and one of the cooling options. Both ranges are liquid cooled to save valuable space and weight.

Display opitons



	DriveMaster View	Drive Master Color View
Item #	142500010	142500050
Includes	mono view	5.7 color LCD
water resistance	IP65 water resistance	IP67 water resistance

Cooling opitons

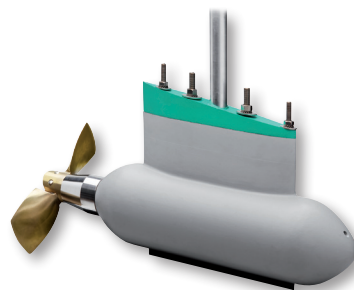


	Direct cooling water pump (fresh water only)	Direct cooling water pump installation kit (fresh water only)	Closed-loop cooling kit
Item #	143500100	143500110	143500200
Includes	water pump	water pump, hose, clamps, water pickup, fresh water filter	recirculating pump, heat exchanger and independent cooling fan

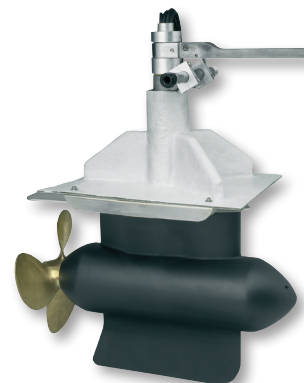
PodMaster series

Mastervolt's ideal solution for motor or sailyachts is installed under the hull to save space and minimise sound and vibrations. Sailing with the PodMaster is the quietest possible solution for electric sailing.

The PodMaster is made of seawater-proof aluminium and given six layers of epoxy coating for extra protection. Depending on the model, the bulb contains an ultra-modern, sensor-free, 3-phase permanent magnet synchronised motor or a highly efficient permanent magnet DC motor. The motor, bearings and plugs were designed for professional use and guarantee years of sailing enjoyment and minimum maintenance. Its high capacity and exceptional efficiency ensure that virtually the entire capacity is transferred to the propeller.



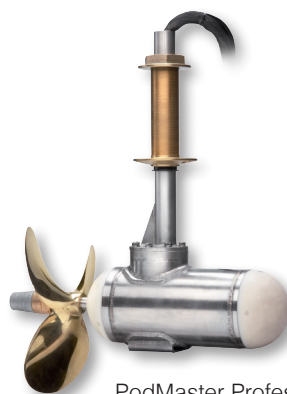
PodMaster



PodMaster Steerable

PodMaster Professional series

The PodMaster Professional is the professional low rpm model of our PodMaster series and fully seawater-proof thanks to its stainless steel construction. The bulb contains an ultra-modern, sensor-free permanent magnet 3-stage synchronous motor that was specifically developed to provide a high torque output. As a result, the PodMaster Professional can be used with a large diameter propeller for extra efficient propulsion.



PodMaster Professional

Type	Capacity	Motor technology	Voltage regulator	Max. RPM	Required battery capacity for		
					3–4 hrs sailing	6–8 hrs sailing	Item #
PodMaster 2*	2 kW	PM	24V	1800	5.6 kWh	9.2 kWh	140600200
PodMaster 4.2	4.2 kW	synchronous	48V	1500	11.8 kWh	19.3 kWh	140600420
PodMaster 6.5	6.5 kW	synchronous	48V	1500	18.2 kWh	30 kWh	140600650
PodMaster 10	10 kW	synchronous	48V	1800	28 kWh	46 kWh	140601000
PodMaster 2 Steerable**	2 kW	PM	24V	1800	5.6 kWh	9.2 kWh	140700200
PodMaster 4.2 Steerable**	4.2 kW	synchronous	48V	1500	11.8 kWh	19.3 kWh	140700420
PodMaster 6.5 Steerable**	6.5 kW	synchronous	48V	1500	18.2 kWh	30 kWh	140700650
PodMaster 10 Steerable**	10 kW	synchronous	48V	1800	28 kWh	46 kWh	140701000
PodMaster 6.5 Professional***	6.5 kW	synchronous	48V	950	18.2 kWh	30 kWh	141300650
PodMaster 10 Professional***	10 kW	synchronous	48V	1050	28 kWh	46 kWh	141301000

* Delivered with fixed propeller, also available with folding propeller.

** This PodMaster model is also as Sterndrive available.

*** Supplied without propeller.

Hybrid sailing: Best of both worlds

The HybridMaster is Mastervolt's solution for hybrid propulsion: combining the advantages of electric propulsion with the sailing radius of a diesel engine. The HybridMaster series has an electric power rating ranging from 3.5 to 10 kW, allowing them to be combined with diesel engines of up to 150 hp. When sailing electrically, the HybridMaster gets its energy from the batteries. When sailing on the motor, the batteries are recharged up to a maximum of 150 A.

HybridMaster

Universally applicable and can be installed parallel to the propeller shaft. The gear ratio between the rpm of the electric motor and the propeller shaft can be adapted, which is crucial as it ensures that the electric propulsion is optimally adjusted to the existing propeller and motor.



HybridMaster Ultra

The top end of the line, using completely silent and maintenance-free brushless asynchronous motor technology.

Type	Capacity	Motor technology	Voltage regulator	Item #
HybridMaster 4.8	4.8 kW	PM	48V	140103000
HybridMaster 3.5 Ultra	3.5 kW	asynchronous	48V	140320350
HybridMaster 7.5 Ultra	7.5 kW	asynchronous	48V	140320750
HybridMaster 10 Ultra	10 kW	asynchronous	48V	140321000



Accessories: It's the details that make the difference

Before you leave shore, double check that your equipment is ready to go. Because once you're on the water, you rarely get second chances. Genuine Marinco and Mastervolt parts and accessories are manufactured to the highest standards, ensure compatibility with your shipboard systems, and are guaranteed to perform.

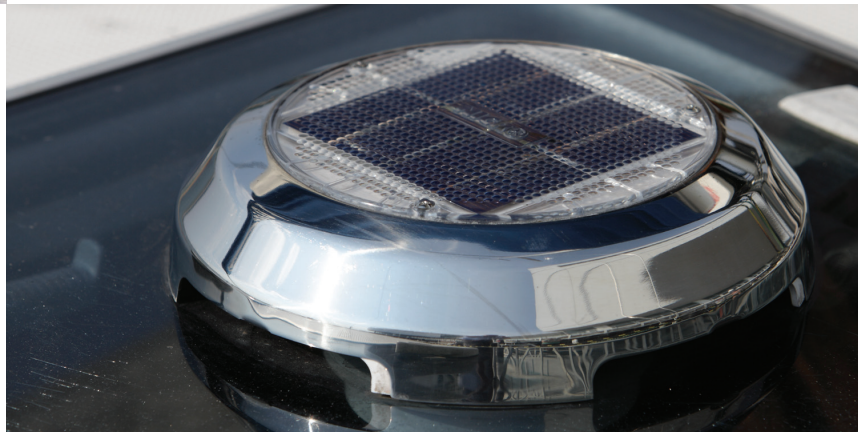
Whether you need common maintenance products, solutions that make life at sea more convenient, or accessories that say a little about your sense of style, Marinco and Mastervolt accessories are the perfect complement.

From fuses to lights, wiper blades to stainless steel components, our product designers have an uncanny insight into the form and function of every accessory, giving you the confidence to enjoy your vessel under all conditions.

Choose genuine Marinco and Mastervolt parts and accessories. It's all in the details.



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Wiper Motors

The motor choice is based primarily on the size of the windshield and where the motor is to be installed, either in an exterior or interior location. Marincos® motors are split into three categories, Standard, Heavy-Duty, and Heavy-Duty Plus, with the categories being defined by the power range of the motors in those categories. Within the three categories, there are motors designed for interior or protected installations, and motors designed for exterior installations. With the addition of the 3.0 motor, we offer wiper motors for all windshield sizes up to 45", which could be covered by a 30" arm and 30" blade combination, driven by a 3.0 motor.









The Standard motor category includes the STD, WMW, and 500, which are all designed for light duty use, defined as being able to drive a 14" arm and a 14" blade. The differences in the motors relate to their casings and the appropriate installation applications. The STD is designed to be used in interior or well protected locations. The WMW, with its chrome-plated brass outer housing, provides protection for exterior installations that have some protection. The 500 motor, with its thermoplastic, watertight housing, is ideal for any light-duty, external installation where the motor is constantly exposed to the elements.

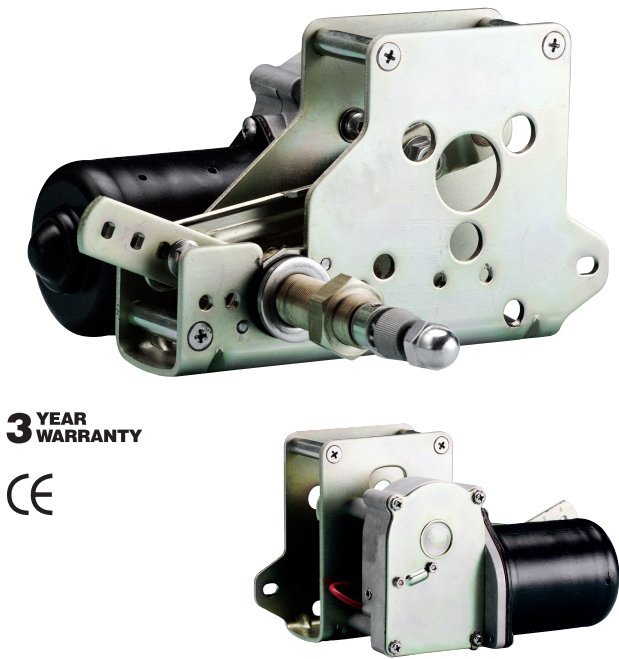
When coverage of a larger windshield is required, Marincos offers the Heavy-Duty motors, which are capable of driving a wide range of arm and blade sizes, up to a 26" x 26" Deluxe arm and blade combination, which would cover windshields up to 39" with

the 2.5 motor. The MRV is built for interior or well-protected locations, and has the power to pull a 22" X 22" Deluxe arm and blade combination. It has two speeds, with adjustable sweep set and adjustable parking. The 1000 motor can pull up to a 16" x 16" Deluxe arm and blade combination. While not as powerful as the MRV, it is waterproof, with the high-density thermoplastic housing offering complete protection from the elements. The 1000 motor is a one-speed motor, with adjustable park and adjustable sweep settings. The third motor in this category, the 1.5 motor has the power to pull a 22" x 22" Deluxe arm and blade combination like the MRV, but is waterproof and built for exposed installations. The 1.5 motor has a powder-coated aluminum base and housing for greater operating efficiency and durability, with two-speed operation, and adjustable park and sweep sets. The fourth motor is the 2.5 motor and has the same features as the 1.5 motor (waterproof, powder-coated aluminum housing, etc.), with the added power to drive a longer (26") Deluxe arm and blade combination.

The 3.0 motor is the motor that makes up the Heavy-Duty Plus category. A wiper motor for internal installations, the 3.0 motor has an external linkage shaft drive that gives it the power and torque to drive a 30" Premier pantographic arm and Premier blade combination. See the following catalog pages for a full set of specifications on this, and all of the other wiper motors.

Choosing the Right Motor

	Model	Voltage	Speeds	Stall Torque/ Stall Current	Compatible Blade Lengths	Available Shaft Lengths	Sweep Angles	Housing
	3.0	12 & 24V	single	165 in-lbs 12.5–14.5 amps	30" Premier Plus single or pantographic	2.5" 3.5"	Factory preset to 110° Adjustable to 45°, 60°	external linkage – no housing
	2.5	12 & 24V	2 speed	139 in-lbs 9–10.5 amps	26" Deluxe 24" Premier	1.5" 2.5"	Factory preset: 80° or 110° Adjustable: 45° or 60°	fully sealed powder coated aluminum
	1.5	12 & 24V	2 speed	109 in-lbs 11.5–13 amps	22" Deluxe 20" Premier	1.5" 2.5" 3.5"	Factory preset: 80° or 110° Adjustable: 45° or 60°	fully sealed powder coated aluminum
	1000	12V	single	55 in-lbs 9.8–10 amps	16" Deluxe 18" Premier	1.5" 2.5"	Factory preset: 80° or 110° Adjustable: 50°, 65°, 80° or 110°	fully sealed, UV stabilized hi-temp thermoplastic
	MRV	12 & 24V	2 speed (but can be operated as 1)	109 in-lbs 11.5–13 amps	22" Deluxe 20" Premier (at 80° sweep)	1.5" 2.5" 3.5"	Factory preset: 80° or 110° Adjustable: 45°, 60°, 80°, or 110°	Corrosion resistant cast housing
	500	12V	single	—	14" Deluxe	2.5"	Factory preset: 80° or 110°	fully sealed, UV stabilized hi-temp thermoplastic
	WMW	12V	single	—	14" Deluxe	2.5"	Factory preset: 110°	chrome plated brass case
	STD	12V	single	—	14" Deluxe	2.5" 3.5"	Factory preset: 80° or 110° Adjustable: 80° or 110°	corrosion proof aluminum alloy case

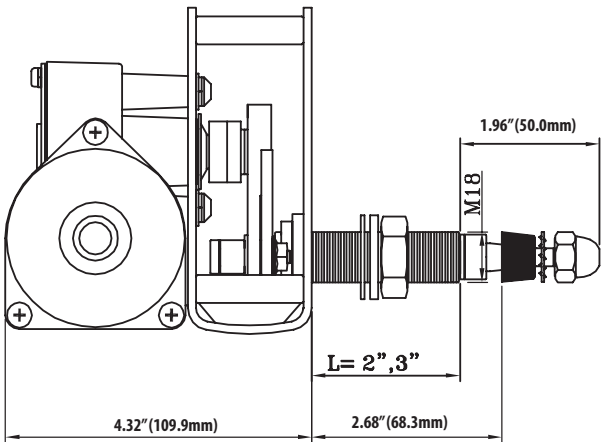
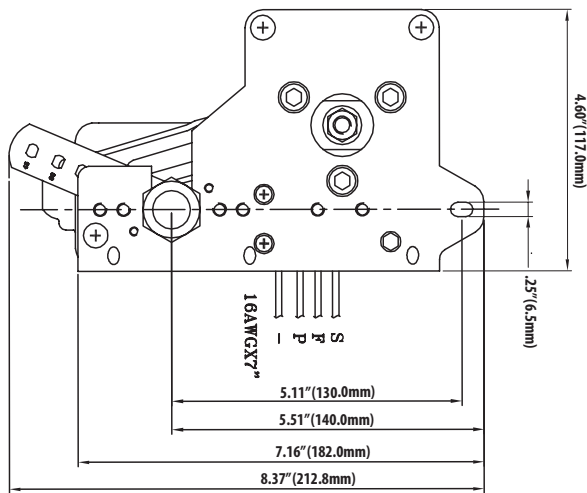


Heavy Duty Plus 3.0 Motor

The Heavy Duty Plus 3.0 Motor is Marinco's only external linkage motor. This design easily powers a 30" Premier arm and 30" Premier blade combination to provide coverage up to 45" of windshield area.

- Available in two shaft lengths: 2.5" and 3.5" (knurled arm fitting adds 2" to overall length)
- Tapered knurled drive shaft
- Factory pre-set sweep angle of 110°, with easy adjustment to 45° or 60°
- Sealed 6" wire leads, 16 AWG
- For interior installations
- Adjustable right or left self parking
- 18 mm diameter shaft
- Measures approximately 8.5" L x 4.625" W x 4.375" D (See below for detailed dimensional drawings)
- Stall torque: 165 in-lbs (190 kgf/cm; 18.6 Nm)
- Stall current: 12.5–14.5 amps
- No load current: 0.8–2.0 amps
- Recommended fuse: 6 amp fuse
- Available in 12V and 24V models
- Coast to park
- RF shielded circuitry

	Voltage	Sweep	OEM #
2.5" Shaft	12V	110°	73112
	24V	110°	73312
3.5" Shaft	12V	110°	73113
	24V	110°	73313

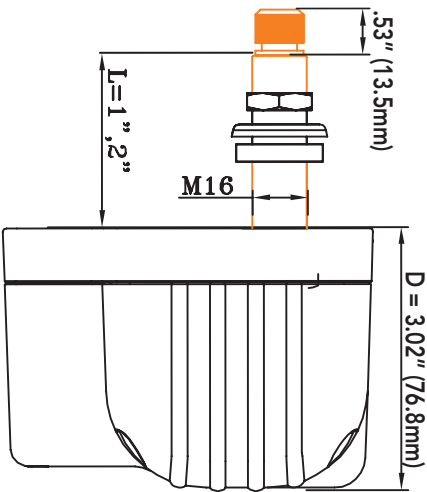
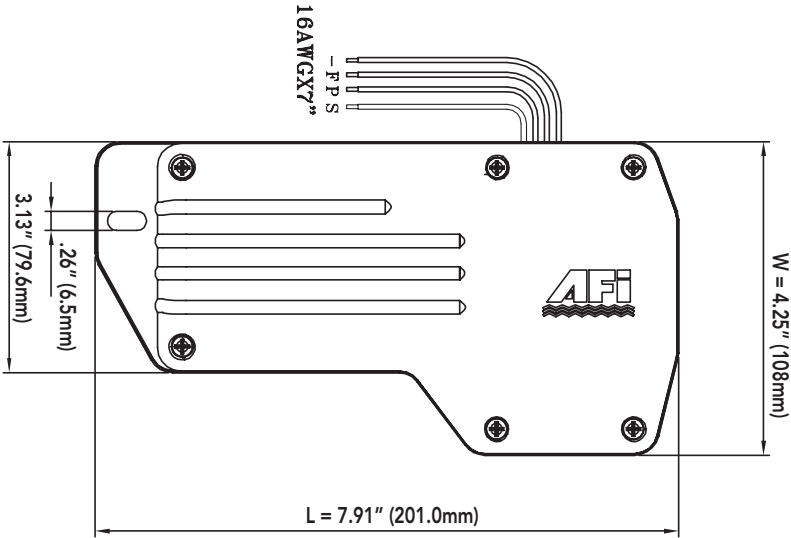


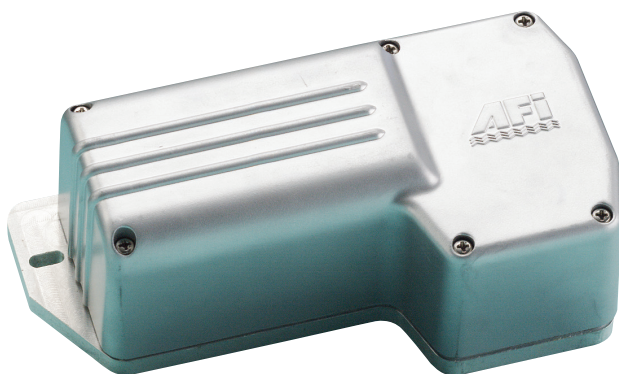


2.5 Waterproof Wiper Motor

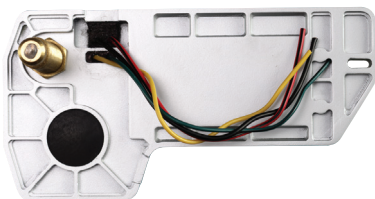
- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 26" Deluxe arm and Deluxe blade combination or a 24" Premier arm and Premier blade combination
- Available in two shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- Factory pre-set sweep angles of 80° or 110°, with easy adjustment to 45° or 60°
- Chrome plated solid brass knurled drive nut with brass and stainless steel drive shaft
- Two speed motor
- Sealed 6" wire leads, 16 AWG
- Adjustable right or left self parking
- .625" diameter shaft (16 mm)
- Available in 12V and 24V models
- Coast to park
- RF shielded circuitry
- Retail version includes 6 amp fuse and holder (operating switch not included)
- Measures approximately 7.875" L x 4.25" W x 3" D (see below for detailed dimensional drawings)
- Stall torque: 139 in-lbs (160 kgf/cm; 15.7 Nm)
- Stall current: 9.0–10.5 amps
- No load current: 1.0 -1.6 amps

	Voltage	Sweep	Item #	OEM #
1.5" Shaft	12V	80°	82081	82181
	12V	110°	82011	—
2.5" Shaft	12V	80°	82082	82182
	12V	110°	82012	—
	24V	110°	82312	82212





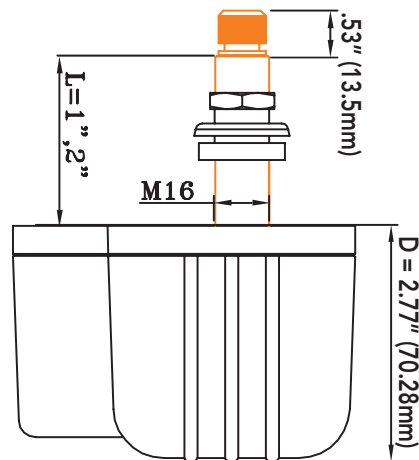
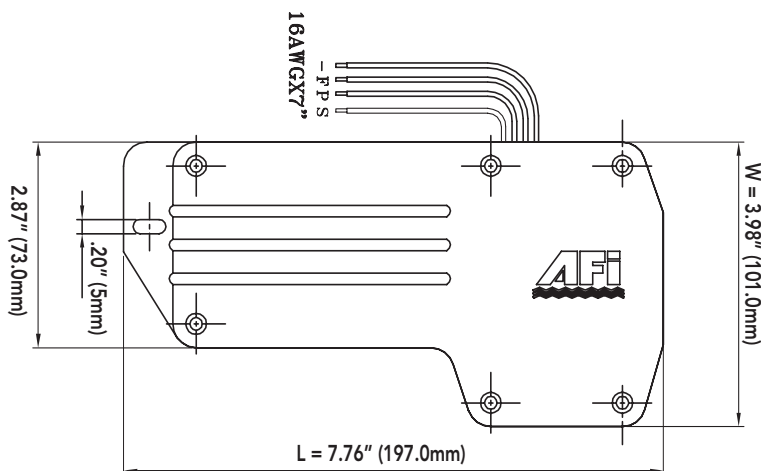
3 YEAR WARRANTY
CE



1.5 Waterproof Wiper Motor

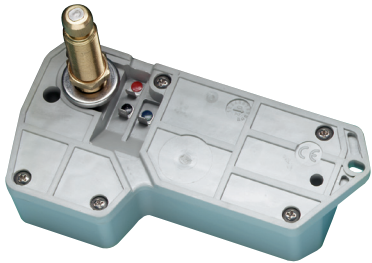
- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 22" Deluxe arm and 22" Deluxe blade combination or a 20" Premier arm and 20" Premier blade combination
- Available in three shaft lengths: 1.5", 2.5" and 3.5" (includes .5" length of knurled arm fitting)
- Factory pre-set sweep angles of 80° or 110°, with easy adjustment to 45° or 60°
- Chrome plated solid brass knurled drive nut with brass and stainless steel drive shaft
- Two speed motor
- Sealed 6" wire leads, 16 AWG
- Adjustable right or left self parking
- .625" diameter shaft (16 mm)
- Available in 12V and 24V models
- Coast to park
- RF shielded circuitry
- Retail version includes 5 amp fuse and holder (operating switch not included)
- Measures approximately 7.75" L x 4" W x 2.75" D (see below for detailed dimensional drawings)
- Stall torque: 109 in-lbs (125 kgf/cm; 12.3 Nm)
- Stall current: 11.5–13.0 amps
- No load current: 0.5–1.2 amps
- Replaces AFI 2000 motor

	Voltage	Sweep	Item #	OEM #
1.5" Shaft	12V	80°	71081	—
	12V	110°	71011	71111M
2.5" Shaft	12V	80°	71082	71182
	12V	110°	71012	71112
	24V	110°	71212	71312





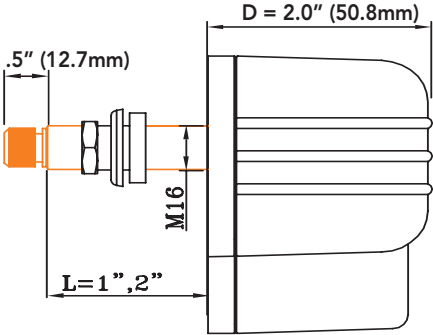
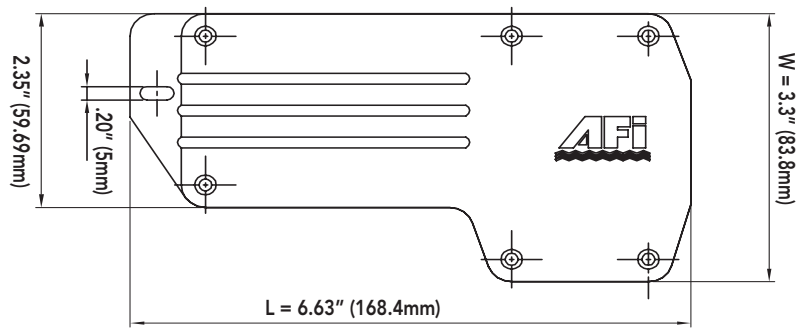
3 YEAR WARRANTY
CE

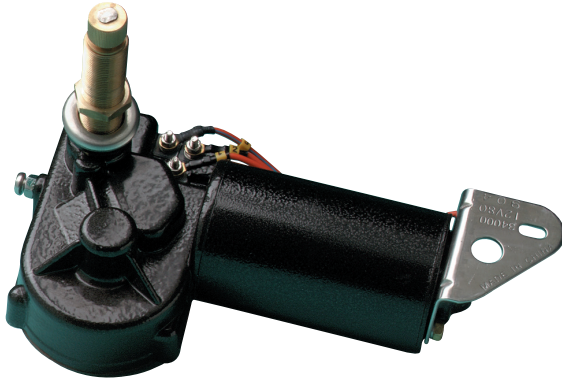


1000 Waterproof Wiper Motor

- Powers 18" Deluxe arm and 18" Deluxe blade combination at sweep sets of 80° or less
- Powers 16" Deluxe arm and 16" Deluxe blade combinations at a sweep set of 110°
- Factory pre-set sweep of 80° or 110° adjustable to 50°, 65°, 80°, or 110°
- .625" diameter shaft (16 mm)
- Fully sealed waterproof housing made of UV stabilized, high-temperature, high-impact thermoplastic
- 12 volt heavy-duty motor with anti-rotation drive shaft
- Knurled drive shaft and solid brass arm drive nut
- Coast to park with adjustable right or left self parking
- Retail version includes 5 amp fuse and holder (on/off switch not included)
- RF shielded circuitry
- Weight: 1.75 lbs
- Available in two shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- Measures approximately 6.625" L x 3.375"W x 2" D
- Stall torque: 55 in-lbs (63 kgf/cm; 6.2 Nm)
- Stall current: 9.8–10.0 amps
- No load current: 0.8–1.2 amps

	Voltage	Sweep	Item#	OEM #
1.5" Shaft	12V	65°	—	36161
		80°	36180	36181
		110°	36110	36111
2.5" Shaft	12V	65°	—	37161
		80°	37180	37181
		110°	37110	37111
2.5" Shaft Kits	12V	80°	37100	—
		110°	37200	—



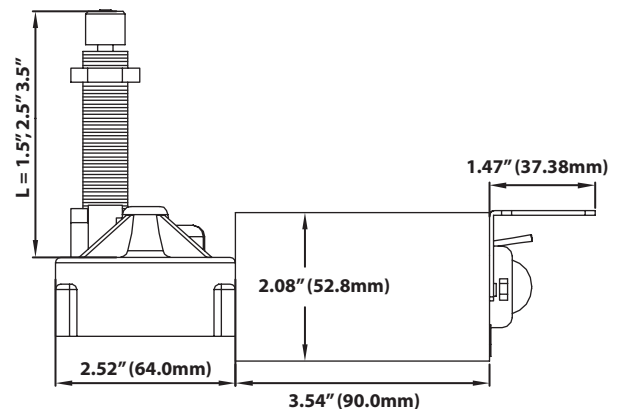
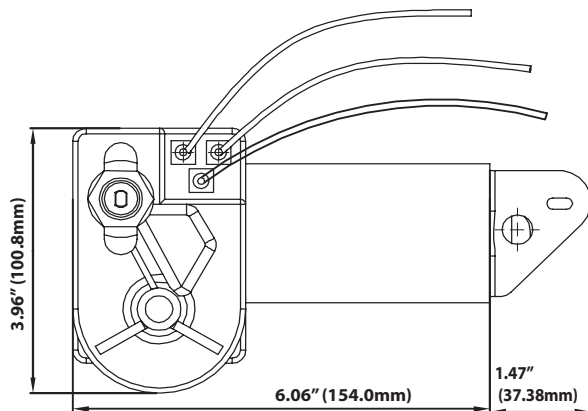


3 YEAR WARRANTY
CE

MRV Wiper Motor

- Easily powers 22" x 22" deluxe arm/blade combinations, or a 20" x 20" premier arm/blade combination at sweep sets of 80° or less
- Factory pre-set sweep of 80° or 110° adjustable to 45°, 60°, 80° or 110°
- .625" diameter shaft (16 mm)
- Available in 3 shaft lengths: 1.5", 2.5" and 3.5" (includes .5" length of knurled arm fitting)
- Corrosion-resistant casing
- Heavy-duty motor with right angle drive
- Two-speed motor, can be operated as one speed
- Solid brass knurled drive nut with brass and stainless steel drive shaft
- Adjustable right or left self parking, coast to park
- Retail version includes 5 amp fuse and holder
- Stainless steel fasteners and mounting bracket
- Use with three-position switch (not included)
- Compact size – 7.625" L x 4" W x 2" D
- Stall torque: 109 in-lbs (125 kgf/cm: 12.3 Nm)
- Stall current: 11.5–13.0 amps
- No load current: 0.5–1.2 amps

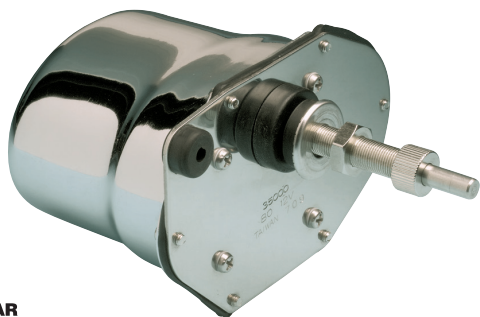
	Voltage	Sweep	Item#	OEM #
1.5" Shaft	12V	80°	34001	38001
		110°	34011	38011
2.5" Shaft	12V	80°	34000	38000
		110°	34010	38010
	24V	110°	34210	—
3.5" Shaft	12V	80°	34005	38005
		110°	34015	—



MRV Wiper Motor Cover

- Constructed of white ABS plastic
- Easily installed

Item # **33025** White
OEM # 33125 White
OEM # 33126 Black



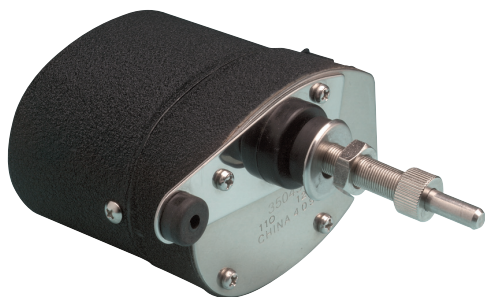
3 YEAR WARRANTY

WMW Wiper Motor

Windshield Mount: .5" Shaft diameter

- Powers up to 14" x 14" arm/blade combinations
- Water-resistant sealed motor
- Chrome-plated brass case and shaft housing
- Stainless steel front plate and wiper shaft
- Maximum current draw: 2 amps
- Shaft diameter: .375"
- For external use in open cabin boats
- Dimensions: 4.25" L x 2.75" W x 3.5" D

	Voltage	Sweep	OEM #
2.5" Shaft	12V	110°	35010



3 YEAR WARRANTY

Recommended for interior installations only

STD Wiper Motor

- Powers up to 14" x 14" arm/blade combinations
- Corrosion-proof aluminum alloy case with black crackle finish
- Base & mounting plates are chrome plated naval brass
- Maximum current draw: 2 amps
- 80° or 110° adjustable sweep, adjustable right or left self-parking
- Shaft diameter: .375" windshield mount, .5" deck mount
- Dimensions: 3.875" L x 2.25" W x 3.5" D

	Voltage	Sweep	OEM #
2.5" Shaft	12V	80°	35040
3.5" Shaft	12V	80°	35050



3 YEAR WARRANTY

WMW Wiper Kit

Windshield Mount: .375" shaft diameter

- WMW Wiper Motor with 11.5" Deluxe stainless steel curved blade (33004) and Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)

	Voltage	Sweep	Item #
Kit	12V	80°	30000
		110°	30002



3 YEAR WARRANTY

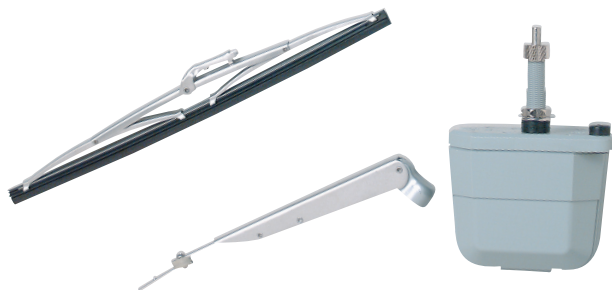
STD Wiper Kit

Windshield Mount: .375" shaft diameter

Deck Mount: .5" shaft diameter

- STD Wiper Motor with 11.5" Deluxe stainless steel curved blade (33004) and Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)
- Deck Mount version includes deck mount adapter kit (33000)

	Voltage	Sweep	Item #
Kit – 2.5" Shaft	12V	80°	32000
		110°	32002
Kit – 3.5" Shaft	12V	80°	32001


**3 YEAR
WARRANTY**

500 Wiper Kit

Windshield Mount: .5" shaft diameter

500 Waterproof Wiper Motor with 11.5" Deluxe stainless steel curved blade (33004) and Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)

	Voltage	Sweep	Item #
Kit	12V	80°	30004
		110°	30005



Hand-operated Wiper Blade

- Chrome-plated brass handle
- Includes stainless steel 7-1/2" to 12" adjustable wiper arm, 11" blade, and all parts for installation
- Economical—an inexpensive alternative to wiper motor kit
- Requires 7/16" diameter hole for installation
- Can be installed up to 7/8" thick material
- For use on flat windshields only

Item # 31000

Replacement Blade

OEM # 33101

Wiper Arms

Wiper arms are available in Standard, Deluxe, and Premier styles and the primary construction material in all wiper arms is stainless steel. Standard arms are used with Standard blades and can only be used with the line of Standard motors, while the Deluxe arms are used on Standard and Heavy-Duty motors. When choosing arms (and blades) it is very important to use only the recommended lengths for the motor that you are using.

The arms are available in a wide range of sizes, in both black and stainless steel finish, and regular and pantographic models. Pantographic arms use a set of two arms joined together to give a flatter and somewhat wider sweep pattern. The Deluxe arms are offered in either with a polished stainless steel finish or a black powder-coated finish. Premier arms are the top of the line product in this category, utilizing heavy-duty stainless steel tubing and components, and they can only be used with the Heavy Duty and Heavy Duty Plus motors. Premier arms come in adjustable length sizes, ranging from 10" to 30", in both regular and pantographic versions. The longer length Premier arms (25" – 30" long) have been designed for added strength and have a tapered wiper shaft fitting made especially to fit the larger, more powerful 3.0 wiper motor. These arms also have a saddle style tip for a stronger connection with the longer length Premier blades (26", 28", and 30" lengths).

Premier arms are also available as "wet arm" versions, with the water hose and sprayer nozzle built into the wiper arm. All that is needed is a water delivery system that the arm can be tied into. For those wanting a windshield washer system for the Deluxe arms, there is a complete washer kit system that is made especially to fit the Deluxe arms.



Wiper Arm Compatibility Chart

							Motor Compatibility Chart				
Style	Wet/ Dry	Length (adjustable)	Color	Material	Item #	OEM #	3.0	2.5	1.5	1000	MRV
Premier Plus											
single	dry	25"-30"	stainless	stainless	33088	33188	✓	—	—	—	—
pantographic	dry	26"-30"	stainless	stainless	33096	33196	✓	—	—	—	—
single	wet	25"-30"	stainless	stainless	—	33188W	✓	—	—	—	—
pantographic	wet	26"-30"	stainless	stainless	—	33196W	✓	—	—	—	—
Premier											
single	dry	10"-15"	stainless	stainless	33082	33182	—	✓	✓	—	✓
single	dry	15"-20"	stainless	stainless	33084	33184	—	✓	✓	—	✓
single	dry	20"-25"	stainless	stainless	33086	33186	—	✓	—	—	—
single	wet	15"-20"	stainless	stainless	33084W	33184W	—	✓	✓	—	✓
single	wet	20"-25"	stainless	stainless	33086W	33186W	—	✓	—	—	—
pantographic	dry	12"-17"	stainless	stainless	33090	33190	—	✓	✓	—	✓
pantographic	dry	17"-22"	stainless	stainless	33092	33192	—	✓	—	—	max 20°
pantographic	dry	22"-26"	stainless	stainless	33094	33194	—	—	—	—	—
pantographic	wet	12"-17"	stainless	stainless	33090W	—	—	✓	✓	—	✓
pantographic	wet	17"-22"	stainless	stainless	33092W	33192W	—	✓	—	—	max 20° ≤ 80°
pantographic	wet	22"-26"	stainless	stainless	—	33194W	—	—	—	—	—
Deluxe Adjustable											
single	dry	6.75"-10.5"	stainless	stainless	33006A	33106A	—	✓	✓	✓	✓
single	dry	10"-14"	stainless	stainless	33007A	33107A	—	✓	✓	✓	✓
single	dry	14"-20"	stainless	stainless	33010A	33110A	—	✓	✓	max 18° ≤ 80° max 16° @ 110°	✓
single	dry	10"-14"	black	stainless	33012A	33112A	—	✓	✓	✓	✓
single	dry	14"-20"	black	stainless	33014A	33114A	—	✓	✓	max 18° ≤ 80° max 16° @ 110°	✓
single	dry	18"-24"	black	stainless	33070A	33170A	—	✓	—	—	max 22°
Deluxe Pantographic											
pantographic	dry	12"-17"	black	stainless	33032A	33132A	—	✓	✓	—	✓
pantographic	dry	17"-22"	black	stainless	33037A	33137A	—	✓	✓	—	✓

Premier Plus Stainless Steel Adjustable Single and Pantographic Wiper Arm

- Heavy-duty component design for use with the 3.0 wiper motor
- Stainless steel and chrome-plated die cast construction
- Motor shaft mount with notched "teeth" and tapered design for secure operation
- Features "Articulating/Bend Back" design that locks arm in upright position for windshield cleaning

**single – adjusts 25" to 30"****pantographic – adjusts 26" to 30"**

Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
single	dry	25"-30"	stainless	stainless	33088	33188
pantographic	dry	26"-30"	stainless	stainless	33096	33196

Premier Plus Stainless Steel Single and Pantographic Wet Arms

- Premier wet arms add a built-in washer system to the high-end, heavy duty construction of the Premier wiper arms
- Premier wet arms feature a black PVC hose that runs up the center of the arm and ends in a four-nozzle fixture that is part of the arm itself
- Each solid brass nozzle is adjustable for maximum coverage



Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
single	wet	25"–30"	stainless	stainless	—	33188W

Note: For use only with Premier Plus Wiper Arms and Heavy Duty Plus 3.0 Motor

Premier Stainless Steel Single and Pantographic Dry Arms

- Heavy-duty component design for use with most Marinco® motors
- Stainless steel construction
- Features "Articulating/Bend Back" design that locks arm in upright position for windshield cleaning
- Motor shaft mount with notched teeth



Single



Pantographic

Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
single	dry	10"–15"	stainless	stainless	33082	33182
single	dry	15"–20"	stainless	stainless	33084	33184
single	dry	20"–25"	stainless	stainless	33086	33186
pantographic	dry	12"–17"	stainless	stainless	33090	33190
pantographic	dry	17"–22"	stainless	stainless	33092	33192
pantographic	dry	22"–26"	stainless	stainless	33094	33194

Pantographic wiper arms will only function properly with wiper motor sweep angles 80° or less

Premier Stainless Steel Wiper Wet Arms

Combine the heavy-duty construction and materials of the Premier wiper arm line with a built-in wet arm system that allows for a clean and easy installation of a washer system. A simple and easy way to keep your windshield clean, the Premier wet arms feature a black PVC hose that runs up the center of the arm and ends in a four-nozzle fixture that is an integral part of the wiper arm itself. Each solid brass nozzle is adjustable to provide a maximum coverage spray pattern for most any windshield.



Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
single	wet	15"–20"	stainless	stainless	33084W	33184W
single	wet	20"–25"	stainless	stainless	33086W	33186W
pantographic	wet	12"–17"	stainless	stainless	33090W	—
pantographic	wet	17"–22"	stainless	stainless	33092W	33192W
pantographic	wet	22"–26"	stainless	stainless	—	33194W

Pantographic wiper arms will only function properly with wiper motor sweep angles 80° or less

Deluxe Adjustable Wiper Arm

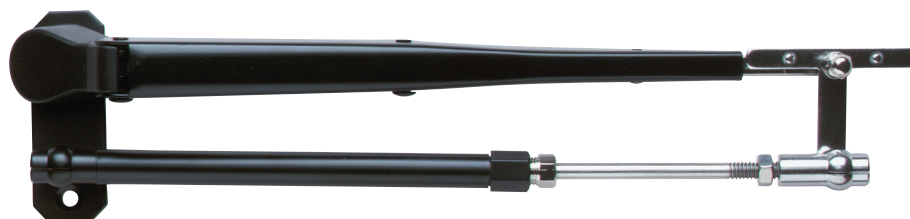
- All arms are stainless steel
- Arm has "articulating/bend-back" feature
- Motor shaft mounting has additional set screw clamping



Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
single	dry	6.75"–10.5"	stainless	stainless	33006A	33106A
single	dry	10"–14"	stainless	stainless	33007A	33107A
single	dry	14"–20"	stainless	stainless	33010A	33110A
single	dry	10"–14"	black	stainless	33012A	—
single	dry	14"–20"	black	stainless	33014A	33114A
single	dry	18"–24"	black	stainless	33070A	33170A

Deluxe Adjustable Pantographic Arm

- For Use with 2.5, 1.5 and MRV Motors
- Stainless steel
- Arm has "articulating/bend-back" feature
- Motor shaft mounting has additional set screw clamping



Style	Wet/Dry	Length (adjustable)	Color	Material	Item #	OEM #
pantographic	dry	12"–17"	black	stainless	33032A	33132A
pantographic	dry	17"–22"	black	stainless	33037A	33137A

Wiper Blades

Standard, Premier, and Deluxe wiper blades are offered in different sizes and styles to fit all of the different types of wiper arms.

Standard styles have plastic frame construction and marine grade rubber squeegees. Premier and Deluxe styles have stainless steel frame construction and high-end silicone rubber squeegees. These two styles have multiple frame construction,

allowing for equal pressure of the entire length of the blade and silicone rubber squeegees that are durable and create a smoother wiping motion. In addition, longer length Premier blades (26", 28", and 30") are specifically designed with a saddle style attachment for the longer length Premier arms. (25"-30").

For maximum performance of all blade styles, replacement of wiper blades is recommended every 6 months.

	Color/Material		Premier Plus Blades				Black/Stainless
	Length	Stainless/Stainless	26"	28"	30"	26"	28"
	Item #	33026S	33028S	33030S	33026B	33028B	
Premier Plus Wiper Arms							
Single Arm	Dry	33088, 33188	✓	✓	✓	✓	✓
	Wet	33088W, 33188W	✓	✓	✓	✓	✓
Pantograph Arm	Dry	33096, 33196	✓	✓	✓	✓	✓
	Wet	33096W, 33196W	✓	✓	✓	✓	✓

	Premier Blades				Deluxe Blades										Standard Blades						
Color/Material	Stainless/Stainless				Black/ Stainless		Stainless/Stainless								Black						
Length	20"	22"	24"		20"	22"	11.5"	14"	16"	18"	20"	22"	24"	26"	12"	14"	16"	18"	20"	22"	24"
Item #	33021S	33022S	33024S		33021B	33022B	33004	33005	33015	33016	33017	33022	33023	33024	31012B	31014B	31016B	31018B	31020B	31022B	31024B
OEM #	33121S	33122S	33124S		33121B	33122B	33104	33105	33115	33116	33117	—	—	—	31112B	31114B	31016B	31118B	31120B	31122B	31124B
Premier Wiper Arms																					
Single Arm	33082, 33182	✓			✓		✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
Pantograph Arm	33084, 33184, 33084W, 33184W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	33086, 33186, 33086W, 33186W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	33090, 33190, 33090W, 33190W	80° only			80° only		✓	✓	80° only	80° only	80° only				✓	✓	80° only	80° only	80° only	✓	80° only
	33092, 33192, 33092W, 33192W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	80° only	✓	✓	✓	✓	✓	✓	80° only
	33094, 33194, 33094W, 33194W	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Deluxe Wiper Arms																				
Single Arm	33006A 33106A						✓	✓	✓						✓	✓	✓				
	33007A 33107A						✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓
	33010A 33110A	80° only	80° only	80° only	80° only	80° only	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	33012A 33112A						✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	33014 330114A	80° only	80° only	80° only	80° only	80° only	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Pantograph Arm	33070A 33170A						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	33032A 33132A	80° only			80° only		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	33037A 33137A	80° only	80° only	80° only	80° only	80° only	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Pantographic wiper arms will only function properly with wiper motor sweep angles 80° or less

Premier Plus Stainless Steel Wiper Blades

- All Stainless Steel Construction
- Marine Grade Silicone Squeegee
- Extra squeegee "claws" spread pressure evenly over the length of the blade, allowing the blade to conform to a curved windshield



Length	Color	Material	Item #	OEM #
26"	stainless	stainless	33026S	33126S
28"	stainless	stainless	33028S	—
30"	stainless	stainless	33030S	33130S
26"	black	stainless	33026B	33126B

Note: For use only with Premier Plus Wiper Arms and Heavy Duty Plus 3.0 Motor

Premier Stainless Steel Wiper Blades

- All Stainless Steel Construction
- Marine Grade Silicone Squeegee
- Extra squeegee "claws" spread pressure evenly over the length of the blade, allowing the blade to conform to a curved windshield



Length	Color	Material	Item #	OEM #
20"	stainless	stainless	33021S	33121S
22"	stainless	stainless	—	33122S
24"	stainless	stainless	33024S	33124S
20"	black	stainless	33021B	33121B
22"	black	stainless	33022B	33122B
24"	black	stainless	33024B	—

Deluxe Stainless Steel Curved Wiper Blades

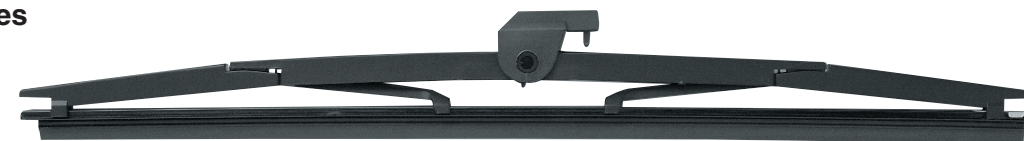
- Works well on curved or flat windshields



Length	Color	Material	Item #	OEM #
11.5"	stainless	stainless	33004	33104
14"	stainless	stainless	33005	33105
16"	stainless	stainless	33015	33115
18"	stainless	stainless	33016	33116
20"	stainless	stainless	33017	33117
26"	stainless	stainless	33024	—

Polymer Wiper Blades

- Black glass poly-impregnated construction
- Marine-grade rubber squeegee



Length	Color	Material	Item #	OEM #
12"	black	polymer	31012B	31112B
14"	black	polymer	31014B	31114B
16"	black	polymer	31016B	31116B
18"	black	polymer	31018B	31118B
20"	black	polymer	31020B	31120B
22"	black	polymer	31022B	31122B
24"	black	polymer	31024B	31124B

Stainless Steel Classic Straight Blade

- Replaces most standard blades in boats made before 1990.



Length	Color	Material	Item #	OEM #
11"	stainless	stainless	33901	—
14"	stainless	stainless	33919	—

Note: NOT for use with currently offered AFI arms

Add-On Windshield Washer Kit

- Can be used on new or existing AFI™ Deluxe wiper arm and blade sets
- Kit includes parts to outfit two wiper arms
- Sprayer fittings (kit includes two) each have four adjustable brass nozzles to provide maximum spray coverage for most any windshield
- Plastic parts are numbered to make installation easy

Complete Windshield Washer Kit

Includes:

- Water tank with mounting bracket
- 12 volt pump motor
- Under deck tee fitting
- Thru deck fitting and hardware
- Below deck clear tubing (16 ft.)
- Above deck black tubing (6 ft.)
- Large and small rivet clips
- Wiper arm clips
- Sprayer fittings with clamps

Item # 33505

OEM # 33515

Below Deck Windshield Washer Kit

Includes:

- Water tank with mounting bracket
- 12 volt pump motor
- Under deck tee fitting
- Thru deck fitting and hardware
- Below deck clear tubing (16 ft.)

Item # 33513



Intelligent Wiper Switches

Microcontroller based "intelligent" switch provides all necessary wiper motor functions in one small component

- Settings for two continuous speed functions and three intermittent speed functions (2 second delay, 4 second delay, 8 second delay)
- Washer system operation function
- Blinking LED lights in switch indicate operating function
- Works with 12V or 24V DC motors
- Fits standard switch size openings, requires 2.65"/67.5 mm depth
- Includes one ten pole connector with female pins and two female quick-connects

Single Motor **Item # 76030** OEM # 76130



Marinco® Horns

Marinco is the leading supplier of horns to the marine industry, with over fifty years of experience in designing and manufacturing sound devices specifically for use in harsh marine environments. Stainless steel is used for all critical components such as trumpets, motor cover, diaphragms, and assembly and mounting hardware. In the case of the XLP trumpet horns, the horn is given extra protection through the complete over-molding of the internal motor cover housing. It is this extra process that provides the added protection needed to back up the five-year warranty.

Marinco offers a complete line of marine horn products designed to meet almost any need, including electric and air trumpet horns, compact horns, electric and air below deck horns, and a comprehensive line of drop-in horns with a wide assortment of grill options. After developing the first below deck horn for the marine industry in the late 1980's, the offering of that product line has continued to expand. The latest addition is the "H" Horn Phase II, which is the loudest drop-in horn available today.

Notes:

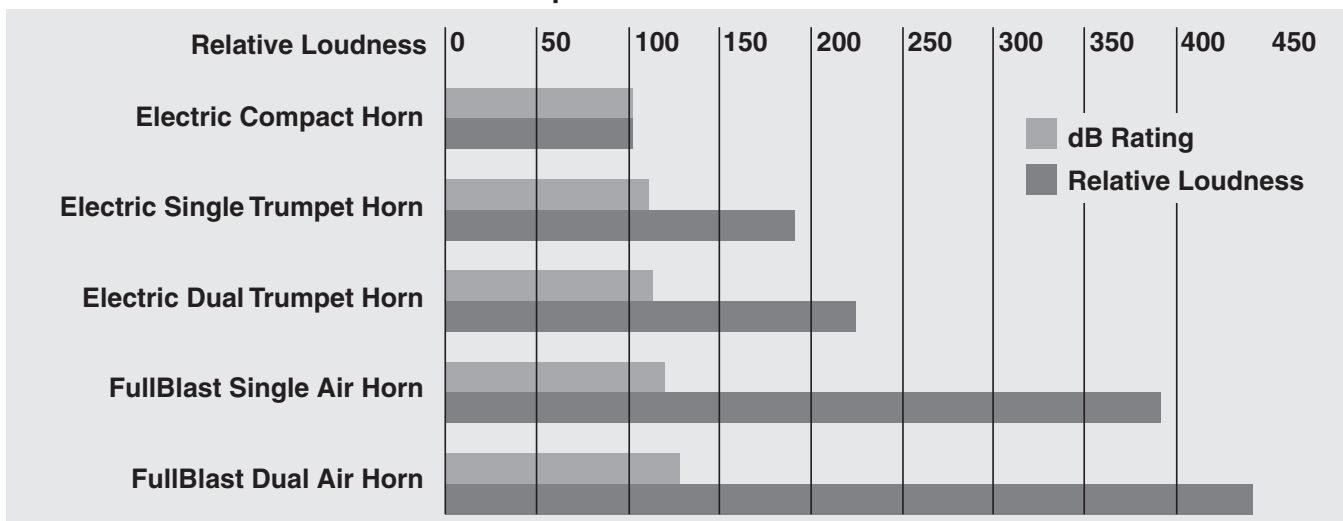
- **Marinco® electric horns meet the American Boat & Yacht Council (ABYC) Regulation #A23 for boats up to 12 meters.**
- **All Marinco® air horns meet the U.S. Coast Guard's C.O.L.R.E.G.S. and U.S. Inland Navigation Rules, Annex III Regulations for boats up to 20 meters.**
- **Marinco® horns are listed in the National Marine Manufacturers Association (NMMA) Certification Program "type accepted" list**
- **All Marinco® horns are listed for boats up to 12 meters and all Marinco® air horns are listed for boats up to 20 meters.**
- **Horn motors and compressors are 12 volt unless otherwise indicated.**
- **Marinco® horns are set at a lower frequency to provide greater range as the sound travels across the water.**
- **Horns should be mounted facing forward whenever possible. The NMMA Certification Program requires this for boats 39' or longer.**

Notice Concerning Marine Horns, CE, and Electromagnetic Interference

In order to operate, an electric horn rapidly makes and breaks an electric circuit. This operation creates electromagnetic disturbance, which may cause electrical "noise" in communications equipment. Because a horn is only used temporarily, any interference in electronic equipment is stopped when the horn is turned off.

The International Marine Certification Institute (IMCI), which certifies boats to the European Community Regulations (CE), has determined that boats using electric horns can comply with CE requirements on electromagnetic compatibility provided the above message is given to the boat owners in their manual.

Marinco® Horn Relative Loudness Comparison Chart



Marinco, the inventor of the first below deck horns, offers a full line of below deck horn products. Concealed horns utilize an upright horn installation and a large grill opening to offer greater sound volume. Drop-In Hidden Horns use a fabric lined grill for water-resistant installations. The concealed trumpet horns are all air horns and provide the maximum amount of sound available in a below deck horn installation.

Important: Please note the space requirement dimensions on some of the below deck models to ensure there is adequate room on the interior of the mounting area to house the horn assembly. Concealed horn models require a minimum 45° mounting angle to ensure proper drainage.

Marinco's Drop-In Hidden Horns combine a number of desired features into one unit including:

- Simple, drop-in installation
- Stylish snap-on grill with water-resistant fabric
- Authentic marine sound
- Easy aftermarket retrofit

Low Profile Hidden Horn with Black and White Grills

- Comes with both white ASA and black ABS screw-in grills
- Grills have water resistant fabric liners
- Easy installation: 2.75" diameter hole x 1" deep
- 12 volt, maximum amp draw: 4 amps
- New louder dB(A) rating: 111 at one meter
- Fundamental frequency: 370±20Hz
- Mounts from the outside, grill screws on for easy install
- Easy retrofit

Item # 10080



Low Profile Hidden Horn without Grill

- Same as 10080 without grill
- When purchasing bulk version, grill must be ordered separately
- 4" from hole to hole

OEM # 11080



Grills for Low Profile Hidden Horn 11080

- Water resistant fabric liner
- Grill dimensions: 5.25" W x 3.375" H x .75" D
- Screw-in

White ASA OEM # 11187
Off-White ASA OEM # 11194
Black ABS OEM # 11188

Stainless Steel Grill Cover for 11080

- Installs over plastic grill 11187, 11194, or 11188
- Installation requires plastic grill
- Grill dimensions: 5.3125" W x 3.4375" H x .875" D

OEM # 11196

Stainless Steel Grill Kit for 11080

- Includes stainless steel grill cover and plastic screw-in grill (11187)

OEM # 11096



Electronic Horn with White Grill

- Electronic Piezo horn sound
- One piece water resistant housing, grill is molded to horn
- 107 dB(A) at one meter
- Fundamental frequency: 550±100Hz
- Mounts in a standard 2.25" opening
- Draws less than one amp, maximum draw: 0.8 amp
- Internal space requirements: 2.25" W x 2.25" H x 2" D
- Grill dimensions: 4.875" W x 2.75" H x .5"D
- Stainless steel grill cover 11185 sold separately

Item # 10082



Stainless Steel Grill Cover for Electronic Horn 10082

- Grill dimensions: 4.9375" W x 2.8125" H x .5" D

OEM # 11185



Drop-In "H" Horn with Grills

- Comes with both black ABS and white ASA snap-in grills
- dB(A) rating: 107 at one meter
- Fundamental frequency: 370±20Hz
- Internal space requirements: 2" H x 3.375" W x 3.25" D
- Distinctive marine horn sound
- Enclosed sound unit
- Easy installation or retrofit, mounts from the outside
- 12 volt, maximum amp draw: 4 amps
- Stainless Steel grill cover #11124 sold separately

Item # 10079



Drop-In "H" Horn without Grill

- Same as 10079 without grill
- When purchasing 11079, grill must be ordered separately

OEM # 11079



Drop-In Hidden Horn without Grill

- Internal space requirements: 2.25" H x 3.625" W x 3.5" D
- Maximum amp draw: 3 amps
- dB(A) rating: 105 at one meter
- Fundamental frequency: 440±20Hz
- Mounts from the outside, horn grill snaps on for easy installation
- Easy retrofit
- Grill must be ordered separately
- 4" from hole to hole

OEM # 11095



PATENTED

Grills for Drop-In Hidden Horns 11079 and 11095

- Water resistant fabric liner
- Grill dimensions: 5" W x 2.625" H x .375" D

Snap-In

White ASA OEM # 11090
 Black ABS OEM # 11091
 Chrome Plated ABS OEM # 11225

Screw-In

White ASA OEM # 11190
 Black ABS OEM # 11191
 Chrome Plated ABS OEM # 11226 (not pictured)

11225



11091



11090



11191



11190

**Stainless Steel Grill Cover**

- Installs over screw-in plastic grill
- Requires plastic screw-in grill for installation
- Grill dimensions: 5.0625 W x 2.75 H x .5 D

OEM # 11124

Stainless Steel Grill Kit

- Includes stainless steel grill cover and plastic screw-in grill
- Grill (with cover installed) dimensions: 5.0625" W x 2.75" H x .5" D

OEM # 11024

**Mini Hidden Horn**

- Type 304 stainless steel diaphragm
- Dimensions: 3.25" W x 1.75" H x 3" L
- Maximum amp draw: 3 amps
- dB(A) rating: 105 at one meter
- Fundamental frequency: 440±20Hz
- This horn is not designed for installation in exposed areas.

Item # 10031

OEM # 11031

**Mini Hidden Horn with Grill Bracket**

- Same horn motor as 11031 but includes grill mounting bracket
- Grill must be ordered separately
- 4" from hole to hole

OEM # 11034

**Screw-In Black ABS Grill with Gasket for 11034**

- Grill dimensions: 5" W x 2.625" H x .375" D

OEM # 11168

**Screw-In Stainless Steel Grill for 11034**

- Grill dimensions: 5" W x 2" H x .25" D

OEM # 11088

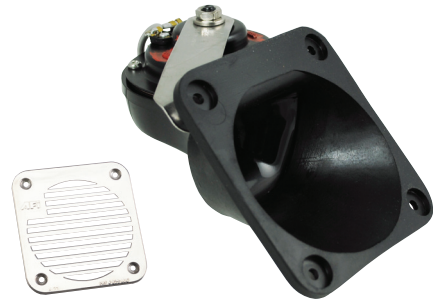


Concealed Compact Electric Horn

- Internal space requirements: 5.5" W x 6" H x 4" D
- Maximum amp draw: 3 amps
- dB(A) rating: 109 at one meter
- Fundamental frequency: 415±20Hz
- Grill must be ordered separately

OEM # 11050 frequency: 415±20Hz

OEM # 11051 frequency: 520±20Hz



Stainless Steel Grill for 11050

- Dimensions: 3.875" W x 4.25" H

OEM # 11060

Concealed Single Mini Air Horn

- Solid brass construction
- Includes compressor, air tubing, fittings, and hardware
- Internal space requirements: 13" H x 5" W x 3.75" D
- Air compressor dimensions: 2.625" D x 5" L
- Maximum amp draw: 20 amps
- dB rating: 126 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz
- Grill must be ordered separately

OEM # 11059



Stainless Steel Grill for 11059

- Dimensions: 4.6875" H x 4.6875" W

OEM # 11064

Concealed Dual Trumpet Air Horn

- Solid brass construction
- Can be mounted side by side with dual grill 11066 or separately with two single grills 11064
- Includes compressor, air tubing, fittings, and hardware
- Internal space requirements: 10" W x 18.5" H x 3.75" D
- Air compressor dimensions: 5" L x 2.625" D
- Maximum amp draw: 20 amps
- dB rating: 121 at one meter, 1/3 octave band
- Fundamental frequency: 375±15/315±15Hz

OEM # 11058

Stainless Steel Grill for 11058

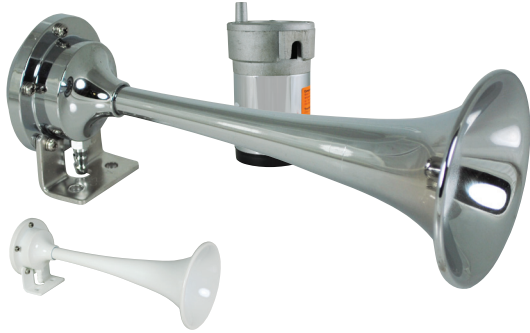
- Dimensions: 7.5625" W x 4.6875" H

OEM # 11066



Marinco's FullBlast compressor driven air horns are the loudest and most complete line of 12V air horns available. All of our air horns produce sound levels ranging between 120 and 127dB, which means all of our air horns meet the ABYC and NMMA regulations for boats up to 20 meters/66 feet. Both 12 and 24 volt compressors are CE listed.

Loudest Single Air Horn at 126 dB



Single Trumpet Mini Air Horns

Solid brass construction

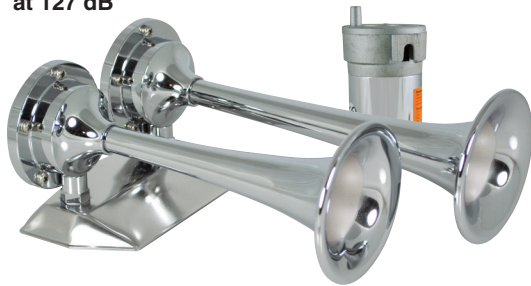
- Non-corrosive Lexan® polycarbonate diaphragm
- Includes compressor, air tubing, fittings, and hardware
- Dimensions: 9.5" L x 3.5" W x 3.5" H
- Maximum amp draw: 12 volt: 20 amps, 24 volt: 10 amps
- dB rating: 126 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz

Chrome Plated **Item # 10107** OEM # 11107

White Epoxy Coated **Item # 10104**

12V compressor produces 9–11 PSI

Loudest Dual Tone Air Horn at 127 dB



Dual Trumpet Mini Air Horns

- Solid brass construction
- Non-corrosive Lexan® polycarbonate diaphragm
- Includes compressor, air tubing, fittings, and hardware
- Dimensions: 9.5" L x 5" W x 3.75" H
- Maximum amp draw: 12 volt: 20 amps, 24 volt: 10 amps
- dB(A) rating: 127 at one meter, 1/3 octave band
- Fundamental frequency: 630±15/525±15Hz

Chrome Plated **Item # 10108**

12V compressor produces 9–11 PSI



Single Trumpet Air Horns

- Solid brass construction
- Non-corrosive Lexan® polycarbonate diaphragm
- Includes compressor, air tubing, fittings, and hardware
- Dimensions: 17" L x 3.75" W x 3.75" H
- Maximum amp draw: 12 volt: 20 amps, 24 volt: 10 amps
- dB rating: 120 at one meter, 1/3 octave band
- Fundamental frequency: 315±15Hz

12 Volt **Item # 10105**

24 Volt **Item # 10524**

12V compressor produces 9–11 PSI

LEXAN® is a registered trademark of Sabic Innovative Plastics IP B.V., Netherlands



Dual Trumpet Air Horns

- Non-corrosive Lexan® polycarbonate diaphragm
- Includes compressor, air tubing, fittings, and hardware
- Dimensions: 17" L x 7" W x 3.75" H
- Maximum amp draw: 12 volt: 20 amps, 24 volt: 10 amps
- dB rating: 121 at one meter, 1/3 octave band
- Fundamental frequency: 375±15/315±15Hz

12V Chrome Plated **Item # 10106** OEM # 11106

12V White Epoxy Coated **Item # 10122**

24V Chrome Plated **Item # 10624**

24V White Epoxy Coated **Item # 12224** OEM # 22224

12V compressor produces 9–11 PSI



Air Compressor

- Replacement compressor fits all AFI™ Air Horns
- Dimensions: 2.625" D x 5" L
- Includes mounting bracket
- Maximum amp draw: 20 amps, Produces 9–11 PSI

12V OEM # 10102

24V OEM # 10224



Our Loudest Electric Single Trumpet Horn at 118 dB

5 YEAR WARRANTY

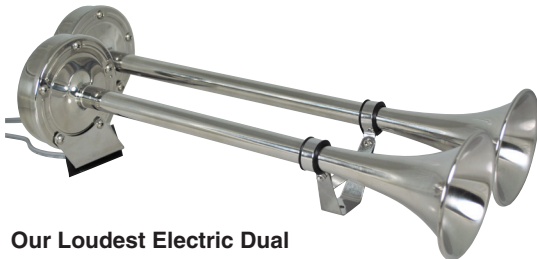
Single Trumpet Electric Horn

- 5 Year Warranty
- 100% stainless steel exterior
- Includes laminated horn signal card and stainless steel mounting screws
- Type 304 stainless steel diaphragm
- Dimensions: 16.5" L x 4" W x 4.75" H
- Maximum amp draw: 5 amps
- dB(A) rating: 118 at one meter
- Fundamental frequency: 390±15Hz

Premium XLP

12V **Item # 10028XLP** OEM # 11028XLP

24V **Item # 10017XL** OEM # 11017XLP Max amp draw: 2.5 amps



Our Loudest Electric Dual Trumpet Horn at 123 dB

5 YEAR WARRANTY

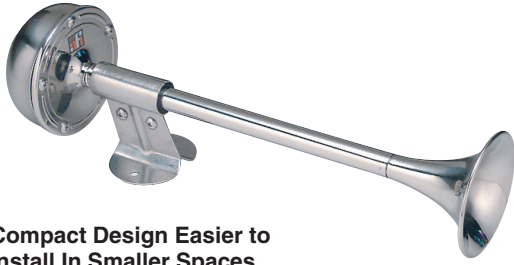
Dual Trumpet Electric Horn

- 5 Year Warranty
- 100% stainless steel exterior
- Includes laminated horn signal card and stainless steel mounting screws
- Type 304 stainless steel diaphragm
- Dimensions: 18.5" L x 8" W x 5" H
- Maximum amp draw: 10 amps
- dB(A) rating: 123 at one meter
- Fundamental frequency: 390±15/330±15Hz

Premium XLP

12V **Item # 10029XLP** OEM # 11029XLP

24V **Item # 10018XL** OEM # 11018XLP Max amp draw: 5 amps



Compact Design Easier to Install In Smaller Spaces

Compact Single Trumpet Electric Horn

- 100% stainless steel exterior
- Type 304 stainless steel diaphragm
- Dimensions: 14" L x 3.5" W x 4" H
- Maximum amp draw: 3.5 amps
- 12 volt
- dB(A) rating: 108 at one meter
- Fundamental frequency: 460±15Hz

Item # 10010



Compact Design Easier to Install In Smaller Spaces

Compact Dual Trumpet Electric Horn

- 100% stainless steel exterior
- Type 304 stainless steel diaphragm
- Dimensions: 16" L x 7.5" W x 4" H
- Maximum amp draw: 7 amps,
- 12 volt
- dB(A) rating: 110 at one meter
- Fundamental frequency: 460±15/415±15Hz

Item # 10011



MiniBlast™ Compact Electric Horns

- Long lasting, non-corrosive ASA plastic cover
- Sealed sound unit with stainless steel diaphragm
- Mounts in same hole pattern as the 10035 horn
- Dimensions: 4.375" L x 3.375" W x 2" H
- Maximum amp draw: 3 amps, 12 volt
- dB(A) rating: 106 at one meter (3 feet)
- Fundamental frequency: 440±20Hz

White **Item # 10099** OEM # 11099

Black **Item # 10098** OEM # 11098



Mini Compact Electric Horn

- Totally sealed sound unit
- Type 304 stainless steel cover, diaphragm, mounting bracket
- Dimensions: 3" L x 3.25" W x 1.75" H
- Maximum amp draw: 3 amps, 12 volt
- dB(A) rating: 106 at one meter
- Fundamental frequency: 440±20Hz

Item # 10035

OEM # 11035



Mini Twin Electric Horn

- Type 304 stainless steel covers, diaphragms, and mounting bracket
- Dimensions: 3" L x 8" W x 1.75" H
- Maximum amp draw: 6 amps, 12 volts
- dB(A) rating: 109 at one meter
- Fundamental frequency: 490±20/440±20Hz

Item # 10001

OEM # 11001



Compact Single Horn with Black Cover

- Stainless steel diaphragm and mounting bracket
- Black polypropylene cover
- Dimensions: 4.5" L x 4" W x 3" H
- Maximum amp draw: 4 amps, 12 volt
- dB(A) rating: 108 at one meter
- Fundamental frequency: 350±15Hz

Item # 10023

OEM # 11023



International Shorty Horn

- Stainless steel diaphragm and mounting bracket
- ABS, triple chrome-plated housing
- Dimensions: 4.25" L x 5" W x 6.5" H
- Maximum amp draw: 4 Amps, 12 Volt
- Fundamental frequency: 290±15 Hz
- Loudest Marinco® compact electric horn
- dB(A) rating: 123 at one meter

Item # 10036

OEM # 11036

**3 YEAR WARRANTY**

Bulb:	100 Watt, H3 Halogen
Power (Input voltage):	12V or 24V
Current draw (idle/in use):	0.03 amps / 7.0 amps
Peak Beam Intensity:	210,000 Cp
Peak Beam Distance:	917 ft (280 m)
Lux @ 66' (20 m):	525 Lux
Coverage at 66' (20 m):	132 sq ft (12 sq m)
Rotation:	370° (built in limit stops)
Tilt:	120° Tilt (75° up & 45° down)
Wireless range:	200 ft (65 m)
Dimensions:	7.5"W x 7.5"H x 9.25"D (19cm x 19cm x 23.5cm)
Weight:	3.30 lbs (1.5 kg)
Housing material:	UV resistant PC/ASA
Lens material:	UV resistant Lexan®
operating temp range:	5°F–113°F (-15°C–45°C)
IP Rating:	IP56

NEW Wireless Remote Spot Light

- Universal 12/24 volt circuit with bright 100W, H3 halogen bulb
- UV resistant, IP56 Weatherproof ABS housing and Lexan® lens
- O-ring sealed housing, designed for the harsh marine environment – moisture, salt, shock and vibration tested
- Universal snap-in mounting system (can be mounted upside down)
- Super-quiet, all-weather motor with limit stops provides a full range of coverage
- 370° sweep and 120° Tilt (75° up and 45° down)
- One touch auto sweep and S.O.S. function
- Wireless dash mount remote standard; (hard wired & handheld remotes are optional)
- 3-Year limited warranty
- Available in white, black and chrome



Description	Color	Item #	OEM #
12/24 Volt, 100 Watt	white	SPL-12W	—
12/24 Volt, 100 Watt	black	SPL-12B	—
12/24 Volt, 100 Watt	chrome	SPL-12C	—
12 Volt, 100 Watt	white	—	SPL-12W.OEM
12 Volt, 100 Watt	black	—	SPL-12B.OEM
12 Volt, 100 Watt	chrome	—	SPL-12C.OEM
24 Volt, 100 Watt	white	—	SPL-24W.OEM
24 Volt, 100 Watt	black	—	SPL-24B.OEM
24 Volt, 100 Watt	chrome	—	SPL-24C.OEM

Replacement Bulbs

Description	Item #
12 Volt, H3 Halogen	202319
24 Volt, H3 Halogen	202320

**Remote Options****SPLR-2****Included**

Remote Specifications	Wireless Bridge Remote
Power	12 or 24 volt (hard wired)
Current draw (idle / in use)	negligible
Wireless range	200 ft (65m)
Estimated battery life	—
Dimensions	3.5"Wx2.25"Hx.75"D 88x57x19 mm
Weight	2.12 oz (60g)
Housing material	UV resistant PC/ASA
Button material	Silicone (glow in the dark)
Operating temp range	5°F–113°F (-15°C–45°C)
IP Rating	IP54

**SPLR-1****(optional)**

Remote Specifications	Hand Held Bridge Remote
Power	CR2450 button cell battery
Current draw (idle / in use)	negligible
Wireless range	200 ft (65m)
Estimated battery life	> 40 hours (continuous use)
Dimensions	2.0"Wx3.78"Hx1"D 51x96x25 mm
Weight	2.82 oz (80g)
Housing material	UV resistant PC/ASA
Button material	Silicone (glow in the dark)
Operating temp range	5°F–113°F (-15°C–45°C)
IP Rating	IP56

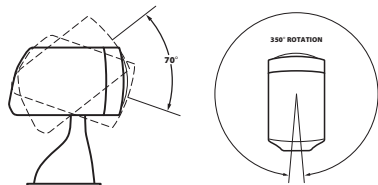
**SPLR-3****(optional)**

Remote Specifications	Wired Bridge Remote
Power	12 or 24 volt (hard wired)
Current draw (idle / in use)	negligible
Wireless range	—
Estimated battery life	—
Dimensions	3.5"Wx2.25"Hx.75"D 88x57x19 mm
Weight	2.12 oz (60g)
Housing material	UV resistant PC/ASA
Button material	Silicone (glow in the dark)
Operating temp range	5°F–113°F (-15°C–45°C)
IP Rating	IP54

Accessories: Spot/Flood Lights & Spotlight Accessories



Spot/Flood kit includes joystick control and 15' wiring cable with easy to install plug ends



5" Stainless Steel Spot/Flood

- Remote control, joystick operation
- 316 stainless steel base, 304 stainless steel head
- Dual station option available
- Light can be directed manually without damaging motors
- One year warranty

Item # 22040A Spot/Flood Kit
Item # 22041A Spot/Flood Only

Spot Power:	72,000 CP
Flood Power:	30,000 CP
Amp Draw:	7 amps
Operation:	12V Incandescent
Bulb:	Replaceable Incandescent
Lamp Dimensions:	9.5" H x 4.5" W x 7.5" L
Base Dimensions:	5.5" L x 3.5" W
Weight:	6 Lbs.
Joystick requires:	2.75" installation hole

Replacement Bulb

- 12V Incandescent

Item # 22014-P

Stainless Steel Spot/Flood Parts and Accessories

Item Number	Oval Panel	Rectangular Control	Dual Station Control Kit	Replacement Bulb Kit
22040A	22240-R	22208A	22218A	22014-P
22041A	22240-R	22208A	22218A	22014-P

Beamer™ Parts and Accessories

Item Number	Control Panel	Dual Station Control Kit	Replacement Bulb Kit	Extension Cable Kit	Wires in Cable
500, 500A	729823-P	729823-P	729493	—	1
501, 501A	729825	729825	729493	—	Wireless
502, 502A	729827-P	729828-P	729493	729528	5
502-1	U-3605	729488	729493	729528	5
502-2	729489	729489	729493	729528	5
503, 503A	729829-P	729830-P	729494	729528	6
503-1	U-3606	729491	729494	729528	6
503-2	—	729492	729494	729528	6

M100 Remote Halogen Spot Parts and Accessories

Item Number	Joystick Control	Dual Station Control Kit	Replacement Bulb Kit
22200	22209	22219A	22230-P
22201	22209	22219A	22230-P

Extension Cables

Length	Male to Male	Male to Female
25 Ft.	22011A-P	—
35 Ft.	22012A-P	22012MA-P

Use with: 22040A, 22041A, 22044, 22045, 22200 or 22201 Lights





Flush Mount Docking Lights—Convex Lens

Compact flush mount docking lights for a variety of applications. Easy to install through a 2" hole. Ideal for Pontoon and Deck boat docking lamps, spreader lamps or rear docking lamps for motor homes. Features a high performance convex lens with a 12V 37.5W halogen bulb for optimum performance. Available with and without stainless steel frame. Pigtail required.

Bulbs:	Replaceable #893 12V 37.5W Halogen
Dimensions:	$\varnothing = 2\text{-}1/2"$ Frame thickness: 7/8" Overall depth: 2-7/8" Mounting depth: 2"
Mounting Depth:	2"

Item #	M051B	With out frame
Item #	M051B-SS	Stainless frame
Item #	11-004-N	Pigtail for M051B and M051B-SS



Flush Mount Docking Lights—Flat Lens

Compact flush mount docking lights for a variety of applications. Easy to install through a 2" hole. Ideal for Pontoon and Deck boat docking lamps, spreader lamps or rear docking lamps for motor homes. Features a high performance free form reflector with a 12V 35W halogen bulb for optimum performance. Available with and without stainless steel frame.

Bulbs:	Replaceable MR16 12V 35W Halogen
Dimensions:	$\varnothing = 2\text{-}1/2"$ Frame thickness: 7/8" Overall depth: 2-7/8" Mounting depth: 2"
Mounting Depth:	2"

Item #	M051A	With out frame
Item #	M051A-SS	Stainless frame



Slim Line Docking Light

This slim line docking lamp was specifically designed for flush mount installations on Pontoon boats. Includes low profile, stainless steel mounting bracket and 12V 35W halogen H3 bulb.

Bulbs:	Replaceable H3 12V 35W
Dimensions:	6-7/8" x 2-3/8" x 1-1/2"
Mounting Hight:	2-1/4" with bracket

Item #	WJ-B2005-A-35W
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Universal Halogen Deck Lamps

State-of-the-art free form lens reflector technology allows for 30% more light output than comparable 55W lamps. Universal mounting brackets and compact size make for easy installation anywhere. Lamp housing is made of UV stabilized plastic and all hardware is 316 chrome plated stainless steel. Includes 12V, 55W halogen bulb and is 24V, 70W compatible.

Bulbs:	Replaceable H3 12V 55W/H3 24V 70W
Dimensions:	3.75" H x 3.375" W x 5.5" L
Mounting Height:	4" with bracket

Item # ML-005BW/DSP OEM # ML-005BW-STC Black
Item # ML-005WW/DSP OEM # ML-005WW-STC White



Flush Mount Deck Lamp

In addition to our highly popular conventional halogen deck lamps, we now offer a flush mount version. Ideally suited for fiberglass hardtop installations and allows for a very clean and finished installation. Free Form lens reflector technology guarantees maximum output. Lamp is completely waterproof and constructed of impact resistant UV stable plastic. Comes complete with 12V 55W halogen H3 bulb. Also suitable for 24V 70W bulbs.

Bulbs:	Replaceable H3 12V 55W/H3 24V 70W
Dimensions:	3.375" H x 1.5" W x 5.625" L
Cutout:	3" hole

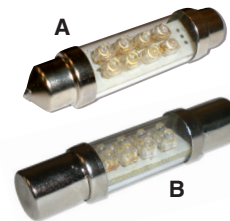
Item # ML-005NWW

Lamps

- Heavy duty glass envelope for break resistance.
- Nickel-plated brass bases prevent corrosion while insuring a positive point-of-contact.
- Filaments, with “rough service” design, permit hours of reliable burning.
- Not rated for navigation.

LED Festoon Bulbs

Figure Letter	Line #	System Dimensions	Volts	Amps	CP	Life	Qty/ Pkg	Item #
A	1	.39" x 1.73"	12	80 mA	2000MCD*8	50,000	1	529417
B	2	.39" x 1.73"	12	80 mA	2000MCD*8	50,000	1	529419



LED Festoon

LED Festoon (double dimple)

LED 360° Bayonet Base Bulbs

Figure Letter	Line #	System Volts	Amps	Current Draw	Life	Qty/ Pkg	Item #
C	3	12.00	2200MCD*20	200 mA	50,000	1	529412
	4	12.00	2200MCD*36	240 mA	50,000	1	529413
D	5	12.00	2200MCD*16	160 mA	50,000	1	529414



Double Contact Bayonet Base



Single Contact Bayonet Base

LED 360° Double Contact Index Base Bulbs

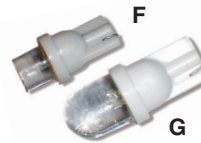
Figure Letter	Line #	System Volts	Light Output	Current Draw	Life	Qty/ Pkg	Item #
E	6	10–30V	75 Lumens	190 mA	50,000	1	529416
	7	10–30V	110 Lumens	180 mA	50,000	1	529420



Double Contact Index Base

LED Wedge Base Bulbs

Figure Letter	Line #	System Volts	Light Output	Current Draw	Life	Qty/ Pkg	Item #
F	8	12.00	4000MCD	20 mA	50,000	1	529410
G	9	12.00	6000MCD	40 mA	50,000	1	529411



1 LED

2 LEDs

LED G4 Bulb w/ Radial Leads 90° Radiation of Light

Figure Letter	Line #	System Volts	Current Draw	CP	Life	Qty/ Pkg	Item #
H	10	12.00	80 mA	2500MCD*8	50,000	1	529421
	11	12.00	80 mA	2500MCD*12	50,000	1	529422
I	12	12.00	180 mA	2500MCD*27	50,000	1	529423



H

I

LED MR16 Bulb

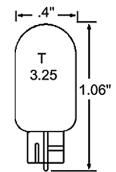
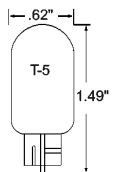
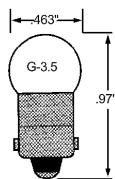
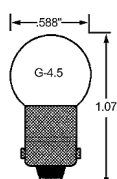
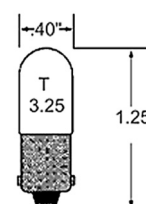
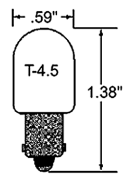
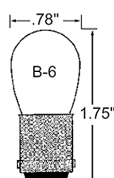
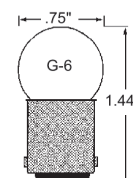
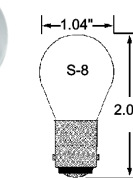
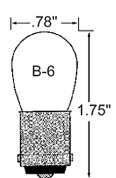
Figure Letter	Line #	System Volts	Current Draw	CP	Life	Qty/ Pkg	Item #
J	13	12.00	140 mA	2500MCD*20	50,000	1	529424



J

General Lamps

Figure Letter	Line #	Trade #	System Volts	Design Volts	Design Amps	Design Watts	CP	Life	Qty/ Pkg	Item #
K	15	194	12.00	14.00	.27	3.80	2.00	1500	2	520194
	16	168	12.00	14.00	.35	4.90	3.00	1500	2	520168
	17		12.00	12.80	1.0	12.8	12.00		2	520912
L	18	906	12.00	13.00	.69	9.00	6.00	1000	2	520906
M	19	53	12.00	14.40	.12	1.70	1.00	1000	2	520053
	20		12.00	14.00	.35	5.0	3.0		2	521126
N	21	57	12.00	14.00	.24	3.40	2.00	500	2	520057
O	22	1816	12.00	13.00	.33	4.30	3.00	1000	2	521816
P	23	1416	12.00	12.80	.80	10.20	8.00	1000	2	521416
	24		12.00	13.50	2.08	25.00	30.00		1	521159
Q	25	1004	12.00	12.80	.94	12.00	15.00	200	2	521004
R	26	82	6.00	6.50	1.02	6.60	6.00	500	2	520082
	27	68	12.00	13.50	.59	8.00	4.00	5000	2	520068
	28	90	12.00	13.00	.58	7.50	6.00	750	2	520090
	29	1224	32.00	34.00	.16	5.10	3.80	500	2	521224
S	30	94	12.00	12.80	1.04	13.30	15.00	700	2	520094
	31	1076	12.00	12.80	1.80	23.00	32.00	200	2	521076
	32	1142	12.00	12.80	1.44	18.40	21.00	1000	2	521142
	33	1142R	12.00	12.80	1.44	18.40	21.00	1000	2	521140
	34	1176	12.00	12.8/14	1.34/.39	17.20	21/6	300/1500	2	521176
	35	1204	24.00	28.00	.71	19.90	21.00	400	2	521204
T	36	1228	32.00	34.00	.45	15.30	15.00	150	2	521228
	37	1003	12.00	12.80	.94	12.00	15.00	200	2	521003

Wedge Base**K****Wedge Base****L****Miniature Bayonet Base****M****Miniature Bayonet Base****N****Miniature Bayonet Base****O****Miniature Bayonet Base****P****Double Contact Bayonet Base****Q****Double Contact Bayonet Base****R****Double Contact Bayonet Base****S****Single Contact Bayonet Base****T**

General Lamps

Figure Letter	Line #	Trade #	System Volts	Design Volts	Design Amps	Design Watts	CP	Life	Qty/ Pkg	Item #
U	38	97	12.00	13.50	.69	9.30	4.00	5000	2	520097
	39	67	12.00	13.50	.59	8.00	4.00	5000	2	520067
V	40	1383	12.00	13.00	1.54	20.00	300		1	521383
	41	93	12.00	12.80	1.04	13.30	15.00	700	2	520093
W	42	1141	12.00	12.80	1.44	18.40	21.00	500	2	521141
	43	1156	12.00	12.80	2.10	26.90	32.00	1200	2	521156
X	44	1034	12.00	12.8	1.8	23/8.2	32/3	200/5000	2	521034
	45	1157	12.00	12.8/14	2.1/1.59	27/8		200/5000	2	521157
	46		12.00	13.50	.83	10.00	12.00	1000	1	521158
Y	47		24.00	24.00	.41	10.00	12.00		1	521162
Z	48		120.00	120.00	.25	30.00	20.00		1	521164

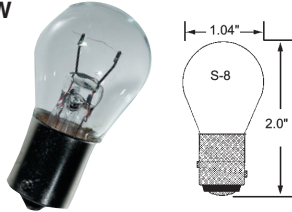
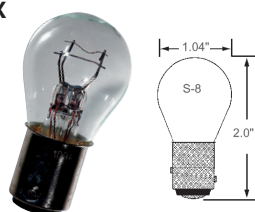
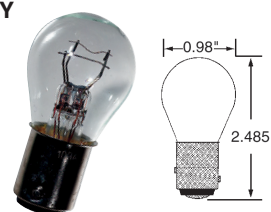
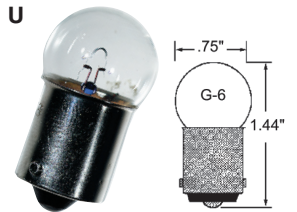
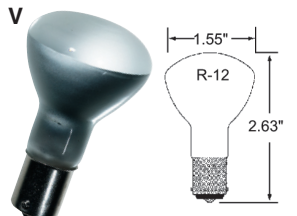
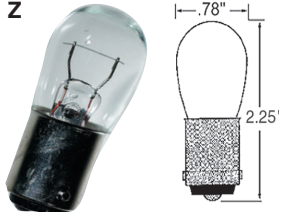
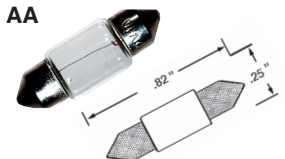
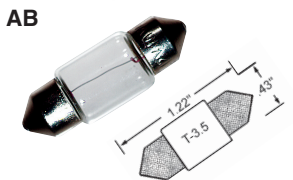
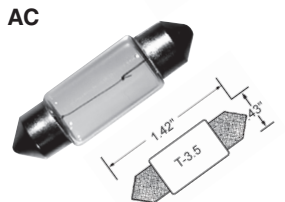
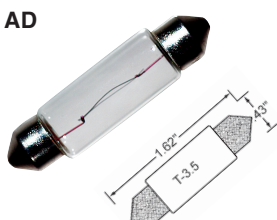
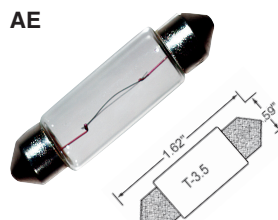
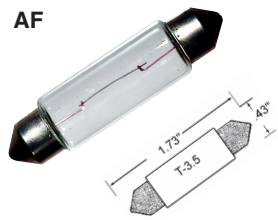
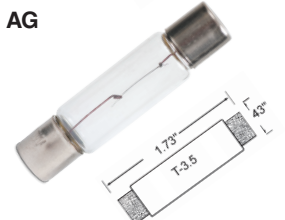
Single Contact Bayonet Base**W****Double Contact Index Base****X****Double Contact Index Base****Y****Single Contact Bayonet Base****U****Single Contact Bayonet Base****V****Double Contact Bayonet Base****Z****Festoon End Caps**

Figure Letter	Line #	Trade #	System Volts	Design Volts	Design Amps	Design Watts	CP	Life	Qty/ Pkg	Item #
AA	49		12.00	13.50	.39	4.75	2.00		2	522124
AB	50		12.00	13.50	.83	10.00	8.00	1000	2	529102
	52		24.00	24.00	.41	10.00	8.0		2	522129
AC	53		12.00	13.50	.50	6.00	2.00	1000	2	529095
AD	54		12.00	13.50	.83	10.00	8.00	2000	2	529104
	55		12.00	13.50	.83	10.00	8.00 (Red)		2	522127
	56		12.00	13.50	.83	10.00	8.00		2	522126
AE	57		12.00	13.50	1.42	15.00	8.00		2	522131
AF	58	211-2	12.00	12.80	.97	15.00	12.00	1000	2	522112
	59	212-2	12.00	13.50	.74	10.00	6.00	2000	2	522122
AG	60		12.00	13.50	.83	10.00	8.00	2000	2	529333

AA**AB****AC****AD****AE****AF****AG**

Medium Screw Base

Figure Letter	Line #	Trade #	System Volts	Design Volts	Design Amps	Design Watts	Life	Qty/ Pkg	Item #
AH	81	15G12/12	12.00	13.50	1.25	15.00	1000	1	511016
AI	82	15A17/12	12.00	13.50	1.25	15.00	1000	2	531015
	83	25A17/12	12.00	13.50	2.08	25.00	1000	2	531025
	84	50A17/12	12.00	13.50	4.17	50.00	1000	2	531050
	85	75A17/12	12.00	13.50	6.25	75.00	1000	2	531075
	86	100A17/12	12.00	13.50	8.33	100.00	1000	2	531100
	87	25A17/24	24.00	27.00	1.04	25.00	1000	2	532025
	88	15A17/34	32.00	36.00	.44	15.00	1000	2	533015
	89	25A17/34	32.00	36.00	.74	25.00	1000	2	533025
	90	50A17/34	32.00	36.00	1.47	50.00	1000	2	533050
	91	75A17/34	32.00	36.00	2.21	75.00	1000	2	533075

**Navigation Lamps**

Figure Letter	Line #	System Volts	Design Volts	Design Amps	Design Watts	CP	Life	Qty/ Pkg	Item #
AJ	92	12.00	12.00	2.50	30.00	26.00	1200	1	529300
AK	95	12.00	12.00	2.08	25.00	24.00	1200	1	529340
	96	24.00	24.00	1.04	25.00	24.00	1200	1	529341
	97	24.00	24.00	.42	10.00	12.00	1200	1	529344

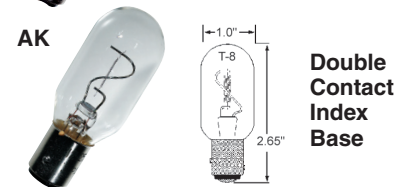
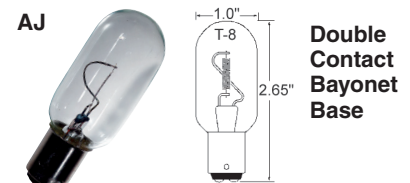
**Fluorescent Tubes**

Figure Letter	Line #	Trade #	Volts	Watts	M.O.L.	M.O.D.	Life	Qty/ Pkg	Item #
AL	98	F8T5/CW	13.5	8.00	11.3"	.5"	7500	2	529405
	99	F15T8/CW	13.5	15.00	18"	1.0"	7500	2	529406

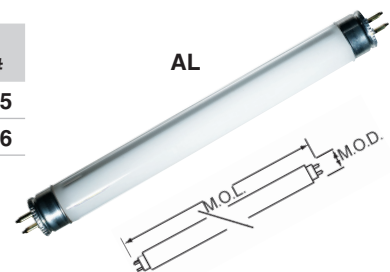
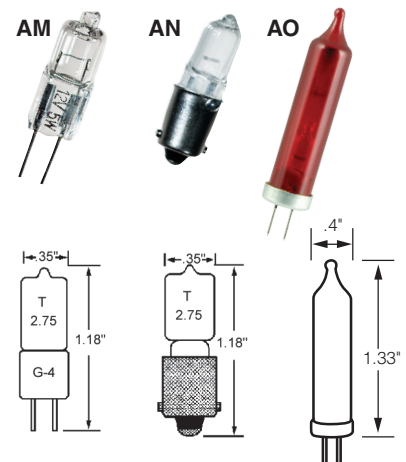
**Miniature Halogen Lamps**

Figure Letter	Line #	System Volts	Design Volts	Design Amps	Design Watts	CP	Life	Qty/ Pkg	Item #
AM	102	12.00	12.00	.42	5.00	5.00	2000	2	529361
	103	12.00	12.00	.83	10.00	11.00	2000	1	529362
	104	12.00	12.00	1.67	20.00	20.00	2000	1	529367
	105	24.00	24.00	.42	10.00	11.00	2000	1	529338
	106	24.00	24.00	.83	20.00	20.00	2000	1	529368
	106	12.00	12.00	.83	10.00		1000	2	529370
	106	12.00	12.00	1.67	20.00		1000	2	529371
AN	107	12.00	12.00	1.67	20.00	20.00	2000	1	529337
	108	12.00	12.00	.42	5.00	5.00	2000	1	529355
AO	107	12.00	12.00	.83	10.00			2	529385



H2/H3 Halogen Lamps

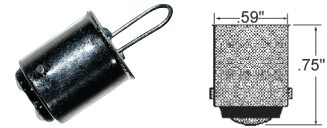
Figure Letter	Line #	Bulb Type	System Volts	Design Volts	Design Amps	Design Watts	CP	Qty/ Pkg	Item #
AP	109	H2	12.00	13.50	4.58	55.00	225.00	1	529168
	110	H3	12.00	13.50	8.30	100.00	100.00	1	529386



Halogen Lamp Adapter Bases

The nickel-plated brass base Halogen Lamp Adapter allows the use of all V style miniature halogen lamps in standard single contact, double contact or medium screw base sockets.

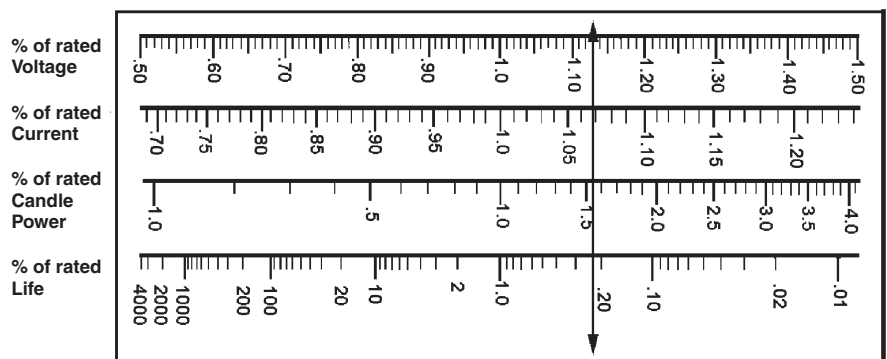
Figure Letter	Line #	Description	Qty/ Pkg	Item #
AQ	112	D C Bayonet	1	529381



Life Lamp Calculator

This lamp life nomograph shows the relationship between voltage, current, candle power and life. Each lamp has a design voltage as well as a nominal operating voltage. This allows the designer of the lamp to tailor the life/output/current draw to meet specific needs, within certain industry standards. We have chosen to emphasize life and brightness. The rated life is based on the average life of 50% of the lamps tested under laboratory conditions – no vibration, stable voltage, room temperature, and in a vertical position. Any other condition will adversely affect lamp life.

Example: To find the effect of under or over voltage on life, current draw and candle power, read in a horizontal line under % of rated voltage. Thus, a #90 bulb rated at 13V but operating at 14.70v (113% of rated voltage – a high charge rate) would have 107% of rated current draw, 155% of rated candle power, but would only last 23% of its rated life.



Cross Reference Listing

Item #	Line #	Figure Letter	Item #	Line #	Figure Letter	Item #	Line #	Figure Letter	Item #	Line #	Figure Letter
511016	81	AH	521156	43	W	529104	54	AD	529411	9	G
520053	19	M	521157	45	X	529168	109	AP	529412	3	C
520057	21	N	521158	46	X	529300	92	AJ	529413	4	C
520067	39	U	521159	24	P	529333	60	AG	529414	5	D
520068	27	R	521162	47	Y	529337	107	AN	529416	6	E
520082	26	R	521164	48	Z	529338	105	AM	529417	1	A
520090	28	R	521176	34	S	529340	95	AK	529419	2	B
520093	41	V	521204	35	S	529341	96	AK	529420	7	E
520094	30	S	521224	29	R	529344	97	AK	529421	10	H
520097	38	U	521228	36	S	529355	108	AN	529422	11	H
520168	16	K	521383	40	V	529361	102	AM	529423	12	I
520194	15	K	521416	23	P	529362	103	AM	529424	13	J
520906	18	L	521816	22	O	529367	104	AM	531015	82	AI
520912	17	K	522112	58	AF	529368	106	AM	531025	83	AI
521003	37	T	522122	59	AF	529370	106	AM	531050	84	AI
521004	25	Q	522124	49	AA	529371	106	AM	531075	85	AI
521034	44	X	522126	56	AD	529381	112	AQ	531100	86	AI
521076	31	S	522127	55	AD	529385	107	AO	532025	87	AI
521126	20	M	522129	52	AB	529386	110	AP	533015	88	AI
521140	33	S	522131	57	AE	529405	98	AL	533025	89	AI
521141	42	W	529095	53	AC	529406	99	AL	533050	90	AI
521142	32	S	529102	50	AB	529410	8	F	533075	91	AI

How Solar Vents Work

Maintenance Ventilation

In most climates, boats that have been closed for a period of time will become “stuffy.” The temperature differential that develops between the boat cabin and the outdoor environment will cause the humidity level inside the boat cabin to rise. When the humidity level in the closed cabin rises, moisture forms, resulting in mold, mildew and musty air. In these conditions, fabrics, boat electronics and even the boat’s fiberglass structure can be damaged. By consistently replacing trapped, stale air in the closed boat with fresh outside air, the humidity equalizes from inside to outside, resulting in effective maintenance ventilation.

Comfort Ventilation

Combining different types of vents, with one vent providing “intake” air flow while another vent provides “exhaust” air flow, creates cross-flow ventilation. A cross-flow ventilation system will make the interior cabin more comfortable and pleasurable because air is constantly moving throughout the cabin. No matter what your boat size or cabin configuration is, you can increase your boating enjoyment with the addition of ventilation.

Safety Ventilation

Most boaters are unaware of the hazards that exist in the boating environment. Any number of serious ventilation problems can occur when a boat is left unattended. And even if you are underway, these problems don’t go away. Fumes and gasses, ranging from carbon monoxide to hydrogen gas from battery charging, to gasoline, propane or solvents stored below, are unpleasant, and can sometimes be dangerous. Also, any open flame devices in the cabin require proper ventilation. Ventilation helps to eliminate these hazards by providing constant air circulation resulting in effective safety ventilation.

How Much Ventilation Is Required For Your Boat?

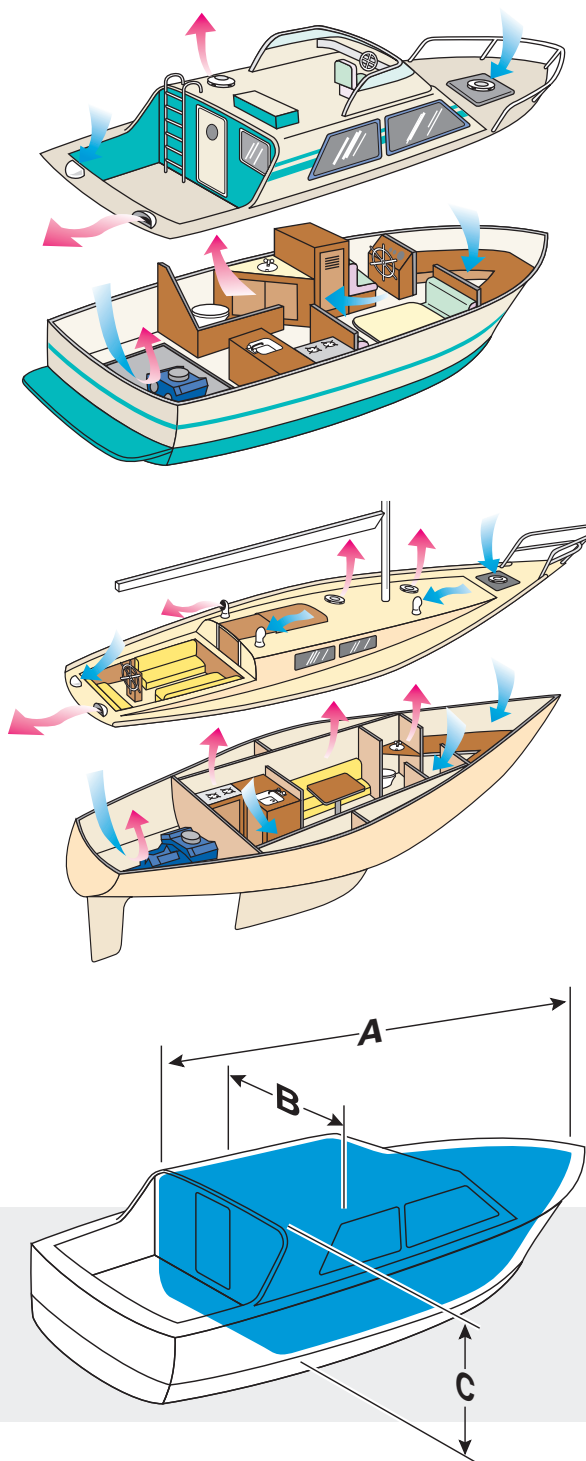
Ideally, the air in the interior of a boat should be circulated once every hour. A typical 30-foot boat contains approximately 800 cubic feet of air. As you will see, our solar powered models can move between 600 and 1,000 cubic feet of air every hour. The general guidelines for providing maintenance ventilation are as follows:

Boat Size	Recommended Ventilation
Up to 24 ft.	1 Exhaust Vent*
24 to 40 ft.	1 Exhaust Vent & 1 Intake Vent
40 ft. and larger	2 Exhaust Vents & 1 Intake Vent

* For effective maintenance ventilation, one vent assumes there will be access for air to get into the cabin (i.e., cowl vent, clamshell vent or louvered panel)

It is important to evaluate the cabin layout of your boat to determine optimal locations for both intake and exhaust ventilation. These illustrations suggest placement for Marinco™ solar powered vents and Marinco™ passive vents.

Note how the placement of the vents creates cross flow ventilation.



To Specifically Calculate Your Boat’s Air Volume, Use This Simple Formula:

$$A \times B \times C \times 70\% = \text{Boat Interior Volume}$$

A Dimension is the interior length (excluding cockpit)

B Dimension is the boat width

C Dimension is the average interior height

Installation

All Marincó™ ventilation products include clear, easy-to-understand installation instructions. These instructions address all of the key factors of a professional installation, such as:

- Proper hole measurement and cutting procedures
- Proper deck plate installation
- Use of sealants to waterproof your vent installation
- Installing vents in hatches
- Installing vents in “cambered” or slightly curved decks
- Use of interior trim rings to “dress up” the cabin

The high quality level of Marincó™ Ventilation products must be combined with a sound installation to guarantee that your vent performs in all conditions. Marincó will make sure that your installation will be easy and successful so that you can enjoy the benefits of installation for a long time to come.

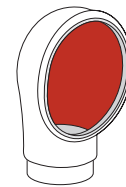
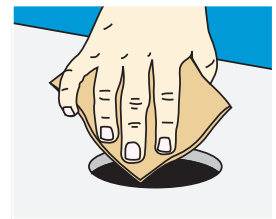
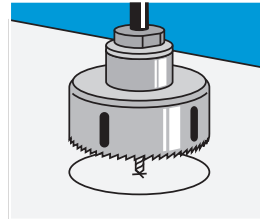
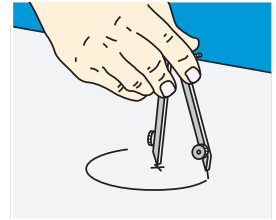
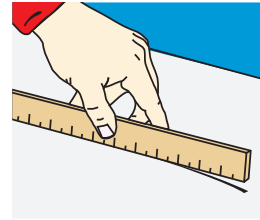
Marincó™ Ventilation Installation Systems

Snap-In Deck Plate Installation

The 12 volt vent, 12 volt combo vent and cowl vents use the Marincó™ Snap-In deck plate system. The Snap-In system allows the easy exchange of any Snap-In part for upgrading or convenience, as well as the use of a Snap-In cover that completely seals the deck plate making it water tight.

Direct-To-Deck Installation

The Day/Night Plus, MiniVent 1000 and AirVent 500 are designed to be installed directly to the deck without the requirement for a deck plate. All of these vent systems have built-in shut-off dampers that operate from below.





























Deck Plate

Deck



Plastic Interior Trim Ring

	Airflow Size	Hole Size Dia	Deck Plate	Mounting Flange Depth	Operation		Cubic Feet of Air	Intake	Exhaust
					Day	Night			
	4" 102 mm	4-3/4"	None (Direct to Deck Mounting)	1.75"	 Solar	 Rechargeable Battery Power	1000 ft³/hour 20 m³ 24,400 ft³/day 672 m³	 Fan	 Fan
	3" 76 mm	3-3/4"	None (Direct to Deck Mounting)	1.75"	 Solar	 Rechargeable Battery Power	600 ft³/hour 17 m³ 16,800 ft³/day 408 m³	 Fan	 Fan
	3" 76 mm	3-3/4"	None (Direct to Deck Mounting)	1"	 Solar	 Passive	700 ft³/hour 20 m³ 5,600 ft³/day 160 m³	Exhaust fan only	 Fan
	3" 76 mm	3-3/4"	None (Direct to Deck Mounting)	1"	 Passive	 Passive	600 ft³/hour 17 m³ In a 15 Knot Breeze	Exhaust fan only	 Passive
	4" 102 mm	4-3/4"	Snap-In (6" Outer Diameter)	1"	 Passive	 Passive	—	 Passive	 Passive
	3" 76 mm	3-3/4"	Snap-In (5" Outer Diameter)	1"	 Passive	 Passive	—	 Passive	 Passive

Day/Night Plus Vent with Stainless Steel Cover

- Circulates fresh air in boat cabin eliminating mold, mildew and musty air
- Moves 1,000 cubic feet of air/hour or 24,000 cubic feet of air/day (4" model)
- Rechargeable battery allows for 24-hour continuous operation
- Whisper quiet fan operation
- No wiring required
- Interchangeable intake and exhaust fans
- High capacity NiMh battery operates vent for up to 40 hours without sunlight on a full charge
- Direct to deck installation
- Built-in on/off fan switch
- Complete air and green water shut-off from below
- All Day/Night PLUS models come complete with two fan blades, white plastic interior trim ring, insect screen, mounting hardware and an easy-to-understand installation manual
- Dimensions: 9" D x 2-1/4" H
- **Replaces NICRO 3" & 4" snap-in deck plates (fits existing holes once snap-in deck plates are removed)**

3" White	Item # N20703W	4" White	Item # N20704W
3" Stainless Steel	Item # N20703S	4" Stainless Steel	Item # N20704S

Now with
more power!



CE
2 YEAR WARRANTY

Replacement NiMh Nickel Metal Hybrid Battery for Day/Night Plus Vents

- High capacity C-cell battery
- 1.2 volts, 2.0 amp-hours
- Replacement battery for current Day/Night Plus vents, as well as, older model PowerVent 3000 and Day/Night 2000 Vents
- Average life: 3-5 years
- Environmentally friendly



Item # N20790

Day/Night Plus Vent Overhaul Kits

- Includes: motor, intake and exhaust fans, solar array, o-ring, insect screen and fasteners for vents

Item # 202430 for 3" vents

Item # 202431 for 4" vents

Day/Night Plus Gasket Kit

- Includes gaskets and fasteners for both 3" and 4" vents

Item # 202432

Mini Vent 1000

The MiniVent 1000 is the smallest and most economical solar vent in the Marinco™ line. At just 7" in diameter and approximately 1-3/4" high, the MiniVent 1000 is compact yet effective. This solar powered model is an exhaust vent only. It will keep the boat cabin cool when you need it most, during the hot sunlight hours. Under solar power, the Mini Vent 1000 will move 700 cubic feet of air an hour. At night, even a light breeze will continue to ventilate the boat passively.

Built-in shut-off damper prevents water intrusion in rough seas. Fits a 3-3/4" diameter installation hole. The vent can be retrofitted to an existing hole of up to 6" in diameter. Available in white ABS plastic or stainless steel. Optional stainless steel cover is also available separately.

- Solar powered exhaust ventilation during daylight and passive exhaust at night
- No batteries or wiring required
- Whisper-quiet fan operation
- Durable white ABS construction
- Shut-off damper to prevent water intrusion in rough seas
- Dimensions: 7" diameter X 1-3/4" high
- All MiniVent 1000 models come complete with white plastic interior trim ring, mounting hardware and an easy-to-understand installation manual

3" White Item # N20020

3" Stainless Steel Item # N20030



CE
2 YEAR WARRANTY

Air Vent 500 Passive Exhaust Ventilation

Marinco offers the AirVent 500 as a non-solar ventilation option that can passively move 600 to 1,000 cubic feet of air per hour in a 15 knot breeze. Marinco's engineering expertise created this vent to be strong, compact and effective. The AirVent 500 is an economical way to provide ventilation in your boat or it can be used in conjunction with other solar powered or 12V vents to create cross flow air circulation.

- Compact size: 7" diameter x 1-3/4" high
- High Air Flow volume 1,000 cu. ft./hour in a 15 knot breeze
- Strong U.V. stabilized white ABS construction
- Center panel is translucent plastic allowing light to pass through it below deck
- Center damper shuts vent off from below
- Easy installation – attaches directly to deck in compact 3-3/4" diameter hole and can be retrofitted to an existing hole of up to 6" in diameter

Item # N28810



**2 YEAR
WARRANTY**

Cowl Vents

Cowl Vents are available in both low profile and standard height contours. These vents are a perfect air intake supplement to solar ventilation, and are also commonly used as a bilge ventilating system with or without a mechanical blower. Marinco was the first supplier of soft, durable PVC vents that are flexible and safe. For interchangeability, Marinco™ 4" cowl vent models fit into the same 4" Snap-In deck plates used by the Combo and 12V vents (3" or 4" sizes).

- Soft and durable PVC construction returns to original shape if stepped on
- Safer than metal cowl vents – prevents injury and resists snagging lines
- Snap-In vents include deck plate and cover
- 4" models interchangeable with Marinco™ Combo and 12V Vent 4" snap-in deck plates
- Marinco™ adapter accessories make installing below-deck duct hose easy

Snap-In Deluxe Low Profile PVC Cowl Vent

- White with bright red interior
- Available in 3" or 4" sizes
- 3" size measures 4-1/2" high
- 4" size measures 5-1/2" high
- Includes white Snap-In deck plate and cover

3" Item # N10863

4" Item # N10864



Snap-In Deluxe Standard PVC Cowl Vent

- White with bright red interior
- Available in 3" or 4" sizes
- 3" size measures 8" high
- 4" size measures 10" high
- Includes white Snap-In deck plate and cover

3" Item # N10963

4" Item # N10964

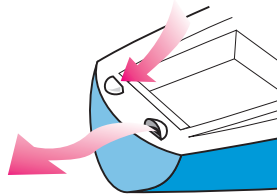


Clam Shell Vents

- Ideal for ventilation needs where a taller vent would foul lines or restrict crew movement
- Work well as stern mounted ventilators for engine compartment
- Can be used for cabin ventilation with dorade boxes
- Flexible PVC construction
- Small clam shell dimensions: 2-1/2" H x 4-1/2" W x 5" L
- Large clam shell dimensions: 3" H x 5-3/8" W x 6-3/4" L

Small **Item # N10873**

Large **Item # N10874**

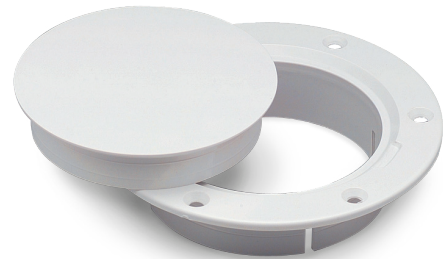


White Snap-In Deck Plate

- Includes Snap-In watertight cover
- Use with any Marinco™ Snap-In vent system
- N10863DW requires a 3-3/4" diameter hole cutout
- N10864DW requires a 4-3/4" diameter hole cutout

3" **Item # N10863DW**

4" **Item # N10864DW**



Plastic Interior Trim Ring

- Finishes off interior installation of vent
- Can be installed in decks between 1" and 2" thick
- Available in 3" and 4" sizes
- White plastic construction
- **Note: Interior trim rings are not compatible with threaded deck plates**

3" **Item # N10866**

4" **Item # N10867**

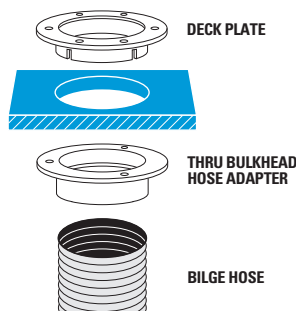


Thru Bulkhead Hose Adapter

- For termination attachment of hose to bulkhead
- For attaching hose to cowl vent
- Can be used with Snap-In or threaded deck plates
- For use in decks or bulk heads of more than 1" thick

3" **Item # N10869**

4" **Item # N10870**



**1 YEAR WARRANTY****Marine Fan**

- 120° adjustable oscillating fan
- Can be set for stationary operation
- Mount on wall, ceiling or dash
- Built-in on/off switch
- Installation hardware included
- 12 volt DC operation, 1.2 amp draw
- Translucent fan blades
- 7.5" vinyl-coated fan guard
- Mounting base dimensions: 3.375" L x 1.5" W
- Stands 8" from mounting surface

Item # 900**1 YEAR WARRANTY****Folding Fan**

- Fan folds out of the way when not in use
- Rotating louver directs air flow
- Mount on wall, ceiling or dash
- Built-in on/off switch
- Installation hardware included
- 12 volt DC operation, .8 amp draw
- Dimensions: 6.75" W x 5.06" H x 1.93" D

Item # 902**1 YEAR WARRANTY****Personal Fan**

- 180° adjustable swivel fan
- Mount on wall, ceiling or dash
- Built-in on/off switch
- Installation hardware included
- 12 volt DC operation
- Compact design installs anywhere
- Great for windshield defogging
- Base Dimensions: 3" diameter
- Stands 5" from mounting surface

Item # 903-5

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